

**New plug-in electric vehicle sales: Investigating whether the  
government's monetary incentive is the sole driver of sales in  
Malta**

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## **Abstract**

In response to climate change, the European Union (EU) has implemented the ‘European Green Deal’. This deal set goals for its member states in order to achieve net carbon neutrality by 2050, along with a more immediate target of reducing greenhouse gas (GHG) emissions by 55% by 2030 compared to the levels in 1990. These targets are part of the ‘Fit for 55’ package. A potential answer to the challenge of decreasing the reliance on fossil fuels, and therefore lowering CO<sub>2</sub> emissions, are electric vehicles (EVs). Since these vehicles run on an electric motor, they produce no tailpipe emissions. The shift from internal combustion engine vehicles (ICEVs) to EVs has brought major change in the transportation sector.

The adoption of these vehicles has been challenging mainly due to their high price and other factors explored in this study. In response, policymakers have adopted incentives to offset these shortcomings and help boost the EV market. The most notable incentive relates to the monetary grant that the Maltese government allocates to those who purchase an EV. This study aims to answer three research questions. The first seeks to determine whether the monetary grant is the sole motivator for the purchase of these vehicles. Secondly, this study questions alternative purchase motivators, which can make EVs more appealing to consumers and potentially increase sales. Lastly, the third research question pursues to determine if and how different grants for battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs), would increase the number of people opting for a BEV, being the ideal and greener option.

Throughout this study, a qualitative research method was employed through Thematic Analysis (Attride-Stirling, 2001). This approach is considered to be effective in providing a comprehensive understanding of personal beliefs and experiences. The sample size was 30

participants, all of whom were owners of either a BEV or a PHEV, also referred to collectively as plug-in electric vehicles (PEVs). The participants took part in a semi-structured in-depth interview which was then transcribed verbatim, and their findings were analysed thematically.

Following this process, three global themes were established; *'Purchase Motivators'*, *'Additional Incentives'* and *'BEV & PHEV Grants'*. The global themes were supported by 12 organising themes; *'Monetary Incentives'*, *'Vehicle Characteristics'*, *'Running Costs'*, *'Environmental'*, *'Priority'*, *'Education'*, *'Monetary'*, *'Selling Price'*, *'Infrastructure'*, *'Grant Process'*, *'Equivalent Grants'* and *'Distinct Grants'*. These organising themes were sustained by 15 basic themes.

Through the emerging of themes, participants express that although the monetary government incentive is the primary purchase motivator, other contributing factors influenced their purchase. These included characteristics related to the vehicle features, fuel and running costs of a PEV and their concern towards the environment. It was also discovered that alternative incentives may be adopted to entice more people to purchase PEVs. These included incentives that were already in place but require improvements. The potential incentives included; the access to designated parking spaces, marketing and educational campaigns geared towards informing the public, incentives targeting electricity rates and the charging wall box, the need to make PEVs more price competitive, a robust public charging infrastructure to support the increase in demand and a more efficient grant process. The last theme related to different grants when purchasing a BEV or a PHEV. Participants agreed that an identical grant is unjust and is seen as a misallocation of funds by the government. Moreover, having distinct grants demonstrates a level of prioritisation towards the adoption of BEVs, which are the ideal eco-friendly option in view of meeting the set environmental targets.

***Keywords***

Plug-in Electric Vehicles, Electric Vehicles, Purchase Motivators, Incentives, Environment, Charging Infrastructure.

**Dedicated to Dale**

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## List of Abbreviations

|                 |                                    |
|-----------------|------------------------------------|
| BEV             | Battery Electric Vehicle           |
| CO <sub>2</sub> | Carbon Dioxide                     |
| EU              | European Union                     |
| EV              | Electric Vehicle                   |
| GHG             | Greenhouse Gas                     |
| ICE             | Internal Combustion Engine         |
| ICEV            | Internal Combustion Engine Vehicle |
| PEV             | Plug-in Electric Vehicle           |
| PHEV            | Plug-in Hybrid Electric Vehicle    |

## Chapter 1 - Introduction

The transition from traditional ICEVs to EVs is one of the most significant changes in the history of transportation. This shift is not merely about technology but has substantial environmental implications. It has become clear in recent years that countries need to find a more sustainable method of transport to reduce the effects that fossil fuels have on global warming. ICEVs emit CO<sub>2</sub> through their tailpipe once the fuel is combusted. However, CO<sub>2</sub> is considered one of the main GHGs in the Earth's atmosphere. These GHGs are present in the atmosphere, absorbing heat and re-emit it, keeping the earth's atmosphere warmer which in turn contributes towards global warming (Brander and Davis, 2012).

The transport sector has contributed to the rise in GHGs, in fact, it represents 25% of the EU's total (European Commission, 2020). As a response, the 'European Green Deal' was enacted setting targets for its member states to achieve net carbon neutrality by 2050 (Fetting, 2020). This along with a more immediate target of the reduction of 55% in greenhouse gases by 2030 when compared to the levels in 1990 which follows the 'Fit for 55' package (Fetting, 2020).

Consequently, EVs have become the answer to this concern as they help in the reduction of fossil fuels and therefore reduce CO<sub>2</sub> emissions. BEVs are considered to be the most sustainable option for the environment since they rely entirely on an electric motor, powered by a battery. Furthermore, PHEVs are also seen as an alternative since they provide an element of eco-friendliness with the incorporation of an electric motor powered by a battery, coupled with a combustion engine. In response to these demands, Malta has set a target of having 65,000 EVs on the road by 2030 (Ellul, 2022). However, data released by the National Statistics Office (2023) shows that by the end of the second quarter of 2023, the amount of EVs on the road

stood at just 14,336. The data also shows that this represents 3.32% of the total vehicle population which stood at 432,039.

While the benefits of EV uptake on the environment is a clear purchase motivator in itself, one must identify other motivating factors which entice people to purchase such vehicles. These may include financial incentives such as rebates, discounted tax rates and other government policies which play a crucial role in promoting EV adoption. Technological advancements like improved battery technology are helping to make EVs a more practical choice for consumers. Moreover, the characteristics of EVs are making them a more sensible choice as they offer a quieter, smoother, and enhanced driving performance, along with lower running and maintenance costs.

With the primary incentive to purchase an EV being the government grant, this study aims to investigate the significance of this incentive and if it is indeed the sole purchase motivator for these vehicles. Moreover, the study will look into other possible incentives that may be introduced to further enhance their adoption. Additionally, the researcher will examine the effect of the BEV and PHEV grants on the adoption of these vehicles. The scope of this study is to shed light onto what can be done to speed up adoption of PEVs to reach the set targets. Data will be gathered through the use of in-depth semi-structured interviews, followed by thematic analysis (Attride-Striling, 2001).

The structure of this study will constitute the following: Chapter 2, the literature review is presented which studies the present literature analysing the current state of the EV market. Chapter 3 will encompass the methodology used by the researcher to gather the data and the analysis used to extract the themes. In Chapter 4, the research findings are presented with

extracts taken from the data collected. Moreover, in Chapter 5 the discussion will look into the findings in the previous chapter and will be compared to similar studies. Lastly, Chapter 6, will conclude the study with the researcher's recommendations based on the outcomes established from the data collected.

## Chapter 2 - Literature Review

### 2.1 A Change Driven by the Environment

Throughout the years, the EU has been committed to meeting strict emission targets, and as a result, has implemented several standards aimed at reducing the environmental impact of vehicles on the road. Initially, these standards focused on improving the efficiency of ICEV which run on petrol or diesel, making it compulsory for car manufacturers to comply with strict regulations in order to keep selling their products within EU member states (European Commission, 2007). Despite these improvements, vehicles which relied on fossil fuels continued to emit a substantial level of CO<sub>2</sub> contributing to climate change. As a response to this matter, the EU shifted its focus towards promoting electromobility, which involves the use of an electric motor powered by a battery. By embracing electromobility, the negative impact of GHGs is further reduced, promoting a cleaner more sustainable future (European Commission, 2014).

During the course of this study, the terms PEV and EV are used interchangeably. Pisani (2020) provides a definition for both types of PEVs below;

- 1) BEVs run solely on an electric motor and are fuelled by a battery. The latter is re-charged by connecting it directly to the grid.
- 2) PHEVs run on both an internal combustion engine (ICE) and an electric motor fuelled by a battery. Optionally, charging can be done by connecting the battery to the grid.

BEVs are widely regarded as the most eco-friendly option available. This is largely due to the fact that BEVs release zero harmful pollutants (Hardman et al., 2017) into the air during operation, making them a great choice for those looking to reduce their carbon footprint. In addition to their environmental benefits, BEVs are also known for their smooth and quiet ride, as well as their ease of use (Von Brockdorff and Tanti, 2017). Jabbari (2018) implies that replacing vehicles powered by fossil fuels with EVs can have a direct positive impact on the air quality of urban areas.

Therefore, it is evident that PHEVs are not long-term solutions to reduce GHGs given that, although they have an electric motor which is powered by a battery, they still emit CO<sub>2</sub> through their combustion engine (Jabbari, 2018). Moreover, PHEVs are heavier in weight given that they comprise an electric motor along with a battery pack and an ICE. In fact, it has been noticed by Abnett and Carey (2021) that this factor leads such vehicles to emit more CO<sub>2</sub> emissions than ICEVs. Furthermore, with these vehicles having a combustion engine to rely on, one cannot guarantee that these vehicles will be run on mostly their electric motor. In fact, in an article by Briscoe (2021), an environmental group in Ireland has branded these vehicles as being fake EVs, while manufacturers of these vehicles are not ensuring that owners of such vehicles charge their cars frequently. This begs the question, Will providing an incentive for these vehicles result in an unfair practice? Since some might purchase PHEVs for the simple reason of benefiting from the grant. As a matter of fact, The Miles Consultancy in Cheshire found that some of these vehicles were purchased solely to benefit from the grant (Miller, 2018).

As people are becoming more environmentally conscious, they are becoming more aware of how they can reduce their impact on the environment. This is having a positive impact on the

sales of EVs, since those who are conscious about the environmentally are more willing to purchase such vehicles (Bienias et al., 2020). Some also prioritise such a factor over monetary incentives when purchasing an EV (Vrösch, 2018).

Policymakers play a vital role in safeguarding the environment, in fact, EU member states have set targets to achieve a 100% zero-emission transportation network. These targets range from as early as 2025 to as late as 2050 (Sa, 2022). Additionally, countries are planning to ban the sales of vehicles that use combustion engines. They are also offering financial incentives and building infrastructures to support the development of EV technologies (Sa, 2022).

## 2.2 Barriers Surrounding the Electric Vehicle Market

Many local and international studies have looked into the challenges hindering the widespread adoption of EVs. One study by Egbue and Long (2012) points out that the higher purchase price of an EV compared to an ICEV is an obvious barrier. Another study by Lutsey et al. (2018) identifies several other barriers, including limited options of EV models, lack of knowledge and additional ownership costs. Moreover, this study highlights two main obstacles surrounding the charging of EVs; the availability of charging infrastructure and the time needed for re-charging.

According to a study conducted by Noel et al. (2020), the lack of knowledge and experience with EVs is a significant barrier to their adoption. This lack of awareness can be seen as a mental barrier. Additionally, in a research study conducted by Jensen et al. (2013), participants identified the limited range of EVs as another barrier. An article published recently by Sechel and Mariasiu (2021) highlights that the main disadvantage of EVs is the need to charge their

batteries periodically at a charging point connected to the local electric grid. The paper continues to describe how the battery's energy capacity also limits the vehicle's autonomy.

According to Jabbari (2018), researchers, governments and the industry recognise several barriers which hinder the widespread adoption of EVs with range anxiety being a prominent deterrent. EV owners may experience range anxiety, which is the fear of running out of battery charge during a trip and becoming stranded (Neubauer and Wood, 2014). This factor has been featured in previous studies conducted in Malta, despite the shorter daily commute distances compared to mainland Europe. For example, Pisani (2020) found that 55% of participants in their study expressed concern about their vehicle running out of charge before they were able to recharge. According to experts, the range is not a technical limitation but rather a matter of consumers' familiarity and experience with EVs (Noel et al., 2020). Additionally, there may be a discrepancy between the distance individuals would prefer to travel in their daily routines and the distance that EVs can currently cover (Jensen et al., 2013).

According to a study by Zaunbrecher et al. (2014), participants found it stressful to plan the recharging of their EV due to the time-consuming process. This barrier was also identified by participants in a study conducted by Graham-Rowe et al. (2012). In fact, the participants in this study considered the waiting time for charging the vehicle as unproductive and believed it limited their freedom of movement.

Research carried out by Zaunbrecher et al. (2014) revealed that the physical appearance of EVs known to participants was deemed unattractive, which acted as a barrier to their adoption. Furthermore, a study conducted in Malta by Cuschieri (2020) identified a significant challenge for EV owners in the form of the limited availability of repair shops that cater for these types

of vehicles. Results from this study show that more understanding of the accessibility of such garages is subject to improvement.

### 2.3 Overcoming the Barriers Surrounding the Electric Vehicle Market

The obstacles listed in the previous section has seen efforts to address these barriers, starting off with the higher purchase price. As mentioned in a study by Slowik et al. (2019), the implementation of consumer fiscal incentives is considered the primary solution to tackle this disadvantage, these include; purchase subsidies, income tax credits, or vehicle tax reductions. Policymakers around the world have implemented these incentives with the goal of reducing the cost of EVs and in turn encouraging more customers to purchase them (Hardman and Sperling, 2020).

DeShazo (2016) mentions that various government policies offer different incentives based on vehicle technologies, such as BEVs and PHEVs or their battery capacity. Likewise, Hardman et al. (2017) recommend that policymakers should adjust their policies to provide a higher incentive for BEVs over PHEVs while acknowledging that several countries have this practice already in place. This provides a better opportunity for the adoption of BEVs over PHEVs, especially since these vehicles emit no tailpipe emissions. According to an article by Abnett and Carey (2021), the reduction in subsidies for PHEVs in the Netherlands in 2016, led to an increase in BEV sales and by 2020, with eight times more BEVs sold than PHEVs.

It was also suggested by DeShazo (2016) to provide incentives at the time of the purchase decision, hence, policies should prioritize rebates that are available at the point of sale, rather than after the purchase. Furthermore, Hardman et al. (2017) also found that a point-of-sale

rebate is the most effective. Additionally, providing a point-of-sale rebate makes it possible to reduce the loan amount that consumers may have to finance (DeShazo 2016).

The reduction in running costs in comparison with ICEVs can also help in the adoption of these vehicles. Farrugia (2018) states that since these vehicles have fewer moving parts they require less regular maintenance. The author continues by saying that less maintenance results in less running costs which may act as an incentive to increase the demand for such vehicles. Moreover, the reduction in re-fuelling costs also incentivises customers to purchase EVs. In fact, research by Graham-Rowe et al. (2012) revealed that low re-fuelling cost is a prime motivator behind the purchase of EVs.

As revealed in a study by Lutsey et al. (2018), the limited availability of EV models is said to be one of the market barriers. This has been alleviated since car manufacturers have modified existing ICE models by converting them to EVs, while also introducing new EV models in the market as a result of higher demand. In fact, McKibbin (2021) reports that by 2020 the available models worldwide stood at 370 which was an increase of 40% from the previous year.

In addition to directly addressing the challenges when owning an EV, alternative incentives have also been put forward. One of these incentives is to allow EVs to use the high-occupancy vehicle lanes or bus lanes as commonly known in Malta (Sa, 2022). These are commonly referred to as non-financial incentives (Fluchs and Kasperk 2017) since they require no monetary outlay. Another essential non-financial incentive mentioned by Langbroek et al. (2016), is the free parking spaces reserved for EVs while charging, which can help address the issue of the inability to charge at home. These designated parking spaces are usually found close to the entrance of a building or in the heart of city centres. This leads us to another

incentive adopted by major cities worldwide. Since February 2003 the council responsible for governing London has implemented a congestion charge that applies to drivers entering specific parts of the city. The charge is intended to alleviate traffic congestion and promote cleaner air quality (Morton et al., 2017). It is worth noting that EVs are not subject to this charge (Sa, 2022), as they produce zero CO<sub>2</sub> emissions. This measure acts as an incentive for residents of the city and also for those who visit the city frequently.

As indicated by He et al. (2013), the charging of EVs has become less challenging due to improvements in battery technology. The latter allows the vehicle to have a longer electric range with one charge, therefore reducing the amount of recharging the vehicle requires as well as alleviating range anxiety experienced by EV owners. This advancement in battery technology means that EVs are becoming more viable, especially in countries with short travelling distances such as Malta (Cuschieri, 2020).

Participants in a study by Borg (2022) stated that awareness of EVs is still very much lacking, highlighting the fact that more effort is required from policymakers in this regard. Since mass EV adoption is relatively in its infancy, the technology is perceived as ‘new’, and people tend to be uncomfortable with a technological change (Pisani, 2020). This sentiment may be relieved by the communication of detailed information regarding EVs, which will help these individuals overcome this fear. The development in awareness of EVs increases the likelihood of purchasing such vehicles (Bansal et al., 2021). Although certain limitations cannot be removed, providing ways to overcome them can help in the adoption of EVs (Riverso et al., 2023).

Being technologically aware plays a major role when purchasing an EV as established by Egbue and Long (2012). This level of awareness is often seen among customers who trust in

the prospects of EVs and were one of the early adopters (Rolim et al., 2012). Moreover, the advancement in technology has a positive impact on EV's performance and comfort. Following an experience of driving EVs, participants in a study by Skippon and Garwood (2011) revealed that they valued the vehicles' responsiveness, smooth drive, acceleration, and low noise. The study also revealed that participants with a higher concern towards the environment rated the performance of an EV as superior to ICEVs. Moreover, Biresselioglu et al. (2018) found that the performance of EVs is a significant motivating factor when purchasing these vehicles. Low noise that is emitted from EVs is also a key factor when purchasing EVs as revealed by Gurudath and Rani (2021).

The implementation of a robust charging infrastructure is a crucial factor in the widespread adoption of EVs (Pisani, 2020). An adequate number of charging stations is essential to increase people's perceived control over EVs and ultimately leads to an increased intention to buy them, especially for individuals who lack garages or parking spaces (Cuschieri, 2020). The limited availability of charging stations also acts as a barrier which requires the support and collaboration of both the government and the private sector (Egbue and Long, 2012). According to Rommel and Sagebiel (2021), the increase in the availability of charging infrastructure also increases the public's willingness to purchase EVs. Moreover, in their experiment, respondents listed the availability of charging infrastructure as a high priority.

EV owners have the possibility of buying a personal charging station however, purchasing and installing these charging stations is costly. Incentives related to charging at home relieve such costs. The advantage of the subsidies has been highlighted in a study by Münzel et al. (2019) as they aim to lower the costs associated with these vehicles. A study has established that having charging facilities at the place of work where owners can charge their vehicles during working

hours, led to a higher uptake of EVs (Slowik and Lutsey, 2017). Providing owners of EVs with discounted utilities has a positive impact on the adoption of EVs as has been discovered in a study by Borg (2020).

#### 2.4 The Significance of a Robust Charging Infrastructure

With the increase of EV uptake on roads, it is expected that the demand for electricity will surge which may cause stress on the energy capacity (Farrugia, 2018). As a result, the current infrastructure may not be well-equipped to handle the high demand for electricity, which can be challenging for Malta (Fenech, 2022). Therefore, it is imperative for countries to develop a robust grid which meets the increase in demand. Moon et al. (2018) emphasise that it is crucial for policymakers to understand the magnitude of electricity demand resulting from EV usage to manage the changes in the grid. Moreover, they suggest that accurate estimation of additional grid constraints from EVs and guidelines for future energy policies require analysing consumers' charging patterns.

Apart from the issues related to the electric grid, the number of available public charging infrastructure also presents a challenge which should be addressed. Certain countries are aiming to completely eradicate their GHG emissions, however, they are facing a significant challenge in terms of the lack of infrastructure available to support the use of EVs (Camilleri, 2020). To facilitate this transition, the EU has enacted the 'Green Deal' which provides member states a framework to accelerate the deployment and distribution of these charging facilities. This is especially important when considering the amount of charging stations available within the EU in contrast with fuel stations (Fenech, 2022). The target set by the EU is for member states to provide a public charging station for every 10 EVs (Lavee and Parsha, 2021).

For those who own PEVs and do not have access to garages, the presence of charging stations in their area is of great importance. From a study by Sa (2022), it transpired that single-family homeowners who rent, value the public charging infrastructure as very or extremely important. This is a concern that is becoming increasingly pertinent in Malta, where many apartment complexes lack adequate parking facilities or do not have such facilities entirely. Sa (2022) continues to suggest the implementation of building codes mandating the installation of wiring for future EV chargers in residential buildings. Studies have also pointed out that since BEVs require a considerable amount of time to charge, these facilities should be strategically placed in areas frequented by owners where they spend a considerable amount of time such as shopping malls, supermarkets and parks (Philipsen et al., 2018).

Needless to say, it is essential to consider not only the accessibility of charging stations but also the quality of the current infrastructure. This holds particularly true as advancements in charger technology continue to progress. Dong (2022) mentions the development of a faster charging capability for these charging stations and how this has been recognised as an important variable that affects the purchase of EVs. Additionally, charging stations should provide clear communication to users and show the charging status while their vehicles are on charge. The enhancement of the charging infrastructure helps elevate customer uncertainty surrounding the purchase of EVs (Thøgersen and Ebsen 2019).

### *2.5 Customer's Willingness to Purchase Electric Vehicles*

The acceptance and popularity of EVs in the market depend greatly on consumer attitudes towards the costs and government support policies. In order to increase adoption, there is a need for innovative production and marketing strategies, as well as supportive government

policies such as infrastructure investment to address perceived differences between EVs and traditional ICE vehicles in terms of cost, performance, range, convenience, aesthetics, and symbolic value (Cherchi, 2017; Degirmenci and Breitner, 2017).

The findings in a study by Hardman and Sperling (2020) suggest that government incentives are becoming increasingly significant not due to the rise of lower-income buyers of EVs, but rather due to a shift in attitudes among consumers. According to the study, the initial users of EVs were enthusiastic innovators who would have bought them even without incentives. However, later buyers are more practical and less likely to change their behaviour without incentives.

Another factor influencing the willingness to purchase an EV is age. In a study by Dong (2022), results reveal that subsidies aimed at promoting the purchase of EVs tend to be more appealing to younger individuals. This could be attributed to the fact that the younger generation is generally more open-minded and receptive towards innovative concepts. This highlights the importance of directing efforts towards this particular age group in order to enhance growth and acceptance. These findings were in line with another study carried out by Cirillo et al. (2017), who also established that younger individuals have a relatively higher willingness to pay for new technologies, especially a BEV. Moreover, research carried out by Farrugia (2018) revealed that individuals who possess a higher level of education and fall within the younger age bracket are the second-fastest group to adopt EVs.

In a study by Zaunbrecher et al. (2014), a group of participants were asked to provide their reasons for purchasing an EV. The results showed that a significant percentage (26%) cited the financial subsidies as a primary motivation. Following that, 19% of the respondents mentioned

free parking as a deciding factor, while the same percentage were influenced by excise tax exemption. Additionally, 15% of the participants emphasised the importance of extended warranties when purchasing an EV and a further 15% mentioned access to charging stations as a significant factor. Furthermore, the authors found that consumers' willingness is influenced by household size, hometown, basic knowledge of such vehicles, and positive opinions about their environmental impact, safety, and social status.

### 2.6 The Sustainability of Incentives

There is ample evidence that incentives play a key role in driving the widespread adoption of EVs. However, it is important to consider the sustainability of such incentives in light of recent global events. The COVID-19 pandemic, the ongoing war in Ukraine, and rising inflation rates have all had significant impacts on the economy and consumer behaviour, which could in turn affect the long-term viability of EV incentives. It is therefore crucial to carefully evaluate the effectiveness and sustainability of such programs in order to ensure their continued success in promoting a cleaner, more sustainable transportation future. Sa (2022) puts forward the idea that with technology being more readily available, it is expected that the incentives, particularly those of a financial nature, will eventually decrease.

With the decline in the cost of EVs, bringing them at par with ICEV, it is vital that governments take a gradual approach towards phasing out fiscal incentives. In light of this, many governments have already announced their plans to do so by 2025 (Slowik et al., 2019). Incentives for consumers to purchase EVs play a vital role in the early stages of the market. However, as EVs become more cost-competitive, these incentives become less significant. Nonetheless, Slowik et al. (2019) write how the decrease in battery and EV prices creates an

opportunity to strategically target low-income individuals, rural communities, and drivers who lack home charging capabilities.

Several researchers such as Hardman and Sperling (2020) and Slowik et al. (2019) indicate that with the increase in EV sales, the financial burden on governments also increases as the demand for incentives rises. The authors agree that the current incentives are not infinite but are also aware that discontinuing the incentives for EVs may pose a challenge if effected while consumers are still dependent on them. This could cause the market for EVs to shrink. The authors note how car manufacturers face regulations on the number of EVs they sell yearly, and the average emissions of vehicles sold. This responsibility forces manufacturers to find ways to reduce costs in order to keep prices low and meet set targets. As a result, the phasing-out of monetary incentives is facilitated since cost parity with ICEVs is achieved. According to a study by McKibbin (2021), analysis of the automotive industry suggests that cost parity may be achieved between 2025 and 2027 due to the decline in battery costs and the development of advanced platforms, resulting in a reduction in the overall cost of EVs.

## **Chapter 3 - Methodology**

### **3.1 Introduction**

The aim of this research study was to investigate whether or not the monetary incentive offered by the government was the primary factor that motivated customers to purchase their PEV. In order to answer the research questions, a comprehensive methodology was employed, and the rationale behind the research method selected will be discussed in-depth in this chapter. Additionally, a detailed description of the recruitment procedure - including participation criteria - will be provided. Alternative methods of data collection and analysis that were considered but ultimately rejected will also be discussed. This chapter will further delve into the procedure adopted during the data collection process, which involved the use of semi-structured interviews and a qualitative analytic technique to analyse the data gathered. The strengths and limitations of interviewing as a tool for collecting data and the chosen technique for analysis will also be analysed in detail. Finally, this chapter concludes with a thorough discussion of the ethical considerations that influenced the study and how they were addressed.

### **3.2 Pilot Study**

The purpose of the pilot study was to identify any errors that may have been missed during the interview design stage. Although the interview was devised following an extensive literature review, piloting ensures that the highest possible quality data is obtained. As established by Pratt and Yeziarski (2018), conducting a pilot study to trial the method and interview guide can enhance the credibility and reliability of the research, as well as improve upon the researcher's expertise. The researcher ensured to ask straightforward questions as

suggested by Bell and Waters (2018) and reminded participants to intervene at any point throughout the interview should they need any clarifications.

Experts advise that the pilot study sample should be 10% of the parent study sample size (Connelly, 2008). Therefore, the recommended pilot sample for this study should have been three participants. However, the researcher chose to conduct the pilot study on five participants to make sure the outcome was sufficient.

The respondents did not suggest any changes and therefore no amendments were made to the interview following the pilot test. Having said this, the researcher engaged in self-reflection and identified room for improvement while conducting the interviews. These improvements included the re-wording of questions when needed and providing the respondents with scenarios to ensure better understanding.

### 3.3 Recruitment Process

In the research process, the first step is to select and identify potential participants who will be involved in the study. The researcher is responsible for deciding on the sample size and recruitment process that will provide rich and informative data. The inclusion and exclusion criteria are also determined at this stage. A study conducted by Marshall et al. (2013) revealed that the data collected is often saturated at 30 participants. Therefore, for this study, the same number of participants will be employed to ensure that an adequate amount of data is gathered.

A comprehensive approach was employed to recruit participants for the study through social media. A Facebook group dedicated to the local EV community was identified by the researcher

and its administrator was approached. The administrator granted the researcher permission to distribute information letters via the group's feed. This group provided the researcher with a potential pool of participants, who reached out to the researcher at their own will. Those who showed an interest to participate and met the inclusion criteria, were given further information if needed and asked to sign a consent form. Upon signing the consent form, the participants and researcher agreed on a suitable date and time to conduct the interview via video conferencing platforms.

### 3.3.1 Inclusion & Exclusion Criteria

These criteria establish whether an individual is eligible to participate in the research. The researcher identifies them after understanding what characteristics are required for this study to succeed and be relevant. For this study, the inclusion criteria were:

- 1) Owners of PHEV and/or a BEV newly purchased from Malta
- 2) Owners of a purchased PHEV and/or BEV between 2014 to present
- 3) A licensed driver

The exclusion criteria were:

- 1) Owners of ICE vehicles (including motorcycles)
- 2) Owners of e-bikes (electric motorcycles)
- 3) Owners of second-hand vehicles
- 4) Owners of purchased electric cars before 2014
- 5) Non-licensed drivers

### 3.3.2 Sample Characteristics

The below table depicts the participants' characteristics, including initials, in order to preserve their identity, the vehicle type and the year it was purchased. Lastly, the table also shows the grant amounts that participants benefitted from.

| Participant | Type of Vehicle | Year of Purchase | Amount of Grant  |
|-------------|-----------------|------------------|------------------|
| SS          | BEV & PHEV      | 2019 & 2023      | €6,000 & €11,000 |
| PB          | PHEV            | 2022             | €11,000          |
| NC1         | BEV             | 2022             | €13,000          |
| CB          | BEV             | 2021             | €12,000          |
| EC          | BEV             | 2023             | €11,000          |
| SM          | BEV             | 2023             | €12,000          |
| WF          | BEV             | 2019             | €7,000           |
| ESK         | BEV             | 2022             | €12,000          |
| ASK         | BEV             | 2023             | €11,000          |
| KM          | BEV             | 2017             | €13,000          |
| AS          | PHEV            | 2021             | €12,000          |
| LD          | BEV             | 2020             | €8,000           |
| CM          | PHEV            | 2020             | €6,000           |
| AM          | PHEV            | 2019             | €8,000           |
| SG          | BEV             | 2022             | €12,000          |
| NC2         | BEV             | 2023             | €11,000          |
| MB          | PHEV            | 2022             | €12,000          |
| BB          | BEV             | 2022             | €12,000          |
| GB          | PHEV            | 2022             | €12,000          |
| YSC         | BEV             | 2019             | €7,000           |
| JG          | PHEV            | 2021             | €12,000          |
| SA          | PHEV            | 2020             | €6,000           |
| HC          | BEV             | 2019             | €8,000           |
| LZ          | BEV             | 2021             | €9,000           |
| AC1         | PHEV            | 2022             | €12,000          |
| SB          | BEV             | 2023             | €11,000          |
| JM          | BEV             | 2023             | €11,000          |
| LC          | BEV             | 2023             | €12,000          |
| AC2         | BEV             | 2022             | €11,000          |
| MSG         | BEV             | 2021             | €3,000           |

Table 1 – Participants (Created by author, 2023)

### 3.4 Research Design

When conducting research on a particular topic, a researcher must choose between two main approaches: qualitative or quantitative. The qualitative approach involves collecting data that is not numerical in nature. This type of approach provides valuable insights into the topic being studied by exploring the lived experiences and perceptions of the study participants. One of the benefits of this approach is its flexibility during the data collection phase. It allows respondents to produce new theories and ideas, which can lead to a deeper understanding of the topic at hand.

However, there are some limitations to using a qualitative approach. One major limitation is the small sample size of participants. This can make it difficult to draw conclusions that are representative of the general population's perception. Additionally, the researcher's interpretation of the data collected may also present a constraint. This is because their assumptions and perspectives of the subject can influence their analysis of the data. Finally, the data collected from a qualitative approach can be challenging to process and analyse, which could be time-consuming.

In contrast to qualitative research, a quantitative research approach places emphasis on numerical data analysis, which aids in the identification of patterns and relationships within the data set. This method is particularly useful in studies that seek to comprehend a larger population. Accordingly, a larger sample size is typically used in conjunction with various statistical analysis techniques. This methodology provides the researcher the ability to test hypotheses and make assumptions based on the collected data. However, due to its reliance on numerical data, this approach may not capture real-life experiences or perspectives.

Furthermore, the collected data may necessitate specialised tools for analysis, which can be expensive for the researcher. Additionally, just like quantitative research, the researcher's interpretation of the data may be biased due to their individual interpretation and assumptions.

#### 3.4.1 Qualitative Research

Upon careful analysis of the available research methods, the researcher concluded that a qualitative approach is the most suitable to adopt for this study, so to gain a thorough insight of the participants' perspectives. Rubin and Rubin (2005) state that qualitative research intends to obtain a detailed account of human beliefs by searching for a deeper understanding of lived experiences. The primary factor behind this decision was the researcher's desire for a comprehensive understanding. In fact, qualitative methods are regarded as ideal for obtaining a rich description of a subjective and personal experiences (Johnson and Onwuegbuzie, 2004). Additionally, this research method has the advantage of facilitating the emergence of other theories or explanations that may not have been initially anticipated. Brown (2005) describes one of the strengths of qualitative research as being its potential to explore a particular phenomenon and potentially generate hypotheses.

#### 3.5 Data Collection

For qualitative research, data is collected through methods which may include focus groups, observations and interviews (Barret and Twycross, 2018). During a focus group, the researcher sits down with a group of people from different backgrounds and experiences to gather data regarding a particular subject. It is mainly used to explore group opinions, attitudes and shared experiences. Observations require the researcher to watch participants in their natural settings.

Behaviours, interactions, and activities are recorded with minimum input by the researcher. Interviews involve the participants interacting either one-on-one with the interviewer or in a group and are conducted in person, online or over the phone. They can also be of a structured, semi-structured or unstructured nature. The ultimate goal is for the researcher to gather in-depth information regarding the participant's beliefs, attitudes, opinions and experiences.

### 3.5.1 Data Collection Tool

Before determining the data collection tool, the researcher must define the questions guiding the data collection process. For this study, the researcher defined three questions which the data collection will aim to answer. These were:

- i) Is the government's monetary incentive the sole reason which drives customers to purchase plug-in electric vehicles?
- ii) What other incentives can play a role in purchasing such vehicles?
- iii) What effects would introducing separate monetary incentives for PHEVs and BEVs have on sales of BEVs?

For this study, it was decided that semi-structured interviews are the preferred means of data collection. These allow the researcher to explore and develop the participant's replies (Alshenqeti, 2014). When the researcher's aim is to gain insight into an individual's specific perspective rather than a broad understanding of a phenomenon, a semi-structured interview is the preferred method of data collection (McGrath et al., 2019). Alternative data collection methods do exist in qualitative research, however, semi-structured interviews allow the

interviewing phase to have a level of focus while allowing the researcher to explore subjects that emerge during this process (Adeoye-Olatunde and Olenik, 2021).

The questions presented above allow for more than one specific answer, determined by the participant's beliefs, backgrounds, understandings and experiences. This allows the researcher to delve deeper into the matter and comprehensively understand the subject.

### 3.5.2 Data Collection Environment and Recording of Interviews

All 30 participants preferred the interview to be conducted online, via a video conferencing platform. The researcher felt that participants were more comfortable within a relaxed and familiar setting. Moreover, online interviews offered scheduling flexibility which increases the likelihood of interviewees willing to participate (Irani, 2018). These audio-recorded interviews ranged between 25 to 45 minutes. The interviews were only recorded following a signed consent form prior to scheduling the interview date and time. Upon meeting the participants, the researcher encouraged them to be as comfortable as possible and that there are no correct or wrong answers. The researcher reminded the participants to engage in a to and fro conversation and provided them with a background of the study. This allowed participants to engage in a more informative and insightful manner.

### 3.5.3 Interview Schedule

The researcher created the interview questions after conducting a thorough review of relevant literature, including previous studies, books, interview guides, and published interviews. In addition to this, the researcher drew on their own personal experience and knowledge while

working within the automotive industry for 6 years. By synthesising these various sources of information, the researcher was able to formulate a 13-item semi-structured interview.

At the beginning of each interview, the researcher asked three background questions. These included; the type of vehicle owned, the year of purchase and the sum of the grant received. Please refer to Appendix C on page 83 for a template of the interview.

### 3.6 Data Analysis

#### 3.6.1 Transcriptions

The process of transcription is crucial in qualitative research (Poland, 2003) when it comes to analysing the data that was collected. In this particular study, the transcription process involved dedicating hours upon hours to listen to the 30 interviews, and then transcribing them verbatim. Moreover, this process also required a number of interviews to be translated from Maltese to English in order to properly process and record the data. Accomplishing this translation task presented a significant challenge, as it was important to ensure that the correct translation was performed while still maintaining the intended message. Moreover, during the analysis process, it is essential for the researcher to maintain transparency and ensure that the results are based solely on the collected data. This approach guarantees the validity and reliability of the final outcome.

### 3.6.2 Thematic Analysis

Thematic Analysis established by Attride-Stirling (2001), is a form of qualitative study which is used to examine categorisations and present theories that convey the data. When conducting qualitative research, the gathered data can often be intricate and multifaceted. In order to adequately analyse this type of data, it is recommended by Holloway and Todres (2003) that thematic analysis be utilised as the fundamental approach. Thematic Analysis is a systematic method that involves identifying, analysing, organising, describing, and reporting the various themes that emerge from a given data set, as outlined by Nowell et al. (2017). For this particular study, the researcher chose to adopt this method of analysis. The process of thematic analysis requires moving through a series of six distinct phases.

- (i) Data familiarisation - Transcribing, reading data (often more than once), and noting preliminary ideas.
- (ii) Generate codes - Coding noteworthy qualities of the data in an organised manner throughout the data set, classifying the data related to every code.
- (iii) Explore themes - Organise codes into possible themes, collecting all information applicable to each probable theme.
- (iv) Themes review – Create a thematic diagram of the analysis by examining if the themes work in relation to the coded extract and the whole data set.
- (v) Outline and name themes – An ongoing exercise to enhance each theme by producing clear descriptions and names.
- (vi) Generating the report – The final evaluation of the extracted data by linking the data to the established research questions and the literature. The analysis is grouped to present a final report (Braun and Clarke, 2006).

### 3.6.3 Thematic Analysis Themes

After the data has been analysed, the researcher extracted three global themes, these will be presented below. To help answer the first research question, the global theme *Purchase Motivators* has been developed. As illustrated in Table 2, it contains four organising themes with basic theme/s for each: *Monetary Incentives* which includes *Rebate* as a basic theme, *Vehicle Characteristics* incorporating *Comfort & Performance* and *Technology* as basic themes, *Running Costs* which contains *Savings* as a basic theme and *Environmental* with *Eco-friendly* as a basic theme.

| Global Theme One    |                         |             |                  |                  |
|---------------------|-------------------------|-------------|------------------|------------------|
| Purchase Motivators |                         |             |                  |                  |
| Organising Theme    | Organising Theme        |             | Organising Theme | Organising Theme |
| Monetary Incentives | Vehicle Characteristics |             | Running Costs    | Environmental    |
| Basic Theme         | Basic Theme             | Basic Theme | Basic Theme      | Basic Theme      |
| Rebate              | Comfort & Performance   | Technology  | Savings          | Eco-friendly     |

Table 2 - Global Theme One (Created by author, 2023)

The second global theme *Additional Incentives* has been adopted to aid in answering the second research question. Table 3 illustrates the hierarchy of this theme which includes six organising themes with basic theme/s for each: *Priority* which includes *Parking* as a basic theme, *Education* which incorporates *Knowledge & Awareness* and *Fear & Uncertainty* as basic themes, *Monetary* incorporating *Electricity* and *Charging* as basic themes, *Selling Price* which contains *Expensive* as a basic theme, *Infrastructure* including *Inadequate* as a basic theme and *Grant Process* with *Duration* as a basic theme.

| Global Theme Two      |                       |                    |                  |             |                  |                  |                  |
|-----------------------|-----------------------|--------------------|------------------|-------------|------------------|------------------|------------------|
| Additional Incentives |                       |                    |                  |             |                  |                  |                  |
| Organising Theme      | Organising Theme      |                    | Organising Theme |             | Organising Theme | Organising Theme | Organising Theme |
| Priority              | Education             |                    | Monetary         |             | Selling Price    | Infrastructure   | Grant Process    |
| Basic Theme           | Basic Theme           | Basic Theme        | Basic Theme      | Basic Theme | Basic Theme      | Basic Theme      | Basic Theme      |
| Parking               | Knowledge & Awareness | Fear & Uncertainty | Electricity      | Charging    | Expensive        | Inadequate       | Duration         |

Table 3 - Global Theme Two (Created by author, 2023)

The third and final global theme as shown in Table 4 is *BEV & PHEV Grants* which contains two organising themes. These include *Equivalent Grants* which incorporates *Misallocation* as a basic theme and *Distinct Grants* with *Prioritisation* as a basic theme.

| Global Theme Three |                  |
|--------------------|------------------|
| BEV & PHEV Grants  |                  |
| Organising Theme   | Organising Theme |
| Equivalent Grants  | Distinct Grants  |
| Basic Theme        | Basic Theme      |
| Misallocation      | Prioritisation   |

Table 4 - Global Theme Three (Created by author, 2023)

### 3.7 Ethical Considerations

In order to ensure that the research is conducted in a responsible and ethical manner, researchers must take into account various ethical considerations. During the interview process, participants were carefully attended to, ensuring that they felt comfortable and at ease

throughout the experience. Prior to conducting the interview, consent was obtained from each participant to ensure that they understood the nature of the study and were willing to participate. Additionally, the researcher made sure to maintain the privacy and confidentiality of each participant, informing them that the conversation was entirely confidential.

Participants were also informed that they had the right to withdraw from the study at any point, even after data collection had been completed. To further ensure the safety and security of the collected data, it was stored on an external hard drive that was password-protected. Finally, it is important to note that once the study is published, the data will be deleted to ensure that participants' privacy and confidentiality remain protected.

### 3.8 Summary

To summarise, the researcher opted for a qualitative research approach as the main objective of this study was to explore the participants' beliefs and intentions regarding the purchase of such vehicles. The participants who took part in the study were considered as contributors to the data collection process, which involved conducting semi-structured interviews. This allowed for a more natural flow of conversation and interaction. Such an approach enabled the researcher to shift the focus of the study and possibly gain new perspectives on the subject matter. The data collected was analysed, categorised, and classified to identify any potential patterns, as outlined in Saunders et al. (2019).

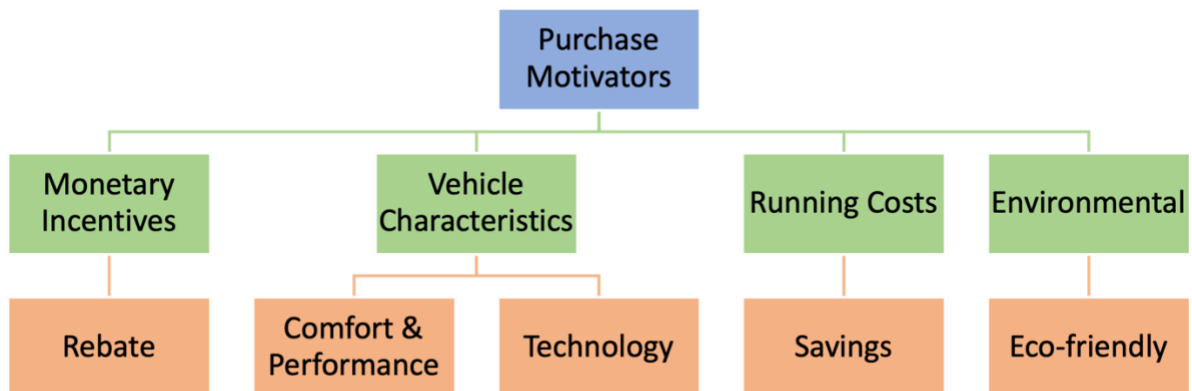
## Chapter 4 - Findings

### 4.1 Introduction

In this section, an in-depth analysis is conducted on the data gathered by the researcher from a total of 30 interviews with owners of BEVs and PHEVs. The primary objective of these interviews was to gain insight into the EV market in Malta, focusing specifically on the monetary incentives provided by the government and their potential impact on customer purchasing behaviour. Through the interviews, the researcher also explored other potential incentives that could influence sales. The grant scheme offered for both BEV and PHEV vehicles was also explored.

Using thematic analysis, the researcher identified themes that were then categorised into three groups: global themes, organising themes, and basic themes. The interview was designed to address three research questions, and a global theme was established for each one of them. The global themes include *Purchase Motivators*, *Additional Incentives* and *BEV & PHEV grants*. Organising themes were then created under each global theme to help categorise the data based on its characteristics. To further enhance this categorisation, basic themes for each organising theme have been generated. In the following section, all the basic themes are analysed and a flowchart for every global theme is presented to guide the reader accordingly. Interview transcripts are included in Appendix D on page 86.

## 4.2 Global Theme One – Purchase Motivators



**Figure 1 - Global Theme One (Created by author, 2023)**

As depicted above in Figure 1, *Purchase Motivators* is the first global theme presented in this analysis. The first organising theme is *Monetary Incentives* containing one basic theme labelled *Rebate*. The second organising theme presented is *Vehicle Characteristics* which is then split into two basic themes: *Comfort & Performance* and *Technology*. The third organising theme is *Running Costs* which is comprised of one basic theme, *Savings*. Lastly, the fourth organising theme is *Environmental* with the basic theme being *Eco-friendly*.

### 4.2.1 Organising Theme One - Monetary Incentives

Within the global theme of *Purchase Motivators*, the first organising theme is *Monetary Incentives*. These incentives are offered by the government to encourage customers to choose EVs over traditional ICEVs. The goal is to narrow the price gap between the two types of vehicles and make EVs a more appealing option for consumers. In the next section, the basic theme will be presented.

#### *4.2.1.1 Basic Theme One – Rebate*

The rebates provided by the government transpired to be the main motivator for the purchase of EVs. This was not just the motivator, but in some cases, the only reason why the participant bought such a vehicle. NC1 states that [line 12] “without the grant scheme I would not have even thought of buying an electric vehicle”, while CM said [line 25] “we had ordered a car for my wife actually, for the simple reason to benefit from the grant.” AM also highlights that [line 20] “it helped obviously, I would never have managed to pay that amount of money”, while AC1 states that [line 15] “the grant were the reasons that I made the decision to go for it which wouldn’t have been the case if there had been no grant”. ESK [line 35] went as far as to say that without the grant they would have kept their previous vehicle, “if the grant wasn’t there, I would have probably kept my car.”

In other instances, the grant motivated and facilitated the participant to purchase the vehicle, [AS line 30] “the grant is a contributor towards the decision...It facilitates people buying an electric vehicle, or a PHEV” and [BB line 16] “if it wasn't for the grant I wouldn't have found it so easy to purchase it”. When asked about the government grant scheme, participants mention that this is required since these vehicles are costly, [PB line 14] “obviously it’s a good amount of money, especially given that the prices are still very expensive”, [WF line 10] “I found it helpful because, my car was already a bit costly and with it I reduced the cost overall”, [NC2 line 16] “so given that the price of the car is relatively more expensive, at least the grant can help cushion a bit and justify you know, going for an electrical.”

The participants perceive the rebates as a way to bridge the price gap between ICEVs and EVs. When asked about the advantages of the grant, MSG commented that [line 17] “essentially

makes them more affordable because they do tend to be higher priced than the normal diesel or petrol vehicles, potentially even hybrids, in my case anyway.” The same sentiment was expressed by CB [line 16] “it does away with the deficit between petrol cars and electric cars” while commenting that the grant [line 18] “makes the car much more affordable.” LZ also said that the advantage of the grant is that [line 16] “it makes the price point a lot more reasonable, especially when compared to a gasoline powered vehicle. So I think that is the primary advantage.”

#### 4.2.2 Organising Theme Two – Vehicle Characteristics

The second organising theme developed is *Vehicle Characteristics*. The participants mention several positive characteristics that they experience while driving their PEVs. As depicted below, participants allude to these characteristics as playing a role in motivating them to purchase an EV. In turn, the two basic themes *Comfort & Performance* and *Technology* emerged.

##### *4.2.2.1 Basic Theme One – Comfort & Performance*

Participants mention how PEVs are more comfortable and perform better than ICEVs when asked about both driving experiences. Participants agree that the performance and comfort of ICEVs is inferior when compared to that of PEVs, [NC2 line 71] “the performance of an electric car is incredible when compared to a combustion engine”, [MB line 54] “it’s a very smooth drive, it’s very comfortable”, as well as [HC line 105] “it’s a breeze, very easy to drive, very comfortable, no stress.”

Other responses mention the fact that these vehicles are “completely silent” [CM line 98] when compared to vehicles that run on a combustion engine. [AC2 line 62] explains the feeling of driving a silent car, “I love the feeling that there’s no sound, it’s silent, I just love it” and [SA line 41] links comfort and performance with the vehicle’s overall efficiency “it gives you much more, for example, than the previous vehicle that I had, functionality, smooth drive, noiseless.”

Another element of performance is that EVs have a high degree of responsiveness and sensitivity when accelerating. This quality was evident throughout the interviews as seen from the following extracts. A participant mentioned speed as being one of the purchase motivators [ASK line 16] “my third one is because I wanted a fast car. And you can’t get much faster than an electric”. Other participants commented on how “the advantages are the response, the acceleration, the performance of the car itself” [HC line 109] and that their sensitivity brings about the fun and enjoyment of driving an EV, “they’re great, I love them, they’re great fun, very sensitive to your foot” [ASK line 66]. KM [line 217] compared the acceleration of ICEVs and EVs, “an ICE engine would have a zero to sixty in nine point five seconds, ten seconds, whilst in an electric you would have that in six point five seconds. Because it’s obviously more responsive.”

#### *4.2.2.2 Basic Theme Two – Technology*

The second basic theme that falls under *Vehicle Characteristics* is *Technology*. Participants have noted that this factor is significant to them and was a contributing factor behind their purchase. The advancements in technology have made EVs more appealing to customers who value technological features in their vehicles. This is evident in the comments made by JM [line 11] “I love trying new technologies and the EV is my kind of toy kind of thing” and by

HC in line 22 “I’m a gadget guy, I like new things and I like to try out these gadgets and stuff so I was enthusiastic about an electric car.”

#### 4.2.3 Organising Theme Three – Running Costs

The third organising theme within this global theme is *Running Costs*. These costs are associated with the day-to-day running of EVs as well as those that are encountered on a yearly basis. It is understood that the interviewed participants weigh these running costs and compare them to owning an ICEV even prior to purchasing an EV.

##### *4.2.3.1 Basic Theme One – Savings*

Within the organising theme of *Running Costs*, *Savings* is the basic theme. The savings are realised on a yearly basis as well as on a day-to-day basis and are seen as such in comparison with the running costs of an ICEV. These savings are based upon the vehicle characteristics and the incentives offered by the government. One predominant factor mentioned by the participants is the fuel savings. In fact, JM describes this as the “biggest advantage” [line 70] and AC2 as an obvious advantage “obviously you save money on fuel” [line 83]. Another participant spoke about saving on fuel and compared it to electricity costs when charging his EV, [SG line 98] “before I used to give petrol, thirty, forty Euro a week. Now I’m charging twice a week and it comes to less than ten Euro. So it makes a difference.”

When asked about the reason behind the purchase of a PEV, ESK cited the savings on fuel [line 12] “having to travel from Mellieha to Gzira every day, I was encountering quite a lot of petrol consumption, I was approximately paying 35, sometimes even 40 Euro a week. And obviously,

you know, times that by four, and keep doing it, you know it's quite a bit of money...I started looking into the possibility of buying a fully electric car, for one reason, obviously to eliminate that weekly, monthly, you know, expense.”

Another saving attributed to the characteristics of a PEV is the fact that they require less maintenance to their electric motor, given that it has fewer moving parts compared to that of an ICEV. This factor is highlighted in detail by LD [line 77] “I never have to change the oil, I never have to service the engine, I never have to change the spark plugs, I never have to change filters, I never have to change any of these things. Once every two years I take it to BMW they charge me fifty Euro, they put some water in my windscreen wipers and I'm out. And that's it, very cheap.”

Several other participants agree that “the maintenance costs of an EV have been very little when compared to maintenance costs of an ICE car” [YSC line 54]. In line 127, participant HC explains as to why this is the case “the actual service which normally the EV is much less because you don't have oil changes and filters and all that, so it will be much less.” In addition, the need for servicing is less frequent as highlighted by SB [line 60] “it requires much less services and upkeep than a normal engine. Whereas a normal engine I have to service it every year, this one, the next service is in two years at the very least. So that's very good.”

Lastly, another saving which was mentioned by the participants is the yearly circular tax, which the government exempts owners of new PEVs from paying. This continues to reduce the overall running costs as seen in the following extracts, [AM line 221] “it was becoming ridiculous, you know. Having a third party insurance, and paying the circular tax was about five hundred, like what?? You know it doesn't make sense.”, [AS line 145] “before I had my electric vehicle,

I used to pay six hundred Euro licence fee.”, [ESK line 98] “The licence, the other one, it was over, nearly 200Euro per year, and this one obviously I’m not paying anything.”

#### 4.2.4 Organising Theme Four – Environmental

The fourth and last organising theme within this global theme is *Environmental*. From a total of 30 participants interviewed, 23 opted to purchase an EV because the environmental aspect is on top of their agenda. The basic theme which developed from this organising theme is *Eco-friendly*.

##### *4.2.4.1 Basic Theme One – Eco-friendly*

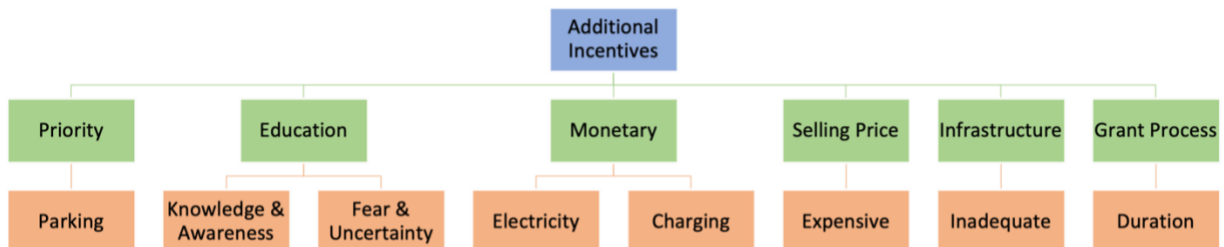
This basic theme encompasses data regarding various environmental factors influencing the purchase of PEVs. One of the topics mentioned is the pollutants that these vehicle do no emit as stated by various participants such as [KM line 131] “the environmental advantages of no emissions”, [NC2 line 53] “the simple fact that you’re not polluting the environment, makes you feel good about it” and [YSC line 53] “also the fact that I’m cutting on emissions, that’s something positive I think from owning an EV car.” Participant BB [line 154] remarked that these vehicles are not only reducing air pollution but also noise pollution, “when you put down the window you don’t hear that noise. Noise is pollution. It’s so smooth, it’s so quiet.”

Participants also comment about the fact that these vehicles produce “no smell” [SS line 53] and others pointed out to both environmental benefits as well as health and safety, [LZ line 52] “the removal essentially, of poisonous gases from where one lives, which in electrical vehicles are obviously removed” and [KM line 148] “the environmental benefits of it, I mean, I have

young children. My least concern, least worry, is that I’m actually reversing my car, or taking my car out of the garage, and obviously I don’t, my children or myself, we’re not exposed to those fumes and toxic gases which come out from an internal combustion engine.”

Furthermore, a certain sense of responsibility and awareness towards a greener environment was observed throughout the interviews as evident from the following extracts, [SA line 60] “I’m contributing to society from a sustainability point of view”, [AC2 line 86] “obviously you’re helping the environment so that’s another thing”, [EC line 14] “I like the environment, I’m an eco-friendly person, my wife is as well, so, even looking at it from an ecological point of view” and [CM line 99] “deep down you still feel you’re sort of greener than before without an engine running.”

### 4.3 Global Theme Two – Additional Incentives



**Figure 2 - Global Theme Two (Created by author, 2023)**

In this section, the second global theme is presented. This theme aims to explore additional incentives that were identified during the interviewing process. These can be both monetary and non-monetary and may be adopted to complement or improve upon the existing incentives. These also include the development of new incentives which may aid in the adoption of EVs.

Six organising themes have been extracted namely; *Priority, Education, Monetary, Selling price, Infrastructure* and *Grant Process*.

#### 4.3.1 Organising Theme One – Priority

The first organising theme that was extracted from the data is *Priority*. Participants mention several factors that should be adopted to entice customers to purchase PEVs in addition to the ones which are already available, with the most prevalent subject being *Parking*.

##### *4.3.1.1 Basic Theme One – Parking*

This theme was developed when asking participants to choose from a list of incentives that would motivate them to purchase an EV. In fact, 19 out of 30 participants chose priority parking. As several participants mention, reserved parking for EV owners is only applicable while the vehicle is on charge, [MB line 49] “in Birkirkara here we have that type of parking, but unfortunately you can only use it whilst charging your car” and [LZ line 35] “other incentives could be preferred car parks for electric vehicles, whether charging or not.” Participants express a great significance on having priority parking, so much so that [AC2 line 37] believes that having such an incentive in place “would make more people buy because it would make it easier” and [BB line 267] chose parking over a monetary incentive, “priority parking is very important to me so basically I would give up the discounted electricity rates and go for the priority parking.”

The importance of such an incentive was also highlighted by other participants given that parking is an issue in Malta, [ASK line 128] “I would definitely want the priority parking,

because parking is like, you know, gold here” and [EC line 156] “priority parking for electric vehicles. I would say, here in Malta, I would say, probably, parking is important.”

Participants made reference to reserved parking spaces for EVs in Valletta, where parking is especially difficult, [ESK line 129] “the priority parking for electric vehicles, I think it’s a very good incentive, you probably have, if for example, you’re going to Valletta, and you know that parking is a problem, if there are specific parking places for electric cars, maybe I’d be more relaxed going there, knowing that I’ll find parking, so, that one” and [SG line 80] “incentivise people who go into Valletta with an electric car and they put some parking or else they give access to those who have an electric car to park in the green bays maybe.”

#### 4.3.2 Organising Theme Two – Education

Participants allude to the fact that a certain level of misconception and a lack of understanding exists within the community when it comes to EVs. Throughout the interviews, participants share accounts of facing criticism about their choice when purchasing an EV. This led them to comment about the importance of educating the public. As a result, *Education* emerged as an organising theme which incorporates two sets of basic themes; *Knowledge & Awareness* and *Fear & Uncertainty*.

##### *4.3.2.1 Basic Theme One – Knowledge & Awareness*

After analysing the participants’ responses, it is evident that they share a common belief whereby a change in people’s mentality towards EVs and the environment in general needs to take place, [SM line 140] “there has to be a shift or a change in mentality” and [KM line 105]

“that again, is an issue of culture, which, I would say, we are still miles away from having the right mindset to embrace this technology and the concept itself.” Participant AC1 [line 49] replied with the following when asked about any other incentives that would promote sales of EVs, “I think first and foremost we need to start by educating the public, raising awareness about the benefits of purchasing these types of cars. These vehicles have only come on the market in recent years, and people need to know about how and from what they stand to benefit.”

On the same lines, the following excerpts represent what participants had to say when asked what might be holding people back from buying an EV, [SA line 69] “probably the education is also an issue. I don’t think there are enough people understanding the repercussions and the consequences of using non-electric vehicles.”, [LZ line 62] “I think it is a lack of education, and misinformation.”, [MSG line 47] “one of the biggest issues there is out there that needs to be overcome is a lack of education that there is in relation to electric vehicles.”

Other participants also highlighted the need for more awareness, including better marketing and carrying out informative campaigns to educate the general public, [KM line 254] “the government has to be more pro-active I would say, possibly, yes, run marketing campaigns, so that anyone considering purchasing a vehicle, should consider purchasing an electric vehicle over an ICE vehicle” and [JG line 100] “I think they need to market it more, they need to do more marketing.” In one of the participant’s words, the lack of information is “a major stumbling block” [HC line 171].

#### *4.3.2.1 Basic Theme Two – Fear & Uncertainty*

The misinformation and lack of awareness that surrounds various aspects of EVs have instilled an element of fear and uncertainty amongst the community. This was revealed throughout the interviews as can be seen in these extracts, [AM line 180] “for people, it’s like, how am I going for a thirty plus thousand car? And that fear of the lifetime of the battery, you know, the lifetime, will the investment be worth it?” and [BB line 228] “people are scared of the challenge of owning, you know an electric vehicle and not getting used to it.”

The most prominent fear mentioned by participants revolves around the vehicles’ battery life and range. Participants talk about range anxiety playing a role in the uptake of EVs, [YSC line 72] “people are not keen on changing to electric vehicles, they fear that they may end up without battery”, the longevity of battery life “people are scared of the shelf life of the battery” [AS line 111], as well as “a lack of knowledge on EV’s and the view that your battery could die and it would be very expensive to replace, which realistically is not a valid argument, especially when you have an eight-year warranty on your car” [LD line 112].

Other participants point out to an existing element of conservatism, [PB line 107] “in Malta probably because we are more conservative when it comes to new technologies”, [CB line 105] “I think for the Maltese population, generally they prefer what they know, rather than taking a risk on what they don't know” while others “are not ready to make the change, not now and not in the near future either” [GB line 112].

### 4.3.3 Organising Theme Three – Monetary

The *Monetary* organising theme will be analysed next. The majority of participants acknowledge that the rebate provided by the government influenced their purchase. Having said this, participants recommend other monetary incentives which should be introduced to increase the adoption of EVs within the market. The two basic themes that surfaced after analysing the data are *Electricity* and *Charging*.

#### *4.3.3.1 Basic Theme One – Electricity*

The first basic theme within this organising theme is *Electricity*. In question number 12 of the interview, the researcher presented a list of incentives that would motivate them in purchasing an EV. From 30 participants, 18 selected ‘discounted electricity rates’ as a purchase motivator, [CB line 117] “discounted electric rates for sure, that would be a major factor”, [EC line 143] “discounted electricity rate because that is an ongoing, a recurring fee for the life of the car”, [WF line 104] “the discounted electricity rates, the electricity rates for sure”, [KM line 338] “discounted electricity rates, yes, that I would say is a very good incentive”. Another participant also suggested for discounted rates to be applicable “both at home and even at charging points” [SM line 162].

It is important to note that discounted electricity rates are already in place. However, in the following extracts, participants explain how this requires the installation of a separate meter against a fee; [HC line 79] “it’s ridiculous almost, it almost makes me angry that when I installed the EV meter at twelve cents nine, which is a good rate, they charge you a monthly fee for having that meter there, it defeats the purpose”, HC continues to say [line 92] “but

mostly the meter fee. Because at this point I'm considering of returning it.", [GB line 139] "the separate meter must be installed next to your existing meter and I didn't want them to use the chaser at home, and I decided to do without."

#### *4.3.3.2 Basic Theme Two – Charging*

A number of participants recommended incentives for home and business charging facilities. [SM line 32] suggested that "the government would consider subsidising or granting or issuing, extending the grant also on the purchase of the charging system of the home box, of the wall box". Other interviewees proposed that the government should incentivise charging facilities for businesses, [ASK line 47] "like, for example at my work, they installed two electric charging stations inside of our private garage. I think that all companies, maybe if it's given by the government maybe as an incentive, like all companies should have it for their employees to have access to have charging stations at work.". NC2 [line 89] believes that companies should be obliged to offer such facilities, "I think it should be mandatory that in certain spaces that there, certain companies, commercial, need to have facilities for charging."

Other participants chose a free rapid charger from the list presented by the researcher, [AC2 line 135] "a free rapid charger, that would be great", [YSC line 85] "a free rapid charger to install at home, because I have a standard charger, but it takes like ten hours for it to be fully charged." One participant suggested that this should be provided by the dealerships, [HC line 69] "the agents who sell the EV's should offer the wall charger as part of, or a very reduced price on the wall charger."

#### 4.3.4 Organising Theme Four – Selling Price

The fourth organising theme that was established relates to the selling price of these vehicles. Participants' responses reveal that EVs tend to be priced higher compared to their ICE counterparts. Therefore, the basic theme that was developed within this organising theme is *Expensive*.

##### *4.3.4.1 Basic Theme Two – Expensive*

During the interview process, participants were asked regarding reasons holding people back from buying EVs. A number of participants attributed the costly price of these vehicles as “one of the main reasons people don't buy them” [LC line 55]. Other participants are in agreement including, [LD line 111] “one of them is obviously cost. They are more expensive, I think we can all agree on that” and [AM line 172] “it's the cost, quite an expensive cost.”

Other participants conversed how the prices are still expensive even when considering the grant being offered, [NC2 line 99] “I think the pricing of electric vehicles, even with the grant, is still on the high side especially when compared to ICE engine.” NC1 comments about the possibility of the grant being larger when asked about other incentives that would enhance adoption of EVs [line 45] “Yes, because when you talk to people, they all tell you that these vehicles are still way too expensive. So instead of the twelve, thirteen thousand that you get now, it would be raised to twenty.” SA also mentioned this factor when asked about the disadvantages of the incentives [line 21] “the incentives themselves I don't see any disadvantages, but I would have liked it to be of a higher value considering the total value of the car I purchased.”

#### 4.3.5 Organising Theme Five – Infrastructure

During the interviewing process, participants frequently brought up the state of the current infrastructure and how it can be improved. It was noticed that this is a weak spot in Malta which needs to be addressed in order to assist current and potential PEV owners. As a result, the researcher identified *Inadequate* as a basic theme.

##### *4.3.5.1 Basic Theme One – Inadequate*

This basic theme incorporates issues surrounding the charging infrastructure in Malta faced by the participants. The additional incentive here relates to the government's effort towards increasing the available chargers on the streets. In fact, question six of the interview asked participants what other incentives they would introduce to motivate individuals to purchase an EV, yielded the following responses; [CB line 45] “one of the things which I think are still holding people back a lot, at the moment is the way the charging works”, [EC line 57] “the infrastructure has to improve...I've been in forums and communities where people do actually need to charge their cars, and a lot of people find that there are chargers that don't work”, [SM line 79] “more commitment from the government in introducing charging points. Charging points are somewhat lacking on our island”. JM [line 38] also recommended that fuel stations should provide a charging station, “there has to be a big push where it comes to charging spots, charging stations. I believe that even pumping stations realistically should have an EV spot.”

The following participants express how outdoor charging presents a challenge for them; [CB line 70] “I mean the biggest one we have is obviously charging, you know, finding an available charger that works”, [ASK line 84] “you can't just rely on charging the vehicle outside because

it's impossible", [AM line 150] "there's a need for far more infrastructure. More charging points", [NC2 line 81] "I think there are too little charging stations in Malta, the infrastructure is not prepared", [YSC line 59] ""the infrastructure in Malta needs to be much much better." Participants emphasised the need for an improved infrastructure, especially for PEV owners who do not have a garage, [LC line 29] "there needs to be more charging stations especially for people who don't have a garage it's very important", [AC1 line 62] "taking into consideration the present infrastructure and knowing that it is not easy for those who do not own a garage."

Participant EC [line 108] describes not having a garage or "somewhere where you can charge on a regular basis" as "a major disadvantage" and [KM line 222] as "a bit of a limitation." Multiple responses from participants only recommend buying a PEV if one owns a garage to avoid relying on the outdoor charging infrastructure, [WF line 81] "people that I know who wanted it and who don't have a garage I think I'd tell them not to get an electric car right away because right now the infrastructure is so limited" and [LD line 61] "only if they have charging facilities. I wouldn't recommend anyone buying an EV and not having a garage."

#### 4.3.6 Organising Theme Six – Grant Process

The last organising theme within the *Additional Incentives* theme relates to the current grant application process. Participants mentioned this aspect throughout the course of the interviews and put forward suggestions as to how this process can be improved. The most prevalent theme was the time taken to process the grant and reimbursement. Hence the basic theme that was established is *Duration*.

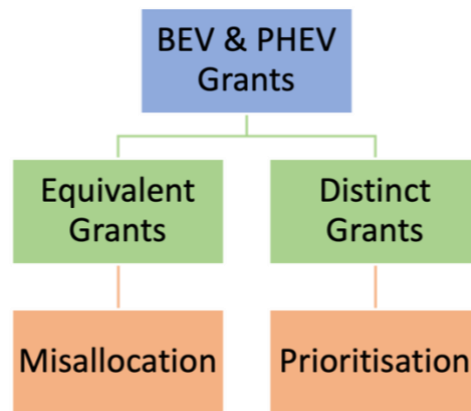
#### *4.3.6.1 Basic Theme One – Duration*

The waiting time for the grant money to be affected was noted to be a disadvantage. AC1 recommends that the grant amount should be deducted straightaway upon the purchase which would encourage people to benefit from the grant [line 38] “It’s a very long wait. If the money had to be deducted from the price, many more people would be interested in buying electric vehicles.” Another participant also shared the same idea, [AC2 line 131] “...if they deduct it (the rebate) immediately that’s better instead of paying the full amount and then receive the money. So that will help a lot.”

Participants explain the reasoning behind why this would motivate people to purchase EVs, [CM line 162] “the grant is given afterwards not beforehand. You know, so people have to fork out the full amount then wait to receive the refund which some people are not happy to do you know.” This aspect was also pointed out by MB [line 103] when asked about the take up of EVs, “even though there’s the grant, initially you have to fork out the full amount.”

Several participants chose to deduct the grant at the time of purchase when asked to identify three motivators they would opt for when purchasing an EV, [YSC line 85] “I would go for the rebate which is deducted at the time of purchase”, [CM line 176] “the rebate deducted at the time of purchase for some people that could be a deal breaker, you know, because if you don’t have the full amount you cannot actually go ahead” and [LD line 126] “a rebate which is deducted at the time of purchase. I don’t think it’s done correctly currently, so I have to pay the full price and get my refund.”

#### 4.4 Global Theme Three – BEV & PHEV Grants



**Figure 3 - Global Theme Three (Created by author, 2023)**

The last global theme relates to the grant available for BEV and PHEV. This subject was introduced in the final question of the interview process with the aim to address the potential impact on BEV sales if alternative incentives were to be introduced. As a result, two organising themes emerged: *Equivalent Grants* and *Distinct Grants*.

##### 4.4.1 Organising Theme One – Equivalent Grants

This organising theme was established after participants had their say regarding the grants and how they were implemented. The same amount for both BEV and PHEV grants has created a debate amongst the EV community. The feedback from the interviews shows that the sentiment is a negative one. Therefore, the basic theme *Misallocation* was established.

#### *4.4.1.1 Basic Theme One – Misallocation*

As recently as last year, the government offered the same amount of monetary incentive for the purchase of BEV and PHEV. The latter has been heavily criticised as undeserving of the same amount as a BEV, [BB line 279] “I don’t think a plug in hybrid should have an electric grant on it”, [SS line 85] “I have Porsche Panamera PHEV, so they have the same grant as the small electric, it’s crazy”, [JM line 130] “but if the intention is to go for eco, eco green, it didn’t make sense at all realistically. Perhaps it should have been a little bit less, eight, four perhaps”. Furthermore, participants questioned why the two were provided with the same amounts, [ASK line 142] “it just doesn’t make sense...I don’t think that they deserve the same monetary amounts given to them because one is fully electric and the other is like a part time electric car”, [LD line 161] “they all benefitted from a discount of twelve thousand Euro on their brand new car which is ridiculous, it’s defeating the purpose” and [CM line 194] “it’s useless giving a grant to someone to buy a PHEV and he uses the combustion engine only.”

Several other participants also mentioned the fact that they believe PHEV owners who benefitted from the grant bought the vehicle for that sole purpose; [NC2 line 145] “I think people were buying PHEV’s simply for the grant because a fifty-kilometre range doesn’t make a difference to anyone and I know people who literally don’t even charge it, but they got eleven thousand Euro grant just the same. I think it was a bit foolish to treat them the same”, [ESK line 145] “most people that bought a plug-in hybrid electric vehicle bought it for the simple reason of the grant and the grant alone.” This participant even admitted that that was the reason why they bought a PHEV, [SS line 81] “Yes, it’s unfair, I mean, that’s why I bought PHEV, because it was obvious, I mean misallocation of the grant.”

#### 4.4.2 Organising Theme Two – Distinct Grants

The second organising theme within this global theme relates to having distinct grants for BEVs and PHEVs. This theme was developed in contrast to the previous organising theme. Moreover, from the interviews, it emerged that a certain level of priority should be employed when it comes to the issuance of the government monetary incentive. This led the researcher to develop the basic theme titled *Prioritisation*.

##### *4.4.2.1 Basic Theme One – Prioritisation*

This basic theme has been developed after participants highlighted the fact that BEVs should be prioritised over PHEVs in relation to the government grant. The element of priority is evident from the replies by participants during the interview process, [AM line 203] “I would definitely give more priority as benefits, monetary benefits, to those choosing fully electric, definitely”, [SG line 187] “I think it’s fair. If you buy an electric vehicle, a fully electric you get the incentive, if you buy a hybrid, so you’re getting both ways, so it doesn’t make sense to get an incentive also”, [LZ line 91] “I think it should be strictly for electric vehicles” and [MSG line 149] “I think that the biggest incentive should be given to those who went all out and are driving a hundred percent electric.”

The element of prioritisation was also mentioned in relation to the environmental aspect, [JM line 125] “realistically there should be much more incentive on the battery because if you’re trying to go green, and you’re trying to decrease the footprint you should incentivise much more the battery operated engine”, [KM line 406] “I mean if you want to curb completely on emissions I mean you go for the full electric you know. I’d incentivise people to go for the full

electric” and [AC2 line 146] “an electric vehicle would have more benefits maybe, they make it like that instead of the money, but I think if we’re going greener it should be a fully electric car that wins.”

The level of priority was also mentioned by participants who believe that PHEVs should still be given a grant, [ESK line 143] “I still think that there should be something, for plug in hybrid, as you’re saying, if for example it’s of a certain range you get a number whilst if it’s under a certain number you get nothing, or you get less”, [AM line 214] “I would still support hybrid though, enough to make it obvious that you’d still go for a cleaner technology rather than the fuel engine ones” and [GB line 147] “in the current situation, where there is no grant at all on PHEV’s I believe that yes, there should be some sort of incentive. Even if it is tied to the car’s range.”

## Chapter 5 – Discussion

### 5.1 Introduction

For this study, the researcher aimed to answer the following research questions:

- Is the government’s monetary incentive the sole reason which drives customers to purchase plug-in electric vehicles?
- What other incentives can play a role in purchasing such vehicles?
- What effects would introducing separate monetary incentives for PHEVs and BEVs have on sales of BEVs?

Following the analysis of data collected from the interviews, the participants helped the researcher identify the following three global themes: *Purchase Motivators*, *Additional Incentives* and *BEV & PHEV Grants*.

In this chapter, a comprehensive analysis of the research findings is presented along with a discussion of the global themes mentioned above. The implications of these findings are also explored in detail with reference to the present literature. Additionally, the limitations of the study are addressed, and suggestions are provided for future research in order to further enhance the understanding of this subject.

## 5.2 Purchase Motivators

The results identified various monetary and non-monetary determinants as motivators which influenced the purchase of these PEVs. The most common incentive mentioned by participants was the government monetary rebate. In fact, as indicated in the findings, this was a major contributor for participants when purchasing their PEVs. This is in line with the literature which underlines the importance of these monetary incentives for the adoption of such vehicles. The objective is to reduce the cost of EVs to encourage more purchases (Hardman and Sperling 2020). Similarly, Hardman et al. (2017) state that lower prices due to financial incentives contribute to higher adoption rates and increased likelihood of purchasing EVs. This factor was also determined by Slowik et al. (2019) who remarked that fiscal incentives are a key factor in the adoption of EVs.

Another motivator which supported customers in making the decision to purchase a PEV is the vehicles' characteristics in comparison with conventional cars. The vehicle characteristics mentioned frequently during the interviews were the vehicle's comfort, their performance and technological advancement. EVs are known for their comfort which is largely down to their smooth and silent operation. The value of these characteristics was revealed by Skippon and Garwood (2011) in their study. This is similar to a study by Bhalla et al. (2018) where they found that comfort and purchase intent are positively correlated.

The vehicle's performance instils a sense of desirability as discussed throughout the interviews. EVs are known for their high-performing electric motor, which is the result of minimal moving parts, allowing these vehicles to accelerate rapidly. Some participants commended the performance of their PEV in comparison with their previous ICEV. This aligns with a study by

Biresselioglu et al. (2018), who recognise the technical performance of EVs as being a significant factor motivating the purchase of such vehicles. This sentiment is also seen in a study by Lin and Wu (2018) as they found that an EV's performance has a significant impact on consumers' purchasing intentions.

This study's findings show that participants exhibited a considerable amount of eagerness towards technology, which was another purchase motivator. This outcome was also discovered and supported in a survey conducted by Egbue and Long (2012), which showed that technology awareness was one of the major players in purchasing an EV. The participants' responses revealed that EVs are viewed as a new technology within the automotive market in Malta. Some owners expressed how their purchase was secondary to their eagerness to try out new technologies. In other terms, they describe themselves as early adopters. This is supported in a study by Rolim et al. (2012) which revealed that early adopters of EVs trusted in its prospect and were excited about the technology. This is in contrast to a study by Pisani (2020) which states that technological change may be uncomfortable for some.

The running costs of EVs were identified as a key motivator when purchasing these vehicles. These savings are attributed to the reduction of re-fuelling costs. Some participants even calculated their anticipated fuel savings prior to their purchase. This correlates with a study by Graham-Rowe et al. (2012) which indicated that the main purpose behind purchasing EVs was the low refuelling costs. EVs also have lower maintenance-related expenses due to their electric motors having fewer moving parts compared to a combustion engine. Participants remarked upon these savings when asked about their purchase motivation. This is in line with a study by Farrugia (2018), where it was revealed that such lower maintenance reduces running costs which helps increase demand for such vehicles.

The participants who took part in this study also mentioned the environmental factor as one of the reasons for purchasing an EV. The impact of an EV on the environment played a big role during the decision-making process. This concurs with a study conducted by Bienias et al. (2020) which found that customers who believe that EVs have a positive impact on the environment, are more willing to purchase such vehicles. Some of the respondents classified this aspect as having a higher importance than the monetary grant, expressing a high level of environmental concern. This characteristic correlates with research by Vrösch (2018), which found that participants prioritise eco-friendliness over monetary gains when purchasing EVs. This correlates with a study by Moons and De Pelsmacker (2015) where the same level of environmental concern is positively correlated with the strong intention to purchase an EV. The participants in the study did not relate the environmental aspect only to air pollution, but also to the fact that these vehicles help in reducing noise pollution by running on a silent electric motor. This aspect was also noted in a study by MN and Rani (2021) which exhibited low noise as being an important factor in choosing to purchase EVs.

### 5.3 Additional Incentives

The second global theme identified the possible incentives that could be introduced to motivate individuals to purchase an EV. The aim of such incentives is to help reach those consumers who have been reluctant to take the leap and switch to these vehicles. The responses have revealed that these incentives can be both monetary and non-monetary. Participants also agreed that supplementary services may allow for further acceptance of such vehicles. They also discuss how the current incentives could be enhanced to attract more individuals to purchase EVs. The interviews have revealed the following organising themes; *Priority, Education, Monetary, Selling Price, Infrastructure and Grant Process*.

In their responses, participants recommended the introduction of priority parking for EVs. They agreed that although this is already in place, they can only make use of them while charging their vehicle. Therefore, participants suggested that reserved parking spaces should be allocated whether one is charging or not. The importance of such an incentive was emphasised by 17 out of 30 participants who chose priority parking as a motivating factor which would influence them to purchase an EV. This finding aligns with that of a study carried out by Zaunbrecher et al. (2014), whose participants mention this characteristic as a determining factor. This is in line with a study by Bienias et al. (2020), in which designated parking was mentioned by participants as a motivating factor. Another study by Langbroek et al. (2016) in Stockholm found that customers are more willing to pay for an EV when they are provided with priority parking.

The participants commented on the fact that lack of knowledge and a sense of uncertainty is holding back the adoption of EVs. This is in line with a study by Noel et al. (2020) which cites the lack of knowledge and experience with these vehicles as barriers to the adoption of EVs. This transpired when they were asked to comment about the slower uptake of such vehicles. Participants discuss the need for a shift in mentality by the public and their perceptions about EVs. They put forward suggestions to overcome this by introducing educational and marketing campaigns aimed at promoting EVs. This coincides with the study by Bansal et al. (2021) which found that higher knowledge about EVs increases the likelihood to purchase such vehicles. Respondents also believe that a level of uncertainty surrounding EVs and their batteries exists amongst the community and should be addressed. This correlates with findings from research by Rivero et al. (2023) as they suggest that communicating the benefits of EVs and how to overcome their limitations could be the best opportunity to increase the adoption of these vehicles.

Those interviewed also mentioned the importance of having discounted electricity rates for EV owners. The current discounted rates are tied with having a separate metre installed at home along with a fee. Participants commented about the inconvenience this causes, so much so that one considered returning the meter. When asked about additional purchase motivators, 18 out of 30 participants chose a discounted electricity rate should this be made available. The importance of this factor was also discovered in a study by Borg (2020) where 81.6% of the participants stated that charging costs are an influential factor when buying an EV. Another possible incentive that was suggested is having discounted or subsidised home charging stations. This corresponds to a study by Münzel et al. (2019) which emphasises the advantage of these subsidies since they aim to lower the costs and enable owners to utilize the benefits of these vehicles.

During the interviewing process, several participants mentioned that the cost of EVs can prove to be an obstacle. Specifically, 13 participants cited that EVs are costly when compared to ICEVs and that this is a major constraint for the adoption of EVs. This is in line with a study by Egbue and Long (2012) which identified this factor as a primary barrier to the uptake of these vehicles. The costly price of EVs is facilitated thanks to monetary incentives offered by policymakers. The affordability of EVs will be realised once these are at parity with ICEVs, this is an issue related to the supply side of these vehicles. Analysis within the automotive industry indicates that between the years 2025-2027, cost parity could be reached as a result of declining battery costs, coupled with the development of enhanced platforms and as a result, decreases the overall cost of EVs (McKibbin, 2021).

The most spoken-about concern hindering the adoption of EVs is the inadequate charging infrastructure in Malta. This is in line with a study by Pisani (2020) who mentions that

implementing a robust charging infrastructure is crucial in the adoption of EVs. This factor has been commented on by 28 out of the 30 participants, making it a very concerning topic. Participants mentioned that the present infrastructure lacks both the quality required to charge with ease as well as limited availability of such charging stations. As a result of the inadequate infrastructure, participants agree that owning a garage is a must. This relates to research by Cuschieri (2020) which states that having an ample number of charging stations is crucial to enhance people's perceived control over EVs and ultimately leads to an increased intention to buy them, especially for individuals who lack garages or parking spaces. A robust network of public charging stations not only provides drivers with peace of mind and convenience, but also helps to alleviate concerns around range anxiety. This is supported in a study by Neubauer and Wood (2014) who found that an adequate infrastructure reduces range anxiety.

The final matter put forward by interviewees relates to the process of benefiting from the monetary grant when purchasing an EV. It is argued that the wait for the grant settlement is lengthy and discourages those who are looking into buying an EV. When asked about additional incentives that would motivate their purchase, 19 participants chose to benefit from a rebate scheme which allows for instant subsidy at the time of purchase. This is also known as a point-of-sale incentive. This correlates to a study by DeShazo (2016) where the author advises point-of-sale incentives which aid the purchase decision. Similarly, this form of rebate was found to be the most effective by Hardman et al. (2017). Furthermore, participants discuss that perhaps the biggest disadvantage is the fact that they are required to fork out the total amount, albeit them being eligible to benefit from the grant. They continue to say that some individuals cannot afford such an expense. This correlates to an observation highlighted by DeShazo (2016) where it is believed that such incentives allow buyers to reduce the amount they finance to purchase their EVs.

#### 5.4 BEV & PHEV Grants

The final global theme that was identified during the interview process relates to the rebate amounts when purchasing a BEV or PHEV. This was a result of the responses gathered in the last question of the interview. The researcher explored the effects should different grant amounts be introduced for BEVs and PHEVs, as opposed to the current scenario. As Fenech (2022) explains, the Maltese government offers one grant for both types of PEVs, that of €12,000 (€11,000 + €1,000 for scrapping an ICEV). In May 2022, the local government announced that the €11,000 grant for PHEVs will be discontinued. However, those who order their vehicle before the end of the month would still benefit from the grant, even if the delivery is scheduled for 2023 (Xuereb, 2022). This is a result of efforts from policymakers to promote a greener method of transport, with BEVs being the best option. In fact, Martin (2022) quoted the Minister for Energy in a local newspaper who commented on discontinuing grants for PHEVs, “Our focus should be on battery electric vehicles - those that don’t pollute. Here the difference is between what is known as a low-emission vehicle and zero-emission vehicles.”

In their responses, participants express a sense of misallocation since both BEVs and PHEVs are provided with an identical monetary grant. This is seen as unjust since PHEVs have an integrated combustion engine which is utilised once the battery is consumed. Research also shows that when PHEVs utilise their engine, more CO<sub>2</sub> emissions are produced when compared to an ICEV (Abnett and Carey, 2021). One participant questioned if PHEVs should be awarded the monetary grant since the motor kicks in once the electrical range runs out. An Irish Transport and Environment group labelled PHEVs as ‘fake electric cars’ and that automakers are not ensuring that users charge their vehicles frequently (Briscoe, 2021). Others are

convinced that those who purchased a PHEV, did so to simply benefit from the grant. This correlates with data gathered by 'The Miles Consultancy' in Cheshire, where it was revealed that the intention to purchase such vehicles was only to benefit from the grant (Miller, 2018).

It was established that a balance could be struck with the introduction of distinct grants with BEVs being given priority over PHEVs. Most participants agree that those who are taking the biggest leap should have the most benefits. Developing a pro-rata rate was also discussed during the final question of the interview. This would effectively tie the electric range of the vehicle with the grant. It would also allow PHEVs to have a grant, however, in accordance with the range its battery provides. The literature supports this notion, Hardman et al. (2017) mention that Norway, France, California and the United Kingdom have policies in place that incentivised BEVs over PHEVs. Hardman et al. (2017) add that governments should modify their incentive programs to provide greater financial incentives for BEVs in comparison with PHEVs with limited driving ranges and that purchase incentives for PHEVs should vary based on their range. This is in line with the study by DeShazo (2016) where it was suggested that incentives should prioritise BEVs in contrast with PHEVs. Participants do agree that a degree of financial aid should still be provided to those opting to buy PHEVs. However, they agree that this should not be the same as BEVs.

Lastly, the research believes that with a significant reduction of the PHEV grant and the prioritisation of BEVs, will help increase the uptake of BEVs. This is backed up in an article by Abnett and Carey (2021) which states that in the Netherlands, where PHEVs still received subsidies, these were reduced in 2016 and as a result, the country saw a significant shift towards BEVs, with eight times more BEVs sold than PHEVs by 2020. This demonstrates how government policies on vehicle technology can greatly influence customer choices.

## Chapter 6 – Conclusion and Recommendations

### 6.1 Conclusion

The primary objective of the researcher was to conduct a thorough investigation to determine if the customers' decision to purchase a PEV was solely based on the monetary incentive offered by the Maltese government. The researcher aimed to determine the extent to which the monetary factor played a role in the participants' buying behaviour. Based on the interview process, it is clear that there are a variety of motivators that influence the purchase of PEVs. These are largely linked to the individual's lifestyle and priorities. Although the main motivator was revealed to be the government rebate, other significant motivators were discovered. These included environmental concerns, vehicle characteristics and the savings on running costs in comparison to ICEV.

Another objective of this study was to determine further incentives, both monetary and non-monetary, that would increase the adoption of EVs. Some of which included the need to improve upon already existing incentives, in order to entice more people to purchase such vehicles. These incentives included priority benefits such as reserved parking spaces. These could be located in the capital city or other town centres and close to entrances leading to commercial businesses (e.g. supermarkets, malls and business centres). Another important factor that was mentioned is the need to run campaigns, both for marketing purposes as well as to raise awareness and educate people about EVs.

Additionally, participants spoke about the possibility of benefiting from discounted electricity rates and home charging facilities. The researcher agrees that owners of PEVs should benefit

from a discounted electricity rate without the need to install a separate meter. Home charging stations could also be incentivised since these allow for a faster charging capacity which increases convenience and lowers the demand for public charge stations. Although the local government is supporting the adoption of EVs by allocating grants, participants comment about the fact that these vehicles remain expensive when compared to their ICEV counterparts. This issue will be resolved once cost parity with ICEVs is achieved. This can be accomplished through the efforts of automotive manufactures by enhancing battery technology and reducing their production costs. This in turn, will make EVs more competitive and appealing.

The factor that was most talked about was the lack of an adequate charging infrastructure. It is evident that policymakers need to invest in more funding to increase the number of public charging stations. Moreover, policies need to be enacted to incorporate charging infrastructure as a requirement in the construction of new buildings for both private households and businesses. Lastly, participants criticise the duration to receive the grant which is a major barrier since people are required to fork out the full purchase price. It is therefore suggested that the monetary incentive should change from a post-purchase grant to a point-of-sale grant, where the grant amount is deducted from the selling price straightaway.

When it comes to differences between BEVs and PHEVs, it is important to understand the unique benefits and drawbacks of each. While BEVs offer zero-emissions and may be more attractive to environmentally conscious consumers, PHEVs offer the convenience of a backup combustion engine which may lessen range anxiety. Participants' responses established that offering identical grants for BEVs and PHEVs is unjust and is perceived as misallocation of funds. This was especially highlighted by BEV owners who commented that PHEVs are not an environmentally conscious option, since they have a combustion engine.

Finally, it was established that the government should prioritise BEV owners by allocating a higher grant amount as this would highlight the significance of going towards zero-emission mobility. Overall, the researcher believes that auto manufacturers play a crucial role since they are fundamental to continually improve BEV technology. Moreover, policymakers should look into adopting the additional incentives recommended throughout this study, especially those related to the charging infrastructure, which plays a crucial role in EV uptake. Moreover, BEV prioritisation should not only focus on the grant amount but also look into introducing other incentives to facilitate the use of these vehicles and help prospective customers realise that opting for a BEV is the ideal choice.

### *6.2 Recommendation for Future Studies*

Future research should consider focusing on understanding the societal and cultural factors that act as barriers for the adoption of BEVs specifically. It may also include an investigation into the public's perception on the health and environmental benefits associated with BEVs. Another study could focus on investigating the perceptions and knowledge surrounding EVs. It would be valuable to conduct a study on the second-hand market of EVs, as many studies have only focused on the new car market. This could possibly shed light on the potential effects of EV uptake, especially for those who are unable to purchase a new vehicle. Finally, it would be interesting to investigate the impact of introducing a point-of-sale grant, by recruiting participants who had previously shown an interest in buying an EV but failed to do so.

## References

Abnett, K. and Carey, N. (2021), *Insight: Once 'green' plug-in hybrid cars suddenly look like dinosaurs in Europe*, Reuters. Available at: <https://www.reuters.com/business/retail-consumer/once-green-plug-in-hybrid-cars-suddenly-look-like-dinosaurs-europe-2021-04-12/> (Accessed: 11 August 2023).

Adeoye-Olatunde, O.A. and Olenik, N.L. (2021), Research and scholarly methods: Semi-structured interviews. *Journal of the american college of clinical pharmacy*, 4(10), pp.1358-1367.

Alshenqeeti, H. (2014), "Interviewing as a data collection method: A critical review," *English Linguistics Research*, 3(1). Available at: <https://doi.org/10.5430/elr.v3n1p39>.

Attride-Stirling, J. (2001), Thematic networks: an analytic tool for qualitative research. *Qualitative research*, 1(3), pp.385-405.

Bansal, P., Kumar, R.R., Raj, A., Dubey, S. and Graham, D.J. (2021), Willingness to pay and attitudinal preferences of Indian consumers for electric vehicles. *Energy Economics*, 100, p.105340.

Barrett, D. and Twycross, A. (2018), Data collection in qualitative research. *Evidence-based nursing*, 21(3), pp.63-64.

Bell, J. and Waters, S. (2018), *Ebook: doing your research project: a guide for first-time researchers*. McGraw-hill education (UK).

Bhalla, P., Ali, I.S. and Nazneen, A. (2018), A study of consumer perception and purchase intention of electric vehicles. *European Journal of Scientific Research*, 149(4), pp.362-368.

Bienias, K., Kowalska-Pyzalska, A. and Ramsey, D. (2020), What do people think about electric vehicles? An initial study of the opinions of car purchasers in Poland. *Energy Reports*, 6, pp.267-273.

Biresselioglu, M.E., Kaplan, M.D. and Yilmaz, B.K. (2018), Electric mobility in Europe: A comprehensive review of motivators and barriers in decision making processes. *Transportation Research Part A: Policy and Practice*, 109, pp.1-13.

Borg, L. (2022), *The impact of electric vehicles on the Maltese insurance market and the general public* (Master's thesis, University of Malta).

Brander, M. and Davis, G. (2012), Greenhouse gases, CO<sub>2</sub>, CO<sub>2</sub>e, and carbon: What do all these terms mean. *Econometrica, White Papers*.

Braun, V. and Clarke, V. (2006), "Using thematic analysis in psychology," *Qualitative research in psychology*, 3(2), pp. 77–101.

Briscoe, N. (2021), *Grant incentives removed for plug-in hybrids*, *The Irish Times*. Available at: <https://www.irishtimes.com/business/transport-and-tourism/grant-incentives-removed-for-plug-in-hybrids-1.4704526> (Accessed: 11 August 2023).

Brown, J.D. (2005), Research methods for applied linguistics. *The handbook of applied linguistics*, pp.476-500.

Camilleri, A. (2020), Investigating marketing content used by automobile companies in order to persuade customers to purchase an electric vehicle (Master's thesis, University of Malta).

Cherchi E. (2017), A stated choice experiment to measure the effect of informational and normative conformity in the preference for electric vehicles. *Transportation Research Part A: Policy and Practice*, 100, pp.88-104.

Cirillo, C., Liu, Y. and Maness, M. (2017), A time-dependent stated preference approach to measuring vehicle type preferences and market elasticity of conventional and green vehicles. *Transportation Research Part A: Policy and Practice*, 100, pp.294-310.

Connelly, L.M. (2008), "Pilot Studies", *Medsurg Nursing*, vol. 17, no. 6, pp. 411-2.

Cuschieri, D. (2020), *What affects buyers' intention when purchasing a new electric vehicle in the Maltese islands?* (Bachelor's thesis, University of Malta).

Degirmenci, K. and Breitner, M.H. (2017), Consumer purchase intentions for electric vehicles: Is green more important than price and range?. *Transportation Research Part D: Transport and Environment*, 51, pp.250-260.

DeShazo, J.R. (2016), Improving incentives for clean vehicle purchases in the United States: challenges and opportunities. *Review of Environmental Economics and Policy*.

Dong, Y. (2022), Analysis of consumers' willingness to accept of government subsidies for electric vehicles. *Transportation Research Procedia*, 61, pp.90-97.

Egbue, O. and Long, S. (2012), Barriers to widespread adoption of electric vehicles: An analysis of consumer attitudes and perceptions. *Energy policy*, 48, pp.717-729.

Ellul, D. (2022), *Drive to reduce car use by 2030, get people to exercise*, *Times of Malta*. Available at: <https://timesofmalta.com/articles/view/drive-reduce-car-use-2030-get-people-exercise.1000516> (Accessed: 05 September 2023).

European Commission (2020), *Putting European transport on track for the future - mobility and transport*. Available at: <https://transport.ec.europa.eu/system/files/2021-04/2021-mobility-strategy-and-action-plan.pdf> (Accessed: 14 August 2023).

European Commission (2007), *Results of the review of the Community Strategy to reduce CO2 emissions from passenger cars and light-commercial vehicles*, *EUR-Lex*. Available at: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52007DC0019> (Accessed: 18 July 2023).

European Commission (2014), *European Council (23 and 24 October 2014) Conclusions on 2030 Climate and Energy Policy Framework*. Available at: [https://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/145397.pdf](https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/145397.pdf) (Accessed: 18 July 2023)

Farrugia, R. (2018), *Assessing the demand for electric vehicles in Malta* (Master's thesis, University of Malta).

Fenech, C. (2022), *PEV charging infrastructure in public spaces: the case of Malta* (Master's thesis, University of Malta).

Fetting, C. (2020), The European green deal. *ESDN report*, 53.

Fluchs, S. and Kasperk, G. (2017), *The influence of government incentives on electric vehicle adoption: Cross-national comparison* (No. 57-2017). MAGKS Joint Discussion Paper Series in Economics.

Graham-Rowe, E., Gardner, B., Abraham, C., Skippon, S., Dittmar, H., Hutchins, R. and Stannard, J. (2012), Mainstream consumers driving plug-in battery-electric and plug-in hybrid electric cars: A qualitative analysis of responses and evaluations. *Transportation Research Part A: Policy and Practice*, 46(1), pp.140-153.

Hardman, S. and Sperling, D. (2020), The need for sustainable and persistent incentives for electric vehicles. In *Forum, The Oxford Institute for Energy Studies* (Vol. 25, p. 27).

Hardman, S., Chandan, A., Tal, G. and Turrentine, T. (2017), The effectiveness of financial purchase incentives for battery electric vehicles—A review of the evidence. *Renewable and Sustainable Energy Reviews*, 80, pp.1100-1111

He, F., Wu, D., Yin, Y., & Guan, Y. (2013), Optimal deployment of public charging stations for plug-in hybrid electric vehicles. *Transportation Research. Part B: Methodological*, 47, 87-101. 10.1016/j.trb.2012.09.007

Holloway, I., & Todres, L. (2003), The status of method: flexibility, consistency and coherence. *Qualitative research*, 3(3), 345-357.

Irani, E. (2018), “The use of videoconferencing for qualitative interviewing: Opportunities, challenges, and considerations,” *Clinical Nursing Research*, 28(1), pp. 3–8. Available at: <https://doi.org/10.1177/1054773818803170>.

Jabbari, P. (2018), *The role of market scale in electric vehicle adoption: consumer and infrastructure perspectives* (Doctoral dissertation).

Jensen A. F., Cherchi E. and Mabit S. L. (2013), On the stability of preferences and attitudes before and after experiencing an electric vehicle. *Transportation Research Part D*, 25, pp. 24-32, doi: 10.1016/j.trd.2013.07.006.

Johnson, R.B. and Onwuegbuzie, A.J. (2004), Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), pp.14-26.

Langbroek, J.H., Franklin, J.P. and Susilo, Y.O. (2016), The effect of policy incentives on electric vehicle adoption. *Energy Policy*, 94, pp.94-103.

Lavee, D. and Parsha, A. (2021), Cost-benefit analyses of policy tools to encourage the use of Plug-in electric vehicles. *Transportation Research Interdisciplinary Perspectives*, 11, p.100404.

Lin, B. and Wu, W. (2018), Why people want to buy electric vehicle: An empirical study in first-tier cities of China. *Energy Policy*, 112, pp.233-241.

Lutsey, N., Grant, M., Wappelhorst, S. and Zhou, H. (2018), Power play: How governments are spurring the electric vehicle industry. Washington, DC, USA: ICCT.

Marshall, B., Cardon, P., Poddar, A. and Fontenot, R. (2013), Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of computer information systems*, 54(1), pp.11-22.

Martin, I. (2022), *Green transport schemes should focus on fully electric vehicles - Miriam Dalli, Times of Malta*. Available at: <https://timesofmalta.com/articles/view/green-transport-schemes-should-focus-on-fully-electric.955573> (Accessed: 01 September 2023).

McGrath, C., Palmgren, P.J. and Liljedahl, M. (2019), Twelve tips for conducting qualitative research interviews. *Medical teacher*, 41(9), pp.1002-1006.

McKibbin, D. (2021), A comparison of electric vehicle (EV) markets and policies to promote adoption in Europe.

Miller, J. (2018), *Government-subsidised plug-in cars may never have been charged*, *BBC News*. Available at: <https://www.bbc.com/news/business-46152853> (Accessed: 11 August 2023).

MN, G. and Rani, M. (2021), Purchase intention of electric vehicles: An empirical study in Bangalore. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(1), pp.4826-4839.

Moon, H., Park, S.Y., Jeong, C. and Lee, J. (2018), Forecasting electricity demand of electric vehicles by analyzing consumers' charging patterns. *Transportation Research Part D: Transport and Environment*, 62, pp.64-79.

Moons, I. and De Pelsmacker, P. (2015), An extended decomposed theory of planned behaviour to predict the usage intention of the electric car: A multi-group comparison. *Sustainability*, 7(5), pp.6212-6245.

Morton, C., Lovelace, R. and Anable, J. (2017), Exploring the effect of local transport policies on the adoption of low emission vehicles: Evidence from the London Congestion Charge and Hybrid Electric Vehicles. *Transport Policy*, 60, pp.34-46.

Münzel, C., Plötz, P., Sprei, F. and Gnann, T. (2019), How large is the effect of financial incentives on electric vehicle sales? A global review and European analysis. *Energy Economics*, 84, p.104493.



Poland, B.D. (2003), Transcription quality. *Inside interviewing: New lenses, new concerns*, pp.267-287.

Pratt J. M., Yeziarski E. J. (2018), A novel qualitative method to improve access, elicitation, and sample diversification for enhanced transferability applied to studying chemistry outreach. *Chemistry Education Research and Practice*, 19, 410–430. doi:10.1039/c7rp00200a

Riverso, R., Altamura, C. and La Barbera, F. (2023), Consumer Intention to Buy Electric Cars: Integrating Uncertainty in the Theory of Planned Behavior. *Sustainability*, 15(11), p.8548.

Rolim, C.C., Gonçalves, G.N., Farias, T.L. and Rodrigues, Ó. (2012), Impacts of electric vehicle adoption on driver behavior and environmental performance. *Procedia-Social and Behavioral Sciences*, 54, pp.706-715.

Rommel, K. and Sagebiel, J. (2021), Are consumer preferences for attributes of alternative vehicles sufficiently accounted for in current policies?. *Transportation Research Interdisciplinary Perspectives*, 10, p.100385.

Rubin, H.J. and Rubin, I.S. (2011), *Qualitative interviewing: The art of hearing data*. sage.

Sa, B. (2022), *Driving Electric with Equity: A Survey of Current Electric Vehicle Infrastructure, Policies and Planning* (Doctoral dissertation, University of Washington).

Saunders, M.N.K., Lewis, P. and Thornhill, A. (2019), "Formulating the research design," in *Research Methods for Business Students*. 8th edn. Harlow: Pearson Education Limited, pp. 179–180.

Sechel, I.C. and Mariasiu, F. (2021), Efficiency of governmental policy and programs to stimulate the use of low-emission and electric vehicles: The case of Romania. *Sustainability*, 14(1), p.45.

Skippon, S. and Garwood, M. (2011), Responses to battery electric vehicles: UK consumer attitudes and attributions of symbolic meaning following direct experience to reduce psychological distance. *Transportation Research Part D: Transport and Environment*, 16(7), pp.525-531.

Slowik, P. and Lutsey, N. (2017), Expanding the electric vehicle market in US cities. ICCT.

Slowik, P., Hall, D., Lutsey, N., Nicholas, M. and Wappelhorst, S. (2019), Funding the transition to all zero-emission vehicles. *ICCT White Paper*. Available online: [https://theicct.org/wp-content/uploads/2021/06/Funding\\_transition\\_ZEV\\_20191014.pdf](https://theicct.org/wp-content/uploads/2021/06/Funding_transition_ZEV_20191014.pdf) (accessed on 30 June 2023).

Thøgersen, J. and Ebsen, J.V. (2019). Perceptual and motivational reasons for the low adoption of electric cars in Denmark. *Transportation research part F: traffic psychology and behaviour*, 65, pp.89-106.

Von Brockdorff, P. and Tanti, G. (2017), Carbon emissions of plug-in electric vehicles in Malta: A policy review. *Case Studies on Transport Policy*, 5(3), pp.509-517.

Vrösch, B.J.A. (2018), *Consumer' acceptance of electric vehicles in Lisbon* (Master's thesis).

Xuereb, M. (2022), *Transport malta hits the brakes on grants for plug-in hybrid Cars*, *Times of Malta*. Available at: <https://timesofmalta.com/articles/view/transport-malta-hits-the-brakes-on-grants-for-plug-in-hybrid-cars.953527> (Accessed: 01 September 2023).

Zaubrecher B. S., Beul-Leusmann S., and Ziefle M. (2014), Laypeople's Perspectives on Electromobility: A Focus Group Study. In: R. Giaffreda et al. (eds.): *IoT360, Part I*, LNICST 151, pp. 144–149.

## **Appendix A**

### Participant Information Letter

12th February 2023

**New plug-in electric vehicle sales: Investigating whether the government's monetary incentive is the sole driver of sales in Malta.**

Dear Participant,

I am currently carrying out a research study investigating the sales of new plug-in electric vehicles (PEVs) and the effect of the government's incentive on clients' decision making when purchasing a PEV in Malta. The aim of this study is to identify whether the monetary incentive is the sole motivator which drives customers to purchase PEVs.

A thirteen-item semi-structured in-depth interview will be devised by the researcher to guide respondents to answer questions in an open-ended manner. The research will be conducted across 30 participants who will be interviewed via video conferencing for a duration of approximately 20 minutes. Five of these interviews will be used for piloting purposes. This will determine whether any questions should be modified. Should such changes be required, the remaining 25 interviews will be carried out with the updated questions. The interview will be audio recorded to analyse and extract data. Participants are under no obligation to participate and can withdraw from the study at any point in time, without justification. No personal details will be obtained and/or divulged while assuring that all data is treated anonymously.

The research results will determine whether any other direct or in-direct factors, other than the government's monetary incentive, drive customers to purchase PEVs.

I would like to invite you to partake in this study if you satisfy the below criteria:

1. An owner of a plug-in hybrid electric vehicle (PHEV) and/or a battery electric vehicle (BEV) newly purchased from Malta and
2. An owner of a purchased PHEV and/or BEV between 2014 to present and
3. A licensed driver

Should you kindly accept this invitation you may contact me or my research supervisor on the below details. Please do not hesitate to get in touch should you have any questions or require further details.

I thank you in advance for your kind help and co-operation.

Your sincerely,

Owen Axiaq

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## **Appendix B**

Consent Form

## Participant's Consent Form

### **New plug-in electric vehicle sales: Investigating whether the government's monetary incentive is the sole driver of sales in Malta.**

I, the undersigned, give my consent to take part in the study conducted by Owen Axiaq. This consent form specifies the terms of my participation in this research study.

1. I have been given written and/or verbal information about the purpose of the study; I have had the opportunity to ask questions and any questions that I had were answered fully and to my satisfaction.
2. I also understand that I am free to accept to participate, or to refuse or stop participation at any time without giving any reason and without any penalty. Should I choose to participate, I may choose to decline to answer any questions asked. In the event that I choose to withdraw from the study, any data collected from me will be erased as long as this is technically possible (for example, before it is anonymised or published), unless erasure of data would render impossible or seriously impair achievement of the research objectives, in which case it shall be retained in an anonymised form.
3. I understand that I have been invited to participate in an interview in which the researcher will question participants to investigate whether the monetary incentive for buying a plug-in electric vehicle is the only driver of sales for these types of vehicles. I am aware that the interview will take approximately 20 minutes and will be performed once. I understand that the interview is to be conducted in a place and at a time that is convenient for me.
4. I understand that my participation does not entail any known or anticipated risks
5. I understand that there are no direct benefits to me from participating in this study
6. I also understand that this research may benefit others by: Helping them understand the prime motivators of customers when purchasing an electric vehicle in Malta.
7. I understand that, under the General Data Protection Regulation (GDPR) and national legislation, I have the right to access, rectify, and where applicable, ask for the data concerning me to be erased.
8. I understand that all data collected will be erased on completion of the study and following publication of results.
9. I have been provided with a copy of the information letter and understand that I will also be given a copy of this consent form.
10. I am aware that, by marking the first-tick box below, I am giving my consent for this interview to be audio recorded and converted to text as it has been recorded (transcribed).

#### **MARK ONLY IF AND AS APPLICABLE**

- I agree to this interview being audio recorded.
- I do not agree to this interview being audio recorded.

11. I am aware that extracts from my interview may be reproduced in these outputs, either in anonymous form, or using a pseudonym [a made-up name or code – e.g. respondent A].

#### **MARK ONLY IF AND AS APPLICABLE**

- I would like to review extracts of my interview transcript that the researcher would like to reproduce in research outputs before these are published.

I would not like to review my interview transcript extracts that the researcher would like to reproduce in research outputs before these are published.

12. I am aware that the interview will be held online; the researcher will use Zoom and will activate the *Require Encryption for 3rd party endpoints SIP/H-323* function. The researcher will only audio record the session.

I have read and understood the above statements and agree to participate in this study.

Name of participant: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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## **Appendix C**

### **Interview Questions**

## **Background Information**

|                  |  |
|------------------|--|
| Vehicle Type     | <input type="checkbox"/> Battery Electric Vehicle<br><input type="checkbox"/> Plug-in Hybrid Electric Vehicle<br><input type="checkbox"/> Both |
| Year of purchase |  |
| Total of grant   | €  |

## **Questions**

1. What were your main reasons for purchasing a Plug-in Electric Vehicle (PEV)?
2. What are the main **advantages** of the current government grant scheme?
3. What are the main **disadvantages** of the current government grant scheme?
4. What are the **positive** qualities of the grant application process.
5. What are the **negative** qualities of the grant application process and how can it be improved?
6. What other incentive would you introduce to motivate individuals to purchase a PEV?
7. Would you recommend others to purchase a PEV? Please state your reasons.
8. What challenges did you experience since owning a PEV?

9. What are the **advantages** of owning a PEV? You may compare this to owning an internal combustion engine (ICE) vehicle.
10. What are the **disadvantages** of owning a PEV? You may compare this to owning an internal combustion engine (ICE) vehicle.
11. In your opinion, why do you think the take up of electric vehicles has been slow when compared to ICE vehicles?
12. Imagine the below are incentives that are available when purchasing a PEV. Which, if any, would motivate your purchase? Give a reason for your answer/s (maximum of 3 responses).
- A rebate which is deducted at the time of purchase
  - A free **rapid** charger to install at home rather than the **standard** charger
  - Discounted electricity rates
  - No yearly circular tax
  - Access to driving in the bus lane
  - No registration tax upon purchase
  - Priority parking for electric vehicles
13. What is your opinion about the introduction of variable monetary amounts when purchasing a BEV versus a PHEV?

## **Appendix D**

### Interview Transcripts

Participant SS

- 1 R: What type of vehicle do you own? Is it a battery electric vehicle? A plug in hybrid or both?
- 2 P: Both, both
- 3 R: So, were they purchased in the same year?
- 4 P: Errrrm no, electric is 19, plug in now, 2023
- 5 R: 2022. And the grants, were they the same? 11,000?
- 6 P: No, 11,000 is the last one, I didn't receive it yet, but it should be, and the electric, was, I
- 7 think, 6,000 if I remember correctly. I shall continue or are you typing? Hello? Hello?
- 8 R: Hello?
- 9 P: Yes, you disappeared somewhere
- 10 R: I think, for some reason, my wife's airpods are connecting to my IMac
- 11 P: Ah, ok
- 12 R: So, EV was, how much was the EV? 6,000?
- 13 P: I think it's 6,000, yes
- 14 R: OK, so, what were your main reasons for purchasing a plug-in, electric vehicle?
- 15 P: I just like it. Easy to drive, cheaper to maintenance
- 16 R: Cheaper, because there's not a lot of moving parts, right?
- 17 P: Yes, yes of course. Well, for plug in it was a little bit different, because, I mean, we're trying
- 18 to get another car for, we drive somewhere outside Malta.
- 19 R: Ok, so you're not restricted, because obviously you're a bit restricted, I understand.
- 20 What are the main advantages of the current government grant scheme?
- 21 P: Advantage is to align a bit the prices with the same vehicles abroad, that's it.
- 22 R: And the disadvantages?
- 23 P: Nothing, you think if you've the money, you just wait a bit longer maybe, that's it,
- 24 R: So the process for applying, obviously you had to apply through Transport Malta ...
- 25 P: Well to be honest I don't remember, it was quite easy, I just signed something and that's it.

## Participant SS

26 R: If you don't remember, that means that there was no issue

27 P: No, not at all, I signed once and received cheque, that's it

28 R: So, moving to the next question, obviously I asked you if there is any negative quality for  
29 the grant process

30 P: Only waiting time, a bit longer than expected

31 R: So, to get the money back, right?

32 P: Yes

33 R: Ok, What other incentives, both money and non monetary, would you introduce to motivate  
34 any other individuals to purchase such vehicles?

35 P: Incentives, I'm not sure it could be, something about, for example, similar to what they do  
36 for separate for installation of electric meters, something like this. How it's done now it's not  
37 ideal, it should be more, like in general the prices for the electricity going significantly lower,  
38 or some deductions from a number of units I would say, something like that.

39 R: OK, so it's cheaper to charge

40 P: Well, yes, it should be because the incentives jumps off, like, let's make more traffic stations,  
41 it's obvious, but I'm not sure if you can name it incentives.

42 R: Ok, ok. Would you recommend others to buy such vehicles?

43 P: Yes, of course. I recommend to everybody. In Malta it's the perfect country for this, I would  
44 not recommend to buy in Russia, for example.

45 R: Have you experienced any challenges with your electric vehicle or PHEV?

46 P: In Malta nothing, no. I tried once in Sicily, that was a bit, it's not a big problem, but you  
47 have to know exactly where you are going, to allocate some time to charge, that's it, just this.

48 R: You have to plan.

49 P: Yes, yes, because everybody is scared to do it, and you cannot find any idea how exactly  
50 what is working, what is not, because, I mean, you can stop in the middle of nowhere, that's it.

51 R: And what are the advantages of owning an electric vehicle or a PHEV, when compared to a  
52 combustion engine?

53 Oh, a lot. Like, driving is easier, much more fun, maintenance is cheaper, there is no smell, no  
54 sound. I mean, from all points of views it's better.

55 R: And the sound bit, that it has no sound, is it considered to be a disadvantage sometimes?

56 P: No, no

57 R: Ok. Are there any disadvantages when compared to a combustion engine?

58 P: Is only the time you need to top it up. Time to charge, yes, in my case it's not an issue, but I  
59 can imagine the scenario when it's crucial point.

60 R: In your opinion, why do you think people are not buying them more frequently than the  
61 combustion engine?

62 P: Price and the charging stations.

63 R: So, the infrastructure, right?

64 P: Yes, yes, and price, but price, price is not so crucial. Basically, I compare it, EV, after grant  
65 is more or less the same as similar, I mean, normal car, with the same features.

66 R: Ok. So it bridges the gap between petrol and electric.

67 P: More or less, yes, not so big to consider it as a gap.

68 R: So, here is a list of incentives that might already be in place, which, in your opinion, is the  
69 most motivating for you to purchase such a vehicle? So, the first one is you get the rebate  
70 deducted from the price, other than having to wait for six months, the second is a free rapid  
71 charger to install at home rather than the standard charger, discounted electricity rates, no yearly  
72 tax, circular tax, access to driving in the bus lane, no registration tax upon purchase, and priority  
73 parking for electric vehicles. You have a choice of three.

74 P: Ok, discounted electricity rate, priority parking and probably, access to driving in the bus  
75 lane.

76 R: And the last question. So, as you know, the grants used to be the same for both electric  
77 vehicles and plug in electric vehicles, plug in hybrid, sorry. So last year they were 11,000 if  
78 you buy both.

79 P: Yes, that was crazy.

80 R: Do you think it's somewhat unfair and there should be a pro rata introduced?

81 P: Yes, it's unfair, I mean, that's why I bought PHEV, because it was obvious, I mean  
82 misallocation of the grant. It should be less for PHEV, for sure, or maybe zero, it doesn't matter.

83 Ok, let's say, in Malta, it should be some grant still, because the price here is crazy, but for  
84 EV's it should be much higher than PHEV. PHEV for example, we have, I mean, now, almost  
85 all cars have one PHEV in the range. I have, in the same garage, I have Porsche Panamera  
86 PHEV, so they have the same grant as the small electric, it's crazy.

87 R: Panamera, I really like that car, I just saw the Taycan, which is fully electric, I work in  
88 Valletta, and they're beautiful cars.

89 P: Of course, that's what I bought as well, but I mean, we have made some incentives, because  
90 now I'm driving plug in hybrid, basically it's enough for one day for sure, maybe for two days  
91 sometimes, if you don't have a lot of destinations for it. So I still can use it the electric car fully  
92 in Malta, so it should be some incentives. But not so much as PV because PV is more expensive

Participant PB

- 1 R: Electric vehicle or plug in hybrid?
- 2 P: Plug in hybrid.
- 3 R: Year of purchase?
- 4 P: 2022
- 5 R: Total grant?
- 6 P: Still not paid out, but it should be 11,000
- 7 R: What were your main reasons for purchasing a plug in electric vehicle?
- 8 P: First of all I had to, sort of, increase the size of my car, so the natural decision was to either
- 9 go for a total internal combustion engine, or a diesel, or obviously go for something more
- 10 modern, so I opted for a plug in rather than electric.
- 11 R: So you're in the middle
- 12 P: In the middle, middle ground, exactly.
- 13 R: What are the main advantages of the government scheme?
- 14 P: Honestly speaking, obviously it's a good amount of money, especially given that the prices
- 15 are still very expensive, yes? But in all honesty, nowadays there are no grants for plug in
- 16 hybrids, so essentially, I was in a way lucky to have been granted, although it hasn't been
- 17 processed yet.
- 18 R: So you haven't got the grant yet
- 19 P: No, I haven't got the grant yet
- 20 R: And that leads me to one of the disadvantages ...
- 21 P: Yes, one of the disadvantages is that it has a very long turnaround, although the management
- 22 that take care of it sort of, the department itself, is quite helpful, so once you send them e-mails
- 23 R: Transport Malta you mean?
- 24 P: Yes, a specific department of Transport Malta, I can't remember the name of the unit

Participant PB

25 R: So that leads me, actually you just stepped into my next question, which is care. So this is  
26 one of the positive qualities of the grant scheme at the moment.

27 P: So for example in my case, I was the one who ordered the car, so the grant was supposed to  
28 be granted to me directly, but for reasons that my wife was going to drive the car, we sort of  
29 changed ownership onto my wife. That led to a couple of questions by the department, but then  
30 they asked us to issue a letter stating that it was going to go to my wife, rather than I being the  
31 sole owner of the vehicle. It was just a case of issuing this letter, and they mentioned the fact  
32 that it was for auditing purposes, because they are audited and they wanted to have something  
33 available just in case a question is raised. But they accepted it wholeheartedly and

34 R: Obviously they are audited by the National Audit Office

35 P: Possibly. I don't know whether, I thought it was something related to the grant itself coming  
36 from the EU

37 R: From the EU, it's coming from the EU, which makes it even more complex.

38 P: No, but they accepted it and now I have the, sort of, the first letter has been sent and I have  
39 to follow up with another two letters which

40 R: Which leads me to the next question – what are the negative qualities of the grant application  
41 process and how can it be improved?

42 P: I mean, negative qualities, as such, it was quite straightforward honestly speaking, there  
43 wasn't a lot of bureaucratic processes involved. But getting to the final grant seems to be very  
44 time consuming, possibly there will be internal issues until the funds are available, so that is  
45 now known by the customer himself.

46 R: And how would you improve that? Would you make it more transparent?

47 P: More transparent? Yes, obviously being given the details, exactly, so in my case, I bought  
48 the car in August, so technically speaking, now it's already March, so, nine months I think. So  
49 only the first letter was issued, and when I asked they mentioned that the grants sort of they are

50 given on a year to year basis. But other than that we don't know when we'll receive the second  
51 letter, or, you know, so it's a bit of a jungle.

52 R: What other incentives, both monetary and non monetary, would you introduce to motivate  
53 individuals to purchase such vehicles?

54 P: Monetary is obviously the first and foremost incentive. And I think, more awareness,  
55 possibly because

56 R: Awareness? As in, the cars or the?

57 P: I think within the car industry itself. So I think they should push the electrical vehicle even  
58 as a type of government, let's say propaganda, that you should go for more electric, nowadays,  
59 if it's the way to go, honestly speaking, rather than

60 R: So you're unsure about it?

61 P: Yes, I'm quite unsure

62 R: And that was one of the reasons, probably, that you went for a plug in hybrid

63 P: Yes

64 R: It's usually the case because I used to be in the

65 P: Yes, yes

66 R: And would you recommend others to purchase such vehicles?

67 P: Well nowadays for sure. I mean, going towards a diesel vehicle is definitely not on the cards,  
68 because diesel is, even the government has specifically mentioned that it will abolish the use  
69 of diesel engines. So yes, I think, internal combustion and probably plug in is probably the way  
70 to go for the time being. Electric will follow in due course, depending on whether other types  
71 of technologies are introduced into the market.

72 R: Especially the batteries technology

73 P: Yes, yes, so hydrogen might be another possibility, more sustainable than electric vehicle

74 R: It's being looked into actually

Participant PB

75 P: Yes, yes, hydrogen is a big one as well.

76 R: And are there any challenges you've experienced as in with the car, with a PHEV? Compared  
77 to your previous vehicle?

78 P: No, no, nothing out of the ordinary. I mean it's more, how do you say, technological, but  
79 also you have less consumption, so technically speaking

80 R: It's good for the environment and good for your pocket as well

81 P: Yes, yes. So for example a small car, on the routes that I drive around in a month, I usually  
82 pay out about 120 Euro of petrol a month. Now with a bigger vehicle and with a bigger engine,  
83 but which is obviously plug in, we're paying around 40 to 50 Euros a month

84 R: From 120

85 P: From 120. Obviously you have to add the electricity cost, but it's minor compared to, so  
86 when I estimated a figure, it was around 70, 75 Euros. I think it's a better amount.

87 R: What are the advantages of owning a PEV when compared to an internal combustion engine  
88 vehicles? So, plug in hybrid versus internal combustion

89 P: You reserve the internal combustion aspect obviously, but the fact that you can get three  
90 quarters of your daily journey using electric will reduce the consumption greatly, so I monitor  
91 the litres per hundred consumption which is normally

92 R: You're more aware of the consumption

93 P: Yes, yes, yes. So it was around 2.8 rather than the 7 litres per 100 by my Mazda so it's a big  
94 improvement

95 R: And it's a relatively smaller engine

96 P: Of course, of course

97 R: And the disadvantage of owning a PHEV?

98 P: Disadvantage I think, is that the range is not very long, so obviously, even though you get  
99 those forty-five kilometres, or fifty, in a small country like Malta you never get the full range,

Participant PB

100 because there's traffic, the AC is nearly all the time going, especially in the summer months,  
101 which reduces the range even further

102 R: You probably waste half the range with the AC

103 P: But if it was petrol, you would still have consumed more petrol because of the AC, so, it  
104 softens the blow, yes, yes

105 R: In your opinion, why do you think the take up of electric vehicles has been so slow compared  
106 to ICE vehicles?

107 P: In Malta probably because we are more conservative when it comes to new technologies and  
108 I think we do prefer internal combustion engines and diesel, because obviously it's more  
109 efficient.

110 R: It may be a culture thing:

111 P: It is a culture thing. We always go for the old school type car.

112 R: Something we know already. Could it be maybe the infrastructure as well? When you  
113 actually compare electric vehicles

114 P: I have a garage, that's why I can use the charge. I don't know how it will be sustainable once  
115 everybody starts purchasing electric vehicles. I know for a fact that there are already problems  
116 with having an electric car that is charged on the road because there is either someone else  
117 parked, or else there's a plug in hybrid being parked for long hours without changing, so  
118 obviously the electric cars need to be charged and if someone remains there obviously you  
119 can't charge your own vehicle so you can't go out until you do.

120 R: So, imagine the below are incentives which may already be in place, that are available when  
121 a person gets an PHEV. Which incentive would motivate your purchase, give a reason for your  
122 answer. You can choose only three. A rebate which is deducted at the time of purchase, rather  
123 than having to wait, a free rapid charger to be installed at home rather than the standard charger,

124 discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no  
125 registration tax upon purchase, priority parking for electric vehicles.

126 P: The rebate is number one, discounted electricity rates, even though there are but they should  
127 be sort of throughout the day, not just in the evening, and the parking as well, but I don't think  
128 it would be that sustainable either.

129 R: They can take the Goto spaces then

130 P: I think they're already

131 R: What is your opinion about the introduction of variable monetary amounts on purchasing a  
132 BEV versus a PHEV? As you know, you, as a PHEV customer got the same amount of grant  
133 as someone who bought a battery electric vehicle. What's your opinion on that? Should there  
134 be a pro rata rate according to the range:

135 P: I would be speaking as myself obviously, but yes, I do believe that going for a full electric  
136 should be incentivised more than someone with a plug in hybrid. But then again, I think it's  
137 early days for Malta to be fully electric when there are so many infrastructure issues. I mean,  
138 if you consider the UK for example, they are pushing electric vehicles a lot but they also have  
139 problems with infrastructure, power generation. Even more so in Malta, when during the  
140 summer months when you have everyone switching on their air conditioners

141 R: Even during the winter

142 P: Yes, of course, so I think it's a big issue to go full electric, but if there are no other  
143 technologies which will eventually take over, then we have to start thinking about proper  
144 infrastructure, which can be also through solar, yes?

145 R: I think we can store a lot of electricity, especially if we're surrounded by sea, turbines, you  
146 know

147 P: Yes, of course.

148 R: So that concludes our interview, thank you for your time, I'll just stop the recording.

Participant NC1

- 1 R: Is your car a fully electric or a hybrid?
- 2 P: Electric
- 3 R: Year of purchase?
- 4 P: Last year, December 2022
- 5 R: And how much did you get back through the grant, eleven thousand plus a thousand for
- 6 scrappage?
- 7 P: Yes, eleven thousand and a thousand scrappage.
- 8 R: A total of twelve thousand. Question number one. What were your reasons for purchasing
- 9 an electric vehicle?
- 10 P: First and foremost for the environment.
- 11 R: What are the main advantages of the current government grant scheme?
- 12 P: Electric vehicles are very expensive, without the grant scheme I would not have even thought
- 13 of buying an electric vehicle.
- 14 R: So basically it bridged that gap
- 15 P: Yes
- 16 R: What are the disadvantages of the current government grant scheme?
- 17 P:
- 18 R: So you had to apply for the grant scheme at the showroom, what are the positive qualities
- 19 of the application process?
- 20 P: I had to apply for the scrappage, but everything else was done at the showroom, the agent
- 21 took care of it.
- 22 R: The agent applied for you. So your biggest hassle was the scrappage.
- 23 P: Yes, I was expected to scrap my car and in such a way that both grant and scrappage would
- 24 be processed at the same time, they moved hand in hand.

25 R: So we had been saying that the scrappage and the application for the grant for the electric  
26 vehicle were processed together, and that the dealer had taken care of the application. So those  
27 were the positive qualities. And what were the negative qualities of the grant application  
28 process and how can it be improved?

29 P: To apply you mean. What I didn't like was that my previous car was still in good shape but  
30 I had to scrap it, however I had to scrap it when I purchased my electric vehicle, because of the  
31 grant and scrappage process. I asked if I could keep it at least till May but I couldn't and had  
32 to scrap it within that period in December even though I would have preferred to keep it till  
33 May and then scrap it.

34 R: So you were obliged to scrap it at a certain time.

35 P: Yes. I would have liked to have my electric car delivered later, in 2023, so that the grant  
36 would be issued in 2023, but I was tied to a period of time to scrap and complete the application.

37 R: Yes, I used to work in the car industry and I remember that regulation, one had first to scrap  
38 the old car before getting the electric vehicle.

39 P: I wanted to keep my car till May, because of the road licence, but the electric one arrived in  
40 December so I couldn't keep it even though I would have liked to.

41 R: What incentives would you introduce to motivate individuals to purchase these types of  
42 vehicles? Both monetary and non monetary.

43 P: It was money I wanted.

44 R: So a bigger grant?

45 P: Yes, because when you talk to people, they all tell you that these vehicles are still way too  
46 expensive. So instead of the twelve, thirteen thousand that you get now, it would be raised to  
47 twenty, I don't know, twenty eight thousand, because I reasoned that with the money I spent  
48 but without the grant, I would only have been able to purchase a Lada Diesel, but not everyone  
49 reasons out in the same way I do. What else would I introduce?

50 R: You answered me already, you would raise the grant. And would you recommend others to  
51 purchase such a vehicle?

52 P: Yes, of course.

53 R: And you said that this would be because of the environment.

54 P: Yes

55 R: What challenges have you experienced since owning an electric vehicle? Any issues with  
56 day to day running? Any challenges when compared to a petrol engine?

57 P: No, no issues as such, just the charging, because with the charger I have it takes a good  
58 fifteen hours to charge. You need to plan and make sure that you don't forget to charge or you'll  
59 end up with no battery. That is the only challenge, but nothing major, it's a matter of getting  
60 used to the routine.

61 R: Until you adapt. And the advantages of a PEV, electric vehicle, when compared to a petrol  
62 engine? For example, it's smooth, it doesn't make any noise, it's cleaner, you obviously save  
63 on fuel

64 P: All of the above. And even, it's a very comfortable ride, the engine is more responsive and  
65 you have everything on the screen which guides you in itself. Something that I realise is that it  
66 is very quiet, silent, and sometimes other drivers don't hear you, so you must be careful and  
67 stop. It is much too silent.

68 R: In fact the next question is about the disadvantages. So this is one of them, a disadvantage,  
69 that it's too silent.

70 P: Yes, sometimes I realise that people take fright because they wouldn't have heard it  
71 approaching and that can be a problem for both drivers and pedestrians.

72 R: Too quiet, yes. In fact sometimes you have to sound your horn because it would be an elderly  
73 person who wouldn't have heard the car until it's upon them and they are frightened by it. So,  
74 in your opinion, although I think that you've already answered this question. Why do you think

75 that the take up of electric vehicles has been so slow when compared to combustion engine  
76 vehicles?

77 P: What do you mean?

78 R: Sales of electric vehicles has been slow when compared with petrol and diesel engines. Why  
79 do you think this is so?

80 P: I don't think this is only a question of money. People are used to a different type of driving,  
81 I want to hear the noise of the engine, I want to be able to change gear, and electric vehicles  
82 are not manual, they're automatic. Car enthusiasts will not be attracted to driving an electric  
83 car because they can never accept that it's a completely different concept. I myself love cars,  
84 and I take care of my car so that it takes care of me.

85 R: Always. That's an expression that I like to use myself. Now I have a list of seven options,  
86 which may already be available when purchasing an electric vehicle. Which of them would  
87 motivate your purchase more? You can choose a maximum of three. So, a rebate that is  
88 deducted at the time of purchase, so basically you don't have to wait around six months to get  
89 your money back because they're deducted from the price. Number two, a free rapid charger  
90 to install at home rather than the standard charger, the third is discounted electricity rates, no  
91 yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, and  
92 priority parking for electric vehicles. You need to choose three.

93 P: Which would motivate me to buy?

94 R: Yes, in your opinion which would motivate you most?

95 P: Some of them already exist no?

96 R: Yes, yes, some of them do. In fact that's why I started out by telling you that some may  
97 already be in place.

98 P: So, the rebate which is deducted at the time of purchase is definite and should be done.

99 R: Almost everyone said the same thing in fact.

100 P: The fact that you have to fork out the full price is not easy, unless one reasons out that the  
101 money is, in a way, put aside and that it will be given back at some point. The second one is  
102 the registration.

103 R: Registration tax

104 P: The tax to register the car the first time no?

105 R: Exactly

106 P: No then, it would be better if one had parking privileges of some sort.

107 R: So till not, a rebate that is deducted at the time of purchase, parking and you have to choose  
108 another one. So a free rapid charger, discounted electricity rates,

109 P: Another metre

110 R: Yes, I was told it's a complicated process, you have to buy another metre

111 P: Yes, you have to have another metre, install it, and at the beginning you have to pay to have  
112 it installed and then pay a monthly charge

113 R: At the beginning even the ones outside were free of charge.

114 P: I have a separate charger but I was told that there are some chargers that are free of charge.

115 R: Yes, the ones with the solar panels, because they are self sustainable.

116 P: I charge my car with the company charger, but to charge from twenty percent to a hundred  
117 percent it takes a very long time.

118 R: Yes, it takes a while, but if it's on charge overnight it should be fine. Now the last question.

119 The way it was before, there was the same grant on the purchase of electric vehicles as well as  
120 on PHEV's, that is, eleven thousand. Do you think that the government should introduce a pro  
121 rata rate, rather than both receiving the same grant?

122 P: I think that whoever purchases an electric vehicle should be incentivised the most and not  
123 those purchasing plug in hybrids. I think those purchasing PHEV's don't receive anything.

Participant NC1

124 R: Yes, yes, it's been removed now. In fact cut off is this year, only those who applied till last  
125 year will receive the grant. That was the last question.

126 P: Sorry, because they still have petrol, in fact the plug ins have a very short range.

127 R: Yes, true, only about forty kilometres. I agree with you completely.

128 P: The way I see it, my nephew bought a plug in hybrid, he will have problems with charging  
129 and he will have problems with petrol.

130 R: You have two problems with a hybrid.

- 1 R: As you can see from the shared screen, the first question is the vehicle type you own
- 2 P: Fully electric
- 3 R: So, fully electric, you don't have to mention the brand, so you don't feel ... the year of
- 4 purchase?
- 5 P: 2021
- 6 R: And the total grant including the scrappage scheme, if you benefitted from it?
- 7 P: Yes, it was 12,000 including the scrappage scheme
- 8 R: So, let's start off with the actual questions. What were your main reasons for purchasing an
- 9 electric car?
- 10 P: Several reasons, we're actually at a bit of a changing point, where the EV's have started
- 11 giving more reliability, so I wanted to give it a try. The second thing is that with the grant, the
- 12 price became a lot more attractive and because they became almost on a par with equivalent
- 13 vehicles.
- 14 R: Great. And the current government scheme, what are, in your opinion, the advantages
- 15 connected to it
- 16 P: So the biggest advantage to it is it does away with the deficit between petrol cars and electric
- 17 cars. In a lot of cases like with like, they almost come to the same prices, give or take a few
- 18 thousand Euro, and it makes the car much more affordable.
- 19 R: So, it bridges the gap?
- 20 P: Yes, it bridges the gap.
- 21 R: Ok. And the disadvantages of the current government grant?
- 22 P: I mean, disadvantages, I don't really see disadvantages of the grant.
- 23 R: Ok, so, no disadvantages, that's great. So, you went through the application process, I
- 24 believe at the showroom. What are the positive qualities of that process?

25 P: In terms of the application, it was very straightforward for us, documentation was minimal,  
26 the logbook and driving certificate, so, I don't think there's much to be improved from the way  
27 it is, from a positive point of view.

28 R: So you see no negative qualities, or any ways you would improve it

29 P: No. The only negative thing in the grant, in the whole process is the wait. You know you've  
30 got three to six months to wait

31 R: The wait for the actual money to reach your bank right?

32 P: Yes. And the other negative thing is that even though this was bridging the gap, you have to  
33 apply, and then get confirmation if you received it or not. For some people who may,  
34 not have the whole payment available, or may not be able to afford to be able to wait, even  
35 though you're pretty confident that you'll get it, but there's always a chance that your  
36 application may be turned down. So, the fact that you have to put the money out before has  
37 become a major negative of the grant, the waiting.

38 R: Yes, it's been the general consensus really, not knowing if you'll get it, if there's any  
39 remaining incentive, like, you'll be in the dark almost. It keeps you on edge, and 12K, it's a  
40 make or break really.

41 P: It is a make or break. Not only is it a make or break whether petrol or electric, but in some  
42 cases, some people cannot afford, literally, the 12K.

43 R: What other incentives monetary or non monetary, would you introduce to motivate  
44 individuals to purchase electric vehicles, including PHEV?

45 P: Ok, so in terms of, one of the things which I think are still holding people back a lot, at the  
46 moment is the way the charging works. The construction, public construction is still not up to  
47 spec. But the cost of doing a whole charger becomes quite substantial especially when you  
48 have to go back to the electricity cost. Maybe a lot of people may not opt for the home EV

49 charger, and I think one of the things the government should look at is, at the moment with the  
50 domestic rate, for home electric use, you can charge using the EV plug means you would spend,  
51 your cost of the home charging, of the home consumption, pretty steep, sky high. The  
52 government needs to start seeing who owns an EV, providing a separate band, to allow the  
53 charging at home, and that would really increase the uptake. The reason why I wanted to specify  
54 that is, if you live in an apartment, you'd be able to have charging, with the EPV unit in your  
55 garage, separate electricity supply, you'd be able to apply for that, and a whole new category  
56 of cars, which is why I'm saying that even from a home point of view, I think, depending on  
57 the setup you have, may not facilitate that. That's why I'm saying they need to provide a  
58 separate band.

59 R: So, electricity band you mean, they introduce, ok. This was in the pipeline I think but it  
60 wasn't really investigated further I think. There was a bade test I think.

61 P: What I know there was is the EV meter, I'm not really sure. An EV meter uses a separate  
62 sub meter, it measures while you're charging up your car, but that requires a specific setup to  
63 be done.

64 R: An extra cost no?

65 P: An extra cost, yes, it can be quite a lot of cost though

66 R: And would you recommend others to purchase an electric vehicle or PHEV, family or  
67 friends?

68 P: Yes, yes, I would

69 R: Any challenges you've experienced with owning an EV?

70 P: I mean the biggest one we have is obviously charging, you know, finding an available  
71 charger that works, or one that isn't taken up, where you'd want and when you'd want. That's  
72 the only issue we've had so far.

73 R: You've been charging at work you mean? So, let's say, your car is sitting there for eight  
74 hours and you aren't able to charge it if you need to.

75 P: Exactly. I mean, I'm not charging at home because of like I discussed, about the EV meter,  
76 because if I charge at home you're shooting the bills sky high. If I charge at the public chargers,  
77 sometimes you know, you have to walk like twenty minutes to find a charger, or you go and  
78 it's not working. Sometimes you can go to three separate chargers, and either they're not  
79 working or they're in use,

80 R: So it circulates again around the infrastructure.

81 P: Yes

82 R: Moving on to question number nine. We might have alluded to this. What are the advantages  
83 of owning a PEV when compared to an ICE vehicle?

84 P: Ok, so in my experience so far, in terms of charging I'd say the cost in the amount of money  
85 for fuel, or diesel. There's a lot less moving parts, that theoretically serve to make it much  
86 cheaper, I think that those two are the main, and obviously, there's the emission. So those are  
87 the advantages.

88 R: And again, you've mentioned a couple, but the disadvantages of owning a PEV when  
89 compared to an ICE vehicle.

90 P: Ok, so the disadvantages of owning a PEV is a bit of range anxiety, that comes into it

91 R: Even in Malta?

92 P: In Malta not so much, I'll be honest with you because there's so many chargers around and  
93 the distances are small so it's really not a big problem, but, for example, travelling abroad, for  
94 a long haul, consideration, we need to park in Gozo, you need to plan a little bit more.

95 R: More planning

96 P: Exactly, but range anxiety in Malta is not really a major concern. The biggest one in Malta,  
97 when it comes to electric vehicles I think is battery replacement, the cost of it is a problem.

98 R: Yes, that would be a considerable amount. As I told you, I was in the industry and that was  
99 one of the main concerns of customers.

100 P: It pretty much almost makes the car unfeasible to repair.

101 R: And in your opinion, why do you think the take up of electric vehicles has been so slow  
102 when compared to the take up of ICE vehicles?

103 P: I think it's a combination of three things. I think EV's for most of the manufacturers, is still  
104 first generation. There are various manufacturers that have been producing EV's for an  
105 extended period of time, and I think for the Maltese population, generally they prefer what they  
106 know, rather than taking a risk on what they don't know. And the automotive industry in terms  
107 of petrol, petrol stations, etc, and all the political lobbying, obviously favour ICE still a lot  
108 more, construction and so on

109 R: Yes, totally agree. And, we have a list here, so imagine the below are incentives. So these  
110 are incentives that may already be in place, or are not, which if any, would motivate your  
111 purchase? Give a reason for your answer, you can choose a maximum of three responses.

112 P: I'm just reading them now.

113 R: You want me to read them out for you?

114 P: I'm going for, so, I think, the first one, the reduction at the time of purchase, and no  
115 registration tax upon purchase, go hand in hand, so I think those two. I'm not sure they're not  
116 the same, because no registration tax is a rebate as well. So I don't know if I would separate  
117 them. And then the other one is discounted electric rates for sure, that would be a major factor.

118 R: The first point I'm making is that you don't have to wait for the grant, so, deducted at the  
119 time of purchase. That's it really, so, let's say the car costs 30,000 and you get 12,000 in rebate  
120 so you pay 18K.

121 P: I mean, it definitely adds incentive if you get it immediately. After six months I was going  
122 to say that probably in that case, I would say, .... I'm thinking you know, because, you know,  
123 circuit tax would be a big one as well but out of the three it would probably be the least  
124 worrying. So yes, electricity rates and the rebate at the time of purchase and no registration tax.

125 R: Ok, so those three. Great, so the last question. So, you know, the PHEV has had the same  
126 rebate last year, it was the same as the battery, so having an electric vehicle and a PHEV, offered  
127 the same grant, which some might find unfair given the total range on electric. What is your  
128 opinion on introducing variable monetary amounts? Let's say, a ratio, so let's say you get 10K  
129 if a car drives 200km in electric range, and you get 1,000 for a PHEV which drives 40km.

130 P: Yes, I think it makes sense. I think having a rate, pro rata rate, based on the cars,

131 R: Pro rata, that's the word I was looking for

132 P: Pro rata taking the battery range I think makes a lot of sense. I was never in favour that the  
133 PHEV and their having the same one. In reality though, having a plug in hybrid, even if you're  
134 using the ICE and battery, you're still saving emissions.

Participant EC

1 R: What type of vehicle do you own? Battery electric vehicle or plug in hybrid?

2 P: It's a battery electric vehicle

3 R: Ok, yes, year of purchase?

4 P: This year, I've just had it for, I think, less than a week

5 R: Interesting! What is it? Volkswagen, BMW?

6 P: It's a BMW, IX 1

7 R: Nice! Very very techy!

8 P: You are the expert in these, so

9 R: Although I moved on, as you can see I'm still associated with them. The total grant, the  
10 monetary incentive, is it the 11,000 and 1000?

11 P: Yes, it's the 11,000

12 R: Let's kick off the questions. What were your main reasons for purchasing an electric vehicle?

13 P: Some time ago I got the opportunity to drive an electric vehicle and I literally loved it. So,  
14 apart from actually loving the drive itself, I'm sort of, I like the environment, I'm an eco  
15 friendly person, my wife is as well, so, even looking at it from an ecological point of view, so,  
16 we went for that.

17 R: Ok, good. What are the main advantages of the current government grant scheme?

18 P: Basically, you get 11 or 12K, depending on what type of grant you're getting. You can either  
19 opt for, you can look at it in two ways from my point of view. Either you have a budget and  
20 you use the 11K to offset, or remove the 11K from that budget, sort of, you have a budget of  
21 30K and you say, ah, instead of 30K, I'm going to spend 19K. Or, you can look at it in opposite  
22 direction, where have a budget of, say, 30K and say, look, I can buy a car of 40, 41K now not  
23 30K.

24 R: And the disadvantages of the government scheme?

25 P: The disadvantages, well, from what I've heard, one, they still haven't come out and I'm still  
26 waiting to apply for it, two they're taking quite some time to be granted.

27 R: So, to actually, customers, people, receiving

28 P: Receiving the grant themselves, yes

29 R: Exactly. So basically, you have to pay that amount, that sum, up front, to whoever you buy  
30 it from, to the agent, so, you're out of pocket by 11 or 12,000, you're forking it out, exactly.

31 R: And the process, obviously, the showroom, applies for the grant. What are the positive  
32 qualities of the grant scheme? The process, is it for example, it's easy because they do it  
33 themselves?

34 P: They guide you through. Obviously I'm in a position where I know the people, so it's a bit  
35 easier for me you know, to trust these people and work things out with them sort of you know.  
36 But the process so far was pretty easy, but having said that, I still do not have the grant in hand,  
37 the application, because they still haven't opened yet.

38 R: So that answers question 5, what are the negative qualities and how would you improve it?  
39 What would you do?

40 P: Well, basically I would give more information to the people that are, that could be in a  
41 position to take this grant. I would also give an indication of how many grants are left. I don't  
42 know if I'll actually get the grant, I'm hoping I am because it's an incentive, but I don't know  
43 if I'm actually going to get it or not.

44 R: So you would recommend, sort of, a live balance, almost?

45 P: Yes, pretty much, something along the lines of, to know where you are. You know, look,  
46 there are two thousand grants left you know. And a better way to know whether you're actually  
47 in the scheme or not.

48 R: So transparency?

49 P: Yes, to the client. Because obviously 11 or 12K is a lot of money, and certain decisions are  
50 taken because of that grant. I'm actually buying two cars, actually one for myself and one for  
51 my wife, so that's 22,000 Euro, and if I'm 22,000 Euro out of pocket, that's a lot of money.

52 R: Yes, I totally agree, and in fact I have a question regarding this thing. The next one is what  
53 other incentives would you introduce to motivate individuals to purchase an electric vehicle,  
54 both monetary and non monetary.

55 P: Well definitely, I think, the charging, outside in the street, has to improve

56 R: So the infrastructure

57 P: The infrastructure has to improve. So far, like I said, I've only had it for about a week, since  
58 last Friday, so I haven't needed to charge the car yet, however, I've been in forums and  
59 communities where people do actually need to charge their cars, and a lot of people find that  
60 there are chargers that don't work, you know you actually go up to a charger, you try to plug  
61 in your car and it doesn't work. And, I mean, it's not only a problem here in Malta, I've heard  
62 it's also abroad, but some sort of indication of, I don't know, a map saying, look this charger,  
63 there are five chargers here, numbers one, two, three and five work, number four isn't working.  
64 So, you know, also, the occupancy of chargers. There are two chargers here but they're both  
65 occupied. There are two chargers here, one is occupied, one is not, they're both free, whatever.

66 R: Ok. Abroad, when I used to work at BMW there was an application, where you could  
67 download it, but obviously, the chargers have to be connected to the infrastructure for them to  
68 work. Because what happens if, then you go, to the charging station, you know the car is not  
69 charging and it's like it's parked there because it's a free parking for an electric vehicle.

70 P: Yes, exactly. Another incentive would be to have these chargers possibly under one entity.  
71 So even if there are multiple companies having multiple chargers, I mean I know that Solar  
72 Solutions used to be involved in the chargers and there are at least one or two with the charging  
73 stations, if I'm not mistaken. Having different maps for different chargers and trying to get

74 your head around who to use and if you're signed up with these people or not, you know, have  
75 one entity, governing those, one rate, ideally, yes, capped to a certain amount. I mean, these all  
76 help make the island greener, the whole place greener really.

77 R: That's the main motivator for the incentive really, for the cars to go green.

78 P: Exactly.

79 R: And would you recommend your friends or colleagues to purchase an electric vehicle? State  
80 your reasons

81 P: Definitely, so far, definitely yes. I mean, I've driven multiple EV's, to be fair, and so far I  
82 think I've liked most of them, not all, but most of them more than an ICE equivalent. Having  
83 said that, I am, sort of like a bit of a petrol head, and I do like car sounds and things like that,  
84 but I'm over that sort of, at my age. Especially if it's going to be used here in Malta, I don't  
85 think there's an issue of range anxiety and things like that, you know. Abroad I would possibly  
86 think twice about getting an electric vehicle, at least a fully electric vehicle, however, here in  
87 Malta, I don't think it's an issue, really.

88 R: Practically it's a city here. I know you've only owned it for a short while, but the challenges,  
89 which is the next question, the challenges you said, charging stations?

90 P: Possibly the charging stations. Again I don't have the experience myself. Another challenge  
91 would be going abroad with the car. Possibly that's not something that I will do in the near  
92 future, whereas with my previous ICE car I used to do that, I mean it wasn't an issue. I think  
93 mostly that, having to do with range.

94 R: The range anxiety would kick in.

95 P: Sort of like range anxiety I guess, you can call it that, yes.

96 R: You have to plan a lot.

97 P: For abroad yes, here in Malta, like I said, it's not really an issue, but if you go abroad yes,  
98 you do have to plan differently.

99 R: And compared to the ICE vehicles you just mentioned, what are the advantages of owning  
100 a PEV, an electric vehicle?

101 P: I actually find not having so many noises, engine noises, relaxing. Also, I don't know if it's  
102 me or not, I try to maximise my range as well, so, I drive, possibly a bit better or a bit more  
103 carefully, you know, to maximise my range sort of.

104 R: So you're a bit more easy, conscious of the way you drive, especially at the beginning.

105 P: Yes, yes.

106 R: And what are the disadvantages of owning a PEV?

107 P: I think mostly the infrastructure, if you don't have a garage where you can charge or  
108 somewhere where you can charge on a regular basis at work for example or at home. That's I  
109 think, a major disadvantage. Given also the question that we had above where the infrastructure  
110 is not that great. I think that is a major disadvantage. Yes, I think for fuel cars, for ICE cars you  
111 have fuel stations left right and centre, you know, every few kilometres, so range is not a  
112 problem, fuelling is not a problem. Also, another disadvantage, quite a disadvantage, is that  
113 you need time to charge. You know you might need five, six, seven, eight hours to charge on a  
114 home plug or on these wall boxes or whatever.

115 R: That leads me to the next question. Why has the take up been so slow when compared to  
116 ICE vehicles? You think it's like something cultural, Is it a change of perception, change of  
117 mentality?

118 P: I think people are a bit worried, one, so, not everyone has a garage, so I think if you don't  
119 have a garage, people don't think about getting a

120 R: That used to be the first question at the showroom

121 P: Exactly, especially if it's a PEV, whereas if it's a PHEV maybe it's slightly different you  
122 know, obviously mild hybrids and things like that there's no issue. Apart from that it's usually

123 higher end cars that are, are, and more expensive cars that are electric vehicles. So there aren't  
124 too many cars with a decent price.

125 R: All right. So you're saying it's even, still expensive, when taking into consideration the  
126 grant.

127 P: Yes, for example, I'll give you an example, even with the grant, my car is more expensive  
128 than a similar car that's just, all right, a base engine car, ok, the same car with a base engine;  
129 fuel, ICE, ok? To be fair, the PEV has much better performance, it's sort of like the top end of  
130 the engines. However, still, even with the grant, considering that it's more expensive than the  
131 same, considering that it's the same car but with a combustion engine.

132 R: Imagine the below are incentives that are available when purchasing a PEV. Which, if any,  
133 would motivate your purchase? Give a reason for your answers. So you have a maximum of  
134 three responses.

135 P: So I can choose three of these?

136 R: Yes, yes, the most important when purchasing. A rebate which is deducted at the time of  
137 purchase, rather than you waiting months, a free rapid charger to install at home rather than the  
138 standard charger, discounted electricity rates, no yearly circular tax, access to driving in the bus  
139 lane, no registration tax upon purchase, priority parking for electric vehicles.

140 P: Interesting. I think one, would be the rebate at the time of purchase.

141 R: So rather than forking out the 11,000 you had previously mentioned, it's deducted on  
142 purchase.

143 P: It's deducted on purchase. I think I would say the discounted electricity rate because that is  
144 an ongoing, a recurring fee for the life of the car, What do you mean exactly by no registration  
145 tax?

146 R: Upon purchase, so registration tax

147 P: Do you know how much that amounts to, approximately?

148 R: That's, given the car and the engine, that would be, I think 18%

149 P: 18%, so, let's say, a 30,000 Euro car, 18% of it is a registration tax. So, ten, twenty, let's say  
150 20%, so that's like 6,000 almost, 5,500, something like that. Ok, access to driving in the bus  
151 lane, priority parking for electric vehicles, no yearly circular tax, free rapid charger, rather than  
152 a standard charger, not really, no yearly circular tax, this is the licence, the road licence? But  
153 that's already like that no?

154 R: These are incentives that are both already active and, for example the free rapid charger is  
155 not.

156 P: Access to driving in the bus lane, priority parking for electric vehicles. I would say, here in  
157 Malta, I would say, probably, parking is important. I think I would say parking.

158 R: So parking.

159 P: Bus lanes, there aren't too many bus lanes around, so really, I mean, it's just certain main  
160 roads, so, I think you get it aye?

161 R: And you do get people who don't drive electric vehicles through the bus lane.

162 P: Exactly. Is it on the ...?

163 R: Yes, yes

164 P: So, I can drive in the bus lane?

165 R: This is to see the participants, what they prefer, like, comfort, which is priority parking, the  
166 participants' priorities actually, if it's the rebate ... The last question is what is your opinion  
167 about introducing variable monetary amounts when purchasing a BEV versus a PHEV? So  
168 currently, let's say, people who buy a PHEV still get the grant although they applied last year,  
169 and they used to be the same amount, so both of them were 11,000. Both electric vehicle and  
170 PHEV. In my opinion that creates a disadvantage because obviously a PHEV has a much lower  
171 range than a battery electric vehicle. What do you feel about creating a variable monetary  
172 amount between the two proportionate to the range they drive?

173 P: Ok, all right. I think it's only fair to be honest. If you're looking at something, you're either  
174 doing this for something monetary, or you're doing it for a greener environment. If you're  
175 doing it for a greener environment, go with something that is actually greener, you know? It is  
176 true that with a PHEV you have a bit less range anxiety, and that sort of thing, you know, there  
177 are advantages to it.

178 R: But it's not about range anxiety in your opinion, it's about actually making our world greener

179 P: Yes. That's the main reason why I went for an electric vehicle in the first place. I think a lot  
180 of people see a monetary gain from it you know, the 11, or 12,000, and obviously that's a very  
181 good incentive, you know. However, my main incentive was to be more eco friendly. So yes, I  
182 do agree that a BEV should have a better monetary incentive than a PHEV.

183 R: Ok, only fair in my opinion.

184 P: Yes, I think so. Currently there are advantages of having a PHEV over a BEV, like I said,  
185 let's say I go abroad with a PHEV, I have no problems, I can use my ICE part of the car without  
186 worry and I don't need to plug in. Whereas if I go with this car abroad, I might have problems  
187 or I really need to plan out my trajectory, or I need to make sure that wherever I stop, hotels or  
188 what have you, have facilities or that they're actually free and available, otherwise I would ruin  
189 my holiday sort of.

190 R: You have to plan around your vehicle

191 P: Yes, yes, exactly.

Participant SM

1 R: What type of vehicle do you own? A battery operated vehicle, just battery or plug in hybrid?

2 P: Right now I am waiting for my vehicle, I don't know if it makes a difference for you, but a  
3 full electric. I'm waiting for a fully electric vehicle.

4 R: No, no problem

5 P: That is basically what I purchased.

6 R: And you purchased it this year I presume?

7 P: It has been purchased at the beginning of this year, yes and I'm hoping that it will be  
8 delivered by May more or less.

9 R: Good luck because the issue with the, is like a chip that is very rare at the moment, everybody  
10 waiting for it. And do you know the total grant or monetary incentive?

11 P: So, so far apparently, the grant for this year has not yet been communicated by the  
12 government. However there is a commitment of an 11,000 grant based on last year's budget,  
13 and an additional 1,000 for the scrappage scheme, so in total that would be 12,000.

14 R: Let's start with the questions. What were your main reasons for purchasing a plug in electric  
15 vehicle?

16 P: Ok, so basically it was time for me to change my car, my diesel car after twenty years of  
17 service. So, when I decided whether to purchase another diesel car or any V car or PHEV car,  
18 I sat down to make some calculations and see what would pay me in the long run vis a vis the  
19 three types of cars that I was going to purchase. By far, purchasing an EV would pay back more  
20 than investing in a diesel car or investing in a PHEV car. That was my main rationale about it.

21 R: Ok, so you were in between three cars

22 P: Yes, yes

23 R: Question number two – what are the main advantages of the current government grant  
24 scheme?

25 P: Ok, no, basically it helps a lot in subsidising the price of the car. So we're talking about cars  
26 that, right now, more or less are in the region of over 25K excluding the grant. I was looking at  
27 a normal, not a small sized car, but an SUV car, and obviously, the advantage that the  
28 government gives you an 11,000 grant in terms of purchasing an EV car, is obviously enticing  
29 to buy an EV car and invest in an EV car.

30 R: And now what are the disadvantages of the current government grant scheme?

31 P: Yes, I would add that to get more people interested in investing in an electric vehicle, I would  
32 suggest that the government would consider subsidising or granting or issuing, extending the  
33 grant also on the purchase of the charging system of the home box, of the wall box. That is one  
34 of the disadvantages and I hope that this might be addressed in the next budget, sorry, in the  
35 next grant.

36 R: You're talking about the charging boxes either offered by the car companies or companies  
37 like, for example, one company that comes to mind is Solar Solutions.

38 P: Solar Solutions, exactly, exactly. But these type of, there is the PV point also, these type of  
39 boxes that can be installed at home. Obviously the cost of these boxes ranges between 700 to  
40 1,000 Euro. Now if you make up the calculations in whether you will be recouping that sum  
41 invested, to get a more expedited charging system at home, it takes long, so I would suggest  
42 that that is a disadvantage and I would, if I were in the government's shoes, definitely consider  
43 subsidising, or at least, at least subsidising, or granting also this type of charging system.

44 R: So it would be an added benefit to fasten the process as well.

45 P: Exactly, definitely.

46 R: They go hand in hand, a good idea

47 P: Exactly

48 R: What are the positive qualities of the grant application process. So when you go to the  
49 showroom obviously there's a process, you need to fill in a document

50 P: Yes, the positive process is that this is taken care of by the car company. That is the most  
51 positive thing. Basically, they fill up all the paperwork, in this particular case, Muscat Motors  
52 have also offered that they will take the application themselves to Transport Malta so the  
53 process in terms of purchasing and applying for the grant is seamless.

54 R: So, you're not involved in any government bureaucracy, which leads me to the negative  
55 qualities of the grant process.

56 P: Exactly. Then comes the actual grant, coming up, which, I'm informed might even take up  
57 to more than a year for you to receive the grant back from the government. Mind you, this is a  
58 process where EU funding is involved. It's a process where the government also basically  
59 issues an allotted amount, which, as far as I know, has never been fully consumed so far. So  
60 the process in terms of giving the grant back to those who purchased an EV car is somewhat  
61 lengthy, exactly, that's the word, lengthy.

62 R: So how would you improve it? How can it be improved?

63 P: I would, definitely, I would, put in a commitment, say, within three months, the funds will  
64 be immediately allocated back to the purchaser of the car definitely. That is the only way how  
65 you improve and how, because, it's not easy

66 R: You need a timeline

67 P: You need a timeline, exactly! It's not easy for anyone to fork out 11,000, 12,000 Euro in  
68 purchasing a car straightaway. Mind you, there's also a scheme where, I don't know if it's  
69 mentioned further on, but there's also the scheme of the loans from the bank, whereby EV cars  
70 are granted a ten year repayment period at zero interest rate from the local banks. So that is  
71 obviously an incentive in itself. That part, the loan part, the grant part is not to be included in  
72 the loan so definitely the first 11,000 have to be forked out by the purchaser.

73 R: So what you are saying is that the bank issues the loan on the remainder of the sum, minus  
74 the grant.

75 P: Exactly

76 R: Let's move on to the next question. What other incentive would you introduce to motivate  
77 individuals to purchase a PEV? So both PHV and EV

78 P: So basically what I have said before, the introduction of a subsidy or the full purchase of the  
79 wall box at home, definitely more commitment from the government in introducing charging  
80 points. Charging points are somewhat lacking on our island. I believe there was a form of  
81 commitment during the last budget and I hope that these will be implemented by at least end  
82 year.

83 R: In my opinion, questionnaire aside, I would introduce a lot of charging stations outside.  
84 When I used to work at the showroom the first thing we used to ask customers is 'do you have  
85 a garage?' If you don't have a garage, forget it, it would be a bit of a disadvantage.

86 P: But even apart, Owen, if you'll allow me, even apart from all this, I would make it mandatory  
87 for public buildings for example, garages within office blocks, to have these types of charging  
88 points. For example, I work in a bank, Bank of Valletta, in the Head Office, and I work in the  
89 facilities section. We're just implementing a number of charging points within our garages.  
90 This has to be mandatory, mandatory within every new application, from Planning Authority,  
91 but even mandatory by, let's say, 2025, in existing office spaces, within the buildings. Why?  
92 Because a person who goes to work with his car, having his car idle for eight hours, can easily  
93 charge it at work, and when I say charge it, even at a cost, I'm not saying free of charge.  
94 Although there's the contribution from the ESG on the part of the company. But even at a cost,  
95 that will obviously make it more enticing

96 R: That makes it an incentive for customers to purchase. Yes, I totally agree.

97 P: Definitely.

98 R: Question number 7, would you recommend others to purchase a PEV? Please state your  
99 reasons.

100 P: Yes, definitely, according to my research, so far, yes, definitely. One, consumption wise, so  
101 if we have to compare what we're paying for petrol and diesel, versus what you will be paying  
102 for electricity, servicing, licensing fees and everything, obviously the car will be much more  
103 valuable to purchase an electric car rather than, that's number one.

104 R: That's the consumption side

105 P: Number two, the way forward is electric. According to various media reports, by 2035 there  
106 will be no more supply of petrol or diesel cars, by 2050 there will be the phasing out of, at least,  
107 EU are hoping to have the phasing out of the petrol and diesel so in itself, the future is electric,  
108 so that's why I would tell people to buy an electric vehicle.

109 R: And question 8 is technically, since you still have to receive your car, what challenges did  
110 you experience since owning a PEV, we would skip that.

111 P: Yes. However I think the main challenge would be changing my mentality in planning more  
112 vis a vis a normal petrol or diesel car, because obviously a petrol or diesel car, if you're running  
113 out of petrol, or almost running out of petrol, you stop at the next petrol station, you fill up and  
114 that's it. If I go abroad with my car, I stop at a petrol station, I fill up and continue my journey.  
115 A PEV definitely requires some form of planning. Planning your route, planning your trips, so  
116 these are obviously challenges that one would experience anyway.

117 R: That was the main issue with customers I used to deal with, yes. Changing the mentality, I  
118 used to get questions like 'what happens if I run out of battery?' I used to answer 'what would  
119 you do if you ran out of petrol?'

120 What are the advantages of owning a PEV? You may compare this to owning an internal  
121 combustion engine vehicle. You have already alluded to this, so I would say the consumption,  
122 no?

123 P: Exactly, the consumption, comfort in itself, I mean, the various comforts being offered today  
124 with cars, obviously you can find it also in ICE vehicles now, however

125 R: They are more technically advanced no?

126 P: Exactly

127 R: And in your opinion, what are the disadvantages of owning a PEV? You may compare this  
128 to owning an internal combustion engine.

129 P: One big disadvantage, as I mentioned before, planning your route if one decides to go  
130 abroad. That is the only disadvantage, because if you are limited on time, travelling from  
131 destination A to destination B, you will definitely have to stop and hoping to find a charging  
132 point readily available to have a fast charge or to charge your vehicle until you wait for it.  
133 Whilst with an ICE vehicle obviously, that's totally different.

134 R: This is an interesting question. So, number 11, in your opinion, why do you think the take  
135 up of electric vehicles has been slow when compared to ICE vehicles?

136 P: I think the, so yesterday, when I was answering your messages, I was in Madrid and I was  
137 impressed, literally impressed, by the quantity of electric vehicles going around. In a city, yes.  
138 So I would easily say that there was a good 30% car zones, electric vehicles, out of which 80,  
139 90% of taxis, were all electric vehicles. So, in my opinion, why do I think that take up of electric  
140 vehicles is slow, why? Because there has to be a shift or a change in mentality. There also has  
141 to be the infrastructure ready to cater for a huge influx, or at least, a considerable influx for  
142 electric vehicles. So I think those are the main variables so far, to which a person

143 R: It's a cultural thing as well

144 P: Yes, yes, it's a mentality thing. We want everything comfortably at home, comfortably,  
145 readily available, so, and let's not talk about our contribution to going green, because that is  
146 the least of what people think about at all. So I'm not just buying a car to go green, no one  
147 considers that.

148 R: In fact it's one of the questions I'm trying to answer in my thesis, so. In my opinion only the  
149 early, the customers who bought the electric vehicles early, like in 2013, which bought electric

150 vehicles just for the sake of going green. Because the incentive was very low at that time. In  
151 fact, this next question tries to understand a bit more the reason, so, let me just read it, because  
152 it's easier. Imagine the below are incentives that are available when purchasing a PEV. Which,  
153 if any, would motivate your purchase? Give a reason for your answers (a maximum of three  
154 responses). A rebate which is deducted at the time of purchase, so as you were saying this  
155 would eliminate waiting for the grant to reach you. So if, let's say, the car costs 30,000, you  
156 would pay 28, so it would be deducted from the price straight away without having to wait.  
157 Then, a free rapid charger to install at home rather than the standard charger, discounted  
158 electricity rates, so, at home, no yearly circular tax, access to driving in the bus lane, no  
159 registration tax upon purchase, and lastly, priority parking for electric vehicles. So you can  
160 choose up to three.

161 P: So definitely I would choose a rebate that is deducted at the time of purchase, no registration  
162 tax upon purchase, and the discounted electricity. Here if I may include though, both at home  
163 and even at charging points.

164 R: The last question, question 13. So as you might know, currently the PHEV and BEV, so the  
165 PHEV they extended the grant because of the delay in the delivery throughout this year. And  
166 battery operated vehicles and PHEV receive currently the same amount of grant.

167 P: Are you sure about the hybrid?

168 R: Yes, yesterday

169 P: Ok, sorry, I thought it was somewhat reduced.

170 R: That's what you would think no?

171 P: That's what I thought actually. And that's what I think the salesman told me as well, but  
172 anyway, whatever. But anyway, I would never consider a PHEV in any case and basically I  
173 wouldn't consider it because you're doubling your problems.

Participant SM

174 R: Exactly, ok, ok. So, would you, because the question asks about the variable monetary  
175 amounts. Let me give you an example, so, a battery electric vehicle gives you 200kms of range  
176 and a plug in hybrid vehicle gives you 40kms range. In my opinion it's very unfair to give the  
177 same amount of grant.

178 P: Definitely agree. I would make a huge difference between them. I mean, let's not kid  
179 ourselves, the difference is huge, I mean having a fully electric vehicle compared to something  
180 which gives you 50kms and then goes on combustion, they definitely don't have to have the  
181 same amount of grant, definitely.

1 R: Let's start with the questions. What were your main reasons for purchasing a plug in electric  
2 vehicle?

3 P: At the time I wanted to change my car, I had a petrol car, a diesel car, and I was planning to  
4 get another petrol car, but I was like, interested in getting an electric car and when I shopped  
5 around, I thought I'd take the leap and get an electric. I wasn't afraid of the leap per se, so, you  
6 know

7 R: That's one of the issues people find, change, the drastic change from petrol or diesel to fully  
8 electric, in fact some opt for plug in hybrid, but not in your case.

9 The advantages of the current government grant scheme?

10 P: I mean, it's, I found it helpful because, my car was already a bit costly and with it I reduced  
11 the cost overall. There was a time when it was 7,000, now it's even more, so it's like, if I waited  
12 a bit more I would have benefited even more.

13 R: Yes, at least you were one of the, let's say, early adopters. And the disadvantages of the  
14 current government grant scheme?

15 P: I would say that the only disadvantage ahead is that in practice, you only get 6,000, at least  
16 at the time, it was only 6,000. I only got a 1,000 if I scrapped my car, which I did, but if I had  
17 a car which didn't fit the criteria I would have lost a 1,000, in a sense. It's not a major  
18 disadvantage, but I would say that

19 R: One of the disadvantages. So you went through a process of applying for a grant, what were  
20 the positive qualities?

21 P: The what, sorry?

22 R: The application process, so you went into the showroom and applied for the grant, what  
23 were the positive qualities of that process?

24 P: Ok, well it was quite straightforward, as in, I found it, from my knowledge now, it was like  
25 the dealership provided me with the documentation and they assisted me throughout.

26 R: The dealership usually take part of the nitty gritty

27 P: Yes, it was one of the dealerships that were trying to promote their cars as much as possible  
28 so I think they wanted it to be as seamless as possible.

29 R: Switching to the negative side, what were the negative qualities of the process and how  
30 would you improve it?

31 P: At the time, I think, I think it just asks for a lot of details, not a major issue, but probably I  
32 would say that there's a certain level of detail, especially when it came to the part of  
33 relinquishing my other car to tap into the additional 1,000, there was like, information I had to  
34 give.

35 R: So, what other incentive would you introduce to motivate individuals to purchase a PEV?

36 P: Possibly, I mean, more ahead, more charging points, because if there isn't that, I mean it's  
37 quite useless to roll out these initiatives, because back then, 7,000 was a lot, and now 12,000  
38 is even more, so

39 R: People comment about the infrastructure being so, the initiatives versus the infrastructure,  
40 let's say they lack.

41 P: Yes, yes, I would say so.

42 R: Question number 7. Would you recommend other friends or family, to purchase a PEV?

43 P: I'm always pestering everyone, so yes, I would

44 R: You're one of those like 'buy electric, buy electric!'

45 P: Yes, I mean, my stepfather got a plug in hybrid recently because he started seeing how I was  
46 using my car, my dad started backwards on it but I think eventually he'll get there, he just needs  
47 more time like most people.

48 R: Some try not to take the larger leap or the longer leap from petrol or diesel to electric and  
49 they decide to go for the middle ground the PHEV, but we'll get to another question later,  
50 there's an interesting one.

51 What challenges have you experienced since owning a PEV?

52 P: I think at first it was like, planning, pre planning more, I mean the luxury of a diesel car is  
53 that you can find fuel in five minutes, there's no charging system, but to be honest now most  
54 chargers are quite rapid, they're not the fastest but they're quite rapid. I would say they're no  
55 longer issues for me.

56 R: Question number 9. What are the advantages of owning an electric vehicle in your case  
57 when compared to owning an internal combustion engine?

58 P: I would say from a money perspective because up front you pay a lot for the car, I find  
59 myself not spending more than two or three Euro for a charge. I don't charge from zero to  
60 hundred, but say it will be 30% I wouldn't spend more than than, so, compared to my old car,  
61 where I was spending 20 Euro every week and a half, that's quite a jump.

62 R: And twenty Euro for a week and a half is decent for a petrol car, there are cases where it's  
63 even worse.

64 P: I think it depends on how much I use it because I'm someone who uses my car every day,  
65 now, this car at least, I charge it twice a week or three times, depending on the usage.

66 R: And the disadvantages of an electric vehicle versus a combustion engine?

67 P: Charge fees I think, in Malta, to my knowledge, there aren't many at all, fast chargers. If  
68 there are I'm not aware of them, I know there are in between, the rapid ones, they're good. I  
69 think that's the main one, if I truly would be with my back against a wall I don't know where I  
70 would be, unless I wait four to five hours to charge the car.

71 R: I think they're working on it, this rapid charger, but then again, you overheat the battery,  
72 you lose its life, it would be only for emergencies. And in reality I feel that even if you had the  
73 slow charger, and you charge it for an hour, you have enough charge to get home.

74 R: You're in Malta

75 P: And even if you don't, then you have enough time to get to another port, closer to your home.

76 R: And in your opinion, why do you think the take up of electric vehicles has been so slow  
77 when compared to ICE vehicles?

78 P: I think it's like with most new technology in life, unless it's something easy to access and  
79 there's easy entry, people will go for it, but given that electric cars are very expensive, the  
80 infrastructure, as we said, is very limited, and also, one thing that I didn't mention about the  
81 infrastructure, but it relates to it is that people that I know who wanted it and who don't have a  
82 garage I think I'd tell them not to get an electric car right away because right now the  
83 infrastructure is so limited that for them to park kilometres away just to charge their car, while  
84 if you had a garage you'd have that luxury. It's not worth it for someone who lives in a side  
85 road, because, I live in Rabat for example, and there are few but not many, and they're always  
86 taken, so if we didn't have our garage, we'd have that issue.

87 R: Plus, you do find cases of people who park there just because they have an electric car and  
88 they don't usually, they just park there without charging it, which is unfair.

89 P: Yes, yes, it happens all the time. It's an added advantage as well when you have a dedicated  
90 spot, but typically for example at University I head straight to the charger if I need to charge  
91 only.

92 R: The next question has seven answers and I need you to chose a maximum of three responses.  
93 So imagine that these are incentives which may already be in place, when purchasing an electric  
94 vehicle. Which if any, would motivate your purchase? Give a reason for your answer. And these  
95 are a rebate which is deducted at the time of purchase, so instead of you having to wait six  
96 months, you get it deducted from the price straight away. A free rapid charger to install at home  
97 rather than the standard charger, discounted electricity rates, , no yearly circular tax, access to  
98 driving in the bus lane, no registration tax upon purchase, priority parking for electric vehicles.

99 P: Which I would choose if I didn't have an electric car, so I have to choose three which

100 R: Which would motivate you further to purchase the electric vehicles

101 P: The rebate I think, for sure, at this point in time it will incentivise for sure.

102 R: Discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no  
103 registration tax, priority parking for electric cars.

104 P: The discounted electricity rates, the electricity rates for sure, yes, because I feel like, if I  
105 didn't have that I'd end up paying as much as a diesel car, if not more, and I think, possibly the  
106 tax.

107 R: So, the circular tax

108 P: The yearly tax, yes. The rest, in my opinion, you don't really need them, as in they're nice  
109 to have but you don't really need them.

110 R: So, we move on to the last question. This is an interesting one in my opinion, not that the  
111 above aren't. What is your opinion about the introduction of variable monetary amounts when  
112 purchasing a BEV versus a PHEV? So let's say, a pro rata rate? So, at the moment, let's say  
113 last year, PHEV and BEV got the same amount of rebate, which is 11,000.

114 P: I'm sorry, you're cutting, that's why it's taking so long

115 R: No problem, no problem. What is your opinion about the introduction of variable monetary  
116 amounts when purchasing a BEV versus a PHEV?

117 P: So we're talking on how much I'd spend on charging, for example? Or is that not really what  
118 you're aiming for?

119 R: No. So at the moment the incentives for PHEV and BEV were the same last year, both were  
120 11,000. And some might argue that it's unfair because obviously the PHEV has much less range  
121 than BEV. And you're incentivising actually people to, people might buy a PHEV without  
122 being, without using the electric side of the car. Introducing a pro rata rate which is associated  
123 with range in my opinion.

124 P: So you want me to tell you a number that I think would be best for how much?

125 R: No, no, let me just, let me repeat it, no problem, no problem. So, PHEV and BEV, the  
126 government last year was giving a monetary incentive for a battery electric vehicle 11,000 and  
127 for a PHEV 11,000 as well. And as you know, PHEV has a combustion engine and an electric  
128 motor which has a 40km range. So that might go against green driving because actually you're  
129 using combustion engine as well so you're still polluting. What is your opinion on introducing  
130 a variable monetary amounts when purchasing BEV versus PHEV? So introducing, like, for  
131 example, if a PHEV does 40kms range, you say, 1,000 as an incentive and a BEV you get  
132 11,000, because you have like 400kms range. So a pro rata range.

133 P: Ah, ok, I see what you mean. That would be very good. I'm not a fan of hybrids in general,  
134 nothing personal, I just feel like if you're going to do the step, might as well do the full step  
135 than half a step. I feel like the hybrid provides you with 40kms, so in reality I don't see it really  
136 as an electric car, it has an electric component, but it's not a fully electric car.

137 R: People who own a battery operated vehicle like yourself, would find it unfair, because I took  
138 the leap, I'm driving very economically and practically saving the environment and the guy  
139 who spent, bought a car which is a both a combustion engine and an electric motor, and only  
140 has 40kms range, people might say that's a bit unfair. I think it is unfair, especially if since from  
141 an environment point of view as well, they're damaging more and getting rewarded the same  
142 amount in a sense.

143 R: Exactly, exactly and that's one of the reasons why they've actually stopped that rebate now  
144 and they're solely focusing on battery electric vehicles.

145 P: From my point of view, I know there was a few years back, they said they wanted to  
146 introduce, by 2030, a cut off point for diesel cars and petrol cars, I don't know

147 R: I think that's 2035 now.

148 P: Assuming that it does happen, if you're giving incentives for a half electric car you're only  
149 prolonging the inevitable, as in, instead of just changing, you're just slowly changing

150 R: Having a half electric car would be, because obviously a PHEV has much less range than  
151 half a BEV for sure, it's a fraction in my opinion.

152 P: Even my father, my father who has a hybrid car, has I think about 50kms, or something like  
153 that, whilst I was happy that he made the leap, a step, for me, who had already experienced the  
154 electric car, he could have made another step, but obviously people are different in how they  
155 approach things.

156 R: And I think it's a cultural thing as well, with us Maltese, it's better the devil you know than  
157 the devil you don't know, taking the leap sometimes is hard. So that concludes the interview.

## Participant ESK

- 1 R: So, let's kick this off. Electric vehicle or a plug in hybrid?
- 2 P: It's a battery electric vehicle
- 3 R: Year of purchase?
- 4 P: 2022
- 5 R: And the total grant?
- 6 P: 12,000
- 7 R: So, 11 plus 1, right?
- 8 P: Yes
- 9 R: What were your main reasons for purchasing a plug in electric vehicle, so, a battery electric  
10 vehicle in your case.
- 11 P: Well, ok, so one of the reasons was the grant, ok? So, I had various reasons though. So, as  
12 you know I had the mini before and it was a petrol ok, so having to travel from Mellieha to  
13 Gzira every day, I was encountering quite a lot of petrol consumption, I was approximately  
14 paying 35, sometimes even 40 Euro a week. And obviously, you know, times that by four, and  
15 keep doing it, you know it's quite a bit of money. So obviously when my favourite car became  
16 available in electric, I started looking into the possibility of buying a fully electric car, for one  
17 reason, obviously to eliminate that weekly, monthly, you know, expense, secondly because my  
18 car was already eight years old and I thought it was you know, maybe time to change it, so that  
19 was another reason, the grant, being, you know, quite a substantial amount, made it very easy  
20 for me to make the decision. Because when you take into consideration that you have the  
21 purchase price and then my previous car which I sold, and then the grant, it literally was the  
22 same amount for me to buy a brand new car, it was the same amount as a second hand one.
- 23 R: It bridged that gap

24 P: Exactly. So the grant bridged the gap for me from going to any second hand car to a brand  
25 new, fully electric vehicle. Well obviously it wasn't like a quick decision, because obviously,  
26 for an electric car you need a garage, so that was the first step. So we obviously had to invest  
27 in a property basically, it has a garage for us to be able to buy an electric car.

28 R: In fact that's the first question we ask when people come in to the showroom to buy such  
29 vehicles.

30 P: Exactly, especially with a fully electric car you have to have a garage because you're going  
31 to be dependent on the range that it's going to give you. Yes, but I think in my case anyway, I  
32 had various reasons why I wanted to move but the grant made it easy for me to make that  
33 decision.

34 R: Ok.

35 P: So probably, if the grant wasn't there, I would have probably kept my car for a couple more  
36 years, or if I really wanted to change, I would have probably gone for another car, you know,  
37 maybe not in that price range that I went for this time.

38 R: Ok, so I'll move to the second question, because there are certain questions that might  
39 overlap with the first one and the next couple of questions. What are the main advantages of  
40 the current government grant scheme?

41 P: Ok, well I kind of mentioned the advantages in my case before

42 R: It bridges the gap.

43 P: Well, yes basically it's the easiest way to put it. The grant right now is probably bridging the  
44 gaps that people before weren't able to bridge. So with the grant now they can. So they can  
45 look into different cars, maybe their dream car you know, that before wasn't possible, so yes, I  
46 think so.

47 R: And the disadvantages of the current government scheme?

48 P: It's the waiting time. It took me eight months to get it.

49 R: So that actually answers question no 5 which the negative qualities of the process of the  
50 grant application? So those go hand in hand, don't worry about it.

51 P: That one and another negative part of the process is that there isn't a system where you can  
52 actually follow your application. Like, you can't go on a website, whatever, put in, I don't  
53 know, your ID card number or your whatever, and actually follow what's happening. You have  
54 to call and someone says 'I don't know', and the other one says 'Oh, you have to wait', it's a  
55 very broad system, it's like, oh, when you get it you get it, kind of.

56 R: Yes, people mention the fact that there should be like, more, more clarity about the process  
57 and more transparency like having a balance online where you can see that there's actually the  
58 grant available or, you know, the usual stuff we used to encounter when people ask us about  
59 their grant.

60 P: Exactly, it should be in the process of the E-ID for example, you know it's a government  
61 thing and it should be incorporated in it. You know you have a different tab and you just click  
62 on it, and maybe it takes you to your application process or something like that.

63 R: And are there any, in your opinion, positive qualities of the process of the grant application?  
64 Question number 4.

65 P: I think, the fact that they at least send you the letters it's something, because you get two  
66 letters. The first one it's basically, actually three. The first one is that when you basically they  
67 hand in the application they literally send you like, a message, that, you know, your application  
68 has been submitted at this day, at this time. And then you get a letter saying that they, like a  
69 formal one, saying that they've received the application and that they will start, you know, the  
70 process, and you get another one at a later stage. Those, I think, are positive ones.

71 R: What other incentives both monetary, or non monetary, would you introduce to motivate  
72 individuals to purchase such vehicles?

73 P: Incentive, can it be, like, let me just say it so maybe you can explain it better. One of the  
74 problems is that there isn't

75 R: Infrastructure?

76 P: Yes that's one, infrastructure. But there isn't enforcement on people not abiding by the  
77 provided infrastructure, if that makes sense. So for example if you have the charging station  
78 and you go to use it, and you find a car which is just parked there which is not electric or plug  
79 in hybrid, there is nowhere you can call and say, listen, like, I need to charge my car because  
80 maybe I don't have a garage, and there's this car, parked there for the past twenty-four hours,  
81 for example.

82 R: Ok, that's an indirect form of incentive. I totally agree, and I'll mention that as well. And  
83 would you recommend to others to purchase a plug in electric vehicle?

84 P: Plug in hybrid no, electric yes

85 R: Why:

86 P: I think that plug in hybrids, I think that the grant, on the plug in hybrid was, it shouldn't have  
87 been there.

88 R: So, I have, my last question is on this subject, we'll get to it later, so I'll leave you to  
89 comment in the last section. Any challenges you've encountered since owning a PEV?

90 P: No, not really

91 R: No, ok. So, what are the advantages of owning an electric vehicle when compared to ICE  
92 vehicles?

93 P: So, let's see, your consumption is out, the electricity is much cheaper. Servicing as well,  
94 there is minimal servicing. My case, power, gaining on the power of the car than what was left  
95 in the previous one.

96 R: Poor thing

97 P: No, it was fine, but, you know, you can't really compare a one with a Cooper S  
98 The licence, the other one, it was over, nearly 200Euro per year, and this one obviously I'm not  
99 paying anything, so that's another advantage and bonus.

100 R: Any disadvantages on the other hand?

101 P: You have to plan differently, in my case, because obviously there are fully electric cars which  
102 have a really, really, good range

103 R: Why do you say in your case, is there something?

104 P: Because my car, which is a fully electric car, it has maybe one of the lowest ranges available.  
105 So obviously I have to plan ahead if for example I'm at work all week, and maybe I also have  
106 some errands during the week, I have to plan ahead to make sure I have enough charge, you  
107 know, and you have to think, even if, for example, there's no electricity and you're on 20%,  
108 you know, what are you going to do? You have to, it's a lifestyle, you have to plan differently,  
109 you have to prepare yourself.

110 R: And in your opinion, so, moving on to the next question, in your opinion, why do you think  
111 the take up of electric vehicles has been so slow when compared to the sales of ICE vehicles?

112 P: Mentality unfortunately. There are a lot of petrol heads here and probably electric is like an  
113 abomination for them.

114 R: I've had this comment I think yesterday, actually. That people in Malta like to, you know,  
115 listen to the engine, feel the power, but usually that comment comes from people who never  
116 drove an electric vehicle in my opinion.

117 P: Yes, they are taken aback, that's why I said mentality, because if they actually pushed  
118 themselves they would change their minds.

119 R: So the below are incentives which may already be in place when purchasing an electric  
120 vehicle. Which would most motivate your purchase of an electric vehicle? Give a reason for  
121 your answer and you have a maximum of three responses. And the first one is a rebate which  
122 is deducted at the time of purchase, rather than you having to wait eight months,

123 P: Yes, that would be very good. I think that's the simplest, most efficient way of doing it, yes.

124 R: A free rapid charger to install at home rather than the standard charger, discounted electricity  
125 rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon charging,  
126 priority parking for electric vehicles.

127 P: I think my main are the rebate which is deducted at the time of purchase, as I said because  
128 it is the most efficient and the simplest way to do it, having said that I had to wait seven months  
129 to get mine, The priority parking for electric vehicles, I think it's a very good incentive, you  
130 probably have, if for example, you're going to Valletta, and you know that parking is a problem,  
131 if there are specific parking places for electric cars, maybe I'd be more relaxed going there,  
132 knowing that I'll find parking, so, that one. Bus lane, not really, circular tax, ok, electricity  
133 rates, I think I'd go for the registration tax. It's quite, well, registration tax is basically a luxury  
134 tax here.

135 R: And the last question. So, let me explain this question. What is your opinion on the  
136 introduction of variable monetary amounts when purchasing a BEV versus a PHEV? So,  
137 introducing a pro rata rate, let's say for every 40kms of range you get a thousand Euro of rebate.  
138 Because people might argue that having the same incentive as it was last year, you get 11,000  
139 for a PHEV and 11,000 for a BEV, it might be seen to be a little unfair. What's your opinion on  
140 that?

141 P: Well I might be a bit biased, because I've met both clients, as in, both types of clients. So, I  
142 don't think that the grant should have been the same for fully electric cars and plug in hybrid  
143 cars. I still think that there should be something, for plug in hybrid, as you're saying, if for  
144 example it's of a certain range you get a number whilst if it's under a certain number you get  
145 nothing, or you get less. The reason is this, most people that bought a plug in hybrid electric  
146 vehicle bought it for the simple reason of the grant and the grant alone. And when I say for the  
147 grant alone, they weren't even bothered to try to understand how the electric part of it actually  
148 worked.

149 R: Instead of an electric vehicle.

150 P: And apart from that, they're not understanding that not using the electric part of the vehicle,  
151 you are only going to cause problems, so technically it's going to cost them more to fix the  
152 problem at a later stage. You have two maintenances anyway, you have to maintain the engine,  
153 obviously, and you have to maintain whatever is left of the battery, so definitely you're  
154 doubling your expenses.

155 R: Exactly, yes, I had this comment before as well, yes. Obviously people who own a PHEV  
156 will not say this and admit to it, but yes

157 P: I also don't think that it's fair to have the grant on certain types of cars, that are of a certain  
158 price and above. Yes, I think there should be a cap, there should be a cap of, say, 40,000 Euro,  
159 which I would maybe say, be the average range of a normal earning person, but you know,  
160 certain types of vehicles that are, I don't know, 90, 100,000

161 R: I think that if you buy those types of vehicles

162 P: You don't need the 11,000. I think, personally, but obviously not everyone is going to agree  
163 with me. I mean, maybe the registration tax, ok, if you have a certain amount of range all right,  
164 but actually getting a grant, I didn't think it was fair.

165 R: So that concludes the interview.

Participant ASK

- 1 R: So, what type of vehicle do you own? A battery electric vehicle or a plug in hybrid?
- 2 P: Battery electric
- 3 R: Year of purchase?
- 4 P: 2023
- 5 R: And the total grant received?
- 6 P: 11,000, but I haven't even applied for it yet, because it's closed, so we'll see.
- 7 R: But you're eligible, no? It's what they always say 'Oh, we'll see!'
- 8 Question no 1, what were your main reasons for purchasing a battery electric vehicle?
- 9 P: My wife.
- 10 R: I was literally going to say
- 11 P: No, I'm joking, but I was going to buy a second hand Smart petrol, and when I worked it
- 12 out with the grant it didn't make any sense, so basically, the main reason, is the grant, obviously,
- 13 also because BOV also just brought out the Eco loan, which is basically, you get the proportion
- 14 of the loan, not including the grant, is at zero interest. It's been out for four months, so it's
- 15 obviously a very good incentive for people who want to purchase an electric vehicle, so those
- 16 two are my main reasons, my third one is because I wanted a fast car. And you can't get much
- 17 faster than an electric.
- 18 R: I want a fast car, yeah! Question no 2. What are the main advantages of the current
- 19 government grant scheme?
- 20 P: Pretty much what I've just said about the monetary value of it. Obviously I hope that many
- 21 people who are not in a position to purchase such cars, will be able to, you know, 11,000 is a
- 22 lot of money.
- 23 R: So, it bridges that gap.
- 24 P: Are you hearing me properly?
- 25 R: Yes, yes, I'm just writing it down.

## Participant ASK

26 P: Because my wife said I'm very low, I have a chest infection, that's why. Yes, as I said before,  
27 it bridges the gap, between what you can't possibly afford and what you can afford with the  
28 help of the government grant scheme.

29 R: And any disadvantages in your opinion?

30 P: I don't really have an opinion yet because I haven't already gone through it. Only from what  
31 I hear other people say, about how long it takes and you can't check up on it, but obviously I  
32 haven't gone through that process yet so I'm kind of a blank page. One thing that was brought  
33 up was, to be able to check on the application, that would obviously be a very good idea, to  
34 know kind of where you stand, you get a kind of time frame and you try to go by that. If you  
35 had somewhere where you could follow and see the progress, that would be really good.

36 R: What are the positive qualities of that, applying process? Like, you went to the showroom,  
37 and everything was done by them? Was that easy for you?

38 P: I haven't applied for it.

39 X: But it will be easy, because basically it will be just them giving you the paper, you'll fill it  
40 out and send it.

41 P: Is that how it works? I don't know. So, when I pick the car up you mean?

42 X: No, when it becomes available

43 P: Ah, ok.

44 R: No problem about that, let's switch to the next question. So, what other incentive, both  
45 monetary and non-monetary would you introduce to motivate individuals to purchase an  
46 electric vehicle?

47 P: Like, for example at my work, they installed two electric charging stations inside of our  
48 private garage. I think that all companies, maybe if it's given by the government maybe as an  
49 incentive, like all companies should have it for their employees to have access to have charging

50 stations at work. More than that there need to be a hell of a lot of charging stations round the  
51 island as well, because they are very few and far between.

52 R: So the infrastructure itself.

53 P: The infrastructure, yes.

54 R: Both privately as you said, and business wise

55 P: Business wise as well, yes.

56 R: And would you recommend others to purchase such vehicles?

57 P: Yes, I would. I don't think anybody, but it's also a massive positive for the environment,  
58 which is pretty much why electric vehicles are here because we're trying to lower the  
59 emissions, so that's one of the many reasons why you should purchase an electric vehicle, and  
60 not just because you get money off it, but you're actually helping out the environment as well.  
61 So anyone who's very health conscious, or conscious about global warming, that would be  
62 good for them, so, and as I said the money is a big incentive.

63 R: I mean, as we've said before, it bridges the gap, it makes it at par with a combustion engine,  
64 so I think it's very useful. And you drive the car, any challenges you've experienced?

65 P: I haven't driven the car, because I can go out next week, but I've driven electric vehicles,  
66 I've driven electric vehicles. I haven't had any issues. They're great, I love them, they're great  
67 fun, very sensitive to your foot.

68 R: So, powerful, yes.

69 P: Very powerful.

70 R: Question number 9, what are the advantages of owning an electric vehicle versus a  
71 combustion engine vehicle in your opinion?

72 P: So for me it would obviously be no road tax, no petrol per week, so, saving money basically.  
73 If you have priority on places to park obviously because Malta's a very small place and parking

## Participant ASK

74 is quite difficult, so if you have certain preferences if you can get parking first because you're  
75 an electric vehicle, that's obviously, an advantage as well.

76 R: And, any disadvantages when compared to a combustion engine vehicle?

77 P: I think with a Smart I might be at a bit of a disadvantage because a Smart's got a very small  
78 range for an electric vehicle, realistically it's like a hundred kilometres, so it will probably have  
79 to be charged every day if not, every other day, depending on how you drive the car, so, again,  
80 that's something that you have to plan around, you can't just, you have to make sure, and also,  
81 with a Smart car, which I find very very strange, they don't sell it with a three pin charger, they  
82 only sell it with the outside charging system. So you have to buy that separately. The fast  
83 charger, but then they'll give you the charger for your own personal garage. And then you have  
84 to buy, I think it's like a thousand Euro. You can't just rely on charging the vehicle outside  
85 because it's impossible. Actually when you have such a small range of a car, you need to have  
86 that security that you have, obviously somewhere to charge it personally. Obviously we bought  
87 our garage specifically for my wife's electric vehicle, which, now we have it it makes more  
88 sense that I would buy an electric vehicle as well. But I did find it strange that the Smart doesn't  
89 come with a charger, you have to buy it separately

90 R: I thought that was a give, you know, you have to have it

91 P: Yes, apparently it's an extra

92 R: In your opinion why has the take up of electric vehicles been so slow when compared to  
93 ICE vehicles?

94 P: I absolutely agree with the mentality aspect because Malta's very car, lots of enthusiasts with  
95 their car. They like to drive up and down the Coast Road, hear the engines and stuff, so I think  
96 it's the mentality, but I think that would change though over time.

97 R: It would have to change, especially if

Participant ASK

98 P: It would kind of become, by force eventually, especially if they stop producing petrol cars,  
99 everybody would have to go into electric or whatever else they bring out, but I think, you know,  
100 especially the younger people, they like these flashy cars with sounds and stuff, maybe that's  
101 why.

102 X: I think the price though as well, making them more expensive

103 P: But then there's the grant, I bought my Smart for 21,000, without the grant, which is  
104 relatively quite cheap for, especially for a Smart brand which is a very expensive brand of car.

105 R: And being an electric vehicle.

106 P: And being an electric vehicle, yes. But I think they are becoming more popular, especially  
107 now with taxi drivers and things like that, you see a lot of like, hybrids, or electric vehicles on  
108 the road.

109 R: At the moment I'm seeing a lot of MG's

110 P: Oh yes, in fact we were driving in an MG today because my wife got it from work. An MG  
111 4 was it?

112 R: We'll get into that subject after the interview, I want to ask a question. So, question number  
113 12, so we have a seven item list, and you have to choose a maximum of three. So imagine the  
114 below are incentives that are available when purchasing a PEV. Which, if any, would motivate  
115 your purchase? Give a reason for your answer. So, we have a rebate which is deducted at the  
116 time of purchase, a free rapid charger to install at home rather than the standard charger,  
117 discounted electricity rates at home, no yearly circular tax, access to driving in the bus lane, no  
118 registration tax upon purchase, priority parking for electric vehicles. So let me go back to the  
119 discounted electricity rates, to charge the vehicle.

120 P: I would go with the rebate which is deducted at the time of purchase, because it avoids loads  
121 of hassle of having to apply, I mean you're eligible for it anyway so why go through the hassle  
122 of having to apply and wait for such a long time? And obviously you have to put that money

123 up front, which a lot of people don't actually have. So that would put a lot of people off  
124 purchasing an electric vehicle because they don't have the money, I mean to put up front. In  
125 my case I did it on the BOV Eco loan, but they don't do the grant at a zero interest, it's at a 3%  
126 interest, so I'm paying interest on that. Obviously if it's not there at the beginning, that saves a  
127 lot of issues. I would take the free rapid charger, since I've already got a rapid charger, that  
128 would be perfect. And I would definitely want the priority parking, because parking is like, you  
129 know, gold here. It is, so if you know that you've got parking for your car, it's perfect.

130 R: We'll take the infrastructure of parking out of the equation because that would be another  
131 topic. And question 13, what is your opinion about the introduction of variable monetary  
132 amounts when purchasing a BEV versus a PHEV? With the same reasoning explained earlier.

133 P: So a BEV, is that a hybrid?

134 R: No, that's a battery operated vehicle, so what you own, versus a plug in hybrid electric  
135 vehicle. A plug in hybrid has much less range when compared to a battery operated vehicle,  
136 maybe, realistically, 40kms? And until last year they both vehicles used to have the same  
137 incentive, so 11,000. And people might argue that's unfair when they strive towards a greener  
138 sort of transport. What's your opinion about that?

139 P: I don't even think they should have made a hybrid electric vehicle, because for me it's  
140 pointless to have a battery and an engine because it's such a small range of an electric vehicle  
141 anyway that the engine kicks in so it's rather like, beside the point of having like this electric  
142 vehicle with an engine. It just doesn't make sense. So I would never myself opt for a hybrid  
143 vehicle. And I don't think that they deserve the same monetary amounts given to them because  
144 one is fully electric and the other is like a part time electric car. So maybe it should have half  
145 the amount given to it since it's half an electric car.

1 R: What kind of vehicle do you own? Is it a battery operated vehicle or a plug in hybrid?

2 P: I was going to say I own, but I am a driver of a fully electric vehicle, the reason being that  
3 it is a company owned vehicle. Basically I have been driving an electric vehicle since 2017.  
4 Basically my previous employment, before I had the present employment, I had also been given  
5 a company car, it was electric, back then it was the Nissan Leaf, I think it was the 2015 model.  
6 Then when I moved on to this company, where I am today, which was towards the end of 2018,  
7 I also availed myself of an electric vehicle, which then again was the Nissan Leaf, but it was  
8 the latest model, which is the same car I'm still driving now and still driving today.

9 R: So you're considered to be one of the early adopters

10 P: Yes. I recall, back then in 2017 I had read an article in one of the papers and at the time the  
11 number of electric car owners was one thousand, five hundred.

12 R: Ok, I thought it was less.

13 P: I was one of them, I think it was round about that amount.

14 R: So the year of purchase, let's say the first time you

15 P: It was 2017, probably 2016, but let's say 2017, I'm pretty much sure I was driving a Nissan  
16 Leaf by then.

17 R: And do you remember the amount of grant?

18 P: I recall, I'm not sure whether it was 13,000 or 11,000, I believe it was, but obviously it was  
19 the company that availed themselves of that car. But I stand to be corrected on the exact figure.

20 R: Ok, no problem, I'll look it up myself and see the exact figure of 2017. So let's take it as if  
21 you are the customer, we'll try and take it from a customer's perspective rather than as a  
22 company car. So, what were your main reasons for purchasing an electric vehicle?

23 P: Yes, well, let me put it this way, the company, because I have to put this in a certain context.  
24 Even if I had to make a choice, if it was my own vehicle, I was purchasing, very likely I would  
25 have gone for an electric just the same. So back in 2017, the company I was working for, it was

26 actually part of an electric mobility project, and it wasn't the only electric vehicle which was  
27 purchased back then, it was four, I believe. In fact we had installed the charging infrastructure,  
28 with the charging stations, you know, so it was part of the company ethos, back then when I  
29 used to work for it, to actually go for this project. Yes, it was quite a pioneering, yes, for sure,  
30 back in 2017, even today, I mean, more so it was a construction company who,

31 R: I take it Vassallo then?

32 P: Yes, correct, it was Vassallo Group and actually my background, just a bit of background, is  
33 in engineering, I was the group technical manager, so it was actually, in itself, a project which  
34 I spearheaded, you know, I was responsible for getting the installation, of the charging stations  
35 installed, procurement, the whole logistics of it.

36 R: Yes, it was a big thing for Nissan, I remember

37 P: Yes, there was a certain amount of publicity which Nissan Iml had taken advantage of, rightly  
38 so obviously. So yes, in that respect it was quite pioneering, considering that it was four  
39 vehicles. This was 2017, so just the concept of BEV's in Malta was very very nouvelle and  
40 very new to the island, and it was coming from a construction company. As I mentioned earlier,  
41 sometimes construction companies are not seen to be embracing environmental principles and  
42 initiatives. But luckily and gladly, the company, Vassallo Group, spearheaded this project which  
43 I must say I was very proud of, that they did so.

44 R: And I take it you were part of the grant scheme? Maybe you were part of the grant scheme  
45 and have an idea of the process?

46 P: Not much to be honest because the grant itself, the application, the procedure, that was taken  
47 care of by the Accounts Division

48 R: And probably by the showroom itself

49 P: Actually, yes I mean as it happened, when I moved my job, I moved onto a new role with  
50 Mizzi where I am today, there happened to be the agents of Nissan, so it was quite natural to

51 do that. When they asked me which vehicle I wanted, as a company vehicle, I wasn't much  
52 spoilt for choice, because pretty much Nissan Leaf was the only model back then, it was  
53 basically on offer. It was basically a straight yes, and I already had two years' experience  
54 driving the previous model, the Nissan Leaf

55 R: It was a natural progression almost

56 P: Exactly. And there was no looking back and actually I went for it once again and I have  
57 absolutely no regrets firstly that I have now been driving a fully electrical vehicle for the past  
58 six years or more, and even with my choice of having a Nissan Leaf, and no intention of you  
59 know, just to praise the brand itself, but it has been a very comfortable car, and it's performance  
60 has been very satisfactory throughout. I mean Nissan have been pioneers in the field of EV's,  
61 I mean

62 R: Yes, they're one of the best in Europe

63 P: Yes, also they have been conducting research in electric vehicles technology for over twenty-  
64 five years, so that experience, they've got that leading edge on their competitors, on the  
65 Volkswagen Group for example, who more or less, it's the last two or three years that they've  
66 been investing heavily, billions

67 R: They're catching up almost

68 P: Exactly, so Nissan in this respect, they are by far are world leaders in that respect yes

69 R: Moving to the sixth question, because two to five I'm not sure they're questions for you  
70 being a company car. What other incentives would you introduce to motivate other individuals  
71 to purchase an electric vehicle?

72 P: So, two things, so firstly, let's put it this way, no I can. I mean my views on the current  
73 scheme of the 11K I believe it is at this moment? I think that itself is a very, very good incentive.  
74 It eventually boils down to the customer's choice, because back in 2017, yes, an electric vehicle  
75 was pretty much expensive, and they still are to a certain extent, but nevertheless, you see

76 people going in a showroom and purchasing a fifty thousand Euro car, sixty, seventy, eighty,  
77 when they could very well buy an electric car. Now, in that case it's not a matter of budget, you  
78 know, because if someone is putting in fifty thousand for a vehicle, and that amount of money  
79 can buy a very good electric vehicle, then it's a matter of choice, of one choosing to go for  
80 electric over a diesel.

81 R: But you see that, maybe you see that because yourself maybe you get to see maybe the  
82 BMW showroom, Jaguar,

83 P: Yes I mean, my role here is, I take charge of the property portfolio of the group, Mizzi  
84 Estates, but obviously I'm well versed in what's going on in the auto mobile sector, which is  
85 basically the leading sector of our group. Mizzi are renowned for their cars, for the involvement  
86 in the car business, so pretty much I'm aware of what's going on, new models, which models  
87 people will tend to opt for. I must say that EV's are becoming more popular. Hybrids, now, the  
88 tendency is that the push by the car manufacturers is more towards fully electric vehicles, so,  
89 as I said, it's a matter of choice ultimately, you know. So if you're going for, to spend 40,000  
90 Euro, to buy a diesel engine car whereas that could easily buy you a fully electric, and plus, get  
91 an 11,000 Euro grant, in that sense it is a very positive

92 R: How would you incentivise those customers, to answer this question, the sixth one, what  
93 would you introduce to motivate these individuals?

94 P: Well I don't think it's a matter of increasing the grant, because obviously the government  
95 has got its limits, and financial constraints, and obviously, the more you increase the grant in  
96 itself, the more you're limiting the pool of people who can actually benefit from that, because  
97 if you've got a budget of ten million and you're doing a ten thousand Euro grant, that will be a  
98 hundred vehicles, well actually one thousand. You will have a thousand new owners benefiting.  
99 If you double the grant you would likely have obviously, half of that. I think the incentive, or  
100 some form of, I don't know how to put it, what has to be a bit more clear, I would say, is the

101 actual charging, the charging infrastructure. Now I know that recently, over the last year or so,  
102 the government has more than doubled the amount of public charging stations, which is again,  
103 a step in the right direction, by all means, however I know that for a fact, because I've  
104 experienced it myself, that there are certain technical glitches which is persistent with them,  
105 with the software, with the app and what have you. The parking, but that again, is an issue of  
106 culture, which, I would say, we are still miles away from having the right mindset to embrace  
107 this technology and the concept itself. But then you have other issues, you know, for example  
108 many people don't own a garage, and yes, that is a valid argument which I would see that not  
109 having your own personal garage where to park a car during the night or whenever, that might  
110 be a bit of a limitation. Yes, I've got my own charging infrastructure, charging station, here  
111 down in my, I've got a reserved parking space at my office, but obviously that's not the rule  
112 you know, for everyone. Now when I happen to, when I'm not charging my car, I'm not at the  
113 office for a long period of time, for a week or so, for example, and I need to charge, you know,  
114 I can charge at home, but I have a garage, and it's basically by means of a three-pin plug you  
115 know, the normal volt connection and that plug in at ten or eleven o'clock in the evening, by  
116 nine o'clock in the morning you would get a 100% fully charged vehicle.

117 R: For your vehicle yes

118 P: But that is not the norm, it is not something that applies for everyone, I mean, there are, I've  
119 seen pictures of people putting extension cables across the pavement you know, and obviously  
120 it shouldn't be that way.

121 R: You can't actually charge a car like that.

122 P: So in this respect the government has to either, I mean there is a parking problem  
123 everywhere, because now you have blocks of flats rather than simple terraced houses, and in  
124 the same property footprint you would have twenty vehicle owners rather than two.

125 R: Sometimes you don't find garages within the block as well

126 P: Yes, and then obviously once you get an electric meter you get the rental fee for the meter,  
127 so there's the expense to that, but let's put that aside, so in this sense, I don't know, I mean the  
128 government has to come up with a bit of a better strategy on the operational and long term  
129 infrastructure. I would say that Malta is an ideal place to have, I mean it can serve as a classic  
130 case study in itself, because Malta we've got, I mean, I'm not mentioning advantages of  
131 obviously, the environmental advantages of no emissions, I mean the drive is actually much  
132 more enjoyable in the sense that you don't hear the engine, you hardly realise you're actually  
133 driving.

134 R: And that actually connects to the seventh question, would you recommend others to purchase  
135 an electric vehicle?

136 P: 100% and I have been doing so ever since I got the keys to my first electric vehicle back in  
137 2017. To build on my argument, Malta would make an ideal case , because we don't have the  
138 distances which probably other places, in mainland Europe, you name them almost, to get to  
139 an office within five, six kilometers, I mean it's a ten minute drive, at worst if you're living, I  
140 mean, if you live in central Malta and you need to cross over to Gudja, that would take you  
141 half an hour, but still, putting things into perspective, that is relatively a short distance when  
142 compared to anywhere in Europe or anywhere really.

143 R: In thirty minutes during the day, during the week

144 P: Exactly, and you've got the advantage as opposed to an internal combustion engine, when  
145 you're at a standstill, in a parking, you're actually not consuming any energy you know, it's  
146 not like an engine consuming petrol with all the detrimental effects of a fluid which is coming  
147 from the exhaust pipe, so. So that's one thing, the relatively short distances we enjoy over here,  
148 that in itself makes it ideal. Second thing, yes, obviously, there are always, the environmental  
149 benefits of it, I mean, I have young children. My least concern, least worry, is that I'm actually  
150 reversing my car, or taking my car out of the garage, and obviously I don't, my children or

151 myself, we're not exposed to those fumes and toxic gases which come out from an internal  
152 combustion engine, so the advantages are not a few I would say. Another point, for example,  
153 again, there is this debate about the survivability and the lifetime of the battery itself, you have  
154 to replace after five years, you know, I mean. I personally never had an issue with battery  
155 degradation, so far. Now I've owned, the latest model I've had, actually I'm into my fifth year,  
156 and the battery doesn't seem to have suffered any degradation so far.

157 R: Ok, is there any way you can test that? Like a service maybe?

158 P: Servicing very regularly, and I haven't been given any indication that there is a problem in  
159 this respect, of the battery and it actually still charges up to full capacity. And even,  
160 performance wise it's still pretty much the same you know. I haven't seen any difference since  
161 the early days, you know, since I had started driving it. Now, to mention it, battery technology  
162 over the last four years, has been very much extensive by all the car manufacturers and I know  
163 for a fact that that has improved drastically already and both in energy capacity, battery  
164 capacity, I've got the range of my Nissan Leaf is, I believe 160kms. Nowadays you can buy  
165 vehicles which will give you 350kms. So that's already a big improvement obviously.

166 R: So obviously, with different pricing maybe?

167 P: Yes, yes, obviously it depends on the brand you opt for, and which range, because obviously  
168 each brand has got its own pricing, the elementary models which would have a certain range  
169 and then you have the premium models which have a far longer range, yes, that is another point,  
170 but the point I'm trying to make is that there are certain misconceptions on battery technology  
171 I believe. What I can say is from experience, I mean I've heard of issues, with batteries, not  
172 going bust probably, but starting to cause trouble after three years, but like, I mean like an  
173 internal combustion engine, a car with an internal combustion engine can be prone to defects

174 R: Yes, even straight out of the showroom

175 P: Exactly, well, the technology is still relatively new, I mean internal combustion engines have  
176 been around for the past seventy or eighty years. Electric cars we're still going through, and  
177 even the car manufacturers are pretty much in a learning curve. It is trying and testing at this  
178 stage, we're in that phase. It depends also on climatic conditions, you know, the performance  
179 of an electric vehicle. In very cold conditions, in Scandinavian countries, it's different from  
180 driving an electric vehicle

181 R: Battery discharges even when parked

182 P: Exactly, than in the equatorial regions, where temperatures are obviously much warmer. So  
183 yes, from a technology point of view, I mean car manufacturers are still conducting extensive  
184 research but by the look of it I mean, the world is heading in that direction and I think it should,  
185 I mean, Volkswagen group announced two years ago they've invested billions of dollars in V  
186 plants and in battery manufacturing plants, you know, so the big car companies are actually  
187 pumping big millions and billions of Euro in this technology. And I think actually, they're doing  
188 it for a reason, you know. Actually they've run through the numbers and they know where the  
189 money is heading in the next ten, fifteen years.

190 R: Are there any challenges you've experience? I take it no, because

191 P: With the car itself, happy to say that no, no particular issues.

192 R: As an electric car, then?

193 P: Well, I was going to mention, well, now it's even less of a problem. Because as I mentioned  
194 the public charging stations are more, have been increased. Yes, for example, I recall, two or  
195 three years ago, we were going to Gozo and that would have been a bit of an issue you know  
196 because if I had to charge, especially in Summer because the amount of battery consumption  
197 in Summer when the AC is on, that would be, obviously, a full charge would last you two days  
198 rather than a full four days as would be the case in Winter for example. Because obviously AC  
199 consumes a relatively substantial part of your energy capacity, so obviously charging would be

200 more frequent, but again, I mean this is a technology that a battery of four, five years ago, as I  
201 mentioned earlier nowadays the batteries have got a bigger capacity, the vehicles themselves  
202 are becoming more efficient, vis a vis the actual motors I must say, and the mechanics of it all  
203 and the electrics, so that is also, has improved. So that yes, I was a bit restricted at some point  
204 that I want if I'm going to Gozo, I need to choose the accommodation, the hotel where I would  
205 be accommodating myself basically, the guest house or hostel, I wanted to make sure that a  
206 charging station is nearby within walking distance. But again, this was two, three years ago,  
207 but now, as I said, the charging stations are at a closer distance, they've increased, so that  
208 wouldn't be more of an issue I would say, if it were more of an issue to me, I would confidently  
209 say that nowadays it's not an issue any more. But the rest I mean, honestly, I don't want, I might  
210 be sounding that I have a certain bias towards EV but

211 R: And that is based on?

212 P: Because my experience has been positive, you know but I couldn't think, vis a vis the vehicle  
213 itself there is no feature that an internal combustion engine has which an EV doesn't have, be  
214 it electric windows, you know, you name it. The interior is very comfortable and all the features  
215 which you would expect in a normal vehicle so to speak, I mean they're all there.

216 R: It's even more powerful

217 P: Yes, sometimes it's even more dangerous because once you hit the pedal. An ICE engine  
218 would have a zero to sixty in nine point five seconds, ten seconds, whilst in an electric you  
219 would have that in six point five seconds. Because it's obviously more responsive, the drive is  
220 smoother, because you don't have as extensive a gear box as in an ICE engine, I mean, I would  
221 say, the limitation is more there, in the actual operation of it, day to day, vis a vis charging, so  
222 yes, not having a garage that is a bit of a limitation. And having to, for example, reporting to  
223 your workplace environment and not having the adequate infrastructure I would say that  
224 doesn't help. I would say that yes, I have the comfort that I have my own charging station here

225 at my office and I may be a bit biased because probably there are certain luxuries if I may put  
226 it this way, that it's not always the case you know, but if one had to do the choice, you know,  
227 for the vehicle itself, from a financial perspective, as I said, if you're going to spend 40,000 to  
228 get a vehicle, then you might as well, with that amount, get a good electric vehicle you know.  
229 Back in 2017 as I said, with the amount of, the choice was very limited, but nowadays that's  
230 not a problem. More so, the choice back then, the models themselves, the Nissan Leaf, in  
231 particular, was a bit of a strange shape,

232 R: Yes, they weren't so attractive

233 P: Yes, let's put it this way, the models were screaming I'm electric, you know. But then, to me  
234 there was a very very big improvement between the latest model Nissan Leaf and the previous,  
235 because you would hardly realise that it is electric. And the same holds for all the other brands  
236 I would say.

237 R: They are still, they look futuristic, but they are the future, so. Do you think that's why the  
238 take up of electric vehicles has been so slow? Is it maybe the design, the mentality, as you've  
239 already said before, is it a culture thing?

240 P: You're saying it's been slow, but from what I hear, over the past couple of months, there's  
241 quite a backlog and applications are taking a bit of time to be processed by Transport Malta.

242 R: But when compared to ICE vehicles, I mean, internal combustion engines, obviously they  
243 sell much more than electric vehicles. In your opinion, why has the take up been slow so far?  
244 All right, it's catching up, it's gaining traction, but

245 P: I think this is another point, and one where the government needs to lead by example. In the  
246 sense that, I know for a fact that the government, any new vehicles that are being purchased by  
247 some departments, and ministries, are going for electric, which is again, a step in the right  
248 direction and that is sending across the right message, but then I hardly see any campaign  
249 actually promoting electric vehicles themselves you know. Indirectly the fact that a hundred

250 fifty, two hundred, additional charging facilities have been installed, that is a good sign and in  
251 itself it's a promotion of the concept, but the way I see it it's more of, it's being done to  
252 accommodate people who are going for electric vehicles rather than to actually promote the  
253 concept of and market the choice for actual people to make the choice to go for an electric  
254 vehicle. So in this respect, the government has to be more proactive I would say, possibly, yes,  
255 run marketing campaigns, so that anyone considering purchasing a vehicle, should consider  
256 purchasing an electric vehicle over an ICE vehicle. I don't know it could be that I'm oblivious  
257 to this, but I'm not aware that there has been any strong campaign in favour of electric vehicles.

258 R: No, the campaigns you see are more like, new chargers, you see it on the news that

259 P: To my mind that's it, now again, I believe, they're already in operation, a number of electric  
260 public buses, public transport, again, a very good initiative but again it shouldn't be just for the  
261 sake of saying that we own, that we have ten, twenty, public buses running through our streets,  
262 you know. I mean the incentive, or, there has to be a change of culture, which has to come with  
263 a bit of a more concrete, hands on, approach, you know. And I think that much more has to be  
264 done in that respect. As I said, yes, true that the government has it's own constraints, I mean,  
265 there isn't, this isn't an infinite pool of money where the government can just fork out money  
266 purely for electric vehicles. But if the strategy is that we truly believe in the technology and in  
267 light of all the congestion and the pollution we have, that is having obviously a cascading effect  
268 on our health, on society at large, I mean, if we truly believe that we want to embrace the  
269 technology and we want people to go for it, I think that much more has to be done in that  
270 respect of promoting the whole concept of EV, and make strides towards having a truly cultural  
271 change, you know, that almost, EV becomes a natural choice. So beyond the EU targets of  
272 having ICE's, ICE cars not being manufactured by 2035, I believe this should go beyond that,  
273 you know. And I believe, to spearhead and lead by example, that has to come from the top. And  
274 also, one other thing which goes hand in hand with what I'm saying, there are a lot of

275 misconceptions, but you hear a lot of views about, you know, the durability, the lifetime of a  
276 battery, and everyone is being bombarded with information

277 R: Misinformation

278 P: With social media, and internet and what have you, and nobody knows, there doesn't seem  
279 to be one channel, again, which probably has to come from the government, which can be  
280 truthful and more factual, you know, because a lot of misconceptions are being created, which  
281 are, in effect, not helping at all. Even this idea that EV's being, the battery, rather than the car  
282 itself, being more prone to a fire. You hear theories of, I mean you see accidents of an ICE  
283 engine, with a car actually going in flames. The risk of an EV vehicle is more than an ICE  
284 engine? I don't know, all I can say is that I'm aware of both, but whether one is more at risk  
285 than the other, I'm not the expert. So these things have to be cleared up, you know. And even,  
286 for example, about the end of life of the vehicle, and what happens of the battery, how would  
287 one go about scrapping it you know. Well, I mean, the concept of itself, is very new, but five,  
288 ten years down the line it wouldn't be a mechanic who would see to a fault in an electric vehicle.  
289 It would be an electronics technician or an electronics

290 R: It would be dangerous for him

291 P: So, so, it's not just about purchasing an electric vehicle, the whole infrastructure, being the  
292 charging infrastructure, being the infrastructure in private residences, you know. Because  
293 obviously the electrical distribution would have to cater for this additional load as well at some  
294 point, and we know that there are limitations in that respect as well locally. Even the actual  
295 repairs and servicing infrastructure, be it by the car manufacturers, be it by self employed  
296 mechanics, I mean they have to update their technology, they have to update their plant, their  
297 equipment, so this is all part and parcel of a strategy, it's not one entity working on it's own,  
298 it's not going into a showroom and getting the keys to an EV, I mean, there are a number of  
299 stakeholders that are entities, be it public, be it private who have to work hand in hand and

300 really devise and set out the plan with a clear target where the country wants to go in this  
301 respect, that yes, by 2035 we want a full electric, all vehicles, or a certain percentage to be fully  
302 electric, and how we're going to get there, with concrete initiatives and concrete measures, you  
303 know. Because a piecemeal approach ultimately remains piecemeal, you know. So it's useless  
304 buying an EV and spending thirty, forty thousand, by a private citizen, and then he realises that  
305 when he plugs it in at home there are limitations to the electrical distribution out in the streets  
306 from Enemalta, you know.

307 R: That infrastructure has to change as well

308 P: Thirty years ago there were issues when AC's were gaining in popularity, that you'd get a  
309 power outage every so often, then Enemalta had upgraded the infrastructure, over a certain  
310 amount of years, and obviously you'd get that power outage once in a while, but it's one thing  
311 getting a power outage once every six months, and it's another thing getting it once every two  
312 weeks. And unfortunately in this sense, we tend to be reactive rather than proactive, so first we  
313 get the power outage, then we update the infrastructure. I think if the government wants to get  
314 it right, and truly wants to go in this direction, the infrastructure has to be updated before, you  
315 know. And if they're going to make way for new buildings, building requirements have to  
316 outlay fully, having parking spaces and private garages with charging stations, you know. So it  
317 would actually be a requirement to be granted a permit by the Planning Authority. In the UK  
318 they've already implemented something along these lines, and I heard that Malta is probably  
319 working towards that as well. But it has to be fast, because things in this industry are changing  
320 very fast, and it has to be well-structured, which is planning. Considering how things work in  
321 Malta, that is a key thing, that the plan is well-structured and implemented in a concrete and  
322 complete manner I would say.

323 R: So Kevin, I'll move to the last couple of questions. Number twelve I present a list of, a seven  
324 item list, that are incentives that may already be in place. So imagine the below are incentives

325 that are available when purchasing a PEV. Which if any, would motivate your purchase? Give  
326 a reason for your answers and you can choose up to three. So the first one is a rebate which is  
327 deducted at the time of purchase. So currently you have to wait, some say three months, some  
328 say six months, there's a bit of a grey area there. A free rapid charger to install at home,  
329 discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no  
330 registration tax upon purchase, priority parking for electric vehicles.

331 P: Many of them I would say they are already there, yes? Because driving in a bus lane, that is  
332 something that is permissible I think, I do it myself.

333 R: Which three would you?

334 P: Ah, three, ok ok. That makes life a bit more easy for me because there are actually more than  
335 one, yes. The rebate which is deducted at the time of purchase, no, that, I would say is the prime  
336 motivator, so the rebate is 11,000 I believe at the moment? Yes, that would be one. A free rapid  
337 charger to install at home rather than the standard charger, discounted electricity rates,  
338 Discounted electricity rates, yes, that I would say is a very good incentive so that would be my  
339 second one. Yes, I believe that, I was actually considering, the hiccup there so to speak was that  
340 one has to install a separate meter.

341 R: Yes, I have heard that as well-structured

342 P: And apparently, the application form is here already, it has been sitting in my drawer for  
343 about a year or so, but then I got to know that you need to pass, you need to get Enemalta to  
344 pass a separate cable, for a new meter, and then I need to install additional cabling from this  
345 meter to my garage, because I'm actually a shared space with a number of garages, and that  
346 put me off because it seems that I'm in for quite an additional expense. And to be honest with  
347 you, as I am I've got a garage with an electrical meter, and to spend I don't know, seven  
348 hundred, eight hundred Euro for this additional infrastructure, and as I am, ok, I'm purchasing  
349 electricity at the normal flat rate, it didn't appeal to me that I'm going to get quite an incentive.

350 Because the capital expense that I was going in for it didn't seem to me to make much sense at  
351 that time, but probably if the incentives or the rates are so much, I believe it's a night tariff, I  
352 believe this tariff works at night time,

353 R: At night yes, that's what they call it, the night tariff.

354 P: And I must say, since I have the comfort of charging my car here at the office, I rarely do, I  
355 charge at home over the weekend and I spend a Saturday running around doing errands or  
356 shopping, and I would avoid the risk of running on a 20% battery and I plug in in my garage  
357 which happens one in, I don't know, three months probably. But if, I mean, looking at the wider  
358 scheme of things, and possibly for the general public out there, I mean, discounted electricity  
359 rates, that would be a good incentive.

360 R: And the third one?

361 P: Well, priority parking for electrical vehicles

362 R: Infrastructure aside

363 P: Yes, I would probably go for one of the two, because the other ones are more of financial  
364 incentives. But access to driving in the bus lanes and priority parking for electric vehicles, in  
365 light of the fact that traffic is obviously a huge problem, so getting a bit of an advantage on  
366 your way to work by way of driving on the bus lane, that helps. But more than that, probably  
367 my third would be priority parking for electric vehicles because parking has become a huge  
368 problem everywhere and residential areas, you name it, has become literally everywhere, and  
369 I mean yes, having that guarantee that you're going to a place and avoiding having to spend  
370 twenty minutes going round every block to find a parking spot, I think that would help. Because  
371 again, I don't want to deviate from the whole scope of the interview, but then this ties in with  
372 the debate of having people leave their car at home and using public transport or, use other  
373 means of transport, but that is, because as much as possible, because I think, if you have to  
374 purchase a vehicle you have to go for electric. But just as important, and this goes hand in hand

375 with the strategy of the mobility I mentioned earlier, the idea that the government pushes  
376 forward the cars, the vehicles being less used, that is also something which we need. We rely  
377 heavily on our own private vehicles and increasing parking and having multi storey car parks,  
378 that works against this concept, because the more you make it comfortable for someone to go  
379 with his vehicle, that is the option of least resistance rather than using public transport. It is  
380 very, very positive to hear that use of public transport has increased over the last months I was  
381 reading actually a week or two ago that the patronage has increased quite substantially so yes  
382 again, the fact that public transport has been made free is another positive measure. Well, I  
383 don't want to deviate as I said earlier, but this is, this is, one other important thing which goes  
384 hand in hand with with

385 R: The actual means behind the introduction of electric vehicles, for a greener method of  
386 transport

387 P: And this ties in with the whole idea and the whole concept at the bottom of it. So yes, having  
388 an EV over an ICE is obviously more environmentally friendly but ideally you leave your car  
389 at home and use other means of transport, shared means of transport because in itself a public  
390 bus is shared transport. So that idea has to be promoted as well and again, I don't think the  
391 government has done enough in that respect.

392 R: What is your opinion about the introduction of variable monetary amounts when purchasing  
393 a BEV versus a PHEV? So, as you know, a PHEV has much less range than an electric vehicle.  
394 What is your opinion about introducing a pro rata rate for the incentive?

395 P: So, BEV would mean?

396 R: A battery electric vehicle.

397 P: Ok, ok, because that to me would mean by default. Plug in hybrids, it seems that plug in  
398 hybrids have been introduced as a transition, so that the market itself gradually moves from  
399 ICE to electric so obviously the hybrid went in between. But to my knowledge the government

Participant KM

400 has stopped the grant on hybrids now as of last year, and again, yes, that is something I agree  
401 with. It's either one or the other, I mean, now obviously the control is pretty much in the hands  
402 of the car manufacturers in this sense because at one point there were plants that were just  
403 manufacturing plug in hybrids and no fully electric vehicles. And that started to change over  
404 the last two or three years I think.

405 R: With the advance in battery technology.

406 P: Yes, yes, I mean if, you want to curb completely on emissions I mean you go for the full  
407 electric you know. I'd incentivise people to go for the full electric

1 R: We'll start off with the vehicle type you own. Is it a battery electric vehicle or a plug in  
2 hybrid?

3 P: Plug in hybrid

4 R: Year of purchase?

5 P: Year of purchase it was in October 2021, just about five days after the budget, the  
6 government budget whereby there was the grant, the government released the grant. I think it  
7 was eleven thousand plus a thousand for the scrappage scheme. I had a diesel engine, it was a  
8 fourteen year old car basically, SUV, I had some trouble, to be fair I was going to repair it but  
9 I realised that there were a lot of repairs that needed attention, so in the global scheme of things,  
10 you know there was the budget, you know it was enticing twelve thousand, eleven thousand  
11 Euro grant, so I bit the bullet and just bought it basically.

12 R: As we say in Maltese, you just made it. And what was your main reason for buying a PHEV?  
13 You have alluded to that.

14 P: So my main reason was that my car was a diesel engine, it was fourteen years old and I  
15 needed a replacement. I had a budget in hand, and I'm not so fussy about cars, but I like a nice  
16 car as well. When I was shopping around, I could only find this BMW, 225 XE, which is a plug  
17 in hybrid which was within my budget, when it came the price was only 24,000 Euro, including  
18 the grant, so I thought it was a good deal. The model had changed, so they had a few in stock  
19 and I just grabbed, I just went and bought a plug in hybrid. To be fair if I had had the budget I  
20 would have gone for full electric, I still have my doubts to be fair, about the full electric as a  
21 consideration.

22 R: In fact, most of the customers who go for a PHEV usually don't want to take that leap, such  
23 a large leap, so they go for the middle road.

24 P: To be fair I would have, gone for fully electric, the only thing that held me back was if I had  
25 to go abroad, Sicily for example, I'm convinced I'm going to have challenges where to charge  
26 my fully electric vehicle.

27 R: And what are the main advantages of the current government scheme? Well, you've alluded  
28 to this, it bridges the gap sort of

29 P: Well to be fair, eleven thousand Euro is good money but I'll be honest with you, I would  
30 still consider an electric vehicle even if there wasn't the grant, to be fair. The grant is a  
31 contributor towards the decision but it's not the primary contributor. It facilitates people buying  
32 an electric vehicle, or a PHEV.

33 R: It gives you a push. And any disadvantages of the current government grant scheme?

34 P: Not really, I don't see any disadvantages to be fair. I can see the disadvantage in a plug in  
35 hybrid, but at the time I got my plug in hybrid there was a grant, and I don't think you have the  
36 same grant nowadays.

37 R: Actually there's a couple of questions, which would comment about this factor, so, we'll  
38 come to that soon. You went through a process obviously, you went to a showroom, applied for  
39 the grant process,

40 P: Yes, Muscat Motors actually facilitated that. In fact, I didn't fork out the eleven thousand,  
41 they absorbed it as part of the cost. I just applied and then when I received the cheque for eleven  
42 thousand, I just gave it to Muscat Motors. So as such, for me it was very straightforward.

43 R: That's a very big bonus because people comment about the fact that they have to fork out  
44 the money

45 P: No, it wasn't so in my case, so that's another factor which is enticing. I asked Muscat Motors  
46 whether there was a similar scheme, whether they have some budget car to buy for my wife, to  
47 replace her petrol engine Honda, but they don't have another at the moment. I would buy it

48 blindly, a PHEV. The only thing is that you have to maintain the ICE, you have both, you have  
49 two engines basically.

50 R: In fact I comment about this at a later stage when we compare ICE and plug in hybrid, so  
51 we'll come to that soon. And any negative qualities of the process?

52 P: The process not really, about the negativity of the car I have some, the short range, the  
53 particularly short range.

54 R: That is a technical point that my interview is not seeking, but I do understand where you're  
55 coming from, because, yes, space is an issue because you have an electric motor, a battery and  
56 an engine. Yes, all of those components need to fit into the car.

57 P: Yes, yes, absolutely

58 R: Any incentives you would introduce to motivate individuals to purchase such vehicles?

59 P: Yes, I would recommend first of all make that software work for charging stations. If you go  
60 to Mater Dei, to find those pillars that don't work, if you go to Birkirkara, simply it just throws  
61 you out abruptly and you have to log in again. A lot of factors, that in my opinion, they're trying  
62 to introduce these electric vehicles, but the infrastructure is not ready yet.

63 R: So on the one hand you have these cars that are very technological and the infrastructure is  
64 lacking.

65 P: No, no, definitely. The infrastructure is definitely not prepared. I would expect for example  
66 you go to the supermarket for shopping. You stopped for an hour and a half, why don't you, for  
67 an extra cost, plug in at the supermarket?

68 R: Not only when you go shopping but, I live next to Pama, you can easily, easily, even  
69 privately, fit in a

70 P: Yes, yes, private, private. So that's what I mean, Pavi, Pavi they don't have them. I don't  
71 know whether Pama have it but Pavi don't have it. Even if it's at an extra cost, you know, we're

72 ready to pay. Really and truly you're saving on the environment when you're not on your petrol  
73 engine.

74 R: But when you're in the city it's easy to travel just in electric mode.

75 P: Yes, but when you have a lot of travelling, like me for example, the forty, forty five kilometre  
76 range in a day, isn't enough for me.

77 R: Especially in Summer with the AC. And would you recommend others to purchase such  
78 vehicles?

79 P: Yes, why not, if you have a garage. If you don't have a garage, definitely not. It's not worth  
80 it unless you, unless they make it easy for people to charge and have the infrastructure ready  
81 you know with these charging points that work

82 R: It's not use giving an eleven thousand Euro grant. And the challenges which you have  
83 already mentioned, which is the infrastructure.

84 P: Infrastructure.

85 R: Any issues with owning, other than the infrastructure?

86 P: Plug in hybrid? Short range.

87 R: Here's the part where I compare a hybrid, in your case, and an ICE vehicle, an internal  
88 combustion engine vehicle. What are the advantages? When we compare both?

89 P: Economy, silence, it's basically lovely to travel without sounds, you know you're in traffic  
90 in the morning, with just music, silence basically. The comfortable ride in my case, the BMW,  
91 Again, I bought a BMW not because, I'm one of the type that doesn't like BMW's to be fair  
92 because of the obvious, unfortunately they are in the wrong hands of a lot of people. But it's a  
93 very good car, a very good car, comfortable car, a nice drive, and again, silence, that's what I  
94 like about these cars.

95 R: And the disadvantage when you compare both?

96 P: The disadvantage of what?

97 R: Of owning a PHEV versus an internal combustion engine

98 P: Maintenance. I think when you have a PHEV you still have to maintain the engine, you still  
99 have to service the engine even though you're not using it. Case in point, for example, in  
100 October I have to go for a service. I don't really need to because I hardly use it, it's programmed  
101 to drive on full electric. When it runs down on the battery then, it kicks in on the fuel, the engine  
102 kicks in. So I always drive in electric mode, always

103 R: So in e-drive, right?

104 P: E-drive yes, yes

105 R: In your opinion, why do you think the take up of electric vehicles has been so slow when  
106 compared to ICE vehicles?

107 P: First of all it's what people say about new technologies, I'm a technologist and I don't mind,  
108 you know, biting the bullet, and trying new technologies

109 R: Early adopters

110 P: I'm an early adopter, definitely. But yes, it's new technology, and I still believe that the  
111 battery has a shelf life. People are scared of the shelf life of the battery, changing the battery is  
112 definitely very expensive but again, I can always drive in petrol you know because of the  
113 normal engine, but again, the infrastructure. People are not ready, the infrastructure is not ready.

114 R: Some say that we have to start from there, we had to start from there because now it's well  
115 down the line.

116 P: People living in an apartment, can you tell me where you're going to charge your car? Where  
117 will you charge your car if you don't have a garage? You know, so, it is challenging, you need  
118 good infrastructure. Even petrol stations nowadays, you need to invest in charging points.

119 R: I don't think they're allowed to be so close to each other I think there's an element of risk  
120 there because obviously it makes total sense to have them there but they say it's very dangerous.

121 P: Well, yes, the risk is always there, yes.

122 R: So, question number twelve is a list of seven items which may be incentives that are already  
123 be in place. Imagine the below are incentives when purchasing such a vehicle. Which, if any,  
124 would motivate your purchase? Give a reason for your answers and you can choose a maximum  
125 of three. A rebate which is deducted at the time of purchase. As you know usually, but not in  
126 your case, you have to wait six months, you had to wait six months but you didn't have to fork  
127 out the eleven thousand. A free rapid charger to install at home

128 P: Wait, for a hybrid, PHEV, a rapid doesn't exist, so it's a slow charger in this case, it's 13Amps  
129 which comes with the car. I just plug it in the 13Amp socket

130 R: And the standard charger came with the car?

131 P: Yes

132 R: Ok, so discounted electricity rates

133 P: In my opinion, they should remain discounted even if there's going to be a shift in the price  
134 of electricity. When getting the car, I got a separate meter in the garage because if I were to use  
135 the same meter in my house, I was being caught in the higher bracket, at 60c per unit. So in my  
136 case, I prefer installing a normal meter in the garage because it's separate from the house. It's  
137 still with the house but it's not interconnecting. So I got a separate meter and I got an electric  
138 vehicle meter, the one that's fifty Euro extra every year, because I benefit from reduced rates  
139 from midnight till six o'clock in the morning and there are some benefits during the day from  
140 noon till four o'clock. So I charge at night, timed, between midnight and six o'clock in the  
141 morning. So definitely, discounted electricity rates is a contributor.

142 R: So that's one of them. No yearly circular tax

143 P: Yes, it's already there

144 R: Access to driving in the bus lane, no registration tax upon purchase

145 P: It's already there yes, it's a contributor, yes, I was paying, before I had my electric vehicle,  
146 I used to pay six hundred Euro licence fee, licence fee

147 R: That's the yearly circular tax, the registration tax is the tax you pay at purchase point. So it  
148 would be in the thousands

149 P: All right, all right, all right

150 R: And priority parking for electric vehicles. You have a choice of three, you chose the  
151 discounted rate, and no yearly circular tax

152 P: Yes, and even priority parking for electric vehicles. It adds value, and I sometimes do it  
153 selfishly, when it doesn't work, I plug it in as if it's charging. It's because there's a free parking  
154 space. They don't always work the charging stations, they don't always work.

155 R: That's one of the issues of the infrastructures. If the infrastructure that's already in place is  
156 not good, not very modern, they're not nice, even aesthetically because even at first glance

157 P: For example, at Mater Dei, next to SAMOC, there is a charging point. It doesn't work and I  
158 realised that there are two, there's a pillar in between, there's a space for another car on the  
159 other side. The cable is short to plug in, if you had to charge your car in front, it's short it  
160 doesn't reach. Even if it worked, this pillar, it's useless you know. All you need is an extra  
161 metre so why didn't you extend it for an extra metre? I don't know who decides

162 R: I think it's a procurement thing and we always go for the cheapest option which in my  
163 opinion is not always ideal.

164 P: Probably.

165 R: Last question. So, based on last year's incentives. So as you know electric vehicles and  
166 PHEV have got the same grant. What is your opinion about the introduction of variable  
167 monetary amounts when purchasing an electric vehicle versus a PHEV? So a pro rata rate  
168 according to the range.

169 P: Let me be fair, if I had the budget I would have bought an electric vehicle. So the fact that  
170 you went for a PHEV you, the person is not convinced about the full electric model. If I had  
171 the budget I would have gone for a full electric. But I needed a car quickly, so I couldn't wait,

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- 172 I couldn't wait for the budget. I must say that there must be a difference between a PHEV and  
173 full electric. Full electric is cleaner ok, so  
174 R: And it's the primary purpose of the grant  
175 P: If you're going for a PHEV basically you're tapping on something that's still not clean you  
176 know. I still believe that the grant should be for fully electric vehicles.

Participant LD

1 R: And we'll kick start this interview with the vehicle type of vehicle you own, is it a battery  
2 electric vehicle or a plug in hybrid or both?

3 P: It is a battery electric vehicle

4 R: And the year of purchase?

5 P: Year of purchase I believe was 2020

6 R: And the amount of grant you got back from the government?

7 P: Eight thousand

8 R: So let's go to the main questions question number one. What were your main reasons for  
9 purchasing an electric vehicle?

10 P: Because I hate mechanics and I hate booking time with companies for a mechanic that is  
11 going to charge me too much money for something that I can do myself. I have a garage so an  
12 electric vehicle made sense. I plug it in, no more servicing.

13 R: That's great, that's a unique response, which is great from your perspective. You probably  
14 pay premium and you get a student, who I was, at MCAST. I used to be an apprentice with  
15 MCAST and we used to do services for cars that are like, BMW etc. What are the main  
16 advantages of the current government scheme?

17 P: The main advantage for me was a massive discount on the car. So originally the car was  
18 worth forty minus eight, it cost me thirty two, so that's a massive discount. It was a big incentive  
19 for me.

20 R: Any disadvantages?

21 P: With the grant scheme for me, no. Definitely not, I can't think of any at least. The only thing  
22 I don't like is that I have to keep the car for a minimum of three years, otherwise I have to give  
23 the money back. But it's not really an issue because I still plan on keeping the car for three  
24 years plus.

25 R: Especially since you already knew

26 P: Yes

27 R: So, you went through a process of applying for the grant, through the showroom. What were  
28 the positive qualities of that process?

29 P: Emma did everything for me.

30 R: Emma being the sales executive, right?

31 P: Emma did everything for me, I didn't need to do any paperwork. What I didn't like about  
32 the application was that you are not informed by the government when you are going to get  
33 your money back. So, in my case I waited I think it was four or five months. Which is long  
34 especially if you've forked out the money and you're waiting for it. Which was my case, I paid  
35 for my car outright, and I was expecting the refund after a number of weeks, but it took five  
36 months. That could be a problem for others.

37 R: Yes, a that's something that each and every person who I interviewed commented about. Are  
38 there any incentives, both monetary and non monetary, that you would introduce to motivate  
39 persons to purchase such a vehicle?

40 P: In terms of incentives I can't think of any right now. I think the biggest blocker for  
41 purchasing EV's, for moving into EV's are obviously the charging facilities.

42 R: Everyone's answer. Literally everyone's answer. Continue, sorry for stopping you

43 P: In my case I have a garage, so I run the battery down to 10%, I get home I plug it in and it's  
44 ready in the morning, which is very practical. People that don't have charging facilities  
45 obviously will complain and rightly so because it's inconvenient having to go and plug your  
46 car outside and waiting there for forty five minutes or one hour for your car to charge. Plus,  
47 you don't always find an empty spot, especially if you're a habitual person and always tend to  
48 go to the same charger. If you find two people charging their car, you're screwed and you're  
49 definitely not going to charge your car at a public facility. That is, I think the biggest incentive

50 for plug ins, or at least hybrids or plug in EV's, would be better charging facilities but it's not  
51 a case of putting more plugs on the roads, or in the streets, it needs to be easier.

52 R: And some say even the ones that are already there are lacking, sometimes they don't work,  
53 or they're not connected, or people are there and they're not charging, so that's another

54 P: I've found the solution for that. If someone is parked there and they're not charging, I hit  
55 the kill switch and then I can remove their socket and plug in myself.

56 R: Ok, because the emergency switch will stop the, ok!

57 P: And it disconnects the cable from the car, then I can remove it.

58 R: That's very clever.

59 P: A bit of a hack, but you shouldn't leave your car there unattended and not charging.

60 R: Would you recommend others to purchase an electric vehicle?

61 P: Only if they have charging facilities. I wouldn't recommend anyone buying an EV and not  
62 having a garage. Or a plug somewhere by their house where they can charge it.

63 R: Yes, you do get people who park in front of their house and you see their wire, coming out  
64 of their window, which is unsafe

65 P: It's unsafe, it's definitely unsafe, but I get their point and it's a very practical way of doing  
66 it, you just plug in and go to bed.

67 R: And any challenges you've experienced since owning an electric vehicle?

68 P: The only one is when I desperately need to charge outside and I don't find a charging station  
69 available, which is not a problem realistically because I can just go to the next station, but it's  
70 a pain looking for stations on the app and obviously the car doesn't read where the stations are  
71 because they haven't been mapped etc That's the only thing I dislike about it. However I very  
72 seldom charge outside so I wouldn't call it a problem, it's a nuisance.

73 R: Because you have charging facilities at home you said

74 P: Exactly. If it's an emergency and it's occupied it becomes a nuisance.

75 R: And what are the advantages of owning an electric vehicle when compared to a combustion  
76 engine vehicle?

77 P: I never have to change the oil, I never have to service the engine, I never have to change the  
78 spark plugs, I never have to change filters, I never have to change any of these things. Once  
79 every two years I take it to BMW they charge me fifty Euro, they put some water in my  
80 windscreen wipers and I'm out. And that's it, very cheap, very practical.

81 R: I don't think people actually think that they don't have to service so much, and that if they  
82 go for a service they won't have to change so much either. They take it for granted.

83 P: Exactly, and services are very expensive.

84 R: And you have to take it there obviously.

85 P: Yes, as long as my warranty is still active, I will keep taking it there. But once my warranty  
86 expires, which in my case is eight years with BMW, so for eight years I'll be taking it there and  
87 I imagine the cost will be pretty much the same over the eight years, not counting inflation etc,  
88 but it's cheap to service an electric car.

89 R: And the disadvantage of owning an electric vehicle when compared to a combustion engine?

90 P: The disadvantage, personally, other than the charging side, the only other disadvantage I see  
91 is arguing with middle aged men explaining to me that my battery might die and it will cost me  
92 too much money to replace it. To begin with I used to tell them about my eight year warranty  
93 and that if batteries die don't buy an i-phone, don't buy a laptop, don't buy anything with  
94 batteries, because your battery may die. And after a couple of years I've decided that I've lost  
95 interest in trying to justify and explain to gas guzzlers and petrol heads that an EV makes more  
96 sense. It's cheaper to run, it's cheaper in every way other than buying it obviously because the  
97 technology is pretty new. But at some point EV's will become cheaper than combustion ones.  
98 It's just the way technology goes.

99 R: The early adopters are usually the ones that suffer the most, the monetary part of it we see  
100 it everywhere. In every new technology, I remember to buy a DVD player, my God I remember  
101 they were very expensive, nowadays, nobody uses DVD's these days.

102 P: It's just the technology rate, and the technology curve, it's pretty standard, these things  
103 always happen. Obviously considering I paid forty thousand for a little Mini, it's very  
104 expensive. I'm pretty sure the next generation Mini will be cheaper and so on and so forth.

105 R: And probably a larger range.

106 P: A larger range, they will have better facilities to dispose of batteries, they will have better  
107 recycling of cobalt, and the other stuff in batteries, it's just a matter of time. Eventually they  
108 will become cheaper.

109 R: And, I think you've answered this question but, in your opinion, why do you think the take  
110 up of electric vehicles has been so slow when compared to combustion engines?

111 P: Ignorance. Well I think one of them is obviously cost. They are more expensive, I think we  
112 can all agree on that and the second is ignorance, a lack of knowledge on EV's and the view  
113 that your battery could die and it would be very expensive to replace, which realistically is not  
114 a valid argument, especially when you have an eight year warranty on your car. Nowadays I  
115 would say that all, well maybe not all but most manufacturers of EV's are giving at least eight  
116 year warranties on their batteries, so it's not a justifiable reason not to want one.

117 R: So, that's an interesting answer, I'll take note of that. In the twelfth question I present a list  
118 of seven items, seven incentives, which may already be in place. So imagine the below are  
119 incentives that are available when purchasing an electric vehicle. Which if any would motivate  
120 your purchase? You can choose a maximum of three responses. A rebate which is deducted at  
121 the time of purchase, rather than you having to wait months for the grant, it's deducted straight  
122 away from the price of the car. A free rapid charger to install at home rather than the standard

123 charger, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no  
124 registration tax upon purchase, and priority parking for electric vehicles.

125 P: In all honesty, none of them, except maybe one would be, number one would be a good  
126 incentive for me, so a rebate which is deducted at the time of purchase. I don't think it's done  
127 correctly currently, so I have to pay the full price and get my refund, x number of weeks after  
128 I've paid or received the car or whatever. It shouldn't be done like that because the initial cost  
129 of the car is very expensive especially nowadays with the twelve thousand rebate. So that  
130 twelve thousand rebate should be deducted from the cost of the car at point of sale, not refunded  
131 to you after you've paid and waited for months. That way you would definitely incentivise  
132 more people to buy EV's. Because it immediately becomes twelve thousand Euro less. That is  
133 a massive discount, so if your car originally cost say, thirty two thousand, you end up paying  
134 twenty at the showroom, you don't have to wait for a rebate and there should be a different  
135 kind of submission form or at least between the car seller and the showroom and the  
136 government and as soon as the sale is done the government refunds the car showroom with the  
137 twelve thousand and you can sign for your car at a fully discounted price straight away. You  
138 don't have to wait for a rebate, you don't have to submit any paperwork, it's all taken care of  
139 by the showroom and you get your discount immediately upon purchase not as a rebate after.

140 That would be my favourite and the only one that I would like from all these. Because a rapid  
141 charger at home doesn't interest me in the least, and besides that, most people are on single  
142 phase anyway, not on three phase, so a rapid charger doesn't work for them anyway to begin  
143 with. Discounted electricity rates I mean I think I pay ten cents, twelve cents per unit at night.  
144 How much more can you discount it? You can discount it to nine cents, eight cents? Then  
145 Enemalta starts making a loss, so it's never going to happen. Access to driving in the bus lane,  
146 meh, no registration tax we already don't have a registration tax on EV's as far as I know,  
147 but I could be wrong.

148 R: But these, imagine that they're not in place

149 P: All right, all right, priority parking for EV's, mehhh not really interested either. So my only  
150 option would be the rebate

151 R: So number one, ok. Totally agree and most of the interviews I've done chose that as number  
152 one. And the last question. What is your opinion about the introduction of variable monetary  
153 amounts when purchasing an electric vehicle versus a PHEV? So a pro rata rate for example  
154 for every forty kilometres of range you get one thousand Euro in rebate. This is regarding the  
155 fact that last year both incentives were the same for PHEV and electric vehicles were the same.  
156 And in my opinion that goes against incentivising people to switch to electric.

157 P: I agree with you 100%. PHEV's should not be included, sorry, yes, PHEV's, so plug in  
158 hybrids should not be included in this grant. I know roughly five people that own PHEV's and  
159 none of them charge them. They fill them with petrol or diesel and obviously the engine charges  
160 up the battery as it is being used. None of them use the charger at home, none of them plug it  
161 in. They all benefitted from a discount of twelve thousand Euro on their brand new car which  
162 is ridiculous, it's defeating the purpose. From my personal view that I hate going in for service  
163 and mechanics, it completely defeats the purpose of owning an electric vehicle because I still  
164 need to service my engine. Not only that, but you're likely to have more problems because now  
165 I have technically two engines running. I've got my combustion engine and my battery, so I've  
166 doubled my potential risk of something going wrong. So for me the grant should be only for  
167 fully electric vehicles, not plug ins. In terms of what you were mentioning before as an example  
168 doing an x number of kilometres per week etc, I disagree with that because it's discriminatory  
169 against those that don't do that many kilometres. So I've had my car for three years and I've  
170 less than ten thousand kilometres.

171 R: No, no, as in, the range on the brochure

172 P: I see, I see, all right I see, ok

173 R: No, it's the range on the brochure, I don't want to discriminate.

174 P: In that case, yes, but incentives, it depends. So my car does a hundred and eighty kilometres  
175 on a full charge, more or less. There are cars that do three hundred, three hundred and fifty,  
176 there are cars that do less than a hundred.

177 R: With newer technology

178 P: But it all depends on your needs. In Malta you don't need a car that does three hundred and  
179 fifty kilometres, on a full charge. It's overkill. I'm not saying it's unnecessary, in the same way  
180 that you don't need a Ferrari in Malta, but if you want to have a Ferrari good for you. A three  
181 hundred and fifty kilometre range for an EV in Malta, for me it doesn't make any sense unless  
182 it's commercial, it's commercial yes absolutely, agreed. Then there should be incentives for  
183 commercial vehicles or companies using EV's for commercial purposes. They should be  
184 incentivised to get batteries which have longer ranges. Obviously because you're minimising  
185 the number of charge cycles etc. So I think it needs to be considered. Smaller batteries for  
186 residential, well, residential I guess not commercial. Smaller batteries shouldn't be  
187 incentivised, but for commercial bigger batteries should. Obviously the bigger the battery the  
188 more expensive the vehicle. But that should be incentivised, and fleets, etc, in that case, yes.

## Participant CM

1 R: What type of vehicle do you own? Is it an electric vehicle or a plug in hybrid?

2 P: Plug in

3 R: Year of purchase?

4 P: 2020

5 R: And the total grant you received from the government?

6 P: Six thousand at that time

7 R: What were your main reasons for purchasing a plug in hybrid?

8 P: First of all I like a lot new technology and so on. Plug in struck the balance of what was  
9 newly available at that time and my actual requirement. In the local scenario I mean, which, a  
10 plug in vehicle, fit in perfectly in my opinion rather than full electric.

11 R: And the current government scheme, what are the main advantages of the incentives in your  
12 opinion?

13 P: Currently, in recent times it changed. Because as far as I know plug in electric vehicles are  
14 no longer eligible for the grant so currently, anyone interested in purchasing a car must go for  
15 a fully electric vehicle. So compared to what was available at the time I purchased, so I see that  
16 it regressed a little bit because now I see that it's forcing people to buy fully electric vehicles  
17 for which, you know, in my humble opinion, the infrastructure is not ready for it in Malta.

18 R: So it's not really an advantage because there is no current scheme

19 P: Well, the value of the grant I believe remained the same, it was eleven thousand or twelve  
20 thousand and it remained the same. I mean, there is an advantage because anyone interested in  
21 buying an electric vehicle, would get the grant you know. In fact last year the grant for plug in  
22 was discontinued at the end of May, so all vehicles purchased before the end of May were  
23 eligible for the full grant, you know, it was eleven thousand.

24 R: In fact they're still being issued.

25 P: Yes, yes, in fact that's where I was coming, we had ordered a car for my wife actually, for  
26 the simple reason to benefit from the grant back then, you know. The car has still not arrived  
27 so she will get the grant once the car arrives.

28 R: Wow, so it's almost a year, but it's a common problem even with the electric

29 P: We were informed beforehand that it would take around a year and a half and actually she  
30 was not in a hurry for a new car, we just ordered it to get the grant before it's discontinued, you  
31 know.

32 R: And you went through a process of applying for the grant, what were the positive qualities  
33 of that process:

34 P: Well actually, I just had to sign a paper from my end because all proceedings were taken  
35 care of by the car dealer. And actually it was, I expected to wait much longer to wait much  
36 longer to get the refund, which, back then in 2020 I got it I believe it was a matter of eight  
37 weeks, so,

38 R: Ok, that's usually one of the negative qualities that people speak about, it's what I hear

39 P: Yes, but I don't know what the mean time it is for the grant to be issued, but back then,  
40 maybe because it was still, now we're speaking three years ago, I mean, maybe it was still not  
41 that popular among local buyers, the electric grant.

42 R: What other incentives would you introduce to motivate individuals to purchase an electric  
43 vehicle or a PHEV?

44 P: I think the most important would be to make it, it sounds contradictory, but to make off peak  
45 hourly rates available more during the day I mean, because currently off peak is available  
46 between noon and four in the afternoon and between midnight and six am. So if you have an  
47 electric vehicle which requires a lot of electricity to charge up, you know, and you're limited  
48 to charge it just six hours a night, and four hours during the day, you're just topping it up, you  
49 cannot charge it fully you know. That brings me back to what I said before, that I believe the

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50 infrastructure is still not ready for, not fully functional and not adequate to cater for fully  
51 electric vehicles.

52 R: That's the general feeling among the participants. So you have cars which are very  
53 technologically advanced, but the infrastructure is totally

54 P: It's lacking. In fact I ended up charging my vehicle, I mean, I don't have to actually charge  
55 it every day, but to benefit from the off peak hours I have to charge it every night so that it's  
56 topped up. So I cannot charge it fully, I just top it up every day and use the benefit of getting  
57 the off peak.

58 R: And do you have enough range to go around?

59 P: Yes, yes, yes I mean, I don't even have to charge it every day actually because with six hours  
60 I get around fifty five, sixty kilometres, which for a day is enough for me you know.

61 R: In Malta especially

62 P: That's it, that's it. That's the main reason I went for a plug in actually because in the local  
63 scene a plug in electric car which gives you seventy, eighty kilometres is more than enough.  
64 Because you know at night you're at home, so it's in the garage and you can charge it up,  
65 conveniently you know.

66 R: And you do need a garage?

67 P: Sorry?

68 R: Do you need a garage for such a vehicle?

69 P: It's ideal.

70 R: Not everyone can and not everyone has one

71 P: Not everyone, yes, but that's also part of the infrastructure thing, it's not just the electricity  
72 supply, it's the way we have managed to build all sorts of apartments everywhere with almost  
73 no access to anyone, so

74 R: And sometimes without a garage as well

75 P: Yes, yes, you get to see, sometimes you're just passing by somewhere you see a cable  
76 hanging out of a window to charge a car

77 R: And that's unsafe, obviously

78 P: That's very unsafe

79 R: Would you recommend others to purchase such vehicles? Do you go round telling your  
80 friends?

81 P: Honestly, after three years of purchasing a plug in hybrid, I'm still not comfortable to pass  
82 on to a fully electric vehicle you know, for the reasons I was mentioning before, but to purchase  
83 a plug in hybrid today it's costly you know because there are no grants, so that's the downside  
84 of it. I mean the grant obviously helps to make the decision of what kind of car you're  
85 purchasing because the car for my wife was around thirty six, thirty eight thousand, the  
86 purchase price, and she'll end up paying eleven thousand less, so that makes a whole difference  
87 when buying a car or not. I mean today if I were to recommend a friend to buy the same car I  
88 would think twice about it because the grant is not available any more.

89 R: And any issues you've come across since owning a PHEV?

90 P: With the car itself you mean, or?

91 R: Just challenges, as in, when compared to an electric vehicle, sorry, to a combustion engine

92 P: No actually not, because with a plug in I'm getting the best of both worlds you know. In  
93 traffic I just sit pretty and glide around, with the electric motor, and I mean, it shows even to  
94 fuel up with the car, I see it as an advantage actually, because at this time I visit the fuel pump  
95 every month and a half, two months. That's something which improved actually because  
96 everyone I think goes every week or ten days.

97 R: So that's an advantage of owning a plug in hybrid

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98 P: Yes, the range, and the comfort that the electric motor gives you, and silent, it's completely  
99 silent, and even, I mean, it's debatable if it's true or not but deep down you still feel you're sort  
100 of greener than before without an engine running, but

101 R: At least while you're driving

102 P: Yes, because one has to evaluate then the battery lifetime and so on, and what happens to  
103 the battery after it's done, so, you know,

104 R: And where does it come from

105 P: Where does it come from, the energy taken in producing them, so you know, To be honest  
106 I'm quite happy with, I've had the car for two and a half years now and the range seems to be  
107 holding the same as day one now. I expected to see some sort of reduction in the range or some  
108 sort of, you know,

109 R: Almost like your phone, in a year's time you see the difference

110 P: Yes, my phone I change my phone every year and a half, two at most because the battery  
111 doesn't hold up, you know. But the car seems to do a wonderful job, so far, in keeping the  
112 range, and I compare this seasonally because obviously the weather affects the range as well.

113 R: Both heat and severely cold weathers. In severely cold weather the battery discharges  
114 frequently as well.

115 P: The range goes down pretty quickly then

116 R: So can we say that is one of the disadvantages maybe? When compared to a combustion  
117 engine

118 P: But that doesn't actually affect me that much you know, because locally instead of seventy  
119 eight, eighty, it gives me sixty, for example, which is fine for me and enough to go around, you  
120 know. Actually it's not only the cold weather you know, it's the driving style and where you're  
121 driving because of the traffic. I go frequently to Sicily with it and when I'm in Sicily, once I

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122 got a hundred and twenty kilometres on a full charge you know. Because on highways then it  
123 just glides.

124 R: One hundred and twenty kilometres? Wow

125 P: Yes

126 R: I've never heard of, that's a lot

127 P: It's a lot for a plug in hybrid. So if you want maybe a disadvantage, booqqq, I don't know

128 R: So no

129 P: So far, I mean, two years and a half and I've seen only advantages because if it comes to a  
130 service, the first full service is due after four full years.

131 R: Of the motor or the battery, the first service?

132 P: The first one just to change the oil, because the life of the oil is two years, so you're bound  
133 to change it. Now I have another service after three years, and it concerns the brakes, because  
134 after three years you have to change them, and the first full service is after four years. So, I  
135 mean, I'm trying to think of a disadvantage but, maybe the thing that you have to plug it in  
136 when you get it into a garage, booqqq, it's insignificant.

137 R: I wouldn't list it down then, because you're trying hard.

138 P: Maybe the thing that I mentioned before then, Owen, the thing that you're restricted on the  
139 time that you can charge the vehicle actually, to get the best rates you know. If you charge in  
140 peak hours you get into third and fourth tier of the ARMS with rates.

141 R: Because then you're affected with the rates,

142 P: In fact in the beginning, in the first two months, before I got the electrical vehicle meter  
143 from Enemalta I ended up going into the fourth tier of the rate you know, which was charging  
144 me about sixty cents per unit or something like that.

145 R: I heard this comment this morning in another interview and he actually ended up solving  
146 this by getting another meter.

147 P: Yes, that's what I did, in fact I had applied for it but it took time to be processed. At sixty  
148 cents it would be more convenient to run it on fuel rather than charging it up, you know.

149 R: That's a disincentive

150 P: Yes, it's a disincentive. And it's also the case when you go abroad. I mean in Malta we hear  
151 a lot about the rates we're paying and so on, but, in Sicily for example, to charge an electric  
152 vehicle was around fifty six cents, I think, which is still inconvenient charging. In fact in Sicily  
153 I don't charge it actually. I just get on with a full charge from here and give it fuel over there  
154 because it's more convenient.

155 R: It makes no sense but that's the Italians for you. Moving on to the eleventh question. In your  
156 opinion, why do you think the take up of electric vehicles, so, just electric vehicles, has been  
157 slow when compared to the sales of ICE vehicles, internal combustion engine vehicles. You've  
158 alluded to this

159 P: Yes, but it's the same thing, the reasons would be a place where to charge, because not  
160 everyone has the facility to charge it at home, the infrastructure, definitely yes, that's one of it.  
161 I mean, those that do a bit of research before buying actually know instead of buying it and  
162 realising after that it's not convenient charging it. And maybe, I don't know, that the grant is  
163 given afterwards not beforehand. You know, so people have to fork out the full amount then  
164 wait to receive the refund which some people are not happy to do you know.

165 R: I agree, in fact moving on to the next question, I have a list of seven incentives that may  
166 already be in place but imagine the below are incentives that are available when purchasing  
167 such a vehicle, so plug in hybrid or electric vehicle. Which if any, would motivate your  
168 purchase. You need to choose a maximum of three. Let me read them. A rebate which is  
169 deducted at the time of purchase, so, as we mentioned, instead of having to wait, even eight  
170 weeks, you still had to fork it out. A free rapid charger to install at home rather than the standard

171 charger, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no  
172 registration tax upon purchase and priority parking for electric vehicles.

173 P: Well, we'll do this through the local scenario obviously

174 R: Yes, totally, totally

175 P: I mean, with the traffic and parking problems and everything. What I mentioned before on  
176 the rebate deducted at the time of purchase for some people that could be a deal breaker, you  
177 know, because if you don't have the full amount you cannot actually go ahead. The discounted  
178 electricity rates are there already but they're not available, you know, widely during the day,  
179 so, if someone wants to buy an electric vehicle it was here. And taking the local scenario,  
180 driving through the bus lane, even if as the owner of an electric vehicle I don't agree with it  
181 because it would still clog the system but that would be ideal, I mean if that's made available  
182 it's like when they did, I think there was something similar a couple of years ago with gas  
183 operated vehicles that were allowed to go through the bus lanes. And it was a great incentive  
184 for vehicle owners to switch to gas you know.

185 R: I think it's still on for electric vehicles, but they removed the signs I think.

186 P: Ok, so you get a fine still.

187 R: But you do get cars, taxis and such, driving through there. So your third option is driving  
188 through the bus lane.

189 P: Yes.

190 R: So, the last question. What is your opinion about introducing a variable monetary amount  
191 when purchasing an electric vehicle versus a PHEV? So, like a pro rata rate let's say, for every  
192 forty kilometres of range you get a thousand Euro. Rather than like it was last year, both cars  
193 got the same incentive.

194 P: I mean, that would hit the aim of why the grant is given in the first place. I mean it's useless  
195 giving a grant to someone to buy a PHEV and he uses the combustion engine only, you know.

Participant AM

1 R: Let's start with some background information. What type of vehicle do you own? Is it a plug  
2 in hybrid or an electric vehicle?

3 P: Hybrid

4 R: Year of purchase?

5 P: 2019

6 R: And total grant you got back from the government?

7 P: Eight thousand

8 R: So let's start with the questions, what were your main reasons for purchasing a plug in  
9 hybrid?

10 P: My issue was becoming spending quite a lot on fuel, so I was trying to find an alternative to  
11 reducing my expenses every month on fuel.

12 R: So, the grant scheme, what are the main advantages, the incentive you were given.

13 P: In all honesty, when I was deciding on what car to get, basically, I was undecided because I  
14 could either go once again for a fuel car, but with a modern engine, at least maybe the  
15 consumption would be more efficient, because my car was already about ten years old or else,  
16 go for the grant. The thing was going for a hybrid car it was quite expensive. So for me, even  
17 though I had the eight thousand grant, it was still beyond my expected budget or what I had in  
18 mind to do. The only thing that convinced me was the person behind me pushing me to do it.  
19 Because back then my ex-husband was quite into these new technologies, so he told me just  
20 look at the long term, in the long term, in the long term. Yes, it helped obviously, I would never  
21 have managed to pay that amount of money

22 R: Without the grant

23 P: Of course, definitely not

24 R: So it bridged that gap almost

25 P: Yes

26 R: And the disadvantages? Any disadvantages you see or you saw in the scheme?

27 P: Not disadvantages per se, I mean, they're quite expensive, the technology is quite expensive  
28 I mean, plus, also, the grant's quite big though. I must admit, eight thousand is quite a hefty  
29 grant. I'm not convinced if they've reduced it by now.

30 R: We'll get to that later because I have a question related, the last question is related to that.  
31 And you went through a process of applying for the grant, at the showroom I believe. So what  
32 were the positive qualities of that process?

33 P: To be honest, your colleague was helping me. Something was wrong because I went to  
34 Transport Malta, they gave me the wrong instructions, then Emma was helping me. She told  
35 me 'Listen, not like that', and she helped me out because I was given the wrong instructions. I  
36 had to go three times to Transport Malta before I got it processed, the showroom helped me.

37 R: So the negative quality, which is the fifth question, the following question, so the negative  
38 quality was negative information from Transport Malta.

39 P: It was the people at the counter, they were giving me the wrong information, then I remember  
40 it took quite a long time until I applied, I think I wasted a few weeks like that, you know.

41 R: Because you got the wrong information.

42 P: Exactly. Then I went back and told them listen, I didn't receive any papers, and my car is  
43 coming, and then Emma had sorted it out for me.

44 R: So the positive quality was that everything was done through the showroom.

45 P: Much better for me, exactly.

46 R: OK, we answered this question, the fifth one, so we move on to the sixth question. What  
47 other incentives, both monetary and non monetary, would you introduce to motivate individuals  
48 to purchase such vehicles? Both electric and plug in hybrid.

49 P: First and foremost it's the clean technology. Each time I have people coming to my garage  
50 that have fuel engines, the whole house smells of exhaust. Literally, as soon as you go into the

51 garage when someone starts the engine, even when I had someone with a motorbike I was  
52 going crazy, it was so so strong, the smell of exhaust. Especially when they start a car, I  
53 completely imagine how it was before and how much better it is now. So definitely that is one  
54 thing I tell them that is the advantage. My owning a hybrid I find it more advantageous than  
55 the full electric. First and foremost this year in Malta, I don't know if I'm changing the subject  
56 here, but going around in Malta, you don't find many places where you can charge your car.

57 R: The infrastructure

58 P: And many people do not respect them. They just park and they don't give a hoot about who  
59 really needs it. We had two cars, mine is hybrid and a fully electric. I remember the frustration  
60 of going around with a full electric, you're running out of battery and you need to charge and  
61 you're going round and on the promenade and everywhere, and everyone is parking there. And  
62 you can't even risk asking someone to move the car because then if you leave yours you might  
63 find your car scratched or something, you know what I mean? Because sometimes, it's the way  
64 it is now. Sometimes also, the infrastructure is not well supported. I work at Smart City and  
65 I've spent two or three years asking when are we getting a charging point, when are we getting  
66 a charging point? I used to go near Esplora, but then I had a long walk, I had to ask people to  
67 drive me back to my office. It was really annoying and then I had to give up.

68 R: And the parking there is huge

69 P: Yes! They did one finally, they did one now. It's a paid one, they did announce a new  
70 company 'Charge my Car' or something like that it's called. They did one now recently, so it's  
71 good. To be honest, yes, but the incentive is this, the technology has a big effect, it's a very  
72 silent car, for me I would still promote, rather than the full electric, the hybrid, because as I told  
73 you, if you run out without having the possibility to charge the car, I have the reserve, I can go  
74 on fuel. Also when I see the big drop in my visits to the fuelling station. I give my car now  
75 maybe thirty Euro a month maybe. But every day I charge it, that's why.

- 76 R: So you use it as a hybrid, not just petrol.
- 77 P: No, no, I use it nearly always on electric but sometimes it switches to petrol because mine  
78 is a hybrid and so even when I'm speeding a bit, you know it shifts.
- 79 R: And moving to the seventh question, would you recommend others to purchase a hybrid or  
80 an electric vehicle?
- 81 P: Yes, yes, definitely. However they have to be aware that they have to have provision at home  
82 to charge it because there are people who rent flats who have a rented garage and they don't  
83 have the supply of electricity so that would definitely be an issue and also the burden on the  
84 units of the house. Look, I moved house, and currently I'm having some issues because my  
85 house is running on high, high, high consumption of electricity, not just because of my car but  
86 my car doesn't help me either. So, to be honest, I had to make a further investment to get the  
87 PV panels, not because of the car, but the car added to the problem.
- 88 R: It builds on the problem
- 89 P: Exactly. So you have to be cautious if you're using the car. Now my BMW gives me a  
90 maximum of about thirty two kilometres and I have only got to know that the new engines give  
91 up to eighty am I right?
- 92 R: I don't work there any more, but yes, it's a new model.
- 93 P: Yes, the new model would give you more kilometres and maybe you would need to charge  
94 less. Still, if it's a larger battery it needs more
- 95 R: Yes, more, more electricity
- 96 P: So either way, it is something somebody needs to consider, like my house, goes on nearly  
97 twenty watts per day. So I don't know if it was better without the car or with the car, but  
98 definitely it added to the problem of the high consumption I have. So I'm not benefiting from  
99 the eco reduction, you know?
- 100 R: There is a rate, there is a better rate

101 P: The night rate I think no? But apparently between the PV panels and the night rate, the way  
102 it was explained to me, it was better for me to go with the PV panels.

103 R: Totally agree

104 P: So, yes, you have to think about that you know. So you need to see the consumption you  
105 already have at home and how much you're going to use the car. I wouldn't recommend it  
106 completely to people who drive around insanely back and forth you know because of the  
107 lifetime the battery is going to give you as long as it's working too. Sometimes people tell me  
108 about the expense I'm going through to maybe have to change the battery or maybe change the  
109 unit, so that's something I hope will take a long time to go through it but yes it's true it's  
110 something you need to consider.

111 R: It's like a phone no

112 P: And another thing I must mention, you need to learn how to drive a battery operated car,  
113 because I had some people driving my car and I'm telling you, in a few minutes they absorbed  
114 my consumption of battery. Yes, you have to learn how to drive it properly. Even I went through  
115 it in the beginning. I was like, oh my god, this has absolutely no range, this car is no good. I  
116 was running more on fuel than on electricity, but then I got the hang of it you know.

117 R: You have to change, you have to change your mentality of the way you drive.

118 P: It's the way you drive, you have to, how can I explain it? As much as possible I stop hitting  
119 the accelerator, and just let the car glide and that feeling helps a lot.

120 R: So it's part of the challenges, question number eight, the challenges you experienced.

121 P: Yes, but still, you know, I must admit, you know, apparently I don't consume as much as  
122 someone with a fuel engine in traffic for example. You know I spent all morning, I take an hour  
123 to go to work and that hour, forty minutes, going mostly, I don't know two kilometres an hour,  
124 so I'm not consuming anything from my fuel like that, you know.

125 R: Apart from Summer

126 P: Overall I still think it's more economic money-wise

127 R: So that's an advantage over a combustion engine, which is question number nine.

128 P: Exactly, yes, yes. I'm anticipating your questions. Overall I need to calculate, I still haven't  
129 understood how many units my car needs to charge. I still haven't figured it out, to be honest I  
130 don't know how I can get that information, if it's from the showroom or not but I'm calculating  
131 that either way I think it adds up to about two, three Euro each time I charge it. So still it's less  
132 than the fuel.

133 R: Maybe there's a way but obviously when you're going on battery there's no fuel  
134 consumption, so obviously it's cheap.

135 P: How much units I am, I need to know how many units I consume to fully charge my car. I  
136 still haven't understood that.

137 R: I think there's a way, a meter probably, you can get a meter.

138 P: No, I doubt it. Because while you're charging, in the house you're still consuming.

139 R: So you cannot stop the electricity while you're charging to see how much you're consuming.

140 P: No, no. I can't switch off the whole house, well I can, technically speaking I can and then I  
141 see how much, but no, no. Anyway, I still think overall, in the long term, compared to all the  
142 money you spend on fuel I don't spend that much on electricity to charge the car.

143 R: And the disadvantages of the PHEV over the combustion engine?

144 P: Again, since I'm hybrid I'm not scared to go long distances, so I'm not worried, crossing  
145 over to Gozo that I'll end up stranded without energy. That was the issue of a full, full electric  
146 car. So I'm like can I afford to go, I don't mind going with my car to Sicily for example, being  
147 a hybrid. If I find, I find where to charge it, if not I go on fuel. To be honest that's the major  
148 advantage of a hybrid. If I had a full electric and I remember using it and having this problem  
149 was the charging points. You can't risk having a full day of errands and then suddenly you're  
150 stuck there with zero battery, you know? More infrastructure, there's a need for far more

151 infrastructure. More charging points and people respecting them. More law enforcement,  
152 warden enforcement, you know. Yes you do get fined if you do park and you don't have an  
153 electric vehicle and the disadvantage is they're also not enforcing the law, there's a particular  
154 spot in Sliema, I can never park there there's always the same car, he probably works there and  
155 always parks there from eight to five.

156 R: In Sliema, on the front? Next to Medasia?

157 P: Yes, there's a BMW that's always there, I think he works there or lives there.

158 R: These BMW owners are all the same!

159 P: And the other disadvantage is, from experience, we left the car charging in Cirkewwa, we  
160 had to go up to Gozo, coming back was a disaster and the police called us. They asked us to  
161 remove the car and we were like, we want to come down but the traffic is stuck from  
162 Ghajnsielem all the way to Rabat, and the police asked us to remove the car because you need  
163 to charge it only for three hours. But the thing is it's a genuine case, if there's not anyone  
164 wanting or dying to charge the car, don't make us move it but yes, balancing and law  
165 enforcement.

166 R: I think the Gozo one, the one at Cirkewwa, is free I think because it has panels and it's self  
167 sufficient.

168 P: Yes, it's free, it's free.

169 R: Moving on to question number eleven, in your opinion, why do you think the take up of  
170 electric vehicles has been slow when compared to a combustion engine vehicle?

171 P: Obviously, like it happened to me. Either I'm buying a nine thousand, thirteen thousand Euro  
172 car, or else a thirty three thousand Euro car. It's the cost, quite an expensive cost. It is, it is a  
173 big big big budget, I mean the cars are quite expensive. In my case it was also, but not just, on  
174 my part, you'll say that I went for a BMW, but I know they are hardy cars. For the safety of my

175 child, going round, if it were a choice between a lightweight car, a paper, from Japan, and a  
176 BMW, you know

177 R: They're very different. I mean compared to other cars, even by closing the door you realise  
178 that it's a sturdy car.

179 P: It's heavy, it's a hardy car. Two advantages, like being a hybrid and also being a BMW with  
180 a hardy body. But yes, for people, it's like, how am I going for a thirty plus thousand car? And  
181 that fear of the lifetime of the battery, you know, the lifetime, will the investment be worth it?

182 R: So, question number twelve. So these, there's a list of seven incentives, both monetary and  
183 non monetary, which may already be in place, but let's say you don't know about the current  
184 incentives. Imagine the below are incentives available when purchasing a PHEV or an electric  
185 vehicle. Which if any, would motivate your purchase? You can choose a maximum of three. So  
186 the first one is a rebate which is deducted at the time of purchase, a free rapid charger to install  
187 at home, discounted electricity rates, no yearly circular tax

188 P: Circular tax?

189 R: The round one

190 P: Ah, ok ok, the licence

191 R: Access to driving in the bus lane, no registration tax upon purchase and priority parking for  
192 electric vehicles. You have a choice of three.

193 P: To choose three? So definitely, the rebate, discounted electricity rates and the registration  
194 tax upon purchase.

195 R: So moving on to the last question. Question thirteen. What is your opinion about the  
196 introduction of variable monetary amounts when purchasing an electric vehicle, so a car with  
197 only a battery, versus a PHEV which you own. So the reasoning behind this question is last  
198 year the incentive for both vehicles was the same. One, the PHEV has a range of about forty,  
199 fifty kilometres, and the battery electric vehicle has much more range because it solely relies

200 on the battery. And some might find this, the incentives being the same, rather unfair. What is  
201 your opinion about, for example, introducing a pro rata rate as an incentive?

202 P: The reasoning behind a pro rata is the government intends to fully eliminate car fuel engines.  
203 Yes, I would definitely give more priority as benefits, monetary benefits, to those choosing  
204 fully electric, definitely.

205 R: That's very fair coming from someone who owns a PHEV

206 P: No, because it's true, it's true. You're going fully electric, I'm cheating a bit by having the  
207 fuel engine as well. However, as I said, in my case, for security purposes I went for both. I  
208 don't want to risk running out of electricity in the middle of somewhere. I don't want to have  
209 a car limited to a certain amount of distance where I can go because I have to go back home to  
210 charge.

211 R: Especially with the infrastructure the way it is.

212 P: In view of the lack of the infrastructure, however, you can't be blinded and say that we are  
213 fully able to go on full electricity. But to go back to your question, definitely I would give  
214 priority to the full electrics, definitely, it's like a hundred percent eco, eco friendly decision. I  
215 would still support hybrid though, enough to make it obvious that you'd still go for a cleaner  
216 technology rather than the fuel engine ones. Even the fact that my road tax is what, I believe  
217 ten Euro when compared

218 R: Eight

219 P: Eighty?

220 R: Eight

221 P: Eight Euro? I mean my Honda Fit was much more expensive, I mean it was becoming  
222 ridiculous, you know. Having a third party insurance, and paying the circular tax was about  
223 five hundred, like what?? You know it doesn't make sense. I would still help people, make it

224 very obvious so that at least they'll go for a hybrid. Again, just because I'm on a hybrid and I  
225 still use fuel, my consumption of fuel is still very low, so I'm still helping the environment.

226 R: Especially if you make an effort to charge

227 P: Yes, but another thing I want to say is what I've been told – I'm not sure and I haven't verified  
228 this information but I've been told many times. We're opting to buy eco, eco, eco, eco, eco,  
229 and we're giving incentives, but apparently, there is no way of recycling the batteries, so  
230 technically speaking

231 R: Yes, it's still unknown

232 P: So technically speaking, we're promoting it as eco, but then the actual thing is not eco at all.  
233 So some people are aware of that as well. But yes, I would still go for monetary incentives as  
234 being a hundred percent for the full electric, a lesser percentage but not less than seventy five  
235 percent for the hybrid because they're still doing an investment. I still did the investment, like  
236 I told you, I had to put up the PV panels at my house, so I would not go lower than seventy five  
237 percent for those choosing hybrid. And yes, I would tax more the engine fuel cars, to make it  
238 more obvious why you should go for at least a hybrid.

239 R: Totally agree if they really want to push for a cleaner environment.

240 P: Yes, but you have to be very convincing about why we're going for a cleaner environment.  
241 You know, it's not just the cars that will make a cleaner environment, it's also traffic  
242 management, better public transport. Public transport cars, I mean the buses would also be  
243 electric. There has to be a whole push, because at the beginning, I remember writing to the  
244 Minister, listen, I invested x amount of money, which is way beyond what I could afford, to  
245 find myself in an environment where I can't support this technology because I can't find  
246 anywhere to charge my car, my house has gone into high capacity all of a sudden. You can't  
247 help someone to go headfirst into this investment and then find no support. I had to support

Participant AM

248 myself by installing PV panels, but that's another investment in addition to what I had already

249 paid.

250 R: Eventually you'll reap the benefits of it

251 P: Yes, but in the long run

252 R: Yes, I totally agree, you have to fork out

253 P: Like the benefits I'm seeing them now but trickling slowly slowly

254 R: Yes, first the car, which is a big expense and then the panels which are not so cheap

255 P: And also what I said, not disadvantages, but I have to be careful how I drive so as to make

256 the best use of my car.

## Participant SG

1 R: Let's begin. So the vehicle type is a battery electric vehicle, right?

2 P: Fully electric, yes

3 R: Year of purchase?

4 P: It's November last year, it hasn't been long, 2022

5 R: The total of grant you got back from the government?

6 P: Till now not even a letter, an acceptance letter, I didn't get

7 R: Ok, ok, we'll get to that disadvantage soon, but let's say what are you entitled to?

8 P: I am entitled to twelve thousand but till now I didn't have any response yet. Because I  
9 scrapped a car, so a thousand, and the eleven thousand, the eleven thousand grant also.

10 R: Ok, let's kick start the questions. What were your main reasons for purchasing an electric  
11 car?

12 P: I have been driving for quite a long time now and the last car I had was a Swift, Suzuki  
13 Swift. And I got it from Japan, the Japan imports. It was giving me some problems because I  
14 drive a lot, a lot of errands and with the children, I take them to school, to University and  
15 everything, Then I work in Valletta and it's a big problem of parking. So I opted for an electric  
16 car so that I would be able to park in Valletta and to be more economical.

17 R: Moving on to the second question, what are the main advantages of the current government  
18 grant scheme? So the incentives the government has at the moment.

19 P: At the moment the incentive is you just get the twelve thousand or eleven thousand grant.  
20 Presently I didn't get anything yet, I applied and I'm still waiting for their reply. The advantage  
21 is that since I got an electric car, a fully electric car I got a CVA permit and I can park in Valletta.  
22 But the problem is that when you get into Valletta you don't find any parking spaces. Why?  
23 There were the Goto parking spaces, the company which is not operating any more, but first  
24 they were going to be available for public cars, now everybody is parking on them, in these  
25 bays.

26 R: Even non-electric cars?

27 P: Even non-electric cars. Normal cars, they're parking over there so it's getting more difficult  
28 to park in Valletta even with an electric car. And even the charging stations in Valletta,  
29 sometimes they don't work, or you don't find, they're not a lot.

30 R: So it's the infrastructure

31 P: If they want more electric cars going into Valletta they have to increase the charging stations  
32 in Valletta.

33 R: So I have a question related to this topic, which we'll come to in a short while. So we'll skip  
34 to question four. You went through a process applying for the grant. What were the positive  
35 qualities of that process?

36 P: The sales, the sales person who sold the car to me, she was very helpful and we managed to  
37 do the papers at the time of sale.

38 R: So the process was swift and got everything done by the sales executive.

39 P: It was swift, yes. And it was in conjunction with the sale of the car, so I didn't have to do it  
40 separately.

41 R: It was done in the process

42 P: Yes, in the process

43 R: And question number five I have a feeling I know the answer already. The negative qualities  
44 of that process.

45 P: Yes, the negative qualities I think, the process is taking very long for the government to give  
46 feedback, for the people to secure the grant, like. I think the process should be within three,  
47 four months, not six, seven months. It's a good grant but I think it's taking too long to process.

48 R: Some say that even the fact that you have to issue or fork out the full amount, in your case  
49 twelve thousand, sometimes it puts people off buying the car.

50 P: And even, I think electric cars went up in price, because they have the government grant,  
51 because when you go shopping around and you say, what should I do, I take an electric car or  
52 a normal car? If it's a normal car, when you calculate the grant you're getting, it's almost in the  
53 same range. But you have to wait seven months to get the grant back. So I think they're  
54 increasing the price of electric cars when compared to the normal cars. And people will say, I  
55 don't care, I'll buy a normal car then.

56 R: That's very true, especially with it being a new technology, But again, I have a question on  
57 why people do not buy an electric car in the next questions. So I'll move to the sixth one. You  
58 already mentioned the fact that you want more parking stations for electric vehicles in Valletta.  
59 Is this one of the motivations you would introduce to motivate

60 P: I would also introduce in Valletta, if they want more electric cars to go in Valletta, instead  
61 of normal cars, they put some parking spaces in the public parking, in the public parking  
62 available, they put it only for electric cars.

63 R: And closer to the main attractions, let's say.

64 P: Yes, that's right. And even, I sometimes try to park near the Central Bank, where there is the  
65 public parking also. Over there he tells me when you want to come and charge the car, come  
66 in the afternoon, after two.

67 R: The parker?

68 P: Yes, the parker. And sometimes I go after two because I know them there, I have been there  
69 for many years now. I go there in the afternoon, after two, I find the parking full and then he  
70 has to remove the cars, so that I can go in the slot to charge my car. And when I go in the  
71 morning and ask if I can park my car because I need to charge my car in the afternoon. He tells  
72 me no, it's for parliament people.

73 R: Ok, yes, because they park there, right.

74 P: So it will be viable to put some parking spaces only for electric cars in a public parking.

75 R: And charging stations.

76 P: Charging stations there are quite a few in Castille, where there is the public parking. In  
77 Castille only there are, because in the other parking areas, public parking areas, there are no  
78 charging stations in Valletta.

79 R: Yes, there is space for charging stations

80 P: There is space for charging stations. Maybe they incentivise people who go into Valletta  
81 with an electric car and they put some parking or else they give access to those who have an  
82 electric car to park in the green bays maybe.

83 R: The ones that are used by the locals?

84 P: The ones used by the locals, yes

85 R: And would you recommend others to purchase an electric vehicle?

86 P: Yes, at first I was a little sceptical, not, I was critical a bit, I said, should I, should I go for  
87 fully electric or not? But now over these four months, I've driven a lot, I think I did about four  
88 thousand kilometres already

89 R: Ok, like a thousand a month

90 P: Yes, around one thousand a month, and it's like, the hassle is to charge the car otherwise I  
91 don't have any problems, it's good, I can park, I can drive, the only thing is you need to plan it  
92 before when you need to recharge the battery.

93 R: So that in your experience is a challenge, which is question number eight, challenges you've  
94 experienced so far.

95 P: Yes, the challenge is you need to plan before, when it's at fifty percent or forty five percent,  
96 I need to charge, I have to go and charge.

97 R: Especially if you're used to combustion engines

98 P: Yes, that is the, but then you have other advantages, because you don't have to, before I used  
99 to give petrol, thirty, forty Euro a week. Now I'm charging twice a week and it comes to less  
100 than ten Euro. So it makes a difference.

101 R: Your answers are perfectly timed because the next question is the advantages over a  
102 combustion engine. So fuel, much less obviously

103 P: Yes, much less, yes. And even like, servicing, when it pops up, it will pop up next year to  
104 give a service to the car. With a combustion engine you have to give a service every six months

105 R: And there's not much to change because there's no oil, filters

106 P: Yes, but now there's the battery, that's the problem, because if the battery goes. It's like a  
107 cell phone, if the battery goes, how much will it cost?

108 R: So you're worried about that

109 P: Yes, I'm still a little

110 R: You'll get over it, you'll get over it. Imagine it's like a phone battery, you treat it well, you  
111 discharge it well and you charge it well

112 P: Yes, yes, but I use it normally, as I used to use a normal car. I don't say I won't go there or I  
113 won't go there, it's my normal routine.

114 R: Yes, especially in Malta, we're very small

115 P: That's it. We are like a city in a foreign country, because that's how I consider Malta, like a  
116 city in a foreign country. You have congestion, the traffic, especially in the morning, and after  
117 work, so it's the same as a city, London, say.

118 R: When you get to the actual centre. And in your opinion, why do you think the take up of  
119 electric vehicles has been so slow when compared to combustion engine vehicles?

120 P: I think the mentality, to change the mentality of the people it's very difficult

121 R: It's a cultural thing as well

122 P: It's a cultural thing, and even, let's take solar and PV panels and everything, they're still  
123 slow, and I think the way we're building, a lot of flats, and a lot of, they don't, they're not  
124 taking into consideration the climate change. And even, it will be an incentive, I think, to those  
125 who have an electric car, and they can do a solar car port.

126 R: That's very very easy for Malta

127 P: It's very easy

128 R: Let's take the parking next to the Granaries in Floriana, because I work close by, so, that can  
129 very easily be done into a solar let's say, parking.

130 P: Yes, solar car ports, it's getting in but slowly. It's very slow, the move is very slow.

131 R: The Freeport parking, I don't know if it's only recently, it's full of panels and it's also shade  
132 for the Summer months as well.

133 P: Yes, look, I work at the Central Bank, so, near Castille, and when I got my car, I told them,  
134 do you have a charger, or can I park in a, do you have parking space for an electric car? He told  
135 me, no, we don't have anything, the only facility for charging the car is for the Governor,  
136 because he has an electric car and he can charge it. I told him so I have an electric car and I  
137 cannot charge it here. He said yes, that's the problem here, we don't have a lot of parking  
138 spaces. They're considering doing some panels on the roof of the Central Bank, so why not? If  
139 you want to go green, why don't you try to do something?

140 R: It's from the top

141 P: Yes, even from government departments that they get in the initiative to do something, to  
142 show that you are green

143 R: And show the public as well – look the government is doing it, why don't you?

144 P: Yes, and if they don't want any cars, normal cars to go into Valletta, they try to do more  
145 initiatives that if you have an electric car you have a priority. Is that fair?

146 R: Yes, I think with the CVA thing

Participant SG

147 P: Yes, it's reduced it, but still. And even, people from Valletta, maybe they have, if they  
148 purchase an electric car, maybe they have more grants, if they have an electric car. Maybe they  
149 think it twice to buy an electric car rather than a normal car.

150 R: We have to start from somewhere. The capital city is usually the starting point.

151 P: It's a starting point.

152 R: And the most beautiful part of the country, so

153 P: Maybe they give initiatives to the people living there

154 R: Not that there are many people living there

155 P: True, not many

156 R: So let's move to question number twelve. So I present a list of seven items, seven incentives,  
157 which may already be in place, but imagine you're purchasing a vehicle, and you can choose a  
158 maximum of three from this list. Which would motivate your purchase the most? You can  
159 choose up to three. A rebate which is deducted at the time of purchase, rather than you having  
160 to wait six months or more

161 P: Yes, I think that's good

162 R: A free rapid charger to install at home rather than the standard charger

163 P: That sometimes it comes with the car already

164 R: The charger yes, the rapid charger, so, the wall box, I don't know if you've seen one. Let  
165 me go through them all and you can think about it. So discounted electricity rates

166 P: Yes, that makes sense

167 R: No yearly circular tax, the round licence to be clear

168 P: It's already in place because one doesn't pay a licence for the first five years

169 R: Access to driving in the bus lane

170 P: Access to driving in the bus lane I think it is already because there are signs, that you can  
171 drive in a priority lane

172 R: But imagine that these have just been introduced. And the last one is priority parking for  
173 electric vehicles. So you've already chosen the first one, now the other two remain. Which  
174 would motivate your purchase the most?

175 P: Maybe no registration tax, if you're going to purchase, and priority parking for electric  
176 vehicles.

177 R: So, last question, so last year the government was providing a monetary incentive to both  
178 electric vehicles and plug in hybrids and they were both eleven thousand.

179 P: This year it's the same?

180 R: No, no, it changed.

181 P: They stopped the one for not fully electric no?

182 R: What is your opinion about the introduction of variable monetary amounts when purchasing  
183 an electric vehicle versus a plug in hybrid? Because people might argue that it's unfair for  
184 someone who only drives a fully electric car, no wait, the other way around. People might argue  
185 that it's unfair for someone who owns a plug in hybrid which has a battery and a motor, to have  
186 the same incentive as an electric vehicle.

187 P: No, I think it's fair. If you buy an electric vehicle, a fully electric you get the incentive, if  
188 you buy a hybrid, so you're getting both ways, so it doesn't make sense to get an incentive also,  
189 if we're going the way to be more clean.

190 R: That's the general consensus

191 P: It's either, or

192 R: Sometimes people argue that you're incentivising a hybrid so you're not really going green  
193 because

194 P: That's it, if you're giving plug in hybrids, you're not going green, you're still stuck there.

1 R: Vehicle type? Is it a plug in electric vehicle or a plug in hybrid?

2 P: Battery electric vehicle

3 R: Ok, year of purchase?

4 P: Year of purchase 2023

5 R: The total of grant you got back from the government?

6 P: I still have to apply but the amount will be eleven thousand.

7 R: Moving on to the questions. So, what were your main reasons for purchasing an electric  
8 vehicle?

9 P: Believe it or not it wasn't related to the grant, so I'm not sure what sort of answers you're  
10 getting, but I have been, in my role as a CFO I have been to quite a few ESG seminars and  
11 environmental awareness has gone up on the agenda and I thought that I should replace my car  
12 and eventually I went for an electric, a full electric vehicle.

13 R: And the current grant scheme, what are the main advantages in your opinion?

14 P: The main advantage it's very clear because at the moment electric cars, given that the  
15 technology is very new, electric cars are still more expensive than, you know, the traditional  
16 combustion engine which has been traditional for so many years. So given that the price of the  
17 car is relatively more expensive, at least the grant can help cushion a bit and justify you know,  
18 going for an electrical and not for a combustion, so there are advantages to it.

19 R: And any disadvantages in your opinion?

20 P: The disadvantage, although I just got my car a month ago, I think is a bit of lack of  
21 organisation in that regard. For example, my car arrived in Malta in February, early February,  
22 I sorted everything out, got the car out, and the application to apply wasn't even issued yet. So  
23 it was not even waiting for the money, there was even a waiting time to fill in, to do the  
24 paperwork, to fill in, to apply for the grant.

25 R: So it's more the process

26 P: It's the administrative process, it has its disadvantages, plus it takes long to get the grant.

27 R: Now, you went through a process of applying for the grant. What are the positive qualities  
28 of that process?

29 P: It's only an application, and I would be lying if I were to say that it's a cumbersome process,  
30 because I think it's quite a straightforward process where I have to enter the vehicle details, my  
31 own details, bank details, and then, so all in all it's quite a straightforward process, yes.

32 R: So the issue revolves around the issue that it takes quite a while to

33 P: Number five, the grant application process, I think, yes, sometimes, you know, ok, what  
34 changed from the application of 2022 to 2023? Most probably it's just the letterhead. Why  
35 should you leave a customer wait for two months before even issuing the application? And I'm  
36 not saying the processing, because I know that the processing will take another six to seven  
37 months to get the refund, which also is

38 R: Not at that stage

39 P: Not even there no, I still have to submit it because yesterday they issued the grant for the  
40 full electric because apparently the PHEV was out a few weeks back but the full electric was  
41 issued yesterday.

42 R: I have a question about the PHEV, I think it's the last question. And in your opinion what  
43 other incentives would you introduce to motivate individuals to purchase such vehicles? Both  
44 monetary and non monetary.

45 P: I would say, because first of all, I think, the government, and non monetary, I think giving  
46 eleven thousand towards the purchase of a car, being a sixty thousand Euro or a twenty five  
47 thousand Euro car, I think the financial benefits are good enough. But I think the government  
48 should offer, for instance, schemes where you can charge free in the public spaces, at least for

49 the first twelve months, and obviously, the government should increase these public spaces for  
50 charging because in my opinion, they are still lacking, too little.

51 R: And, since you've had your car, would you recommend others to purchase an electrical  
52 vehicle?

53 P: Yes, I think on a conscious point of view, the simple fact that you're not polluting the  
54 environment, makes you feel good about it, it takes some getting used to, because the first few  
55 days you're always looking at the battery sign, but then it becomes your routine like going to  
56 the fuel station. So yes, and one has to be patient and be a bit organised. Because when you go  
57 to the fuel station, you fill up your car in less than five minutes, when you need to charge your  
58 car from twenty to eighty percent, you need a good four or five hours, in my case at least. So  
59 you need to organise yourself, so if you organise yourself, I think there are many advantages  
60 to it.

61 R: So the challenge is, being, this is question number eight, planning

62 P: I think it's more planning, yes, you can't just go out for a long day of going around with the  
63 kids with twenty five percent battery because it's going to be a bit risky because there aren't  
64 facilities where you can go in and charge in ten minutes. You need hours to charge the car.

65 R: So, question number nine. So, I take it you previously owned a combustion engine vehicle

66 P: I still do, let's say I still do as well

67 R: What are the advantages when you compare your ICE vehicle and your electric vehicle? For  
68 example, comfort, noise

69 P: In terms of comfort, I would say it's practically the same. Obviously the advantage is you  
70 are not polluting. The performance is amazing, so the performance of an electric car for people  
71 who are, I just drive for comfort but I like the performance of a car. The performance of an  
72 electric car is incredible when compared to a combustion engine, something which I had no

73 idea about until I drove my electric vehicle the first time, I realised what a difference there is  
74 in the performance. You know more than me.

75 R: What's the car? Remind me

76 P: Mine is a BMW I 4

77 R: Ok ok, yes, so super powerful

78 P: Yes, yes, very powerful

79 R: The technology, very powerful, it's like an i-pad on four wheels. And the disadvantages of  
80 owning an electric vehicle compared to a combustion engine vehicle?

81 P: I go again back to the charging. I think there are too little charging stations in Malta, the  
82 infrastructure is not prepared, and the availability of fast chargers. I think once there is the  
83 availability of a faster infrastructure, you can literally plug in, have a coffee and your car is  
84 from twenty percent to eighty percent, in ten minutes, that would be a game changer in my  
85 opinion.

86 R: And in my opinion, the private sector should start providing.

87 P: Yes, definitely. We had even spoken to the Minister about it that he should start giving  
88 incentives, for instance, to offices, to office blocks like PWC for example, it's a very clear  
89 example. PWC employs five hundred, six hundred people. They have a huge parking space, I  
90 think it should be mandatory that in certain spaces that there, certain companies, commercial,  
91 need to have facilities for charging. It has to be made easy, I think the minute, with the grants  
92 that are being given, I think the minute government makes a bit life easier for the owner of an  
93 electric car to have where to charge it, and maybe in a shorter time frame, I think it will make  
94 a whole difference on the roads, I would say we will see a surge, in the number of electric cars  
95 on the island.

96 R: So moving to question eleven. In your opinion, why do you think the take up of electric  
97 vehicles has been slow when compared to internal combustion engine vehicles? You've  
98 mentioned a couple of points.

99 P: Let me consolidate on three areas. I think the pricing of electric vehicles, even with the grant,  
100 is still on the high side especially when compared to ICE engines. A bit of an insight which I  
101 have from my day to day job is the car sector is very price sensitive so people still, an important  
102 decision, an important factor when deciding on their new car is the price. So sometimes they  
103 don't even look at the make, at the vehicle make, they just go for the price. So I think the fact  
104 that electric cars are still so expensive, has its drawbacks and took long. I think it's a change in  
105 mentality, so when you come with an electric car it's a complete change in mentality, as I was  
106 mentioning, the charging, having to plan your trip. I also think that people like going to Sicily  
107 as well. Let me take my example, I go to Sicily very often with the car. I will not go with the  
108 electric car though, because the infrastructure in Sicily is even worse than in Malta when it  
109 comes to charging. So these are all factors that when they come together, I think the Sicily one  
110 is a bit exaggerated, it doesn't apply to all, but yes, the lack of facilities, I mean I live in Zebbug.  
111 Within a radius of a kilometre there's only two spaces, which no one enforces them and a lot  
112 of different cars park which are not there to be charged. And that is, the government should  
113 enforce that because it's not fair.

114 R: And the fact that they might not be, the charging stations may not be working

115 P: The twice I used I had no problem, but the problem is when they are available because  
116 everyone parks there, they don't care. And I think that there should be enforcement and they  
117 have to make it a point that the car has to be charging there, it's not a parking spot.

118 R: So, question number twelve, presents a list of seven items that are incentives that may  
119 already be in place. But imagine that these are just new and you're buying a new car. Which

120 would motivate your purchase the most? You can choose a maximum of three. I have an idea  
121 of which one you will choose first.

122 P: I would choose first number two, a free rapid charger

123 R: So, a rebate that is deducted at the time of purchase.

124 P: That is obviously another, so if I have to choose three, the first two for sure

125 R: And then discounted electricity rates, no yearly tax

126 P: Some of them are already there, so no yearly circular tax

127 R: Yes, yes

128 P: Priority parking for electric vehicles, so one, two and the last one I would say.

129 R: Ok, and we'll move to the last question which is always interesting. So last year, PHEV, had  
130 the same grant as electric vehicles.

131 P: Makes no sense, that

132 R: What is your opinion on the introduction of variable monetary amounts when purchasing  
133 both vehicles? As you know some people might find it unfair, the whole scope of the incentive  
134 is to go green. I'll let you continue.

135 P: So I don't think they should have been the same and I think when government removed them  
136 I think he removed them too much in a rush because people could not plan etc, But it didn't  
137 make sense to have an eleven thousand Euro grant for an electric and a PHEV. Why? Because  
138 a PHEV ultimately gives you an electric range of about fifty, sixty kilometres, the rest you have  
139 to fill up your fuel tank. Apparently the car, I'm not a technical guy, but apparently a PHEV is  
140 even heavier because of the fact that it has two systems, the electrical system and the  
141 combustion system so the vehicle is heavier and apparently when it consumes fuel it consumes  
142 more than a normal car. Whereas an electric is solving the problem completely. So I don't think  
143 there should have been the same grant. Giving a grant on a PHEV makes sense but I don't think

144 it should have been for the same amount. So I don't think government solved much of the  
145 environmental issues we have with PHEV's because I think people were buying PHEV's  
146 simply for the grant because a fifty kilometre range doesn't make a difference to anyone and I  
147 know people who literally don't even charge it, but they got eleven thousand Euro grant just  
148 the same. I think it was a bit foolish to treat them the same.

149 R: That's the general consensus apart from customers who bought a PHEV, because I'm  
150 interviewing both.

151 P: Yes, but I don't think, and I heard it directly, I think PHEV did not solve the environmental  
152 issue because there was still the element of pollution and the range of the electric, let's be  
153 honest, fifty kilometres. Now if you switch on the AC, you're stuck in traffic, I mean you  
154 consume them in a few hours, so it wasn't going to solve the problem.

## Participant MB

1 R: Let's kick off with the background information. So what type of vehicle do you own? Is it  
2 an electric vehicle or a plug in hybrid?

3 P: A plug in hybrid

4 R: Ok, the year of purchase of the vehicle?

5 P: 2022

6 R: And the total grant you got back from the government?

7 P: Twelve thousand, eleven thousand plus another one thousand of the scrappage scheme

8 R: So moving on to the actual questions. What were your main reasons for purchasing a plug  
9 in hybrid?

10 P: More environmental conscious and I believe that's the way that the world is going, that the  
11 world should be going in the future, let me say this.

12 R: So, question number two, what are the main advantages of the current government grant  
13 scheme? So the one you used to buy the vehicle.

14 P: So the advantage, it will ease a bit off the the expense of buying an expensive car.

15 R: So, it makes it easier to buy, right?

16 P: Not easier to buy, but eventually, because the thing is that you still have to fork out the whole  
17 amount of the car, but you will have something back other than the car. A monetary, financial  
18 help.

19 R: The disadvantage of the government scheme? Are there any disadvantages?

20 P: Yes, the disadvantage is from my end I bought the car, let's say I started the process in  
21 February, I got my car in August and up till today in March, I still don't have the money back.  
22 And when I enquired this week I was told a couple of weeks ago they had a six months time  
23 frame, for payment, but now that time frame is being ignored because they are taking longer to  
24 process the paperwork it seems.

25 R: So that actually goes with question number five, because both questions are almost identical  
26 because you've tackled the process part of the application. But in between these questions there  
27 is question number four, what are the positive qualities of the grant process? I take it you went  
28 to the showroom

29 P: The process for me it was quite easy because I went to the showroom, I bought the car, the  
30 salesman filled up all the paperwork, I provided my bank account details, and they took care  
31 of everything, and even from Transport Malta's end, I did receive an acknowledgement of the  
32 application form and the acceptance of the application, in that I will be paid.

33 R: But you haven't received the money yet.

34 P: The grant no, I haven't received the funds.

35 R: So I will note it down under the fifth question, which is the negative qualities. What other  
36 incentives, monetary and non monetary, both are incentives. So what other incentives would  
37 you introduce to motivate individuals to purchase both an electric vehicle and a plug in hybrid?

38 P: First of all monetary, I think the monetary aspect I think the grant being paid out before,  
39 because I believe that the word of mouth goes around, the grapevine is very fast. Non monetary  
40 I think, so for example, I'm going to give you an example, I don't know if you can understand  
41 me. All the electric vehicles are large in size, and unfortunately I find it a problem to park in  
42 car parks. I believe, why shouldn't as a person who invested so much money in such a car, not  
43 being provided with, I'm not saying a particular parking space for my car, but why not reserve

44 R: Priority for electric vehicles

45 P: Priority, exactly, for example you have an hour free of charge in this car park for example,  
46 or else, I don't know

47 R: For example in the UK, you get car parks, in the front you get parking spaces specially  
48 designated for such vehicles or families for example. So you get priority.

49 P: Exactly, so for example in Birkirkara here we have that type of parking, but unfortunately  
50 you can only use it whilst charging your car. And there's only one, there are three parking  
51 spaces but there's only one charger. So it's no use having three parking spaces but only one car  
52 can use it.

53 R: Very true. And would you recommend others to purchase such vehicles?

54 P: Yes, I do because first of all it's a very smooth drive, it's very comfortable. I feel that I am  
55 responsible not only for the people I am carrying but also for the car, one due to the expense,  
56 and secondly the more gas you press the more you consume, so you be careful even in your  
57 driving skills basically.

58 R: More conscious

59 P: Exactly, you become more conscious. It's a very smooth drive, it's quiet

60 R: I have a question regarding this subject in a couple of questions, because I compare them  
61 with a combustion engine vehicle. But before, are there any challenges you have faced since  
62 owning the vehicle? For example, people might say, but I might have to plan,

63 P: Let me tell you this, the only challenge I had whilst purchasing it was the size of the car, as  
64 I told you before electric vehicles they are all large in size. And I'm a person who owns a garage  
65 and I feel very irresponsible if I leave my car outside. So the first challenge I had to face was  
66 if the car fits the garage. Fortunately for me it did. But my garage has been built over twenty,  
67 twenty five years ago, I believe in the small garages that are being built now it's a bit of a  
68 problem.

69 R: I believe the issue there would be even to get into the garage.

70 P: Exactly, the length and everything because they are big cars. The way they are built they are

71 R: Built to accommodate the battery, the motor

72 P: Exactly

73 R: So, moving to question number nine, what are the advantages of owning a PHEV over an  
74 internal combustion engine? So, a normal car, a normal engine, sorry

75 P: So from my end the fact that I have a battery but I also have fuel just in case the battery  
76 finishes it's an advantage. The drive, as I told you is smooth, when I had a combustion engine  
77 I had a manual, and not an automatic, so you just can imagine what a big difference for me it  
78 was

79 R: I think until you got used to it

80 P: But it only took a couple of days, obviously something new, the fact that you don't have a  
81 gear lever stick makes it even more new

82 R: You don't know where to put your hands almost, you say where am I going to put my hands?

83 P: Basically sometimes I say I think if I have a broken leg I can still go to work because I can  
84 drive.

85 R: Yes, yes, the left part

86 P: Exactly

87 R: And disadvantages?

88 P: The disadvantage is the length and width of the car

89 R: So still the size of the car

90 P: Yes, because even the parking spaces they are still small. Sometimes I say ok, I fit, then, I  
91 don't fit, no

92 R: Actually the parking spaces in Malta, their average size is four point two meters, which is  
93 quite small.

94 P: My car is I think, four point one or four point two, so you can imagine how I fit.

95 R: Yes, yes, you barely fit and if there's a larger car behind you or the same size you have a  
96 problem.

- 97 P: Exactly, in fact when I visit my mother in law in St Julians, my husband tells me forget it  
98 we will not be going with your car which is not that much, just ten centimetres shorter, if there  
99 is ten centimetres.
- 100 R: All right. In your opinion, why has the take up of electric vehicles been so slow when  
101 compared to the sales of combustion engine vehicles?
- 102 P: Definitely the price, definitely the price because there's not a big difference in my opinion  
103 from a manual to an automatic car but the price as I told you before, even though there's the  
104 grant, initially you have to fork out the full amount.
- 105 R: That's been the response of many of my participants. The fact that you have to fork them  
106 out still. In fact if you look at the twelfth question, I present a list of seven items, seven  
107 incentives, that may already be in place, but imagine they are all available and they're new,  
108 when you go to purchase a plug in hybrid or an electric vehicle. Which will motivate your  
109 purchase the most? You can choose a maximum of three. The first one is a rebate which is  
110 deducted at the time of purchase, rather than you having to wait six months, eight months, so  
111 it's deducted straight away from the price. A free rapid charger to install at home rather than  
112 the standard charger, discounted electricity rates, no yearly circular tax, access to driving in the  
113 bus lane, no registration tax upon purchase, and priority parking for electric vehicles.
- 114 P: So I would go for the first one, a rebate, the discounted electricity rates even though they are  
115 already discounted, however I had to go through another process for that
- 116 R: Another bureaucracy
- 117 P: Exactly, I'm going to pay here and getting someone to do something here, whatever. Even  
118 the no registration tax upon purchase it would be interesting. It would lower definitely the price  
119 of the car.
- 120 R: The last question relates to the incentive like it was last year, when you purchase a plug in  
121 hybrid like yourself, you get eleven thousand, and an electric vehicle got the same incentive.

122 And people might argue that having the same incentive is unfair especially for those buying an  
123 electric vehicle because they don't have an engine to rely on if the range, if the battery is, you  
124 know, running out. What is your opinion about the introduction of variable monetary amounts  
125 when purchasing one over the other?

126 P: I believe, well let me tell you this, when I got my car there was even a difference between a  
127 Gozitan and a Maltese

128 R: It still is

129 P: And I believe it still is, they got one thousand more than I did. So I wouldn't go crying over  
130 one thousand Euro when I know I will be getting eleven thousand. I'm very sure that in the  
131 future there will be other incentives that most probably will be paying higher so that people  
132 will be more encouraged to pay. However I think that the expense that re buying the battery of  
133 the car is expensive, the battery of the car, that's why the car is so expensive because the battery  
134 is expensive. I believe that there should be incentives for people who are, in five, seven years'  
135 time, this process will start, people will start changing the batteries of the car because it has a  
136 lifespan. I believe it would be nice if the government gives incentives on the upgrading of the  
137 battery, for example. Because for example, my car at that stage will not be environmentally  
138 friendly that much because I will be consuming, most probably I will be consuming more fuel  
139 than the battery if it's at the end of its lifespan.

140 R: Ok, let me rephrase the question, because I think you misunderstood it. It doesn't relate to  
141 the battery itself. So, when you go to purchase a new vehicle, last year, someone who bought  
142 a PHEV got eleven thousand, for buying PHEV, and someone who bought an electric vehicle,  
143 driving in just electric, got the same amount, got eleven thousand. And those who bought an  
144 electric vehicle found it unfair that those who bought a plug in hybrid, which has an engine, to  
145 rely on

146 P: All right, now I'm understanding your point, all right

Participant MB

147 R: What is your opinion? Obviously you're an owner of a PHEV

148 P: Yes, I know, my car, that's a plug in obviously when it finishes the battery it consumes fuel

149 and that's not environmentally friendly. However, the prices of the cars didn't differ, being a

150 PHEV or BEV. So I believe that was the reason why the grant was still the same. The intention

151 I believe is more for the government to incentivise people to start somewhere.

152 R: Ok, so take the first step you say. Test the waters.

153 P: Exactly, the prices are still high, so

Participant BB

1 R: The vehicle type you own?

2 P: Ok, like the model?

3 R: No, is it a battery electric vehicle or a plug in hybrid?

4 P: It's a battery electric vehicle

5 R: Year of purchase of the vehicle?

6 P: 2022

7 R: And the total grant you got from the government?

8 P: Twelve because I scrapped my car

9 R: So eleven plus one. Let's start with the questions, so what were your main reasons for  
10 purchasing an electric vehicle?

11 P: Because I want to reduce the carbon print

12 R: Question number two. What are the main advantages of the current government grant  
13 scheme? So the initiatives the government currently has, or in your case, the one you benefited  
14 from.

15 P: It's monetary I guess, getting your money back, because it's not cheap getting an EV you  
16 know, it's quite hefty. So if it wasn't for the grant I wouldn't have found it so easy to purchase  
17 it. Per se, they're quite expensive, when I went to see the Mini, because I wanted the Mini, the  
18 EV versus a normal car, with a normal engine you know, it's quite pricey. So the grant gives  
19 you the push to go for an EV.

20 R: So it bridges the gap

21 P: It does. It does, because like I said, it's pretty pricey and they've gone up. So I was thinking  
22 about getting an EV for a long time. The question was can I afford it? So I was already in touch  
23 with Muscat Motors because I wanted the Mini because I didn't want a biggish car, I wanted a  
24 small car and a fun car and the Mini ticked my boxes, but when I went the first year asking for  
25 prices, this was 2020, I thought I can't afford it, I can't. I went the following year and the first

26 thing Muscat Motors told me, the prices have shot up. Which made it even more of a  
27 disadvantage.

28 R: And the current government grant scheme, are there any disadvantages?

29 P: Yes, they take long to pay you back. It took me eight months to get my money. Before there  
30 was like a three month waiting which is doable, but Muscat Motors prepared me, Emma in  
31 particular, she told me it's taking so long that people are taking loans to be able to afford an  
32 electric vehicle. They take a loan against the grant of twelve thousand.

33 R: All right. So they know they have to fork out.

34 P: Literally, because like that they would be able to afford purchasing an EV

35 R: Obviously that will add interest then into the equation.

36 P: That's it. So they end up losing money. So ultimately they're not getting the full twelve  
37 thousand. Luckily when I bought the car, when I ordered it, I had the money because I was  
38 saving up for it. Then again, from the month I ordered it to the month I received it, it took a  
39 year, so I had ample time to save the money. The delivery, I ordered it in August 2021 and the  
40 delivery was, I had an option, whether I wanted it end of December 2021 or February 2022. I  
41 opted for February 2022 and I'll tell you why. Because Emma had given me the advice that  
42 when it comes to selling it there's going to be a year's difference.

43 R: Yes because even if you get a car, delivery is 31<sup>st</sup> December 2021, your car is 2021 in the  
44 eyes of the buyer.

45 P: Exactly. So I went for February 2022, then it was March, then it was April, then it was May,  
46 then it was June. June I told Emma what is happening? Because I know people, friends of mine,  
47 who just got an EV, a Mini, exactly identical to mine, within two months. So what happened to  
48 my order? Is my order being pushed back or taken by someone else? And she told me definitely  
49 not. Those are people who literally purchased Minis from the stock that we get periodically.

Participant BB

50 Yours is a particular order full extras and with built in specifications, so your order is still  
51 there. Ultimately I received it but it took a whole 365 days, I'm not joking Owen.

52 R: And it's disappointing because you want the car

53 P: And you know what I did Owen? When I ordered my Mini, in 2021, I had a BMW ok, and  
54 I love my cars. So my BMW was impeccable even though it had quite a number of years on it  
55 so I decided to take it to a sprayer, revamped it and sold it for a very good price. And I sold it  
56 within a week because it was snapped up because it had low mileage, it was impeccable inside  
57 and out, it was snapped up within twenty four hours literally that I put it on Marketplace my  
58 BMW was gone. And I ended up without a car.

59 R: Because you sold it before it actually arrived

60 P: Luckily, luckily my son the borders had opened up, there was still COVID at the time but  
61 they started opening up, and he started on his gap year. So I started using my son's car. Which  
62 was fine but then when April, my car hadn't arrived and my son was coming back, I needed it,  
63 I needed a car. And I said this is unacceptable, my delivery was supposed to happen three  
64 months ago. So Muscat Motors again came forward and they gave me a replacement car at no  
65 cost.

66 R: Only fair

67 P: And I had a brand new Seat Ibiza, full extras, new, no mileage.

68 R: That's amazing, very good service, given the circumstances

69 P: I'm telling you, Muscat Motors, I recommend them, believe me, I love that company. When  
70 then I got my Mini and I gave them the Seat back, they realised that my Mini wasn't connected  
71 to Carplay. So I handed it back in so they could handle the issue from the Munich factory. They  
72 gave me a brand new Mini Countryman, another EV

73 R: You've had your fair share of cars over the past year

Participant BB

74 P: I'm telling you now I've lost my phobia of driving other cars because I was experimenting  
75 with so many cars

76 R: And different sizes, different brands

77 P: Literally, and the Countryman isn't small compared, so having it on loan for a week I was  
78 like, oh my god I can't do this! But Emma she told me come on Ben, go for it, you're a good  
79 driver! Yes, but it's not my car! Anyway, I can't complain, I still can't complain. I'm telling  
80 you and then what Muscat Motors did, Emma she told me we're going to offer you a free  
81 freebie, like. Choose any of these, what do you call them?

82 R: Merchandise

83 P: Merchandise. And I chose, funnily enough, a key chain. Now there were even some which  
84 were like eight hundred Euro. I wasn't interested in them, or t-shirts or base ball caps. I told  
85 her but I also want the luggage, the Mini luggage, the same colour

86 R: Cool

87 P: And she gave me the luggage as well.

88 R: Only fair, only fair. I'm going to continue with the questions. So the grant application  
89 process you went into the showroom and I take it someone applied for you. How was that  
90 process? Positive qualities

91 P: Emma had already prepared the grant, duly filled up, and all I had to do was sign it and she  
92 took care of everything.

93 R: So plain sailing when it comes to the application process

94 P: Plain sailing. She even, given that I had sold my car, she told me are you going for the  
95 scrappage scheme? I told her my car is sold. She told me you want to purchase a car and then  
96 we scrap it so that you get the full twelve thousand? I told her is that legal? Because I want to  
97 do everything above board. She said it's very legal and the government is encouraging this,  
98 because then we scrap more cars. So I purchased a Maruti Subaru

- 99 R: Another car!
- 100 P: Another car which I never saw. I purchased it for four hundred Euro and then got an extra  
101 one thousand for scrappage. So I benefit from an extra six hundred Euro.
- 102 R: Ok. That's very very positive from Emma's side as well.
- 103 P: And she had told me leave the paperwork to me, all you have to do is sign the papers. So it  
104 was that plain, that simple.
- 105 R: What other incentive – so I'm skipping question number five because you've alluded to that  
106 in the disadvantages, the negative qualities of the process. So question number six, what other  
107 incentive both monetary or non monetary, would you introduce to motivate individuals to  
108 purchase an electric vehicle?
- 109 P: Very simple. More plug in stations around the country, there aren't enough. When there was  
110 the Zoes all over Malta they were springing out of nowhere, you know, and this is the general  
111 public and I can only think of two places where I know there are, which is Sliema and, I think,  
112 Mellieha. I don't know of any other places to be honest, where I can go in and charge my  
113 vehicle if needs be.
- 114 R: This is the general consensus that the infrastructure lacks when it comes to
- 115 P: We're not ready Owen. The grant is not enough, the country is not ready. We don't have the  
116 infrastructure.
- 117 R: So the technology of these cars are very advanced and then you have a system in Malta, the  
118 infrastructure which is totally the opposite. They have to be at par
- 119 P: Absolutely. And they keep promising everybody, every budget, that in five years' time we're  
120 going to have five hundred stations. Where are they?
- 121 R: You don't see them, it's like they're hidden for someone, only a couple of people know them
- 122 P: Literally, and you know what? The one I know about in Sliema, is basically on the front  
123 R: Next to Medasia no?

Participant BB

124 P: Next to Medasia, and I see it every morning because I go for a jog there before work, and  
125 every time I pass there's always a car plugged in. Always, always

126 R: It's probably the same car

127 P: Yes, it's always the same car so there's no way I can go to plug in my car there if needs be.  
128 And unless a person has a garage at his disposal, where he can plug in his EV, he can't get an  
129 electric vehicle. Because there's simply nowhere he can plug it in. You know? So you need to  
130 have a garage.

131 R: That's the first thing I used to ask when someone came into the showroom asking about an  
132 electric vehicle because you have to have a place to charge securely.

133 P: Yes, I mean the way the system works, is that nobody can pull out the charging cable for you  
134 because you need the big key of the vehicle for it, you know, so the key has to be close. So you  
135 can't just remove it if I'm in a public place you know what I mean? But still, you need to have  
136 a garage you know. Because how can you not plug it, after all you're using up electricity and  
137 you have to pay for the electricity to charge your own vehicle. You know what I mean?

138 R: And would you recommend others to purchase an electric vehicle?

139 P: Without a doubt.

140 R: And any challenges you've experienced since owning an electric vehicle? Just from the  
141 electrical vehicle side.

142 P: No not really. I thought at first I thought it's going to be quite challenging, getting used to  
143 the whole setup of charging it. No, because the cars are manufactured in such a way where you  
144 get on the screen the minute you switch on the engine, how much battery is left. Once a tow  
145 truck told me that their biggest, their frequent clients are people with ET's because they forget  
146 to charge their cars. I can't see how that can easily happen because the car keeps reminding  
147 you, it's in front of your face sixty percent battery, you have like a dial, you have percentage,  
148 it's on your phone, it's everywhere

149 R: Especially with these recent vehicles, with the technology the way they are

150 P: Exactly

151 R: And what are the advantages of owning an electric vehicle versus a combustion engine  
152 vehicle?

153 P: The advantages. I'm into cars, I love my cars, for example the first thing that comes to mind  
154 is the smoothness of the engine. There's no engine really just a battery, so when you put down  
155 the window you don't hear that noise. Noise is pollution. It's so smooth, it's so quiet. So before,  
156 because I'm into music in a big way, I would never put the windows down because the noise  
157 of the engine would mess with the music blaring in my car. But now I can open my sunroof I  
158 can put down the window and all I hear is my music because there's no sound of an engine, of  
159 a combustion engine.

160 R: Only a hum

161 P: Exactly, some people who own these big racing cars they tell you maaaaaa the sound of a  
162 Ferrari, it excites me! I never could understand that. I find it so yuqqqq, you know. Honestly  
163 Owen, I have back to back to my bedroom, there's this garage, and all they have is  
164 Lamborghinis and all these really really loud combustion engines

165 R: I need your address and I need to find a way to extract those vehicles without them knowing.

166 P: Oh my god, and they use them at the weekend mostly and I wake up on a Sunday to these  
167 noises of an engine running. I want to kill them. I'm not telling you because they wake me up,  
168 because this won't be early but it really gets to me, what is the beauty of making so much  
169 noise? And they leave it running on purpose. They're literally loving the sound of the engine  
170 running. And if they knew how much it annoys the neighbours, I want to throw stones at them  
171 I hate it so much, and this happens every weekend. What do you do? What do you do?  
172 Everybody has his hobbies I guess.

173 R: Some people's hobbies are to annoy people, but anyway. Question number ten asks what are  
174 the disadvantages of owning an electric vehicle versus a combustion engine? Do you find any?

175 P: The disadvantages? It's of a plug in hybrid but, that

176 R: No a PEV is a plug in electric vehicle a PHEV is a plug in hybrid. It's to associate both types  
177 in one abbreviation.

178 P: Ok. The main disadvantage I see with owning a PEV is that I can't go on a long distance trip  
179 with it unless I know that there are charging stations along the way. And even if there are Owen,  
180 I know that I'm going to be stuck waiting for my engine to fire up, to charge up before I can  
181 even go and continue my journey. Because charging is quite long

182 R: More than eight hours no?

183 P: Yes, I tend to charge it at the end of the day until the following morning. I never charge it  
184 during the day because it takes too long. And when I asked, because I also did a lot of research  
185 on PEV's, if I should use a fast charging cable, they told me don't even consider it because it  
186 depletes the battery.

187 R: Yes, actually some recommend that you charge the battery from twenty percent to eighty  
188 percent.

189 P: Yes, in fact this is one thing that I need to start doing because normally in my case, when I  
190 see it falling below fifty, I charge it

191 R: That's the anxiety

192 P: Yes, because I don't like to be, caught you know red handed without enough charging power,  
193 but I know that I should be leaving it to drop, to, say, twenty or ten percent and then I charge  
194 it. But I never do and I've had it since August and I've never done it.

195 R: Because one day you have errands, forty minutes and then you have another

196 P: Yes, Owen I'm very lucky, I am lucky in a lot of ways because I live in Swieqi and work in  
197 Swieqi so I go to the office on foot, so mostly, mostly for example, I don't go anywhere because

198 I go for my morning jog down on the Sliema front so I drive it to Spinola every day, that's five  
199 times a week. After work I do classes, I do Pilates classes and trying to keep my life simple,  
200 logistics are very important to me. So my classes are very close, one is in Pembroke, one is in  
201 San Gwann. So I don't go long distances most of the time

202 R: They're in the same area

203 P: Yes, yes, my shopping I do on foot, I have my bank next door, I have my hairdresser next  
204 door, I have my nail technician next door, so I don't need the car much. I mean my longest  
205 distance is going to see my dad all the way to the south. That's once a week but other than that,  
206 sometimes I don't even charge my vehicle in two weeks.

207 R: It's true, that's maybe a total of forty kilometres?

208 P: Literally. I told you, when I got to sell my BMW it was snapped up simply because of the  
209 low mileage. And this is going to be another case with the Mini, and now my life has become  
210 even simpler, because then when I had the BM I used to ferry my children to private lessons,  
211 to friends', to parties. Now my children are grown up, they live abroad and if they come to  
212 Malta they have their own car. And when I go out in the evening, you'll say you don't go out  
213 in the evening? Yes, I do, a lot, too much

214 R: You probably get a Bolt too

215 P: I always get a Bolt. Because I'm drinking and I won't risk it Owen.

216 R: What a simple and nice life

217 P: Yes, yes, you know what? When you get to my age it's about keeping life simple, it's about  
218 you know making sure that what counts in life is quality of life. And that's what I seek  
219 nowadays, quality. Not quantity and stress and I'm trying to fit everything in. Hence I switched  
220 from going to the gym and loads of training, to Pilates because I find it more holistic, you  
221 know?

222 R: Ok, so let's just finish the questions and finish the encounter. Question number eleven, in  
223 your opinion, why do you think the take up of electric vehicles has been slow when compared  
224 to combustion engine vehicles?

225 P: Ok, I can answer you this. Very simply, because I talk to a lot of people and they tell you  
226 how is it going? I'll never have one, I'll never have one. And I keep asking them why, and I  
227 can see the reasons because these are the same reasons that came to mind when I decided to  
228 order it. For example people are scared of the challenge of owning, you know an electric vehicle  
229 and not getting used to it. That scares people ok, some people will tell you I don't have a garage  
230 so for me it's not going to work. I can't take it abroad with me, I can't travel with it. So there  
231 are a lot of factors to consider before purchasing you know. I mean in my case I said, ok,  
232 ultimately what do I want? Am I going to travel with this car? And I know that if I'm going to  
233 travel abroad, it's more me taking a plane and then hiring a car if needs be. You can tell me  
234 what about Sicily, people take the car you know and drive around Sicily. Yes, yes, but I know  
235 that if I'm going to do that kind of trip I'm going to be with someone. And maybe I'm going  
236 to be using that someone's car so in my case I'm not going to do it alone.

237 R: And the infrastructure of Sicily as well, you don't know the infrastructure. Some say it's  
238 even worse than Malta, some say, I've heard it through the interviews.

239 P: I told you because I know someone who has an EV and he goes to Sicily with it. And he told  
240 me when the battery drops down and he has to charge it he is stuck in a place literally, eating  
241 or you know, just for his battery to go up. Then it's only twenty percent more and it's not  
242 enough to continue the rest of your journey.

243 R: So you're stuck, you're tied to the infrastructure

244 P: With an EV you can't really travel with it Owen. Because you don't know what you're going  
245 to find abroad, and there aren't many stations either even in Sicily. In Sicily unfortunately in  
246 this respect they're very much like Malta. There aren't enough stations.

247 R: Maybe you would have to find a hotel to find the infrastructure

248 P: And plug it in in a garage, yes, you know. So I think that is the major, so in my case I said I  
249 want, tipo a city car. I'm not going to travel long distance, so for me it was fine. Some people  
250 will tell you I have more than one car, if I need to travel I'll take the second car. Fair enough,  
251 but in my case it's ok. So it worked.

252 R: Ok so question number twelve I present a list of seven items which are incentives, some of  
253 them are already in place. But imagine they are not and you're just going to a showroom to  
254 purchase an electric vehicle and you have this list. I present a list, so let me read the question,  
255 it's better. Imagine the below are incentives that are available when purchasing an electric  
256 vehicle. Which if any would motivate your purchase? Give reasons for your answers and you  
257 can choose a maximum of three responses. So we start with number one a rebate which is  
258 deducted at the time of purchase rather than you having to wait months for the rebate. A free  
259 rapid charger to install at home rather than the standard charger, discounted electricity rates, no  
260 yearly circular tax, access to driving in the bus lane, no registration tax upon purchase and  
261 priority parking for electric vehicles.

262 P: Difficult, but the rebate for sure, no registration tax, and discounted electricity rates. Plus  
263 the priority parking I like, but it's ok. I wish I had four but you said three so it's ok.

264 R: I would have thought you would choose priority parking, but it's ok, no problem.

265 P: Which one?

266 R: I thought you would choose priority parking, because you alluded to it

267 P: Yes, priority parking is very important to me so basically I would give up the discounted  
268 electricity rates and go for the priority parking.

269 R: I influenced you

270 P: No, no, no, it was something I was trying to challenge myself because ultimately that is more  
271 of an exception to me.

272 R: Some people might argue that ok, priority parking, but if there isn't the infrastructure to  
273 invoke a priority parking scheme, but it's ok. So, the last question. So last year you had two  
274 types of electric vehicles which had the same grant, which was eleven thousand. So a plug in  
275 hybrid, which has like forty or fifty kilometres of range, of electric range, had the same grant  
276 as a fully electric vehicle. And some people argue, and rightly so, that that is unfair because an  
277 electric vehicle should have priority over a PHEV. Why are you giving them the same  
278 incentive?

279 P: One hundred percent agree. One hundred percent. I don't think a plug in hybrid should have  
280 an electric grant on it. Or at least a minimal one, because ultimately they still have a combustion  
281 engine and they're still harming the environment.

282 R: Which defeats the whole purpose of the scheme in my opinion.

283 P: They want the best of both worlds, why should they be rewarded? They always have Plan

284 B, I never have Plan B if I'm without a battery.

## Participant GB

1 R: So your car is a plug in hybrid

2 P: Yes

3 R: Year of purchase is 2022

4 P: Yes

5 R: Total amount of the grant was eleven plus one?

6 P: Exactly

7 R: So here are the questions. What were your reasons for purchasing a PHEV?

8 P: From my side, it was the next way forward because I wasn't ready to go for electric and I'll  
9 tell you why. With an electric car I would be full of anxiety and looking at the battery all the  
10 time to make sure it had enough charge. So with a plug in hybrid I felt safe but at the same time  
11 it is not a diesel or a full petrol, although my hybrid has a petrol engine as well. That was my  
12 reason in making a step towards getting rid of my diesel engine and getting a plug in. There  
13 was also the government grant and that helped too.

14 R: You mention the government grant. What is the advantage of the grant in your opinion?

15 P: For me it's the fact that you can buy a good brand of car, because you can go for an inferior  
16 brand but the electric cars are still way too expensive. Next door is a showroom and an MG is  
17 selling for forty thousand, which is not a joke for an MG 4.

18 R: Yes, that is very similar to a BMW.

19 P: With the government incentive you can go for a better car and when you eventually receive  
20 them back, you'll be on the same scale, and yet owning a good brand of car, without going for,  
21 for example, a French car.

22 R: For you it allowed you to go for a better brand, higher quality car. And are there any  
23 disadvantages of the scheme?

24 P: This incentive has now been discontinued, so that's the disadvantage, however we're still  
25 selling quite a few plug in hybrids. The reason being that people want to go abroad with their

26 cars. The maximum range of a hybrid is around four hundred kilometres. If you want to go  
27 abroad with your car you need to do your homework properly, you need to know about the  
28 charging stations and everything.

29 R: Yes, in fact further on I have some questions about the subject, but let's put it to one side for  
30 now. Let me ask you another question so that we won't deviate. So, the application process,  
31 was it a positive one in your opinion? When you went to apply for the grant, did the process  
32 have any positive qualities? Was it easy?

33 P: Yes, yes, it was. You fill in a form, after having registered your car, not before, there needs  
34 to be an existent log book for the car. But yes, it was quite straightforward and I knew that there  
35 was a six month wait in order to receive the grant.

36 R: So that is the negative quality then, on the other hand.

37 P: Yes but it's to be expected, because these are government funds and one can't expect to  
38 receive them the next day.

39 R: Yes, but a lot of people don't understand it and most people I interviewed complained about  
40 the waiting time. They suggested that there would be a system whereby you can log in and  
41 check about your application.

42 P: You can call Transport Malta and check on your application in fact. In my case I applied in  
43 May 2022 and was given the money in October. First you receive a letter saying that your  
44 application has been accepted, then after six weeks, or eight weeks you receive another letter  
45 and it's around twelve to fourteen weeks after that that you receive the grant. And it was on  
46 point.

47 R: So at least there's some sort of guide. And are there any other incentives that you would  
48 introduce to motivate people to buy an electric vehicle? Any other incentive, both monetary  
49 and non monetary? Not necessarily monetary.

50 P: Electric vehicle? Not a plug in hybrid?

51 R: Electric vehicle

52 P: The grant scheme is a very good one, people don't complain about it. There is also a scheme  
53 for those wanted to charge at home, for a separate charging point, or meter, in the household,  
54 to install in your garage so that you have a separate account to your household one. So there  
55 are enough incentives so I can't think of any more in this respect. Maybe more charging points,  
56 those yes, more public charging points which should also be free of charge. All of them cost  
57 money, there are only about two that are free of charge, one in Ta' Xbiex I think, and one in  
58 Cirkewwa.

59 R: Would you recommend others to buy an electric vehicle? Obviously not from a sales  
60 perspective now. But if someone were to ask you whether you would recommend them to buy  
61 an electric vehicle, would you?

62 P: Plug in?

63 R: Plug in hybrid or electric

64 P: Yes of course. I just love it when the engine starts because I have really got used to the quiet,  
65 my mind is aware that it's clean, and sometimes after driving around doing errands, getting  
66 into the car and switching it on, but I know that I only have about two kilometres left, then I  
67 just want to get home to charge. But the car has this system, just by pressing a button, that when  
68 you press the brake, the battery starts to charge so that at least you can get back home. It gives  
69 you about ten kilometres.

70 R: Like charging as you drive.

71 P: Exactly, it charges a little because we're talking about a plug in here. And while you're  
72 driving it switches over to the engine.

73 R: And what challenges have you experienced since owning a PHEV? Anything that is different  
74 from your previous car?

75 P: No, on the contrary, till now, since May I've only bought a hundred Euro of petrol till now.  
76 The car also shows you how much electricity you've consumed in charging it from zero to full  
77 and from zero to full it costs me one Euro seventy to charge it. The app lets me know how  
78 much it costs. It lets me know the progress, but when it reaches full charge it tells me how  
79 much money it has consumed to charge.

80 R: Ok, that's sounds like something new.

81 P: I can send you a photo of it if you like

82 R: Ok, ok. Somebody was saying in fact, that they would like to know how much it was costing  
83 him to charge the vehicle.

84 P: And I don't have a separate electricity metre at home, so I'm using my home electricity  
85 metre. And when I calculate before May 2022, my electricity bill is still the same as it was  
86 before, so I can't even say that my electricity bill has increased drastically. I've calculated,  
87 through the app that I'm consuming around eighteen, twenty Euro of electricity per month.

88 R: You're saying that you haven't seen much difference in your electricity bill

89 P: No, no, not at all

90 R: What are the advantages of the vehicle you have now, to the one you had before? You've  
91 just mentioned fuel no?

92 P: Yes, fuel and the noise. Listen, it's true! Once you get used to it you start to realise just how  
93 noisy the other cars are.

94 R: You start to hear the outside noise instead of yours.

95 P: Yes, yes, true. And I realise that it's switched to the engine only because the accelerator gives  
96 me a sort of feeling, otherwise I wouldn't realise that it would have switched to the engine. So  
97 yes, I get a sort of feeling from it and I realise that I'm using the engine.

98 R: And are there disadvantages in owning a PHEV compared to your previous car? For example  
99 something you used to do before that now you can't.

100 P: Yes, before I used to have a rear wheel drive, and now I have a four wheel drive, which has  
101 much more road holding than the rear wheel drive, as it tends to spin and skid. But as a car now  
102 it's bigger, higher, more spacious.

103 R: In your opinion why do you think that the take up of electric vehicles has been slow, although  
104 now admittedly sales have picked up.

105 P: To electric vehicles?

106 R: Yes

107 P: They will remain slow because the Maltese are not ready to make the change to full electric.  
108 I still hear the same thing to this very day – 'I don't want electric, I can't stand the fact that  
109 they are silent'. They want to hear the sound of the engine. The fact that it makes no noise and  
110 that it's difficult to go abroad with it has not been accepted. In fact sales of diesel and petrol  
111 cars are still at the normal level, although not in large quantities because eighty five percent of  
112 the vehicles are electric. But you still find people who are not ready to make the change, not  
113 now and not in the near future either. And we get a lot of customers who don't have the means  
114 to charge at home. People living in Sliema, St Julians, in apartments which only have a car  
115 space which does not have electricity. That is another problem brought about by all this  
116 construction, and these are situations I see every day. There is a big problem with charging  
117 points. I had a client who bought a fully electric car, he was determined to go green, planning  
118 to charge it at a charging station some twenty five metres away from his house .However, he  
119 was very aware of the risk that when it was not available, then he had to remain without a  
120 charge. Then there are people who have solar panels who are getting their charge completely  
121 free, so they are totally clean.

122 R: That is extremely worth it. Now the next question lists seven incentives, that may already  
123 be available. But imagine that you go into a showroom and you don't know about them. You  
124 will be asked which you prefer the most and you will have to choose three. A rebate to be

125 deducted at the time of purchase, without having to wait months for the money. A free rapid  
126 charger to be installed at home, discounted electricity rates, no yearly circular tax, access to  
127 driving in the bus lane, no registration tax upon purchase and priority parking for electric  
128 vehicles.

129 P: Are you talking about fully electric vehicles?

130 R: Both

131 P: Ok. So, the circular tax is already free on fully electric vehicles, and for plug in hybrids it's  
132 free for the first five years, then it's ten Euro. So I won't choose that because it's already in  
133 place. The rebate is a good incentive so yes, I would say yes to that. The bus lane, electric cars  
134 can drive in the bus lane, but not plug in hybrids, so that would be an option that I would  
135 choose. I didn't understand about the electricity rates.

136 R: Your electricity rates would be cheaper.

137 P: I could have that if I got a separate meter, so it's my fault that I don't have it.

138 R: There are some people who say that getting a separate meter is expensive in itself.

139 P: The separate meter must be installed next to your existing meter and I didn't want them to  
140 use the chaser at home, and I decided to do without. However, if I were given the option and it  
141 would not need to be next to the existing meter, then I would go for it, yes, discounted electricity  
142 rates.

143 R: Ok, that's three. Now, the last question. As you know, last year, electric vehicles and PHEV's  
144 had the same incentive, the same grant. It can be argued that this is counter productive to the  
145 reason for the grant in the first place, which was to go green. What is your opinion on the  
146 introduction of variable monetary incentives, a pro rata rate according to the range of the car?

147 P: In the current situation, where there is no grant at all on PHEV's I believe that yes, there  
148 should be some sort of incentive. Even if it is tied to the car's range, it would be quite fair as it

Participant GB

149 would be calculated on a pro rata basis. At least it would be helping people to purchase the  
150 vehicle, knowing that they will be getting back some of the money.

Participant YSC

- 1 R: Background information. The vehicle, is it an electric vehicle or a plug in hybrid?
- 2 P: It's a battery electric vehicle
- 3 R: Year of purchase?
- 4 P: 2019
- 5 R: And the total grant you got back from the government?
- 6 P: Seven thousand
- 7 R: Question number one. What were your main reasons for purchasing an electric vehicle?
- 8 P: One of the reasons for purchasing an electric vehicle is that it is more economical than fuel.
- 9 R: More economical, ok. Question number two. What are the main advantages of the current  
10 government grant scheme? In your case the grant you used up
- 11 P: The grant I benefited from. The main advantage was obviously getting the money back, it  
12 was a good incentive in itself, and it brings down the cost of buying a new electric car.
- 13 R: So it bridges the gap almost with a commercial engine vehicle, with the price of a  
14 commercial engine vehicle. Ok, and any disadvantages of the grant scheme?
- 15 P: One of the disadvantages is that you would not know how much funds are left from the  
16 scheme.
- 17 R: Ok, so there's no online system where you can check if there are funds available. Which is  
18 understood
- 19 P: Not that I know of
- 20 R: No, there isn't. And for you to apply for the grant you went through a process I guess. How  
21 was the process, was it positive?
- 22 P: Yes, it was quite a positive process because the application was quite straightforward and it  
23 was filled in actually by the showroom, so it was very smooth
- 24 R: So straightforward. And the negative qualities of the grant process?

25 P: I think one of the negative qualities is that you have to pay the total price of the car up front  
26 and then you get refunded but you don't know actually when so it might be a few weeks or  
27 months, it depends.

28 R: And what other incentives both monetary and non monetary, would you introduce to  
29 motivate individuals to purchase such vehicles?

30 P: I think having a better infrastructure would definitely help and motivate others to buy an  
31 electric vehicle. Providing more charging pillars and schemes, membership with pay per use,  
32 not membership, sorry, not a monthly membership but a pay per use. And they have to be  
33 reliable as well. And also offering home chargers with a special rate.

34 R: Ok, so charging at home with a better rate.

35 P: Yes. I know that there are home chargers that you can apply, but you have to go through  
36 another application

37 R: A bureaucratic process

38 P: Yes.

39 R: Would you recommend others to purchase electric vehicles?

40 P: Yes, I would, I find it, as I said, more economical, and the fact that you can charge your car  
41 while you are at home, in your garage, or while you are at work, sometimes I do that as well,  
42 and for me not going to the petrol station is a plus.

43 R: So you can charge it at home, so you have a garage.

44 P: Yes.

45 R: Any challenges you've experienced since owning an electric vehicle?

46 P: The biggest challenge or fear, especially at the beginning, is not knowing how much battery  
47 will serve you and to plan for the journey, especially at the beginning. Because you'll think  
48 that, you have a lot of anxiety that you'll end up without battery, but it's never happened. And

49 also, one of the other challenges I find when charging outside, is that sometimes the parking  
50 places are taken up by ICE cars, and charging pillars are not functioning properly.

51 R: So the infrastructure in general is lacking. All right, and what are the advantages of owning  
52 an electric vehicle when compared to a combustion engine?

53 P: I like how smooth it is and also the fact that I'm cutting on emissions, that's something  
54 positive I think from owning an EV car. The maintenance costs of an EV have been very little  
55 when compared to maintenance costs of an ICE car, such as oil changes, and spark plugs, fuel  
56 filters. And also, driving on the bus lane, sometimes, if there's a bus lane, and also when going,  
57 finding parking bays for electric vehicles obviously whilst you're charging them.

58 R: And the disadvantages of owning an electric vehicle when compared to an ICE vehicle?

59 P: As I mentioned before, the infrastructure in Malta needs to be much much better, and you  
60 have to plan the journey ahead. You can't just drive for four days and just let it be, I mean you  
61 can't stop at a petrol station. I mean, you can charge outside, but still, for example when I went  
62 to Gozo I was a bit anxious because I knew it would be a long drive, and then that we were  
63 going around Gozo, we stayed three days and had to come back and I had to look for a charging  
64 station. Sometimes it is a bit

65 R: Did you look for accommodation with a charging infrastructure?

66 P: No, I hadn't even thought of that actually. I tried to look for charging stations close by

67 R: Probably in Rabat?

68 P: There was one where there is the temple, at Ggantija. I found one there because we had a  
69 farmhouse and it was close by.

70 R: And in your opinion, why do you think the take up of electric vehicles has been so slow  
71 when compared to ICE vehicles?

72 P: I think people are not keen on changing to electric vehicles, they fear that they may end up  
73 without battery, obviously the cost of an electric vehicle is not cheap. But I think mostly it's,  
74 people do not try to change.

75 R: Fear of change, it's our culture no?

76 P: That's what I think.

77 R: So I present a list of seven incentives that may already be in place, but imagine going into a  
78 showroom and these seven incentives are available for you to buy. Which, if any would you  
79 choose that would motivate your purchase? You can choose a maximum of three.

80 P: Ok

81 R: The first one is a rebate which is deducted at the time of purchase rather than you having to  
82 wait months for the rebate to go into your bank account. A free rapid charger to install at home,  
83 discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no  
84 registration tax upon purchase, priority parking for electric vehicles.

85 P: So, as I mentioned, I would go for the rebate which is deducted at the time of purchase, a  
86 free rapid charger to install at home, because I have a standard charger, but it takes like ten  
87 hours for it to be fully charged. And, either discounted electricity rates or priority parking.  
88 Between the two I think I would choose priority parking.

89 R: And the last question. So what is your opinion about the introduction of variable monetary  
90 amounts when purchasing an electric vehicle versus a plug in hybrid? So technically last year  
91 the grant was the same for both types of vehicles. What is your opinion for introducing a pro  
92 rata rate for example you get a thousand for every forty kilometres of range.

93 P: I think it would make more sense, because driving an electric vehicle you can't really do  
94 otherwise if you don't have, I mean you can't change to fuel like the PHEV, so

95 R: So you find it unfair that they have the same amount?

96 P: The same amount, yes of course.

Participant JG

- 1 R: Let's start with the background information. Your vehicle, I take it is a PHEV?
- 2 P: Yes
- 3 R: And you bought it? 20?
- 4 P: Two. 2021 sorry, I apologise if I made a mistake but you can arrange I presume.
- 5 R: No problem, this is as informal as possible especially since we know each other.
- 6 So, the total of grant you got back from the government?
- 7 P: Twelve
- 8 R: So eleven plus one I take it, right?
- 9 P: Right, yes
- 10 R: So, let's start with the actual questions. I have thirteen questions and they'll be presented
- 11 now. What were your main reasons for purchasing a plug in hybrid?
- 12 P: One of the main points was the reason for the grant, two, the technology also the advanced
- 13 technology. Being something new on the market, something that people were ready to, let's say
- 14 test, but it was more, the grant was the selling point.
- 15 R: Ok. Because it bridged the gap
- 16 P: That's it.
- 17 R: In fact that's the second question, kind of what was the advantage of the scheme, what was
- 18 the incentive
- 19 P: The advantage was because getting refunded the twelve thousand was, I could emphasise
- 20 more on the specs of the vehicle
- 21 R: Ok, so you added more specs
- 22 P: Exactly
- 23 R: Ok, that's nice. And any disadvantages of the scheme? Not the process, the actual incentives
- 24 P: No, it was very attractive to be honest and very straightforward.

Participant JG

25 R: So that was a positive quality, which is the fourth question. So the process was  
26 straightforward.

27 P: Very plain sailing, yes it was. I got an acknowledgement from Transport Malta and was  
28 informed that I have been accepted and I will be expecting the refund obviously within a couple  
29 of weeks, which I did.

30 R: So you got it actually within that time frame, because people might argue that one of the  
31 negative qualities was the actual getting the refund back.

32 P: No, no it was pretty easy

33 R: So no negative qualities.

34 P: No, absolutely

35 R: Ok. Question number six. What other incentives, both monetary and non monetary would  
36 you introduce to motivate individuals to purchase such vehicles, both electric and PHEV

37 P: Incentives like more electric points in my opinion.

38 R: More charging stations?

39 P: Yes. Unfortunately in Malta only if I'm aware of three locations and very limited. There'll  
40 be two or three electric points where to charge and they'll be occupied by other vehicles.

41 R: Sometimes not even electric vehicles

42 P: Yes, agreed

43 R: And would you recommend others to purchase such vehicles?

44 P: The main point I would but with conditions. Like, they have to be garaged, they have to have  
45 a charging point at home because I know people who bought a hybrid and they don't have the  
46 access to charging their vehicles so they leave it on petrol.

47 R: So they benefited from the grant

Participant JG

48 P: Yes, and not for any other reason. And second, the reason being, if, there are disadvantages,  
49 I don't know if I should mention it here, having a hybrid, because it's very limited and not  
50 much mileage, it doesn't give you a reasonable mileage on the battery.

51 R: So you would prefer if it had more electric range.

52 P: Yes, absolutely.

53 R: Actually that goes with question number eight, which is the challenges you experienced, so  
54 you would prefer more range.

55 P: Definitely, definitely, especially if you go overseas, in Sicily there are no charging points

56 R: Really? The infrastructure is worse than Malta? Kind of?

57 P: Yes. You have to find a hotel or some kind of location where you can say ok, I can charge it  
58 here. I've been to Sicily with the car and just one place I found where to charge it. In one  
59 particular hotel.

60 R: Probably an expensive hotel I take it

61 P: No not really, it was a new hotel.

62 R: Yes, it has to be a new hotel. So question number nine. What are the advantages of owning  
63 a PHEV when compared to a normal combustion engine?

64 P: So, when I saw this, sorry to mention, when I saw ICE I thought you wanted to pull my leg  
65 with the number plate I had before, you remember before the number plate?

66 R: Yes, yes, it was it was, now I remember!

67 P: And I said oh my god, this is taking me back to the memories!

68 R: Oh my god! That was a nice vehicle!

69 P: It was it was. Well the advantages, it's very simple, I mean very straightforward, the  
70 opportunity of having the first few miles on the electric and then obviously it turns on to petrol.

71 R: How many miles do you do on electric?

72 P: Thirty seven kilometres, not much. Then you have the advantage that if you don't charge it  
73 you can use the petrol. So there you have sort of a choice, an option, of either leaving it on  
74 petrol and not charging it, if you don't have petrol you have the peace of mind that you have  
75 the charged car. So there you have a piece of the cake, you know what I mean? You can eat it,  
76 have it and eat it, rather than

77 R: Best of both worlds

78 P: Exactly

79 R: And the disadvantages between the two?

80 P: The disadvantage is that you have to stay charging it on a very regular basis.

81 R: But when compared to the combustion engine vehicle? Like for example

82 P: It wastes more petrol, or

83 R: One of the disadvantages in my head is like for example, with a PHEV you have to service  
84 both the battery or the electric motor and the engine.

85 P: Yes, and that is one of the disadvantages. Thank you for reminding me, you have a point,  
86 obviously if you have a problem with the battery it costs thousands.

87 R: Sorry for reminding you

88 P: Yes, that is one of the big disadvantages of point number ten. That will create problems  
89 because a battery costs over ten thousand Euro.

90 R: But you have the warranty for ten years no?

91 P: No, no, not on the battery, two years. It used to be like that?

92 R: The actual battery, the electrical motor battery isn't it more?

93 P: I wouldn't know, to be honest. Thank you, I will check to be honest

94 R: Check, check with Maurizio, I haven't spoken to him for a while now.

95 P: I will, I will.

96 R: Because some people think that the warranty is the same for the small battery.

- 97 P: Yes, ok. Thank you, good point.
- 98 R: So, question number eleven. In your opinion why do you think the take up of electric  
99 vehicles has been so slow when compared to internal combustion engine vehicles?
- 100 P: I think they need to market it more, they need to do more marketing, more points
- 101 R: Points as in more charging points?
- 102 P: Charging points yes, because it's an issue in Malta. And automatically people will be  
103 encouraged to, sort of, you know, to go for them.
- 104 R: Ok, so question number twelve, I present seven incentives. So imagine you go into a  
105 showroom to buy a PHEV or an electric vehicle, and you have these seven incentives. Some of  
106 them may already be in place but imagine they're all available and all new. You have a choice  
107 of three, which three would you choose? A rebate which is deducted at the time of purchase,  
108 one, a free rapid charger to install at home rather than the standard charger, discounted  
109 electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax  
110 upon purchase and priority parking for electric vehicles.
- 111 P: To be honest they're very attractive, all of them. One of them, the first one, if I had to choose,  
112 one of them would be the rebate deducted at the time of purchase. Two, something that is  
113 ongoing, is discounted electricity rates, which is something ongoing, and the third one if  
114 possible no registration tax on purchase. Those are all of them expensive, but the others all  
115 make sense.
- 116 R: Some of them not from a monetary point of view. So, the last question, question thirteen.  
117 So last year the grant for PHEV and electric vehicles were the same, were eleven thousand,  
118 even you got eleven thousand. And some might argue that that's unfair, kind of, especially for  
119 those who own an electric vehicle. What is your opinion about the introduction of variable  
120 monetary amounts between the two? For example, a pro rata rate.
- 121 P: If I'm not mistaken I had got twelve, because they had increased it by one thousand.

122 R: Eleven plus the scrappage.

123 P: You're saying

124 R: A PHEV has much less range than an electric vehicle. And the incentive is to incentivise  
125 greener means of transport, especially those that do not emit. As you said, there are some  
126 customers who benefited from the grant and they never charged the car, so that's counter  
127 productive, kind of.

128 P: Exactly

129 R: What do you think about the introduction of variable monetary amounts, like for example a  
130 pro rata rate? Where for example like on the brochure a car does forty kilometres so for every  
131 forty kilometres of range you get one thousand. So for example if a car does a hundred and  
132 twenty you get three thousand. Pro rata rate

133 P: Pro rata. I think yes I agree with your point, because the higher the range, the more they  
134 should get some incentive. For example if I'm thinking right, many people that I've spoken to  
135 they consider the mileage of electric capacity. What I mean to say is the more they can gain  
136 from using the electric rather than

137 R: Because they don't have to charge

138 P: Exactly, they charge it once a week, and even the fact that they need to travel to Sicily with  
139 the car, you know they have peace of mind that they have a few days without charging it. So  
140 that I think would, if the government had to look into this consideration, give advantage to the  
141 mileage, if I'm understanding, myself well. It makes sense because people today are very  
142 conscious

143 R: And the fact that it takes so long to charge, some people that's why they're put off from  
144 buying electric.

145 P: Yes, but once you do it overnight, it doesn't really bother me I'll be honest with you,  
146 sometimes it takes five hours sometimes it takes four, so I throw it on charge and in the morning

Participant JG

147 it's fully charged. So for me personally, I'm not waiting for it with the clock if you know what

148 I mean, so it's not an issue for me.

149 R: You don't have that anxiety

150 P: No, the come on let's move on. It's very straightforward, I leave it on charge and that's it.

Participant SA

- 1 R: Background information about the vehicle itself. The type of vehicle is a plug in hybrid,  
2 right?
- 3 P: Yes
- 4 R: Ok, and the year of purchase was?
- 5 P: 2020
- 6 R: I'm trying to figure out if it was Covid or not.
- 7 P: Yes, it was during Covid.
- 8 R: It was Covid.
- 9 P: In fact it arrived around nine months late.
- 10 R: And the total grant you got back from the government?
- 11 P: Six thousand Euro
- 12 R: So, let's start with the questions. What were your main reasons for purchasing a plug in  
13 hybrid?
- 14 P: Basically because of sustainability reasons. It was always at the back of my mind that at  
15 some point in time I had to move forward and start giving a contribution to society and also  
16 hopefully to make some savings to my fuel costs as well.
- 17 R: And the grant scheme itself, what were the advantages of it? As in, the incentives?
- 18 P: Obviously it brought me to a situation where I could financially afford the car I eventually  
19 bought from you.
- 20 R: Yes. So, any disadvantages? Of the incentives?
- 21 P: The incentives themselves I don't see any disadvantages, but I would have liked it to be of  
22 a higher value considering the total value of the car I purchased.
- 23 R: Ok, so you wanted it like a pro rata rate for a bigger car?
- 24 P: Like a pro rata or percentages

25 R: So, you went through a process of applying for the grant. What were the positive qualities  
26 of that process?

27 P: Most of the work was done on my behalf by the seller of the car itself, by Muscat Motors,  
28 but apparently it wasn't a long process, it wasn't a bureaucratic process if I remember well.

29 R: If you don't remember then it wasn't bureaucratic.

30 P: Exactly

31 R: Any negative qualities of that process? You said no?

32 P: No, no no

33 R: In your opinion, what other incentives, both monetary or non monetary, would you introduce  
34 to motivate individuals to purchase such vehicles? And including electric vehicles, so not only  
35 PHEV

36 P: Yes, obviously the government has introduced the scheme where you pay less electricity at  
37 certain times of the day or night when you plug it in in your own residence, so that is already  
38 a positive. Maybe some incentive related to servicing, maintenance of the vehicle, might also  
39 be an incentive itself.

40 R: And do you recommend others to purchase such vehicles?

41 P: Yes, definitely, definitely. It is an efficient vehicle and it gives you much more, for example,  
42 than the previous vehicle that I had, functionality, smooth drive, noiseless and obviously, the  
43 main reason, it emits, less emissions, yes.

44 R: Are there any challenges you've experienced since owning the PHEV?

45 P: Being a hybrid my main challenge is that the electricity charge when it is used for a long  
46 time during the day, or a longer duration, unfortunately it does not serve me for a whole day so  
47 the challenge might be finding ways of recharging the vehicle not solely at home but in an  
48 efficient, quick and short time doing it otherwise unfortunately you have to use fuel at a point  
49 in time.

50 R: And when you're comparing the PHEV and a combustion engine, you previously owned,  
51 what are the advantages? You already mentioned a few, but this is another question.

52 P: One other advantage is the, funnily enough but it does make sense. I'm having less fuel,  
53 what do you call it?

54 R: Consumption?

55 P: No, no, the emission of fuel when the car is being parked inside your garage, which in our  
56 case is a basement which is partly rooms.

57 R: Ah, ok, ok. So when you start your vehicle, the fact that there's no emissions being emitted

58 P: And when it's being parked, coming back in, so that is saving us from a lot of emissions, as  
59 I said it's another advantage. But the other advantages I practically mentioned, the noise, the  
60 efficiency of the car, the fact that I'm contributing to society from a sustainability point of view.

61 R: And any disadvantages when you compare it to your previous combustion engine vehicle?

62 P: The other disadvantage is that there are not enough, and it is not so clear where you can  
63 charge your vehicle, it's not like when you look for a petrol station, you find it easily, it's big,  
64 it's comfortable, you park in a big area, you go in, you know, so when you're charging it outside  
65 your residence, it is an issue in my opinion.

66 R: And in your opinion, why do you think the take up of electric vehicles has been so slow  
67 when compared to combustion engines?

68 P: The cost probably, and the second one, the education, I think that when first time drivers,  
69 and there's a third reason I'll tell you about. Probably the education is also an issue. I don't  
70 think there are enough people understanding the repercussions and the consequences of using  
71 non-electric vehicles, and there's another disadvantage that first time drivers have been told  
72 that electric cars or hybrid cars, have always to be automatic cars. I don't think if I'm saying a  
73 good thing but that's what they're telling me. And that is a disadvantage for first time drivers  
74 who need to learn how to drive, not using an automatic gear lever. So my son is a case in point,

75 he's doing his driving test very soon and we were looking into buying maybe a hybrid or an  
76 electric car. Apart from the fact that it might be a bit too expensive for young drivers, but put  
77 that aside there's this issue that it doesn't make sense that the first time they drive they use an  
78 automatic gear because then they won't be learning how to drive properly.

79 R: I don't think there's such a vehicle, I've been trying to think, but

80 P: Whenever I asked they always told me automatic.

81 R: Obviously that way I think the system is more efficient.

82 P: No, in ten years' time probably every car produced will be automatic, I don't know, but in  
83 the meantime if my son had to drive his sister's car he would have an issue if he's driving  
84 automatic immediately because he wouldn't know how to drive it. You know and you don't  
85 learn also the principles of driving. So that might be an issue also why young drivers eighteen,  
86 nineteen, twenty year olds are probably, I don't know, most of them are considering, or buying  
87 cars which are not electric. So that might be another thing that might be slowing down the  
88 process.

89 R: I remember when I was eighteen, you would want to drive manual, you know? Sometimes  
90 dangerous, but

91 P: I mean, whether you like it or not, for example if you're abroad and you hire a car. If it's not  
92 automatic, you must know how to drive a car which is not automatic, I don't know, if I'm going  
93 to drive

94 R: And it's cheaper as well

95 P: Exactly, so that might also be an issue, there aren't enough, so what do they do? Maybe they  
96 buy a second hand car to use it for a couple of years, until you know, they get to grips and then  
97 buy the electric car later on, I don't know, if they eventually do.

98 R: That's a good point.

99 P: New point or good point?

100 R: Good point but I was going to move on to the next question. But it is a good point, I had  
101 never heard such an answer which is correct

102 P: That's why, I didn't realise but going around, in fact we had to stop, because listen, we're in  
103 this situation. We can't buy you, or you can't buy an electric car, because obviously you can't  
104 just go into this car without having

105 R: The proper experience

106 P: It's not available, it's taking long for cars to arrive, which is another issue but let's put that  
107 on the back burner for the moment. And when I spoke to others they told me listen, the solutions  
108 that they're finding is probably this thing of getting a second hand car, a good second hand car,  
109 use it for a year or two, resell it and then eventually do what you were going to do but do it a  
110 year or two later so when you really have got used to driving the traditional car.

111 R: When I'm at University I see younger generation, new drivers, driving electric, it's odd for  
112 me because usually there's always like an evolution. Like you start with a petrol engine, then,  
113 but they're fun cars.

114 P: You have to see their age, you have to see their age as well because if it's a twenty three year  
115 old or a twenty two year old, it's one thing but if it's an eighteen year old it might be something  
116 different because a twenty two, twenty three year old might have passed through the first  
117 process of owning the first car. Next.

118 R: I present a list of seven incentives that may already be in place, but imagine that you go into  
119 a showroom and they are offered to you for the first time. Which if any, would you choose,  
120 would motivate you the most to purchase the vehicle? You can choose a maximum of three.  
121 So, a rebate which is deducted at the time of purchase, rather than you having to wait to get the  
122 rebate after a few months. A free rapid charger to install at home, discounted electricity rates,  
123 no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase,  
124 priority parking for electric vehicles, or a PHEV.

125 P: A rebate which is deducted at the time of purchase, discounted electricity rates, What does  
126 this mean? Free rapid charger means that it charges much quicker?

127 R: Quicker. You can install it at home. Like the wall box, remember at the beginning we had  
128 discussed this? Instead of the standard cable you get a free charger.

129 P: Priority parking would be good but after a time there would be so many electric vehicles  
130 that priority parking would not be any more priority.

131 R: And some might argue that the infrastructure, but put that aside.

132 P: So a free rapid charger then.

133 R: And the last question. So question thirteen. So last year the grant for PHEV was eleven  
134 thousand, and so was the grant for an electric vehicle. And obviously the difference between  
135 the two is that a PHEV has a combustion engine, like you have, and the electric vehicle only  
136 has the electric motor and the battery.

137 P: PHEV hybrid?

138 R: Yes, a plug in hybrid electric vehicle. Now it stopped, they stopped doing it. What is your  
139 opinion on introducing variable monetary amounts when purchasing the two? So for example  
140 if a PHEV has a range of forty kilometres, its electric range, you get one thousand, if it has  
141 eighty, two thousand. So for every forty kilometres, for example, you get one thousand.

142 P: What I don't agree is that they removed what there was, but apparently that was something  
143 the government was giving out whilst the other one is coming from EU funding. So, at this  
144 stage we are in I would definitely have a grant for PHEV as well because it's a very good step  
145 forward, Just for your records, I do seventy percent with a PHEV electric, out of hundred. I use  
146 the car a lot, since I've bought it from you I am at forty thousand plus

147 R: Wow, that's a lot

148 P: So out of those forty thousand I've done seventy percent electric, so I'm giving a good  
149 contribution to society.

Participant SA

150 R: Given the size of your car.

151 P: But obviously it has to be a variable monetary status

152 R: Pro rata sort of

153 P: Yes but not starting from zero. A PHEV should have a base itself as well of incentive, because

154 seventy percent is a good contribution.

155 R: Totally understood and agreed.

## Participant HC

1 R: Background information regarding the car. So you have both a PHEV and an electric vehicle,  
2 right?

3 P: Correct

4 R: The year of purchase?

5 P: The PHEV I purchased in 2019, and the EV, the Smart Fortwo, I purchased also in 2019 and  
6 the BMW I3, the Range Extender in 2020.

7 R: And do you remember the total grant you got for each?

8 P: The PHEV was not new, I bought it from England, but there was still a grant. I think it was  
9 about two thousand. It was practically new, less than a year old. And the Smart I got from the  
10 agents, new, and I'm not sure, it might have been eight thousand Euro, I'm not sure at that time.  
11 And the BMW the I3 I ordered from a local agent, from England as well, I chose that particular  
12 model as well, but it exceeded the kilometres required for the grant so I didn't get the grant on  
13 it.

14 R: Ok. So let's focus on the Smart Fortwo because my investigation is on brand new vehicles,  
15 not imported.

16 P: The PHEV was practically new

17 R: Yes, but I'm focusing mostly on the new ones, you know, bought from the agent in Malta.  
18 So, what were your main reasons for purchasing an electric vehicle?

19 P: I had a couple of reasons. First of all it was the experience of driving an electric car. You  
20 have to drive an electric car to know what I'm talking about.

21 R: Yes exactly

22 P: It's exciting to drive an electric car. It's suave. Secondly I'm a gadget guy, I like new things  
23 and I like to try out these gadgets and stuff so I was enthusiastic about an electric car.

24 R: You were an early adopter, let's say

Participant HC

25 P: And also, since I was approaching retirement which was in a couple of years, I wanted to  
26 minimise expenses, mostly the licence, and of course the running costs, which of course were  
27 achieved.

28 R: And the advantage of the incentive of the government?

29 P: Yes, of course, that also motivated me, yes, it was a big help as well.

30 R: It helps you

31 P: Definitely, definitely

32 R: Now, moving to question number three, the disadvantages of the grant scheme, of the  
33 incentives? Any disadvantages?

34 P: I don't like paperwork in general, and it seems there was quite a lot of paperwork. What I  
35 did with the agent was listen, I'll buy the car but you take care of all the paperwork and don't  
36 tell me anything. And he took care of all the paperwork.

37 R: So that's a positive quality in the process

38 P: But because the agent accepted. I mean he could have told me no, but in that case I would  
39 have told him then I'll buy a car from someone who will take care of the paperwork for me.

40 R: Exactly, exactly

41 P: And after a few months I received the grant. So I think that reducing the paperwork in the  
42 sense that if the agents were to offer the service to take care of all the hassle, paperwork, go to  
43 Transport Malta and all this, I think it would be very good.

44 R: And some argue that another negative quality is the fact that you have to wait quite a while  
45 to get the money back. Is that the same in your opinion, in your case?

46 P: In my case I didn't think it was too long. In any case I wasn't in need of the refund if you  
47 know what I mean. It's not like I was depending on the refund to live, you know what I mean?

48 R: Ok, ok

49 P: I mean it could have been the case of course and I can understand that, but then again if that  
50 was the case, why spend all that money? I don't know.

51 R: It's true. Some argue, but I have to, you know, and the larger the grant, like now it's eleven  
52 thousand and twelve

53 P: Plus a thousand if you scrap a car, which is really good

54 R: And I don't know if you know this but if you are Gozitan you get two thousand for the  
55 scrappage.

56 P: Why?

57 R: Don't tell me the reasoning behind it. Honestly I don't know.

58 P: That's good. Maybe they have more old cars there.

59 R: Probably, probably

60 P: That's very good, if I didn't already have two EV's I would actually consider getting one  
61 with this grant. But it doesn't make sense to have three cars you know.

62 R: So I'll move on to the next question. Sixth one. So, what other incentives both monetary  
63 and non monetary, would you introduce to motivate individuals to purchase electric vehicles?

64 P: I think the grant as it is, even compared to other countries is really good, I think it's good as  
65 it is. What I would improve is the charging facilities, the public charging facilities and, myself  
66 I have never charged on a public charger because I have a drive in, I just park and plug into the  
67 wall charger which was supplied free of charge with the car, or at least it was part of the cost  
68 of the car which is really good. That is a point which I should have mentioned actually. That  
69 the agents who sell the EV's should offer the wall charger as part of, or a very reduced price  
70 on the wall charger. Because it's so practical and so comfortable

71 R: And faster to charge as well.

72 P: Obviously it's much faster, yes. The one I have isn't, you know, out of this world, it's a four  
73 kilo one, a sixteen amp, but it's still twice as fast as the granny charger, the big charger you

74 know. Because that is just about two kilowatts but anyway they're both good, obviously the  
75 wall charger is better. So what I was going to say is two things. One that the agents or the  
76 people who sell the EV's should give you the wall charger if not free of charge, but reduced or  
77 at least they will give it to you at cost as an option. That is one thing, I mean they're already  
78 making a profit from the car, so, you know, if they import them and offer them at cost, I think  
79 most people will buy them. And the second thing is, it's ridiculous almost, it almost makes me  
80 angry that when I installed the EV meter at twelve cents nine, which is a good rate, they charge  
81 you a monthly fee for having that meter there, it defeats the purpose.

82 R: So the monthly fee is for the actual, like the Enemalta side of the

83 P: Enemalta, there was an offer, which is good, that off peak, at certain hours, you can charge  
84 the car, this is from noon to four o'clock in the afternoon every day, and from midnight to six  
85 am every day, and Sundays all day. And that's good. But why charge that extra monthly fee? It  
86 defeats the purpose.

87 R: I'll write it down, it defeats the purpose.

88 P: And another incentive would be of course, if they could increase the off peak hours or say  
89 Saturday, for example, why not have Saturday all day as well?

90 R: Increase off peak, ok. I've had this comment as well, before. Especially the meter fee and  
91 the off peak hours.

92 P: But mostly the meter fee. Because at this point I'm considering of returning it. Because since  
93 I'm retired I don't use it every day. Sometimes the cost per month, the five Euro per month is  
94 about the same as the charging cost. So what's the point?

95 R: Very true. It doesn't add up. And moving on to the next question, Do you recommend others  
96 to purchase an electric vehicle?

97 P: Definitely, definitely, if things remain as they are. Obviously if they're going to increase the  
98 licence, that would be one major setback but I can see this happening eventually, when the

99 scope is achieved and there is enough or a lot of EV's on the road, it will be just another car on  
100 the road. And they will tax you, but anyway. That's important.

101 R: And any challenges you've experienced since owning these vehicles?

102 P: No, not really. I mean, I've heard some people who've had some problems, but no, touch  
103 wood, no, everything goes well, Then of course if something goes wrong

104 R: Challenges, as in, the day to day driving mostly

105 P: No, no, no, it's a breeze, very easy to drive, very comfortable, no stress

106 R: In fact, the next question asks what is the advantage of owning these vehicles, in your case  
107 electric and even a hybrid, when compared to an ICE vehicle, internal combustion engine  
108 vehicles. What are the advantages, so, smooth, I guess

109 P: The advantages are the response, the acceleration, the performance of the car itself, you  
110 know unless you have like a five hundred brake horse power ICE vehicle but that's not very  
111 common. But my PHEV is three hundred break horse power, it compares to the BMW IQ which  
112 is approximately half the power

113 R: 170BHP

114 P: In Malta, lower speeds, if you go in autostrada or, you know, when you're abroad it's  
115 different, then the PHEV comes into play. Because you have better peace of mind, you don't  
116 have to worry about charging, and all these things. That is why actually I have a PHEV. Because  
117 when I go abroad, I go abroad once or twice a year and I invest, for peace of mind.

118 R: So you use the PHEV instead of the EV for peace of mind because obviously it's different  
119 when you go abroad, and you need to plan more

120 P: But going back to the original question, what's better in an EV or a PHEV than an ICE car,  
121 is obviously as I said the performance, the economy, the overall running economy, because  
122 there's no comparison, I mean, a modest ICE car will cost you a minimum, a minimum of ten,  
123 thirteen cents per kilometre. An EV, it depends on what EV, but like, my two EV's, the Smart

124 will cost less than two cents, one point eight, and the BMW will cost around two point one  
125 cents. So that is five times cheaper at least, that's the day to day running cost. Then of course  
126 you have the licence, the road licence, which is a few hundred, depends what car you have.  
127 Even the most modest car will be more than a hundred Euro, and then the actual service which  
128 normally the EV is much less because you don't have oil changes and filters and all that, so it  
129 will be much less.

130 R: Only an air filter and air condition filter

131 P: Yes. It's cheaper, it's at least a hundred or two hundred Euro cheaper, apart from BMW  
132 service every couple of years which makes sense, but Smart they have to be serviced every  
133 year which doesn't really make sense to me but anyway. So the financial economical side of it  
134 also comes into play. Recently I told my brother to purchase an EV and he actually purchased  
135 it last week. And when he worked it out, because a bank, a local bank, BOV is offering an  
136 interest free loan on the car, absolutely, So it's ten years, you pay zero interest. He worked it  
137 out at just below two hundred Euro a month to pay back over ten years.

138 R: You pay that in fuel sometimes with an ICE vehicle.

139 P: That's probably the same amount of fuel you would spend in a month, but instead of giving  
140 them to the guy at the petrol station you're purchasing a new vehicle. But anyway, that's a  
141 calculation everybody needs to do.

142 R: And the next question asks, any disadvantage when owning, let's say an electric vehicle  
143 compared to an ICE vehicle?

144 P: Maybe, if you say have some problems, maybe, I don't know, I haven't experienced this yet,  
145 I dread to think about it but I don't think there are, definitely not as many knowledgeable people  
146 you know not many experts so to say who are qualified to work on EV's but comparatively  
147 speaking, much less, so

148 R: You have to go to the dealer directly

149 P: Not necessarily the dealer, of course I expect that at least the dealer should be knowledgeable  
150 but I have my doubts, I have my doubts. But there are dedicated companies and people who  
151 are knowledgeable and have studied and do that specific work.

152 R: But I think what you're saying is we're used to going to a mechanic, like someone who is  
153 in the same neighbourhood you'll go to him, that needs to be increased in your opinion.

154 P: Definitely, definitely. And if you speak to mechanics in general they're opposed to EV's for  
155 the simple reason that you know, you're taking away their bread and butter because they don't  
156 know how to fix an EV. I mean give them oil and muck and they're happy to pull an ICE engine  
157 apart and if you put an EV in front of them they don't know where to start from. And it's not  
158 their fault, it's a completely different technology. It's like a mechanic and a farmer, you can't  
159 give a horse to a mechanic and you can't give an engine to a farmer.

160 R: Totally agreed on that. And in your opinion why do you think the take up of electric vehicles  
161 has been so slow when compared to ICE vehicles?

162 P: It's incredible how many misconceptions there are about battery life. I speak to a lot of  
163 people, I mean a lot of people, well, I speak to people

164 R: People see you driving an electric car and usually ask you

165 P: They tell me but you know it's not worth it to throw away the car after eight years, I start  
166 laughing, I start laughing really, or crying I don't know which one to say.

167 R: I think you would cry because some people

168 P: And they're sure of what they're saying, they are sure that the battery will not last more than  
169 eight years and the cost of the battery is more than the cost of the car. It's ridiculous. If people  
170 think they're going to throw their car away after eight years, will they spend their life savings  
171 practically, to buy this car? So I think that is a major stumbling block. That there's this  
172 misinformation. And it's spread maybe on purpose, or maybe initially it was. I think

173 R: An agenda, you say

174 P: Yes. I mean today, apart from the facts, because most lithium batteries, you can charge them  
175 to a hundred percent from one thousand five hundred to two thousand times. So if you charge  
176 them once a week, what is that twenty years? And even after that

177 R: I never heard that statistic

178 P: So it will outlive the car. And today I mean even as we speak, there's new technology for  
179 batteries there's graphite, there's sodium, there's phosphate, and they're all double that, like  
180 four thousand cycles and they're safer. So this is really not an issue.

181 R: So, misconception on the battery life, that's interesting

182 P: Yes, definitely, definitely

183 R: So, in the next question I present seven incentives. Imagine that you're going into a  
184 showroom and these incentives are new. So some of these incentives are already in place. I'm  
185 going to present a list of seven incentives. Which if any would you choose and would motivate  
186 your purchase the most? You can choose up to three. Some of these incentives are already in  
187 place, ok? So, number one, a rebate that is deducted at the time of purchase, a free rapid charger  
188 to install at home rather than the standard charger, discounted electricity rates, no yearly  
189 circular tax

190 P: What's that?

191 R: The round licence

192 P: But for how long?

193 R: For the lifetime of the car.

194 P: Ah, ok

195 R: Access to driving in the bus lane, no registration tax upon purchase

196 P: That's the same thing?

197 R: No, no, so when you buy a car you pay a registration tax. Then you pay a yearly circular  
198 tax. The registration tax yes, it's part of the price. It's like a percentage, I think it is, ten percent  
199 for sure.

200 P: Ok, so ten percent, a reduction of ten percent

201 R: And the last one is priority parking for electric vehicles. So you can choose up to three.

202 P: They're all good to choose between them, I think the least, my opinion I don't know, depends  
203 on the traffic, but the use of the bus lane. It's a difficult choice, they're all very good. Could  
204 you go over them again quickly?

205 R: So a rebate which is deducted at the time of purchase, so rather than having to wait like, six  
206 months, or eight like they are doing now

207 P: That could be interesting for certain people but it's not much of a problem for me.

208 R: Even people who are not in financial difficulty find it difficult because I've had most

209 P: I'm not saying that, financial difficulty in the sense that, forking out that amount, in that  
210 sense.

211 R: The second one is a free rapid charger which you alluded to earlier, the wall box

212 P: I would go for that, yes

213 R: Discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no  
214 registration tax, and priority parking for electric vehicles.

215 P: So between the priority parking and the road tax, I think priority parking, so those three

216 R: So a rebate which is deducted at the time of purchase

217 P: No, no

218 R: No, so, tell me the three

219 P: The reduced rates, the charger and the parking

220 R: Discounted electricity rates?

221 P: Yes, yes

222 R: So, we move on to the last question.

223 P: It's a difficult choice

224 R: Yes, they're very difficult

225 P: If they suddenly decide to put a tax on the road licence, then, but even if they say you have  
226 zero road tax for life, they can retract that no?

227 R: Like everything, they issue a white paper or something

228 P: Exactly, so no thank you, I'll take my chances

229 R: So, this is an interesting question in my opinion. This is the last question. So last year the  
230 grant for the PHEV and the electric vehicles when purchasing new, were the same, both had  
231 eleven thousand. Some people might argue, that having the same amount of grant was unfair  
232 let's say because PHEV has an ICE engine to rely on and a battery electric vehicle doesn't. And  
233 the fact that the incentives are aimed at reducing emissions that might have defeated the  
234 purpose. What is your opinion about the introduction of variable monetary amounts, like, for  
235 example a pro rata rate, where for example for every forty kilometres of range on the brochure  
236 you get one thousand Euro when purchasing these vehicles.

237 P: How can you reason that way? I agree there should be a calculation but not that way. Because  
238 for example, take my PHEV. It's a big car, it's a Mercedes 350E. And the electric range only is  
239 very limited, in theory it's twenty, but in practice it's thirty if you drive slowly and all that,  
240 thirty kilometres. And it's very bad, thirty kilometres, but the truth is that most of the driving  
241 in a day is about thirty or less kilometres in a day, so in actual fact it's like an EV, ok so you're  
242 lacking behind an engine. I have to carry it, true, and it consumes more because it's heavier,  
243 true, but if you're talking about emissions, I start the engine purposely because most of the  
244 time it doesn't even start. So if you say you get emissions, it's not true. So in my case I, the last  
245 time I gave it petrol was two years ago. Can you imagine that, two years ago I gave it petrol. I  
246 filled the tank, and I have three quarters of a tank, because it only starts when I push it

247 purposely, you know, so that the engine works. But normally, and today, most PHEV's have  
248 fifty or so kilometres, it's more than enough, but at the same time you have peace of mind  
249 especially if you're going abroad, because for Malta it doesn't make sense, unless you're like  
250 a taxi driver or something like that and you do two hundred kilometres a day. But even then,  
251 most EV's today they do even three hundred kilometres a day. But anyway when I purchased  
252 it it wasn't the case

253 R: Because this was 2019 no? And the technology, four years ago

254 P: It has improved, the range has improved dramatically, practically doubled. But even when  
255 I'm abroad, I go over I don't charge it, I don't stop to charge, I just, you know it works like a  
256 hybrid. I still get sixty miles to the gallon, that's I don't know that's four point something,  
257 between four and five litres per hundred kilometres. Which is nothing, it's less than the smallest  
258 car, ICE car you can get.

259 R: So it's still very economical and greener to the environment

260 P: Of course, of course, I mean and this is when I'm not charging. Remember it's a PHEV, so  
261 I'm abroad, driving on highways and what else. Here in Malta it will practically work as an  
262 EV. Ok, with that reasoning as well, if you don't use it that way, why bother to have a PHEV,  
263 why bother carrying around

264 R: Some might argue that way yes

265 P: It's true, but the scope of a PHEV isn't that. You have a PHEV because you have a lot of  
266 travelling to do every day or you go abroad. But again, today today, you can find an EV which  
267 has a good range, three or four hundred kilometres. Now there might be people who do three  
268 hundred kilometres a day

269 R: Wow I don't envy them

270 P: In fact I was at a mechanic the other day and this guy he did a hundred thousand kilometres  
271 a year. Not a guy it's a company, but the car doesn't switch off

Participant LZ

1 R: Background information about your car, plug in hybrid or fully electric?

2 P: Fully electric

3 R: Year of purchase?

4 P: 2021

5 R: And the total of grant you got back from the government?

6 P: Eight plus one

7 R: So, let's kick start the questions. What were your main reasons for purchasing an electric  
8 vehicle?

9 P: The main reason was I think it was time, firstly, for a new car, and I had a lot of experience  
10 in the family, of people who I know very well, friends and family, who had gone for electric  
11 vehicles, and I had since been looking into the topic quite a lot, and so for me it was a no brainer  
12 to go for an electric vehicle. For a number of reasons, for cost, for the environmental impact as  
13 well, but I think cost, running cost would be the primary driver.

14 R: And moving on to the scheme itself, the initiatives, what were the advantages of the grant  
15 scheme?

16 P: Well the advantages are that it makes the price point a lot more reasonable, especially when  
17 compared to a gasoline powered vehicle. So I think that is the primary advantage.

18 R: And the grant itself, are there any disadvantages you would highlight? Not the process.

19 P: I think the disadvantage is that you have to pay the car in full up front and then receive the  
20 grant afterwards, and another disadvantage is that it might take a few months after you register  
21 it to receive the money.

22 R: And the application process, which is question number four, what are the positive qualities  
23 of that process?

24 P: Well to be honest, the car dealer did the application process, so I didn't have to get into it.

25 R: Ok, so plain sailing from that part.

26 P: Yes, yes

27 R: And moving on to the negative qualities, you've mentioned that you have to wait a couple  
28 of months so that would be listed as the negative quality of that process?

29 P: Yes, yes I'd say that that is a negative point, the fact that you have to, that there is a delay,  
30 the fact that it has to be paid up front nonetheless by the consumer, and possibly the fact that it  
31 is limited to, before it was one per person, now it is two per person. I don't, I think the more  
32 EV's we have the better.

33 R: So, what other incentives, both monetary and non monetary, would you introduce to  
34 motivate individuals to purchase such vehicles?

35 P: I think other incentives could include grants for the installation of charging bays, both at  
36 home and at the private businesses' car parks. Other incentives could be preferred car parks for  
37 electric vehicles, whether charging or not. I think those are the two that we are missing in Malta,  
38 that can influence sales. Because the road toll is something we don't have which other countries  
39 have subsidised for EV's, ferries, some countries have cheaper or free rates, to us there is just  
40 the Gozo ferry, perhaps that is an idea. Those are what come to mind at the moment.

41 R: I have a point about this, after the interview I'll speak to you about it, just remind me. Would  
42 you recommend others to purchase such vehicles?

43 P: Without a doubt.

44 R: Without a doubt. As you are speaking from a Model 3 ... so, any challenges you've  
45 experienced so far since owning an electric vehicle? Maybe infrastructure wise in Malta?

46 P: I think the public network in Malta leaves a lot to be desired especially after experiencing  
47 the greater European network, to be honest. But I think for anybody with the facility to charge  
48 at home it is a no brainer.

49 R: And what are the advantages of owning an electric vehicle when compared to an ICE  
50 vehicle?

51 P: I'd say the significant reduction in running costs in terms of fuel savings and licence cost  
52 savings. The removal essentially, of poisonous gases from where one lives, which in electrical  
53 vehicles are obviously removed. I think those would be the primary reasons.

54 R: And the disadvantages?

55 P: The disadvantages I think is that it does require more planning especially until you get used  
56 to the change. The range, or the lack of range of EV's compared to petrol cars I don't think is  
57 an issue in Malta with any model you buy. But the fact that it is a change in mentality with  
58 regards to the charging, versus refuelling, that needs a bit of a paradigm shift in how we think  
59 of things.

60 R: And in your opinion, why do you think the take up of electric vehicles has been relatively  
61 slow when compared to ICE vehicles?

62 P: I think it is a lack of education, and misinformation, and possibly lack of incentives aimed  
63 at increasing the charging architecture from the private sector.

64 R: Interesting point, especially with the, a lot of construction going on you would think that  
65 would be a good point to pass through. So now I present a list of seven incentives that, some  
66 of which are already in place, or most of them. But imagine these are, you go into a showroom,  
67 you're going to buy an electric vehicle and you're presented with these seven incentives, but  
68 you can choose a maximum of three. Which one would motivate your purchase the most? A  
69 rebate which is deducted at the time of purchase, a free rapid charger to install at home rather  
70 than the standard charger, discounted electricity rates, no yearly circular tax, access to driving  
71 in the bus lane, no registration tax upon purchase, and priority parking for electric vehicles.

72 P: Right, I would choose the grant at the time of purchase, the rapid charger, and possibly, I  
73 think it's the ones already in place to be honest, and no yearly circular tax.

74 R: Circular tax or registration tax?

75 P: Circular, circular. The licence right, that is?

Participant LZ

76 R: Yes, yes. So, the last question. As you know, last year the incentives for PHEV and BEV  
77 were the same, and this presented a bit of an injustice for people who chose to buy a fully  
78 electric vehicle. What is your opinion about the introduction of variable monetary amounts  
79 when purchasing a BEV versus a PHEV? Let's say a pro rata rate, for every forty kilometres  
80 of range on the brochure, you get a thousand Euro and so on and so forth.

81 P: To my knowledge, the grant on the PHEV is now gone.

82 R: Yes, yes, it's finished, in fact I said last year.

83 P: No, I don't think it made any sense to be honest, especially, I mean I'm talking about the  
84 past now, but if it was in place, I think it should have been at a lesser rate rather than the same  
85 rate. I am glad that it's been changed. I am very happy with the way it was discontinued, in the  
86 sense that they set up a cut off date, so people weren't left hanging, not knowing whether they  
87 would get a rebate or not. So I think that was very fair and I hope the same

88 R: Some are still benefiting, because the cars haven't arrived yet.

89 P: So what is the question? Variable?

90 R: Variable amounts, like, a pro rata rate.

91 P: No, no I don't agree, I think it should be strictly for electric vehicles.

Participant AC1

1 R: So, type of vehicle you own, whether it's a fully electric or a plug in hybrid.

2 P: Plug in

3 R: And in what year?

4 P: Last year in August

5 R: 2022

6 P: Exactly

7 R: And the total grant that you got from the government?

8 P: For the plug in, I think eleven thousand, because it's been so long since I applied that I've  
9 forgotten, but it's something like that.

10 R: Now, let's start with the questions, what were the reasons that you bought a plug in hybrid?

11 P: I decided to go for a plug in hybrid after I looked around and saw the benefits that exist when  
12 comparing a normal fuel engine and a plug in hybrid. I personally was attracted to the  
13 efficiency of the plug in, especially here in Malta with the short distances to and from work.  
14 The efficiency of the fuel was the major reason that made me decide on a plug in hybrid. That  
15 and the grant were the reasons that I made the decision to go for it which wouldn't have been  
16 the case if there had been no grant.

17 R: In fact, my next question is what is the advantage of the grant?

18 P: The fact that it lowers the price of the car is an incentive for you to purchase.

19 R: And as a scheme, not the process, are there any disadvantages? Of the scheme not of the  
20 grant.

21 P: I don't know whether it's true or not, but I've spoken to people who said that the amount of  
22 the grant is deducted right away from the price of the car, by the dealer. Not in Malta I believe,  
23 but abroad, that's what they do and if that were the case it would incentivise a person more to  
24 make the decision to take the step. People who are not in a position to fork out that extra eleven

25 thousand need to get them from somewhere, be it a loan, or with interest from the dealer  
26 himself. That is the disadvantage I see, apart from the waiting time for the money itself.

27 R: In fact, about the process itself, question number four. What are the positive qualities of the  
28 grant application process? The process itself, to apply.

29 P: Can you repeat that?

30 R: The positive qualities of the grant application process. As a process, what is the positive  
31 attribute?

32 P: The fact that I'm still waiting for my money is not a very positive attribute, however, by  
33 means of applying for the grant, everything was done for me by the dealer himself. I didn't  
34 have to run around here and there to apply. The dealer had all the information he needed and  
35 obviously all the knowledge and he did it all himself. It was straightforward and there was no  
36 hassle at all.

37 R: And the negative quality therefore is that you need to wait.

38 P: It's a very long wait. If the money had to be deducted from the price, many more people  
39 would be interested in buying electric vehicles. Speaking to people I know, especially in my  
40 age group, they all say that it would be a problem to fork out the whole sum.

41 R: And the higher the grant, the higher the burden, because if the grant were to increase to  
42 twenty thousand Euro, say, then instead of eleven thousand you would have to fork out twenty  
43 thousand, and that is a daunting sum. So it's a double edged sword.

44 P: That's it, and if you had to wait a whole year to get the money back then you would definitely  
45 need some help to get the money in the first place. And it would take a longer time to be  
46 reimbursed because twenty thousand is not a small sum.

47 R: What other incentives would you introduce, both monetary and non monetary, to motivate  
48 individuals to purchase these types of vehicles?

49 P: I think first and foremost we need to start by educating the public, raising awareness about  
50 the benefits of purchasing these types of cars. These vehicles have only come on the market in  
51 recent years, and people need to know about how and from what they stand to benefit. People  
52 also need to be made aware of the advantages of these vehicles, how they are ideal for Malta.  
53 This would go a long way to attracting more purchasers, especially those who, I don't want to  
54 use the word antiquated, but especially people who are of the mentality that fuel based cars are  
55 the best. And if the rebate were deducted from the price, that would be a big plus to incentivise  
56 people to buy. If for example instead of forty thousand the car would cost, say thirty, and the  
57 grant were to be received in a couple of weeks, it would make a big difference.

58 R: Would you recommend others to purchase this type of car?

59 P: Personally I can't complain. In the way of fuel, in a whole week of driving to work and  
60 back, I don't use fuel at all. I'm talking about a plug in hybrid, not an electric car. Then if you're  
61 going to drive around for a whole weekend, then yes, you'll need fuel. In my opinion, in Malta's  
62 state, plug in hybrids are ideal, taking into consideration the present infrastructure, and  
63 knowing that it is not easy for those who do not own a garage. I happen to have a garage and  
64 can charge it overnight because one of the disadvantages of the plug in hybrid is that it needs  
65 to be charged regularly because with a range of forty kilometres, then the next day you will  
66 need fuel if it hasn't been charged. Traffic and the fact that we have to use the AC don't help  
67 either. It's the same situation with a mobile, as soon as you get home you need to put your  
68 mobile on charge.

69 R: The same same mentality as with your mobile phone needs to apply with the plug in

70 P: Once I forgot to put the switch on, and the next day I was lost, driving to work very slowly  
71 to preserve what little charge I had left.

72 R: Anxiety galore. And what challenges have you experienced since owning a PHEV? As in,  
73 for example, infrastructure, planning

74 P: One of the reasons that I went for a PHEV and not a full electric was so that I wouldn't be  
75 restricted, as in, for example, if I wanted to go overland with it, or to Sicily, I didn't want to be  
76 thinking in my mind that I needed to stop and charge. That's one of the reasons for my decision,  
77 and if I need to drive for two whole days, I can just fill it up with petrol and drive normally. I  
78 have a garage so I've encountered few challenges so far. For the rest, if someone doesn't own  
79 a garage it's a problem unless there is a charging station close to his house.

80 R: The infrastructure is still a bit lacking

81 P: That's what I can think of in the way of challenges, though I haven't had any problems so  
82 far.

83 R: And the advantages of owning a PHEV versus owning an ICE vehicle? An internal  
84 combustion engine you owned previously?

85 P: The advantages?

86 R: Yes

87 P: The biggest advantage I've seen is the fuel efficiency. My decision was based on economy  
88 and efficiency because I use it every day and it's charge is a very efficient one. When  
89 calculating the cost of fuel and comparing to the cost of electricity there is a very big difference,  
90 so it is much more cost efficient to use it as a plug in. There are many advantages, one of them  
91 being that there is no smell of exhaust when putting into the garage.

92 R: Yes, there was another person who commented about this. Out of the thirty interviewees,  
93 only you and another person commented on this. It is something many people take for granted.

94 P: I think it depends on whether you are used to smelling it. Once it's not there you realise that  
95 there's something different and eventually you realise that it's the usual smell of exhaust fumes  
96 that is gone. I personally own two cars, an ICE and a plug in. Whenever I use the ICE I realise  
97 that the garage stinks. Gradually you realise the differences between the two vehicles. The plug

98 in is much healthier, because you breathe in the exhaust fumes once you're in the garage, more  
99 so because mine is on level minus two so there is very little air circulation.

100 R: On the other hand, the disadvantages of the PHEV when compared to an ICE vehicle.

101 P: Disadvantage?

102 R: If you don't have any it's not a problem.

103 P: Well, there's battery life, which you have to be aware of. I'm still new to this so I can't really  
104 comment but I've heard that after some time the battery may possibly start to wane as a  
105 percentage. Someone was telling me that within a year, battery percentage fell under ten and  
106 he was told that it is normal. I'll be honest, I'm not an expert so I wouldn't know.

107 R: It's called battery degradation.

108 P: If you calculate seven percent per year, and the pattern repeats itself, if you do the math, the  
109 battery won't remain new forever

110 R: It's like your mobile

111 P: That's it, like a mobile, but here we're talking thousands of Euro not hundreds. The service,  
112 I don't know what type of service it requires and what could raise the cost. I was supposed to  
113 do the service but I haven't done it yet, I will obviously.

114 R: There are people who say that it's the fact that you need two types of service, because you  
115 have a normal engine and the battery.

116 P: Yes, true, but I can't comment on it because I haven't been there yet. However there are  
117 more advantages than disadvantages because you have two engines, and they alternate between  
118 one and the other. When there is no charge in the electric engine, you just go to ICE.

119 R: In your opinion, why do you think the take up of electric vehicles has been slow when  
120 compared to ICE vehicles?

121 P: I think sales have been slow because, as I said before, people are not aware of all the  
122 advantages or else they don't yet believe in them, as happened for example with the

123 introduction of computers. The first people to start experimenting on them were the people who  
124 really needed them, young people or the more adventurous types. Eventually, as they started to  
125 evolve people started to realise they had many advantages. I believe that if the price had to be  
126 lower, and the grant maybe more attractive, and the waiting time for the grant money would be  
127 shorter, it would be a plus and sales would increase. Apart from that the infrastructure is  
128 lacking, there are many chargers which do not work. I am in a Facebook group on which there  
129 are so many negative comments regarding the infrastructure, especially the difficulty in getting  
130 chargers to work, charges that don't work, which are all things that need to be improved in  
131 order to be able to move forward so that people can start trusting the system when it comes to  
132 these types of vehicles, especially for people who have no garage and therefore no opportunity  
133 to charge at home.

134 R: Question number twelve. Just this and another question left. In this question I present a list  
135 of seven incentives, some of which are already in place. But imagine that these are incentives  
136 you've never heard of and you're in a showroom to buy a car and there are these seven  
137 incentives. You can only choose three of them, so yes, it's a bit difficult to choose three out of  
138 seven. I think you're going to like this one. A rebate which is deducted at the time of purchase,  
139 a free rapid charger to install at home rather than the standard charger, discounted electricity  
140 rates, no yearly circular tax, which would be the round one. Access to driving in the bus lane,  
141 no registration tax upon purchase and priority parking for electric vehicles.

142 P: Too difficult. So, the rebate deducted from the purchase price for sure, that would incentivise  
143 people, especially those who cannot afford to fork out the full price. The circular tax every year  
144 would be another help. I have another car for which I pay over three hundred Euro yearly, and  
145 it's an ordinary car, nothing special, there are a great deal of them around. It's costing over  
146 three hundred yearly, so that would be a good incentive. And the electricity rates, if they are at  
147 a good rate, then one can save even on the day to day costs, not only when charging the car.

148 People would like to save money on a daily basis and if one is careful, even with charging and  
149 use of the electric vehicle, as a package it would be more attractive. I think those are the ones  
150 I would choose, but the others are all good as well. The rapid charger is good but in my case I  
151 don't need it

152 R: I don't imagine your battery takes a long time to charge

153 P: Usually three to four hours on average. For people who have an electric car, a rapid charger  
154 is useful but for Malta, with a range of two hundred and fifty, three hundred kilometres, one  
155 can plan and anticipate needs, so if you have time to charge only for five hours, you should be  
156 fine for a good while.

157 R: Ok, so those three we chose. Now, the last question. As you know, last year, the incentive  
158 was the same for both an electric vehicle and for a PHEV, it was eleven thousand for both types.  
159 There were people who argued that the whole point of the incentive was to go completely green  
160 or fully electric. What is your opinion about the introduction of variable monetary amounts, a  
161 pro rata rate, where, for example, for every forty kilometres of range on the brochure, you get  
162 a thousand Euro.

163 P: I have mixed feelings about this. I seem to have heard this before, that the incentive is given  
164 according to the range of the car. The more the range increases, the more expensive the car  
165 would be, so this sounds very much like a politician talking. It's like being talked into buying  
166 something bigger or better but at the end of the day you are not getting anything other than a  
167 little more comfort for yourself. As I said, if the incentive were better it would be more  
168 attractive to people. The greater the incentive, the more attractive and the easier it becomes for  
169 people to purchase electric cars that would make their life easier and more comfortable.

170 R: It would be an added push.

171 P: Yes, the greater the push the better, but if a person needs a car for daily use, and it doesn't  
172 make much difference to him, so he takes a different view of things. He wouldn't need a big

## Participant AC1

173 range because in Malta the distances are small so this person would reason that he would be  
174 getting less because he would be purchasing a car with a smaller range of battery. On the other  
175 hand, people who need a bigger range, like taxis, would get more help because of the bigger  
176 range. These people would, perhaps be prepared to work longer hours in order to be able to  
177 afford a bigger range of battery because of the nature of their work, driving. These would use  
178 the vehicle much more than those driving to work and back only, as I do at the end of the day.

## Participant SB

- 1 R: Let's start with the background information regarding the vehicle type you own.
- 2 P: Mine is a battery electric vehicle
- 3 R: And the year of purchase?
- 4 P: It was 2023
- 5 R: And the total grant or are going to get from the grant
- 6 P: Eleven thousand
- 7 R: Let's start with the questions. What were your reasons for purchasing an electric vehicle?
- 8 P: In my case it was more, I was influenced by political and regulatory decisions, so I know
- 9 that the way forward from a political aspect and even from the EU that they're promoting more
- 10 battery powered vehicles rather than the traditional fuel engine. So I decided that now I needed
- 11 a car and my old car was broken down, so the wise choice was to go for a battery powered
- 12 vehicle in my case, since that's the way forward for most governments.
- 13 R: And the scheme itself, what were the advantages of it?
- 14 P: Of course it's a nice boost so for me getting eleven thousand Euro from the final total was a
- 15 very nice incentive. We're talking, almost one fourth, so it was a very good total for me, to buy
- 16 R: A lump sum
- 17 P: Exactly, to buy such a vehicle, it was an additional plus for me.
- 18 R: It bridges the gap, almost
- 19 P: Exactly
- 20 R: And any disadvantages of the scheme? The grant, the incentive not the process
- 21 P: Well, it did influence my purchasing decision because I had waited, I did wait for the grant
- 22 to be announced before actually I placed my order, so it did influence my purchase, if that can
- 23 be called a disadvantage because I prolonged the use of my older car.
- 24 R: So you had to wait
- 25 P: Exactly

Participant SB

26 R: And the grant process, I guess you went through a process of applying, what are the positive  
27 qualities of that process?

28 P: I can't comment a lot because in my case I just filled out the form and left it in the hands,  
29 exactly, it was quite easy. I left it in the hands of my car dealer in my case.

30 R: And the negative qualities of that process?

31 P: Nothing in particular in that case. As I said it was quite an easy process, I just filled in the  
32 form and then let the dealer take care of the rest. So I didn't have to wait in line and I didn't  
33 see any negative aspects in my case.

34 R: And what about the incentive itself, which is part of the process, was it, did you get the  
35 money back straight away?

36 P: I haven't yet but I've applied quite recently, less than three weeks ago.

37 R: Ok, because that's usually the negative quality

38 P: In my case it's quite fresh.

39 R: Quite fresh, so, no negative qualities. Question number six. What other incentives, both  
40 monetary and non monetary, would you introduce to motivate individuals to purchase electric  
41 vehicles?

42 P: Definitely what I mentioned that the way forward for most governments and the EU is that  
43 they want battery, electric powered vehicles, so that means heavier taxes on the current types  
44 of engines. So whoever is thinking of buying a new car, that would be the argument from my  
45 end.

46 R: Would you recommend others to purchase electric vehicles?

47 P: Yes, they're very convenient. Very different from a normal car, however depends on whether  
48 the other person, like myself, has an available charging station. In my case I have a charging  
49 station in my drive in so it's very easy to keep and maintain a battery powered vehicle. Other  
50 individuals may not have such commodities in their own home, so that might be a limitation.

51 R: Usually they don't have a garage let alone a comfortable drive in.

52 P: Exactly, exactly

53 R: So that's a double bonus. And question eight, what challenges have you experience since  
54 owning an electric vehicle?

55 P: Nothing in particular, so far it's been very smooth, no particular challenge.

56 R: Question number nine. What are the advantages of owning an electric vehicle when  
57 compared to an ICE vehicle, so a petrol powered vehicle?

58 P: Well, as I mentioned, it's environmental friendly, that's number one. It's also, the drive is  
59 much smoother, I found, than the normal combustion engine, the speed, it's much quicker than  
60 a normal car, I found, much more responsive. There's no, it requires much less services and  
61 upkeep than a normal engine, whereas a normal engine I have to service it every year, this one,  
62 the next service is in two years at the very least. So that's very good.

63 R: And even then, the service won't be so, with oil, and so many filters

64 P: Exactly, it's just the check on the brakes. And if I'm not mistaken, battery powered cars don't  
65 buy, you don't pay road tax at the moment, so that's also very good.

66 R: The disadvantage of owning an electric vehicle versus owning an ICE vehicle?

67 P: Well, as I mentioned, I got a charging station at my own home but if the power is out and I  
68 have to charge my car, then I have to look somewhere else. Whereas with a normal classic car  
69 you just go to your normal fuel station, pump up the car and go. In that case if I need to charge  
70 my car somewhere else it would be time consuming.

71 R: Question eleven, in your opinion why has the take up of electric vehicles been so slow when  
72 compared to ICE vehicles?

73 P: Maltese people love their cars! Most Maltese people wouldn't change from the normal  
74 engine to an electric engine because they think that the electric engines are less powerful. I  
75 think that is one of the main misconceptions that there are in Malta. I can see from my own

76 family, when I tried to promote the use of electric cars, most of my family were like, no, I won't  
77 go for an electric car, I can't stand that type of car and I prefer driving a car with gears, it  
78 doesn't feel like a normal car if it doesn't have the gears.

79 R: So question twelve I present a list of seven incentives, that some of them are already in place  
80 I know. But imagine you go into a showroom and you have these incentives, you have seven  
81 incentives, and you can choose a maximum of three. Which would motivate your purchase the  
82 most? And number one we have a rebate which is deducted at the time of purchase rather than  
83 you having to wait, a free rapid charger that you can install at home rather than the standard  
84 charger, discounted electricity rates, no circular tax, the licence, to be clear, access to driving  
85 in the bus lane, no registration tax upon purchase and priority parking for electric vehicles.

86 P: Definitely the priority parking, that's number one. Then right after it the rebate which is  
87 deducted at the time of purchase, and the discounted electricity rates. Those would be the top  
88 three for me.

89 R: Last question, question number thirteen. So last year the incentive for a PHEV, PHEV is a  
90 plug in hybrid, have you ever experienced one?

91 P: The plug in hybrid, my boyfriend drives one.

92 R: So last year the PHEV and the electric vehicle like you own, both got the same grant, both  
93 eleven thousand. So one does, for example, the PHEV does forty kilometres of electric range,  
94 and the electric vehicles

95 P: Almost two hundred.

96 R: Two hundred and some even more, depending on the price obviously. Usually the larger the  
97 range, the higher the price. And some people found it unfair, especially those who own a battery  
98 electric vehicle. What is your opinion on the introduction of variable monetary amounts when  
99 purchasing an electric vehicle versus a PHEV? Like for example a pro rata rate.

100 P: To be honest I have nothing against people keeping the same monetary incentive, because  
101 at least. The plug in hybrids, when they were introduced, a lot of people purchased them as a  
102 nice introduction to electric vehicles like a nice in between although in reality it is much more  
103 difficult to maintain because you need to maintain like, two engines to maintain. But lots of  
104 people they went for the plug in hybrid because they were under the illusion of trying one type  
105 of technology but I am still retaining the old one. So to me, it's a nice incentive if it's kept the  
106 same even though plug in hybrids do the same type of environmental damage and they're not  
107 as efficiently run as the fully electric ones. But it's still a nice way to start introducing the new  
108 technology to the masses.

109 R: It's a stepping stone sort of

110 P: Exactly like a stepping stone, so I have nothing against keeping the same incentive.

1 R: So, the type of vehicle you own.

2 P: So I went for a battery EV not a hybrid.

3 R: Ok, and the year of purchase?

4 P: 2023, purchased 2022, delivered 2023

5 R: Ok, and the total grant you got back from the government?

6 P: I'm expecting around eleven K

7 R: So let's move on to the questions. What were your main reasons for purchasing an electric  
8 vehicle?

9 P: The environment thing plays a big role, going forward I believe that what's good for the  
10 environment is good for us at the end of the day. Apart from at some point for sure we have to  
11 but apart from that I love trying new technologies and the EV is my kind of toy kind of thing.

12 R: All right, that's a very good explanation. And I'll move on to the grant scheme. So what are  
13 the advantages of the grant scheme itself? Not the process, the incentive.

14 P: It is a big incentive at the end of the day. I mean, the new cars, the diesel ones roughly forty  
15 K starting realistically so getting one fourth back is quite, quite good. I mean this is from the  
16 EU and even from America there is a big push obviously so, yes, the grant, it's helping a lot.  
17 It's helping a lot making an easier decision kind of thing.

18 R: And are there any disadvantages of the incentives or the grant scheme?

19 P: The grant per se? I'm not seeing any, I mean as I said, I just got my car a few weeks back so  
20 I didn't get the grant yet. I think from my understanding it's like a five to a seven month process  
21 and you obviously have to fork out the money before you get the grant but once they come,  
22 once you get them back I think it's nice. I'm not seeing per se any disadvantages in that.

23 R: And the process itself for applying for the grant, what are the positive qualities of that  
24 process?

25 P: To say the truth from my end I didn't do anything, I mean just provided some paperwork for  
26 the importer, in this case, Mizzi, Mizzi Auto and that's all. I mean, now if there are any more  
27 papers at a later stage I don't know I wasn't informed let's put it that way, but realistically it's  
28 quite straightforward.

29 R: And moving on to the negative qualities, I would imagine the fact that you have to fork them  
30 out? You alluded to this, is it a negative quality for you?

31 P: It's not a negative per se, I think it's quite reasonable realistically. I mean the government,  
32 all entities, they cannot just fork out that much money at one go without proper due diligence  
33 and admin, so. I believe it's a take it or leave it kind of thing.

34 R: Exactly, it is. And obviously these have to be audited by the EU and the process is quite  
35 thorough to audit from an EU perspective, so it's understood kind of. And what other incentives  
36 both monetary and non monetary, would you introduce to motivate individuals to purchase  
37 electric vehicles?

38 P: For sure there has to be a big push where it comes to charging spots, charging stations. I  
39 believe that even pumping stations realistically should have an EV spot. One small box in a  
40 corner with an EV plug because realistically there's a big network with pumping stations. They  
41 would get subsidised with electricity perhaps on their end and the convenience would be there  
42 for those having an electric vehicle. As you know pumping stations we have around every  
43 corner in this country, perhaps a bit too much

44 R: And they keep on trying to apply for new ones, especially the ones in Fgura, there's a big  
45 fight going on

46 P: Exactly, so having an EV spot at each spot there, you have already real estate, you don't  
47 need to pass a new cable because most of them have passed and have already everything in  
48 place, it's just a question of having a plug with a meter and a subscription.

49 R: And safety, because you're mixing electricity and fuels

50 P: Well realistically you're already risking with a pumping station and there are multiple other  
51 stuff that are more hazardous than a simple plug because at the end of the day an EV all you  
52 need is either a three pin plug but obviously that would be a bit slow to charge, but if you have  
53 a proper pillar and if you have three phase electricity at each pumping station which most  
54 probably they already have, and that would benefit a lot for EV owners.

55 R: Moving on to question seven. Would you recommend others to purchase electric vehicles?

56 P: Perhaps it's a bit too early to answer this question. But as I said, realistically we're all going  
57 there either electric or hydrogen in a few years. As you know, hydrogen is already a work in  
58 progress, and in fact BMW already manufactured an engine. But EV has been in the market for  
59 over ten years now. So it's a bit more realistic let's put it that way.

60 R: You said you haven't had the car for long but any challenges you've experienced so far?

61 P: No, as long as you plan the charging and everything, realistically it's quite plain sailing  
62 because you go home, just plug it to the wall. Obviously if you have a garage or a drive in, you  
63 have a wall socket, you know it's easier to charge. So that may be a bit of a no no for a lot of  
64 people unfortunately as the situation is but most of the local councils are doing the electric  
65 pillars so at least you can look around and see if there's one nearby. At least when you go home  
66 you know you put it on charge and leave it there and get notified on the app or something like  
67 that.

68 R: And what are the advantages you've experienced of owning an electric vehicle versus a  
69 combustion engine vehicle?

70 P: For sure the biggest advantage is cost, running cost. First of all fuel, there's no fuel and  
71 charging per se is much cheaper. For example my mileage, kilometres actually. On a weekly  
72 basis I tend to do two hundred twentyish more or less. In diesel usually that would be twenty,  
73 twenty five Euro. In charge, at home, charging at home, it's like seven to eight Euro basically,  
74 it's less than half the price.

75 R: And how much range is that?

76 P: With the same, no, no we're speaking about the same range. Two hundred, two hundred  
77 twentyish

78 R: All right, that's great then.

79 P: So like with like, kilometre wise I mean it's less than half the price realistically, so for sure  
80 that's one of the biggest advantages. Furthermore, even, I mean, running costs, there's no  
81 engine fuel, there's no wear and tear in certain components of the normal engine, let's put it  
82 that way. And how an EV works when you release the acceleration, the gas pedal, kind of, it  
83 starts to decelerate and charging the battery at the same time so basically when it's stopping  
84 because the car will come to a full stop at some point you're even decreasing the consumption  
85 of brake pads and other wear and tear which you use in a normal car. So realistically the  
86 maintaining costs are much lower than a normal machine. No oil, no brake fluid, and all the  
87 other stuff relating to normal cars. Realistically the ownership of the car is cheaper. Obviously  
88 there's a bigger cost when it comes to purchase but over x amount of years it will become more  
89 convenient and cheaper to run.

90 R: And moving on to the disadvantages, any disadvantages you see when comparing the two?

91 P: Clinging to my previous points, the issue with the charging spots basically.

92 R: Charging spots in Malta?

93 P: Yes, yes, in Malta. Although even abroad, it's still a bit of an issue. I mean we look at  
94 America, Tesla for example they have their own network, but if you stay in Europe it's not that  
95 massive, the infrastructure per se

96 R: And moving on to question eleven, in your opinion, why do you think the take up of electric  
97 vehicles has been so slow when compared to internal combustion engines? In Malta

98 P: Yes, I think it's global actually. First of all it's a question of cost most probably and the  
99 question of uncertainty, what will happen? As I said there are new technologies being

100 developed but besides that, a question of charging. I hear a lot of people how are we going to  
101 charge ...? I think those are the main three points which are slowing down the whole process.

102 R: And in question twelve, I present seven incentives that some of them are already in place  
103 but imagine you go into a showroom and you have these seven incentives and you can only  
104 choose three, which would motivate your purchase the most? A rebate which is deducted at the  
105 time of purchase, a free rapid charger to install at home, discounted electricity rates, no yearly  
106 circular tax, access to driving in the bus lane, no registration tax upon purchase, priority parking  
107 for electric vehicles.

108 P: Most of them as you said are already in place.

109 R: But imagine you don't know about these and you went into a showroom and you have these  
110 available

111 P: So we'll do the first one, you know it's nicer to get it than pay for it, getting it there and then,  
112 so that's definitely one. Discounted electricity rates, because that's much more in the long term.  
113 The rapid charger is not cheap, a good one costs around eight hundred nine hundred Euro, I  
114 think the first three. Yes, the first three, yes.

115 R: Ok, great. Now, the last question. So the last question is regarding the rebate, the PHEV  
116 rebate which was the same as the battery operated vehicle last year. Some might argue that  
117 having the same rebate was unfair especially for those having a battery operated vehicle  
118 because they don't have any engine to rely on. And they are more obviously reliable and  
119 greener to the environment. What is your opinion about the introduction of variable monetary  
120 amounts when purchasing a battery electric vehicle versus a PHEV? Let's say a pro rata rate

121 P: PHEV being the plug in hybrid?

122 R: Yes, exactly, exactly

123 P: First of all I'm not aware how much it was the grant for the PHEV

124 R: It was the same, it was eleven thousand

125 P: The same. Ok, I know it was consumed the first one the hybrid. Realistically there should  
126 be much more incentive on the battery because if you're trying to go green, and you're trying  
127 to decrease the footprint you should incentivise much more the batter operated engine, because  
128 most of the people who went for the hybrid one because of the concerns I mentioned earlier.  
129 Charging, fuel, not fuel, I mean charging spots actually. Realistically the hybrid one is like  
130 having the best of both worlds sort of. But if the intention is to go for eco, eco green, it didn't  
131 make sense at all realistically. Perhaps it should have been a little bit less, eight, four perhaps.  
132 The other way for the battery operated ones.

133 R: That's the general consensus, especially those who own a battery operated vehicle they  
134 found it a bit unfair, because they have to plan more

135 P: We're taking a bigger risk, that you end up in the middle of nowhere and you have to call a  
136 tow truck and all that hassle

## Participant LC

1 R: The first question is the background of the car, so what is the vehicle type? Is it a battery  
2 electric vehicle or a plug in hybrid?

3 P: A battery vehicle

4 R: Year of purchase?

5 P: 2023

6 R: And the total grant you got back from the government?

7 P: It should be twelve, yes

8 R: So let's start with the actual questions, so, question number one, what were your main  
9 reasons for purchasing a battery electric vehicle?

10 P: To be honest the grant was a very big part of the reason actually.

11 R: All right. So what is the main advantage of the current government grant scheme? So the  
12 grant itself. What are the main advantages of it? Like, it helps customers to purchase, electric  
13 cars tend to be expensive so that softens the financial impact, or it becomes almost at par with  
14 the internal combustion engine vehicles

15 P: Yes, electric cars, at a par with the others are more expensive I think and obviously the grant  
16 helps as an incentive. At least for us it was an incentive.

17 R: And what are the disadvantages of the grant scheme? Are there any disadvantages in your  
18 opinion?

19 P: No I don't think there are at all actually.

20 R: What are the positive qualities of the application process? So when you went to the  
21 showroom you applied for the grant and how was that process?

22 P: Quite straightforward. It was quite straightforward. I had no issues at all. It wasn't a difficult  
23 or complicated process.

24 R: Now, on the other hand what are the negative qualities of that process? Like getting the grant  
25 back, some people say it tends to take a while

26 P: In fact we're still waiting for it and the average time is months, which is quite long.

27 R: In your opinion, what other incentives would you introduce to motivate individuals to  
28 purchase electric vehicles?

29 P: I think there need to be more charging stations especially for people who don't have a garage  
30 it's very important, you need to have an alternative where to charge your car and I don't think  
31 the ones that there are are enough actually.

32 R: So the infrastructure?

33 P: Yes

34 R: Question number seven. Would you recommend others to purchase an electric vehicle?  
35 Please state your reasons.

36 P: I would if that person had their own garage, because I would never have purchased a car if  
37 I had to charge it on the streets. It's not practical at all I think.

38 R: Totally understood and I think I agree with you.

39 P: If these are always occupied you never have a chance to charge your car, I mean it's totally  
40 impractical to have an electric car.

41 R: And since owning your electric car, were there any challenges you've experienced?

42 P: Not yet but to be fair it's quite recent so I can't really be objective on that answer.

43 R: So, what are the advantages of owning an electric vehicle when compared to an internal  
44 combustion engine vehicle? So a normal petrol or diesel engine.

45 P: Not having to go for petrol, you can charge it again, at your own convenience, not going to  
46 the petrol station, if there are strikes or whatever they don't effect you. And obviously when  
47 you consider the impact of the other cars on the environment.

48 R: Yes, that's the purpose of the electric vehicles and the incentives actually. And on the other  
49 hand, the disadvantages of owning an electric vehicle when compared to a normal combustion  
50 engine. If none comes to mind, no problem at all.

51 P: The short range of the car maybe? You have to charge it more frequently. But that depends  
52 on the car obviously, I think.

53 R: So you have to plan more. So in your opinion, why do you think the take up of electric  
54 vehicles has been so slow when compared to the sales of internal combustion engine vehicles?

55 P: I think, first of all I think they're more expensive, people I think, that's one of the main  
56 reasons people don't buy them and secondly I think, the practicality of charging it as well.

57 R: Exactly. We're used to going to the petrol station and taking barely five minutes and  
58 refuelling. Question number twelve I present a list of seven incentives that some of them are  
59 already in place. But imagine you can go into a showroom and you can choose up to three.  
60 Which three would motivate your purchase the most? So, a rebate which is deducted at the time  
61 of purchase rather than you having to wait months till you receive the incentive, a free rapid  
62 charger to install at home rather than the standard charger, discounted electricity rates, no yearly  
63 circular tax access to driving in the bus lane, no registration tax upon purchase and priority  
64 parking for electric vehicles.

65 P: So, first one, second one and last one.

66 R: So the last question. So last year the incentives for PHEV, so plug in hybrids, were the same  
67 as fully electric vehicles, and some people might find that unfair. What is your opinion on the  
68 introduction of variable monetary amounts when purchasing a fully electric vehicle versus a  
69 plug in hybrid electric vehicle? Like for example a pro rata rate, if the car has forty kilometres  
70 of range, you get a thousand Euro back.

71 P: Could you explain more this question?

72 R: So plug in hybrid electric vehicle has a range of forty kilometres and it has both an electric  
73 engine or motor and a combustion engine, so they have two engines.

74 P: Yes

Participant LC

75 R: Last year the incentive was the same as a fully electric vehicle, so it was eleven thousand  
76 and some people, especially those who bought a fully electric vehicle found it unfair because  
77 you know you have to plan more. When you have a combustion engine obviously you can rely  
78 on the combustion engine. What is your opinion on the introduction of variable monetary  
79 amounts rather than being the same?

80 P: No I agree with it, it should be variable, I don't agree that it should be the same. It's not fair,  
81 it should be less I think the hybrid.

1 R: Background information about the vehicle. What type of vehicle do you own?

2 P: A Smart, a Smart electric

3 R: Is it a battery electric vehicle?

4 P: Yes

5 R: Ok, and the year of purchase?

6 P: Last year, so 2022, November

7 R: And the total grant you applied for?

8 P: Eleven thousand

9 R: Question number one, what were your main reasons for purchasing an electric vehicle?

10 P: I already had an electric vehicle and I liked the advantages of it and we wanted to go smaller  
11 so we opted for a Smart electric.

12 R: Ok, great. So, the current government grant scheme, what are the main advantages of it?

13 P: With the grant obviously the grant comes cheaper so it makes you eager to buy it more, you  
14 know what I mean? Electric cars tend to cost more although some are small cars so with the  
15 grant it helps you financially.

16 R: And moving on to the disadvantages of the scheme, not the process. Are there any  
17 disadvantages?

18 P: Of the scheme scheme there isn't a disadvantage, but to apply for the scheme there's a lot.  
19 There's a lot of paperwork, the actual grant from November till now we still didn't receive it  
20 yet. I don't know, there's a backlog I think, I don't know, but it's taking months.

21 R: So it's a lengthy process

22 P: Even to fill in the papers, it's a long paper, I think they do it like that so people actually don't  
23 apply for the grant at the end of the day, they get disheartened.

24 R: The Maltese, if you have a hundred pages and they can get a hundred Euro they will still  
25 apply. I'm just joking. What are the positive qualities of the grant application process? Are  
26 there any positive qualities, like some people say that the dealership handles all the paperwork.

27 P: Our dealership didn't. He just filled up some but he didn't fill up all. So we had to fill it up  
28 and ask around a bit because some of the questions are a bit, but some of it yes, the dealer fills  
29 it up for you.

30 R: It's very strange, because usually the dealership does it.

31 P: I don't know

32 R: Now, question number six. What other incentives, both monetary and non monetary, would  
33 you introduce to motivate individuals to purchase an electric vehicle?

34 P: It's not clear, the question

35 R: So what other incentives, would you introduce to motivate individuals to purchase electric  
36 vehicles?

37 P: Maybe, if we had more parking spaces designed for electric vehicles, I think that would  
38 make more people buy because it would make it easier, more charging stations around, even  
39 the way charging stations are, it's a bit. Last I checked, you need to call this electric company,  
40 you need to make an account with them, the fee it's not cheap to park outside, so if they help  
41 more in this case, I think people would buy them more. Even, there isn't a lot around. I think  
42 in Gozo there's just one if I'm not mistaken.

43 R: In Rabat.

44 P: I think in Mgarr, I think, I'm not sure. I never charge outside so I don't know, I always charge  
45 at home.

46 R: That's very convenient

47 P: What, sorry?

48 R: That's very convenient to charge at home

49 P: At home yes, it's very convenient, although it takes time because we don't have the fast  
50 charger like, we have the normal one. Not like abroad, abroad if you go to a petrol station they  
51 have the very fast charging that in twenty, thirty minutes you're ready, you know, you have a  
52 full charge and you can proceed. Even, abroad, I was seeing, if your electric vehicle stops  
53 without a battery, the guy that comes he has a battery so he can charge you and you can go to  
54 the next station. So they charge you enough to go to the next petrol station. Here if you stop  
55 you stop. You've had it. Either you ask your neighbour or you know, someone. So, some things  
56 still need, you know, to be fixed so people will buy them.

57 R: Ok, and would you recommend others to buy an electric vehicle? Please state your reasons  
58 why.

59 P: I love an electric vehicle, because I love that you drive without a sound, I love the feeling,  
60 even the feel of it, like if you push the gas it goes faster, I like it and I like that it doesn't make  
61 a sound. I don't know why, at first I found it very strange I didn't know whether it was on or  
62 not, but now I love the feeling that there's no sound, it's silent, I just love it. So yes I would  
63 recommend other people. Like if you're the kind of person that doesn't use the car a lot, I don't  
64 know, like the Smart it has quite a good range.

65 R: Yes, for a small car, it's about a hundred kilometres

66 P: I do, I would recommend it yes.

67 R: Any challenges you've experienced since owning an electric vehicle?

68 P: Yes, I will forget to charge it the day before, and then I will need to go out with it and I find  
69 it without a charge.

70 R: So planning

71 P: And then you'll be like bleeehhhhh. And you cannot go abroad with it. Until now it's a bit  
72 challenging, because until you find the next stop. In Sicily once we were trekking, and there  
73 isn't a lot to charge in Sicily yet, so it's a bit of a problem

74 R: It depends on the range of the car as well.

75 P: Yes, if you have a big SUV, yes, you're fine, but a Smart, one thirty? You don't have a good  
76 range to travel abroad.

77 R: Question number nine. What are the advantages of owning an electric car when compared  
78 to an internal combustion engine vehicle?

79 P: Obviously you save money.

80 R: Save money on fuel?

81 P: What?

82 R: You save money on fuel?

83 P: Yes, obviously you save money on fuel. If you charge at night they deduct from the  
84 electricity, so

85 R: It's a better rate, right?

86 P: So, there is that good thing about it. So yes, you save money out of it, obviously you're  
87 helping the environment so that's another thing. Even like I told you, the noise, not a lot of  
88 noises, but the money, most of it the money. I had a car before, a small car, I used to give her a  
89 lot of money on the fuel, for nothing, but it was a small car, you know what I mean? And if you  
90 have an SUV. And the licence is cheap and that's a good thing. Because if you own an SUV it's  
91 not like a Smart, because the licence of the Smart it's not that, it won't make much difference,  
92 but if you buy a big SUV it will make a difference paying ten Euro only.

93 R: And the disadvantages of an electric vehicle when compared to a combustion engine vehicle.

94 P: As I told you, you cannot just leave, you need to plan ahead. You need to say I need to  
95 charge, you need to plan ahead, you cannot just say I'm not going to charge it and just leave,  
96 you need to plan ahead. Even, as we said before, to travel, with a normal car you can just travel,  
97 you find a petrol station and you just refuel, but having an electric car, even if you have a big

98 range, you need to plan ahead, see which are the petrol station that have an electrical, it's more,  
99 it's a bit of a hassle, that's it.

100 R: Challenging as well

101 P: Challenging yes.

102 R: In your opinion why do you think the take up of electric vehicles has been slow when  
103 compared to the sale of internal combustion enging vehicles?

104 P: I think some people are still a bit scared like. They're still a bit hesitant and don't know  
105 exactly, I think there's still a lot of question marks still around it. I think people are still scared  
106 to buy an electric car.

107 R: A lot of uncertainty

108 P: Yes. Once there was a question, in the rain can I go out in an electric car? Imagine! So yes,  
109 people, there's a lot of lack of knowledge

110 R: Yes, it's like they didn't test them before they were launched. I mean a Smart is a German  
111 car, German, French, so I'm sure they would have tested.

112 P: We've been in the rain with it, we tested it, we're fine, so, what else? People who don't have  
113 garages may be a bit hesitant where to charge it. Although I see some people coming out of  
114 their door, people who live in an apartment, maybe. It's a bit, you know, and since there aren't  
115 a lot of charging stations outside, they would be a bit hesitant about that. And the range,  
116 although the range of electric cars is coming better with time, it's still a bit lacking.

117 R: It lacks a bit. Question number twelve I think you need to see the list. I present a list of seven  
118 incentives, and some are already in place. But imagine you're going into a showroom and these  
119 seven incentives are new, you've never heard of them before. So you can choose a maximum  
120 of three. Which would motivate your purchase the most?

121 P: Priority parking for electric vehicles, like I told you before, that would be really good and I  
122 think people really like that, especially in Valletta. Because once I didn't know and I parked in

123 a space that was owned by an electric company and I thought I could park there but eventually  
124 I couldn't so that would be great if you could park in Valletta, Sliema, there would be certain  
125 parking to make people who work there, it would be even better for them. So that one for sure.

126 R: A rebate that is deducted at the time of purchase rather than having to wait months.

127 P: That one is good as well I think, but although once I went to a dealer and he wanted, he told  
128 me, if I want I pay the amount, so the rebate goes to him not to me. So there are some dealers  
129 who do that.

130 R: But it's not official, right?

131 P: But not all dealers do that so that if they deduct it immediately that's better instead of paying  
132 the full amount and then receive the money. So that will help a lot.

133 R: You can choose another one. So either a free rapid charger to install at home

134 P: That is good, because discounted electricity rates I told you, we have that already, like, but  
135 you need to charge it at night. But a free rapid charger, that would be great. So if you forget to  
136 charge your car, at least you don't wait three hours you just wait thirty minutes.

137 R: So number two is your third option, your third choice, sorry.

138 P: Yes

139 R: Ok, so, last question, question number thirteen. What is your opinion about the introduction  
140 of variable monetary amounts when purchasing an electric vehicle versus a PHEV? As you  
141 know last year the incentives were the same and some found that unfair. What is your opinion  
142 about that?

143 P: People were right. I don't think they should be the same in a way, but then again, owning a  
144 hybrid is better than owning a fully diesel, a petrol, whatever. So in a way I still believe there  
145 should be a government, like, the government gives you something, but I don't think it should  
146 be the same amount as a fully electric vehicle. Or an electric vehicle would have more benefits  
147 maybe, they make it like that instead of the money, but I think if we're going greener it should

Participant AC2

148 be a fully electric car that wins, you know what I mean. I believe they shouldn't be the same,  
149 but still I think they should give priority still to hybrid, to plug in hybrid vehicles, because it's  
150 better than nothing, they're doing something good, still.

## Participant MSG

1 R: So, thank you for participating, I will start with background information regarding the  
2 vehicle and the grant. So, what type of vehicle do you own?

3 P: The model is a Hyundai Kona, fully electric

4 R: So it's fully electric

5 P: Yes, yes

6 R: The year of purchase of the vehicle?

7 P: 2021

8 R: And may I ask the total grant you got back from the government?

9 P: Total grant from the government in my case was of three thousand Euro. The reason being  
10 it was, the vehicle was already on the road, it was purchased, it was considered a second hand  
11 purchase although it didn't have many miles on it.

12 R: Ok. What were your main reasons for purchasing an electric vehicle?

13 P: Personally I feel it revolves around sustainability, environmental, it's definitely the way  
14 forward.

15 R: Question number two. What are the main advantages of the current government grant  
16 scheme? So, the grant scheme being the eleven thousand one let's say.

17 P: I think the most obvious one would be the fact that it obviously reduces the initial capital  
18 investment, so essentially makes them more affordable because they do tend to be higher priced  
19 than the normal diesel or petrol vehicles, potentially even hybrids, in my case anyway.

20 R: And any disadvantages of the scheme? There might be none, no problem.

21 P: Not really, basically I mean maybe a collateral disadvantage would be maybe they have  
22 become so affordable that we can't keep up with the infrastructure. That's my personal opinion,  
23 but that's obviously a collateral effect of the way we do things.

24 R: First we do the incentives, then we see

25 P: Exactly, exactly

## Participant MSG

26 R: What are the positive qualities of the grant application process? So I take it you still went  
27 through a process to apply.

28 P: Yes, yes, I went through the normal process being that it was actually already on the road,  
29 being driven by one of the directors of the agency, it qualified as second hand. But all in all it  
30 was a relatively simple process and in the meantime I also scrapped my old vehicle, so it wasn't  
31 a question of selling my old vehicle, but I also scrapped the previous vehicle to purchase this  
32 with the grant based on second hand.

33 R: Question number five, so the negative qualities of the grant process, and how can it be  
34 improved?

35 P: The process itself

36 R: The process even including the timing of the money to help you a bit

37 P: Ah, yes, ok, yes. You tend to forget that you're due a grant. Yes, it did take a while, I can't  
38 remember how long it was but it took quite a while. However, having said that, whenever I did  
39 e-mail them to get information as to where it was at, I always got feedback, so it wasn't a  
40 question of not getting feedback, so yes, there were the negative qualities, but I think they were  
41 set up properly for the negative qualities that they knew they had. I suppose it's understandable  
42 at that level that, at government level not at that level, that it might take time.

43 R: EU level as well

44 P: Exactly, I wasn't expecting to get a cheque the next day.

45 R: Question number six asks what other incentives would you introduce to motivate individuals  
46 to purchase an electric vehicle? Even non monetary

47 P: I don't know if this is the right answer but I think that one of the biggest issues there is out  
48 there that needs to be overcome is a lack of education that there is in relation to electric vehicles.  
49 Somehow many people still think that you're driving it and the battery just stops and you need  
50 to recharge it like you're charging a mobile, but it's not the case, so many people are still

## Participant MSG

51 lacking as a term for it, many people are still very scared that you're driving and the battery  
52 just stopped. It doesn't necessarily work that way, on the contrary, it's just like driving another  
53 vehicle but there you say, ah, ok, I need to fill up. In this case you're filling up with electricity  
54 but I don't think the incentive needs to be monetary any more. On the contrary, I would  
55 definitely say it needs to be relative in the sense of more promotional of the infrastructure if  
56 you know what I mean.

57 R: Education, infrastructure

58 P: Exactly, infrastructure, education, but listen you're buying this and once you buy this you  
59 can do this over here, here, here ... in my case it was and still is, pretty much like a treasure  
60 hunt for outdoor charging stations. Nowadays I can honestly say that I charge mainly on the  
61 outside as opposed to at home because the ones I have come across are actually very, very, very  
62 efficient.

63 R: That's very good. You do find people who charge only at home.

64 P: To be quite honest it's how I started off because I have a garage and I have the specific meter  
65 at home, but it is much slower to charge at home. I still just have the normal three-pin charge  
66 at home. So what I can, I do in the road. Over here I'm calling you from Ta' Qali so I have one  
67 at Crafts Village which if I'm really worse off in a whole day's work it will easily give me a  
68 lot of charge and further up I've also used fast chargers at Mtarfa that do the job in pretty much  
69 an hour and twenty minutes. So yes, it's quite easy nowadays.

70 R: It's not easy to see people charging at Mtarfa and Ta' Qali so you're lucky that way.

71 P: Yes, it's true, it's true

72 R: Question number seven. Would you recommend others to purchase such vehicles?

73 P: Definitely, and I don't think they're going to have a choice in the future to be honest.  
74 Definitely, definitely, although there are counter arguments to the sustainability, I still think

## Participant MSG

75 they are cleaner and much more efficient even in terms of noise pollution than other vehicles.

76 Definitely

77 R: And have you experienced any challenges since owning an electric vehicle? Like planning  
78 for example?

79 P: Not really, I think, I mean, not only in my case, but distances are so short in Malta that there's  
80 not really need for planning to the extent that you really need to think of where you're going  
81 to charge. I mean you might need to in the case that, you go up to Gozo for a weekend. I've  
82 done it a number of times, but I still come down with the same charge that I went up with quite  
83 honestly, in the sense that I didn't charge it again because you just don't need to.

84 R: You tend not to drive around in Gozo unless you need to go to Rabat maybe.

85 P: Exactly, but still, when you're driving around it's so efficient that, you know, you rarely, it's  
86 just a whole efficient process, I can't complain.

87 R: And what are the advantages of owning an electric vehicle when compared to the  
88 combustion engine vehicle?

89 P: Servicing is significantly cheaper, less expensive, so areas, I don't know, consumables such  
90 as brake pads are rarely affected because in most cases you're using the

91 R: Regeneration

92 P: The regeneration, exactly, it's obviously much cleaner for the environment. And obviously  
93 much more cost effective when it comes to you know, the monetary value that you pushed into  
94 ICE vehicles versus the petty cash that you would need to recharge an electric vehicle.

95 R: And on the other hand, any disadvantages of owning an electric vehicle versus a combustion  
96 engine?

97 P: Whilst they are still costly, insurance tends to be expensive. That's something I've seen, so  
98 although you almost don't pay anything for your road licence, insurance tends to be a bit silly

99 R: They always find something.

## Participant MSG

100 P: Of course, of course they do. Although there are green loans I don't think there's any  
101 equivalent in terms of insurance which is a bit silly because they should incentivise in that area  
102 as well not only at the capital investment. However, obviously they're running a business so  
103 you can understand it. But I think the main ones would be, you know be the green aspect, those  
104 areas.

105 R: Question number eleven. In your opinion, why do you think the take up of electric vehicles  
106 has been slow when compared to ICE vehicles? You've mentioned a few before but now a  
107 direct question.

108 P: Well I think it's definitely relevant to the start up cost you know, investing in one. Obviously  
109 ICE vehicles are much more mass produced so they're significantly less expensive nowadays.  
110 So probably people are just waiting for them to become less expensive. That's what happens  
111 you know, LED screens in the beginning were costing us around two thousand Euro, now you  
112 can buy it for a pittance. It will eventually happen but I still think there's an element of lack of  
113 education. So possible people of my age who saw electrics

114 R: Some say it's cultural

115 P: Yes, yes, I'm sure. In fact I hear a lot of that as well because to be quite honest when you're  
116 speaking to other people sometimes they tell you because you're not shifting any gears, you  
117 definitely are not hearing any engines, you're not hearing anything but you know there are still  
118 and there will always be that look at driving in that way. Having said that there are still super  
119 brands and super vehicles that have taken up the electric world as well such as the Porsche.  
120 There are lots of virtual sounds that could set off the engine that people so traditionally like.  
121 I'm sure someday they'll look back and say ah, this sounds much better and possibly even nicer  
122 for the environment.

123 R: Faster

124 P: Oh yes, a leap

## Participant MSG

125 R: Now question twelve I present a list of seven incentives some of which may already be in  
126 place but imagine you go into a showroom and you have a choice of three. Which would  
127 motivate your purchase the most? Number one, a rebate which is deducted at the time of  
128 purchase, a free rapid charger to install at home rather than the standard charger, discounted  
129 electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax  
130 upon purchase, and priority parking for electric vehicles.

131 P: Definitely the free rapid charger to install at home, I think the three would be the rapid  
132 charger, discounted electricity rates which is something I have at home and I think it makes a  
133 lot of sense, and the priority parking for electric vehicles something I almost use nowadays  
134 already, indirectly.

135 R: Yes, you've alluded to this, about the charger no? So the last question, so last year the  
136 incentive for PHEV, plug in hybrid electric vehicles and electric vehicles were the same, they  
137 both were eleven thousand. Some might say that's unfair especially for those who have an  
138 electric vehicle, so they just depend on the battery, they don't have a battery to rely on like a  
139 PHEV. So what is your opinion on the introduction of variable monetary amounts when  
140 purchasing an electric vehicle versus a PHEV? So, for example, a PHEV gets, for every forty  
141 kilometres of range, you get a thousand Euro to kind of make it fair.

142 P: Is the question sort of aimed at the advantage of fully electric versus hybrid? That's the  
143 question?

144 R: The incentive. So the monetary incentive was the same for both, like last year they were  
145 both eleven thousand, for PHEV and EV.

146 P: Yes, the grant, exactly

147 R: And some found that unfair because people who have a PHEV can rely on an engine and  
148 the point of the incentives are for cleaner driving.

## Participant MSG

149 P: Personally, without wanting to sound biased I think that the biggest incentive should be  
150 given to those who went all out and are driving a hundred percent electric. Because technically  
151 speaking the plug in hybrid still has a small dependence on engine fuel of sorts. Yes, they are  
152 cleaner, but, they are still contributing but they need to be viewed compared to ICE vehicles  
153 that obviously have no engine whatsoever, so they need to look better when compared to ICE  
154 not to full one hundred percent. There's also probably an element of the capital cost so if you're  
155 comparing models and one is one hundred percent and one is plug in, someone has brought out  
156 more money for the hundred percent versus the plug in so he should, in theory, be incentivised  
157 further because he took that extra step. Perhaps because he could in that case, but yes.

158 R: And the fact that the incentives are aimed for a greener environment so the greener the car  
159 is the larger the amount should be.

160 P: Exactly, exactly. When you compare that someone has to purchase a plug in and it's going  
161 to stay another five, six years, still having to depend on fuel when he could have

162 R: It defeats the purpose

163 P: It does, it does. It's almost a pause or a slow motion of something that's about to happen.

## **Appendix E**

### *Analysis Of Interview Transcripts*

Participant SS 1/1

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme   | Organizing theme  | Global theme                               |
|-------------|-------------------------------|---|---|---|---|--|
| 14          | R                             | OK, so, what were your main reasons for purchasing a plug-in, electric vehicle?   |   |   |   |  |
| 15          | P                             | I just like it. Easy to drive, cheaper to maintenance   | "Easy to drive"<br>"Cheaper to maintenance"   | Comfort & Performance<br>Savings  | Vehicle Characteristics<br>Running Costs                  | Purchase Motivators<br>Purchase Motivators |
| 33          | R                             | Ok, What other incentives, both money and non monetary, would you introduce to motivate any other individuals to purchase such vehicles?  |   |   |   |  |
| 35          | P                             | Incentives, I'm not sure it could be, something about, for example, similar to what they do for separate for installation of electric meters, something like this. How it's done now it's not ideal, it should be more, like in general the prices for the electricity going significantly lower, or some deductions from a number of units I would say, something like that.   | "the prices for the electricity going significantly lower, or some deductions from a number of units"           | Electricity   | Monetary  | Additional Incentives                      |
| 51          | R                             | And what are the advantages of owning an electric vehicle or a PHEV, when compared to a combustion engine?  |   |   |   |  |
| 53          | P                             | ...driving is easier, much more fun, maintenance is cheaper, there is no smell, no sound. I mean, from all points of views it's better.   | "driving is easier"<br>"much more fun"<br>"maintenance is cheaper"<br>"there is no smell"<br>"no sound"         | Comfort & Performance<br>Comfort & Performance<br>Savings<br>Eco-Friendly | Vehicle Characteristics<br>Running Costs<br>Environmental | Purchase motivators                        |
| 60          | R                             | In your opinion, why do you think people are not buying them more frequently than the combustion engine?  |   |   |   |  |
| 62          | P                             | Price and the charging stations.  | "Price"<br>"the charging stations"  | Expensive<br>Inadequate   | Selling Price<br>Infrastructure                           | Additional Incentives                      |
| 68          | R                             | So, here is a list of incentives that might already be in place, which, in your opinion, is the most motivating for you to purchase such a vehicle? So, the first one is you get the rebate deducted from the price, other than having to wait for six months, the second is a free rapid charger to install at home rather than the standard charger, discounted electricity rates, no yearly tax, circular tax, access to driving in the bus lane, no registration tax upon purchase, and priority parking for electric vehicles. You have a choice of three. |   |   |   |  |
| 74          | P                             | discounted electricity rate, priority parking and probably, access to driving in the bus lane.  | "discounted electricity rate"<br>"priority parking"   | Electricity<br>Parking  | Monetary<br>Priority                                      | Additional Incentives                      |
| 76          | R                             | And the last question. So, as you know, the grants used to be the same for both electric vehicles and plug in electric vehicles, plug in hybrid, sorry. So last year they were 11,000 if you buy both.  |   |   |   |  |
| 79          | P                             | Yes, that was crazy.  |   |   |   |  |
| 80          | R                             | Do you think it's somewhat unfair and there should be a pro rata introduced?  |   |   |   |  |
| 81          | R                             | Yes, it's unfair, I mean, that's why I bought PHEV, because it was obvious, I mean misallocation of the grant. It should be less for PHEV, for sure, or maybe zero, it doesn't matter. Ok, let's say, in Malta, it should be some grant still, because the price here is crazy, but for EV's it should be much higher than PHEV. PHEV for example, we have, I mean, now, almost all cars have one PHEV in the range. I have, in the same garage, I have Porsche Panamera PHEV, so they have the same grant as the small electric, it's crazy.                   | "Yes, it's unfair, I mean, that's why I bought PHEV, because it was obvious, I mean misallocation of the grant" | Misallocation   | Equivalent Grants   |  |
| 83          | P                             |   | "for EV's it should be much higher than PHEV"   | Prioritisation  | Distinct Grants   | BEV & PHEV Grants                          |
| 85          | R                             |   | "I have Porsche Panamera PHEV, so they have the same grant as the small electric, it's crazy"                   | Misallocation   | Equivalent Grants   |  |

Participant PB 1/1

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme                        | Organizing theme                                       | Global theme                                 |
|-------------|-------------------------------|--|--|------------------------------------|--|--|
| 13          | R                             | What are the main advantages of the government scheme?   |  |                                    |  |  |
| 14          | P                             | Honestly speaking, obviously it's a good amount of money, especially given that the prices are still very expensive, yes?  | "it's a good amount of money, especially given that the prices are still very expensive"   | Rebate                             | Monetary Incentives                                    | Purchase Motivators                          |
| 52          | R                             | What other incentives, both monetary and non monetary, would you introduce to motivate individuals to purchase such vehicles?  |  |                                    |  |  |
| 54          | P                             | Monetary is obviously the first and foremost incentive. And I think, more awareness, possibly because  | "more awareness"   | Knowledge & Awareness              | Education  | Additional Incentives                        |
| 56          | R                             | Awareness? As in, the cars or the?   |  |                                    |  |  |
| 57          | P                             | I think within the car industry itself   |  |                                    |  |  |
| 66          | R                             | ...would you recommend others to purchase such vehicles?   |  |                                    |  |  |
| 67          | P                             | ...going towards a diesel vehicle is definitely not on the cards...even the government has specifically mentioned that it will abolish the use of diesel engines...  |  |                                    |  |  |
| 76          | R                             | ...are there any challenges you've experienced as in with the car, with a PHEV? Compared to your previous vehicle?   |  |                                    |  |  |
| 78          | P                             | ...it's more, how do you say, technological, but also you have less consumption...   | "it's more, how do you say, technological"<br>"you have less consumption"  | Technology<br>Savings/Eco-Friendly | Vehicle Characteristics<br>Running costs/Environmental | Purchase Motivators                          |
| 105         | R                             | In your opinion, why do you think the take up of electric vehicles has been so slow compared to ICE vehicles?  |  |                                    |  |  |
| 107         | P                             | In Malta probably because we are more conservative when it comes to new technologies...  | "In Malta probably because we are more conservative when it comes to new technologies"   | Fear & Uncertainty                 | Education  | Additional Incentives                        |
| 112         | R                             | ...Could it be maybe the infrastructure as well? When you actually compare electric vehicles   |  |                                    |  |  |
| 115         | P                             | ...I know for a fact that there are already problems with having an electric car that is charged on the road because there is either someone else parked...if someone remains there obviously you can't charge your own vehicle so you can't go out until you do.  | "there are already problems with having an electric car that is charged on the road because there is either someone else parked" | Inadequate                         | Infrastructure   | Additional Incentives                        |
| 121         | R                             | Which incentive would motivate your purchase, give a reason for your answer. You can choose only three. A rebate which is deducted at the time of purchase, rather than having to wait, a free rapid charger to be installed at home rather than the standard charger, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, priority parking for electric vehicles. |  |                                    |  |  |
| 126         | P                             | The rebate is number one, discounted electricity rates, even though there are but they should be sort of throughout the day, not just in the evening, and the parking as well, but I don't think it would be that sustainable either.  | "the rebate is number one"<br>"discounted electricity rates...throughout the day"<br>"the parking as well"                       | Rebate<br>Electricity<br>Parking   | Monetary Incentives<br>Monetary<br>Priority            | Purchase Motivators<br>Additional Incentives |
| 131         | R                             | What is your opinion about the introduction of variable monetary amounts on purchasing a BEV versus a PHEV? As you know, you, as a PHEV customer got the same amount of grant as someone who bought a battery electric vehicle. What's your opinion on that? Should there be a pro rata rate according to the range  |  |                                    |  |  |
| 135         | P                             | I would be speaking as myself obviously, but yes, I do believe that going for a full electric should be incentivised more than someone with a plug in hybrid.  | "I would be speaking as myself obviously, but yes, I do believe that going for a full electric should be incentivised more"      | Prioritisation                     | Distinct Grants  | BEV & PHEV Grants                            |

Participant NC1 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme  | Organizing theme                                       | Global theme          |
|-------------|-------------------------------|---|---|--|--|-----------------------|
| 8           | R                             | ...Question number one. What were your reasons for purchasing an electric vehicle?  |   |  |  |                       |
| 10          | P                             | First and foremost for the environment.   | "First and foremost for the environment"  | Eco-friendly   | Environmental  | Purchase Motivators   |
| 11          | R                             | What are the main advantages of the current government grant scheme?  |   |  |  |                       |
| 12          | P                             | Electric vehicles are very expensive, without the grant scheme I would not have even thought of buying an electric vehicle.   | "without the grant scheme I would not have even thought of buying an electric vehicle."   | Rebate   | Monetary Incentives                                    | Purchase Motivators   |
| 41          | R                             | What incentives would you introduce to motivate individuals to purchase these types of vehicles? Both monetary and non monetary.  |   |  |  |                       |
| 43          | P                             | It was money I wanted.  |   |  |  |                       |
| 44          | R                             | So a bigger grant?  |   |  |  |                       |
| 45          | P                             | Yes, because when you talk to people, they all tell you that these vehicles are still way too expensive. So instead of the twelve, thirteen thousand that you get now, it would be raised to twenty   | "Yes, because when you talk to people, they all tell you that these vehicles are still way too expensive. So instead of the twelve, thirteen thousand that you get now, it would be raised to twenty" | Expensive  | Selling Price  | Additional Incentives |
| 61          | R                             | ...And the advantages of a PEV, electric vehicle, when compared to a petrol engine? For example, it's smooth, it doesn't make any noise, it's cleaner, you obviously save on fuel   |   |  |  |                       |
| 64          | P                             | All of the above. And even, it's a very comfortable ride, the engine is more responsive and you have everything on the screen which guides you in itself  | "All of the above"<br>"it's a very comfortable ride"<br>"the engine is more responsive and you have everything on the screen which guides you in itself"  | Eco-Friendly/ Savings<br>Comfort & Performance<br>Technology | Environmental/Running costs<br>Vehicle Characteristics | Purchase Motivators   |
| 78          | R                             | Sales of electric vehicles has been slow when compared with petrol and diesel engines. Why do you think this is so?   |   |  |  |                       |
| 80          | P                             | I don't think this is only a question of money. People are used to a different type of driving, I want to hear the noise of the engine, I want to be able to change gear, and electric vehicles are not manual, they're automatic. Car enthusiasts will not be attracted to driving an electric car because they can never accept that it's a completely different concept.   | "they can never accept that it's a completely different concept"  | Knowledge & Awareness  | Education  | Additional Incentives |
| 85          | R                             | Now I have a list of seven options, which may already be available when purchasing an electric vehicle. Which of them would motivate your purchase more? You can choose a maximum of three. So, a rebate that is deducted at the time of purchase, so basically you don't have to wait around six months to get your money back because they're deducted from the price. Number two, a free rapid charger to install at home rather than the standard charger, the third is discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, and priority parking for electric vehicles. You need to choose three. |   |  |  |                       |
| 98          | P                             | So, the rebate which is deducted at the time of purchase is definite and should be done.  | "rebate which is deducted at the time of purchase"  | Duration   | Grant process  | Additional Incentives |
| 100         | P                             | ...The fact that you have to fork out the full price is not easy, unless one reasons out that the money is, in a way, put aside and that it will be given back at some point. The second one is the registration.   |   |  |  |                       |
| 103         | R                             | Registration tax  |   |  |  |                       |
| 104         | P                             | The tax to register the car the first time no?  |   |  |  |                       |
| 105         | R                             | Exactly   |   |  |  |                       |
| 106         | P                             | No then, it would be better if one had parking privileges of some sort.   | "better if one had parking privileges"  | Parking  | Priority   | Additional Incentives |

Participant NC1 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme    | Organizing theme | Global theme      |
|-------------|-------------------------------|---|---|----------------|------------------|-------------------|
| 118         | R                             | Now the last question. The way it was before, there was the same grant on the purchase of electric vehicles as well as on PHEV's, that is, eleven thousand. Do you think that the government should introduce a pro rata rate, rather than both receiving the same grant? |   |                |                  |                   |
| 122         | P                             | I think that whoever purchases an electric vehicle should be incentivised the most and not those purchasing plug in hybrids. I think those purchasing PHEV's don't receive anything.  | "whoever purchases an electric vehicle should be incentivised the most" | Prioritisation | Distinct Grants  | BEV & PHEV Grants |

Participant CB 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme | Organizing theme    | Global theme          |
|-------------|-------------------------------|--|--|-------------|---------------------|-----------------------|
| 8           | R                             | What were your main reasons for purchasing an electric car?  |  |             |                     |                       |
| 10          | P                             | Several reasons, we're actually at a bit of a changing point, where the EV's have started giving more reliability, so I wanted to give it a try. The second thing is that with the grant, the price became a lot more attractive and because they became almost on a par with equivalent vehicles.   | "with the grant, the price became more attractive"   | Rebate      | Monetary Incentives | Purchase Motivators   |
| 14          | R                             | ...And the current government scheme, what are, in your opinion, the advantages connected to it:   |  |             |                     |                       |
| 16          | P                             | So the biggest advantage to it is it does away with the deficit between petrol cars and electric cars. In a lot of cases like with like, they almost come to the same prices, give or take a few thousand Euro, and it makes the car much more affordable.   | "it does away with the deficit between petrol cars and electric cars"  | Rebate      | Monetary Incentives | Purchase Motivators   |
| 18          | P                             |  | "makes the car much more affordable"   | Rebate      |                     |                       |
| 21          | R                             | ...And the disadvantages of the current government grant?  |  |             |                     |                       |
| 29          | P                             | ...The only negative thing in the grant, in the whole process is the wait. You know you've got three to six months to wait   | "The only negative thing in the grant, in the whole process is the wait"   | Duration    | Grant process       | Additional Incentives |
| 31          | R                             | The wait for the actual money to reach your bank right?  |  |             |                     |                       |
| 32          | P                             | Yes. And the other negative thing is that even though this was bridging the gap, you have to apply, and then get confirmation if you received it or not. For some people who may, a: who may not have the whole payment available, or may not be able to afford to be able to wait, even though you're pretty confident that you'll get it, but there's always a chance that your application may be turned down. So, the fact that you have to put the money out before has become a major negative of the grant, the waiting.  | " For some people who may, a: who may not have the whole payment available, or may not be able to afford to be able to wait, even though you're pretty confident that you'll get it, but there's always a chance that your application may be turned down. So, the fact that you have to put the money out before has become a major negative of the grant, the waiting" | Duration    | Grant process       | Additional Incentives |
| 43          | R                             | What other incentives monetary or non monetary, would you introduce to motivate individuals to purchase electric vehicles, including PHEV?   |  |             |                     |                       |
| 45          | P                             | Ok, so in terms of, one of the things which I think are still holding people back a lot, at the moment is the way the charging works. The construction, public construction is still not up to spec. But the cost of doing a whole charger becomes quite substantial especially when you have to go back to the electricity cost. Maybe a lot of people may not opt for the home EV charger, and I think one of the things the government should look at is, at the moment with the domestic rate, for home electric use, you can charge using the EV plug means you would spend, your cost of the home charging, of the home consumption, pretty steep, sky high. The government needs to start seeing who owns an EV, providing a separate band, to allow the charging at home, and that would really increase the uptake. | "one of the things which I think are still holding people back a lot, at the moment is the way the charging works. The construction, public construction is still not up to spec"  | Inadequate  | Infrastructure      | Additional Incentives |
| 51          | P                             |  | "The government needs to start seeing who owns an EV, providing a separate band, to allow the charging at home, and that would really increase the uptake"   | Electricity | Monetary            | Additional Incentives |
| 69          | R                             | Any challenges you've experienced with owning an EV?   |  |             |                     |                       |
| 70          | P                             | I mean the biggest one we have is obviously charging, you know, finding an available charger that works, or one that isn't taken up, where you'd want and when you'd want. That's the only issue we've had so far.   | "I mean the biggest one we have is obviously charging, you know, finding an available charger that works"  | Inadequate  | Infrastructure      | Additional Incentives |
| 76          | P                             | ..If I charge at the public chargers, sometimes you know, you have to walk like twenty minutes to find a charger, or you go and it's not working. Sometimes you can go to three separate chargers, and either they're not working or they're in use,   | "sometimes you know, you have to walk like twenty minutes to find a charger, or you go and it's not working. Sometimes you can go to three separate chargers, and either they're not working"  | Inadequate  | Infrastructure      | Additional Incentives |

Participant CB 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme        | Organizing theme | Global theme          |
|-------------|-------------------------------|---|---|--------------------|------------------|-----------------------|
| 82          | R                             | What are the advantages of owning a PEV when compared to an ICE vehicle?  |   |                    |                  |                       |
| 84          |                               | ...in terms of charging I'd say the cost in the amount of money for fuel, or diesel.  | "in terms of charging I'd say the cost in the amount of money for fuel, or diesel"  | Savings            | Running Costs    |                       |
| 85          | P                             | There's a lot less moving parts, that theoretically serve to make it much cheaper, I think that those two are the main, and obviously, there's the emission.  | "There's a lot less moving parts, that theoretically serve to make it much cheaper"   | Savings            |                  | Purchase motivators   |
| 86          |                               |   | "and obviously, there's the emission"   | Eco-Friendly       | Environmental    |                       |
| 101         | R                             | And in your opinion, why do you think the take up of electric vehicles has been so slow when compared to the take up of ICE vehicles?   |   |                    |                  |                       |
| 105         | P                             | ...I think for the Maltese population, generally they prefer what they know, rather than taking a risk on what they don't know...   | "I think for the Maltese population, generally they prefer what they know, rather than taking a risk on what they don't know"       | Fear & Uncertainty | Education        | Additional Incentives |
| 109         | R                             | so imagine the below are incentives. So these are incentives that may already be in place, or are not, which if any, would motivate your purchase? Give a reason for your answer, you can choose a maximum of three responses.  |   |                    |                  |                       |
| 114         | P                             | I'm going for, so, I think, the first one, the reduction at the time of purchase, and no registration tax upon purchase...And then the other one is discounted electric rates for sure, that would be a major factor.   | "reduction at the time of purchase"   | Duration           | Grant process    | Additional Incentives |
| 117         |                               |   | "discounted electric rates for sure, that would be a major factor."   | Electricity        | Monetary         | Additional Incentives |
| 125         | R                             | ...So, you know, the PHEV has had the same rebate last year, it was the same as the battery, so having an electric vehicle and a PHEV, offered the same grant, which some might find unfair given the total range on electric. What is your opinion on introducing variable monetary amounts? Let's say, a ratio, so let's say you get 10K if a car drives 200km in electric range, and you get 1,000 for a PHEV which drives 40km. |   |                    |                  |                       |
| 132         | P                             | Pro rata taking the battery range I think makes a lot of sense. I was never in favour that the PHEV and their having the same one. In reality though, having a plug in hybrid, even if you're using the ICE and battery, you're still saving emissions.   | "Pro rata taking the battery range I think makes a lot of sense. I was never in favour that the PHEV and their having the same one" | Prioritisation     | Distinct Grants  | BEV & PHEV Grants     |

Participant EC 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|--|--|-----------------------|-------------------------|-----------------------|
| 12          | R                             | What were your main reasons for purchasing an electric vehicle?  |  |                       |                         |                       |
| 13          |                               | Some time ago I got the opportunity to drive an electric vehicle and I literally loved it.   | "I literally loved it"   | Comfort & Performance | Vehicle Characteristics |                       |
| 14          | P                             | So, apart from actually loving the drive itself, I'm sort of, I like the environment, I'm an eco friendly person, my wife is as well, so, even looking at it from an ecological point of view, so, we went for that.   | "I like the environment, I'm an eco friendly person, my wife is as well, so, even looking at it from an ecological point of view"  | Eco-friendly          | Environmental           | Purchase Motivators   |
| 24          | R                             | -----<br>And the disadvantages of the government scheme?   |  |                       |                         |                       |
| 25          | P                             | The disadvantages, well, from what I've heard, one, they still haven't come out and I'm still waiting to apply for it, two they're taking quite some time to be granted.   | "they are taking quite some time to be granted"  | Duration              | Grant process           | Additional Incentives |
| 38          | R                             | -----<br>what are the negative qualities and how would you improve it? What would you do?  |  |                       |                         |                       |
| 40          | P                             | Well, basically I would give more information to the people that are, that could be in a position to take this grant. I would also give an indication of how many grants are left. I don't know if I'll actually get the grant...  |  |                       |                         |                       |
| 45          | P                             | ...something along the lines of, to know where you are. You know, look, there are two thousand grants left you know. And a better way to know whether you're actually in the scheme or not.  |  |                       |                         |                       |
| 49          | P                             | ...Because obviously 11 or 12K is a lot of money, and certain decisions are taken because of that grant.   | "certain decisions are taken because of that grant."   | Rebate                | Monetary Incentives     | Purchase motivators   |
| 52          | R                             | -----<br>what other incentives would you introduce to motivate individuals to purchase an electric vehicle, both monetary and non monetary.  |  |                       |                         |                       |
| 55          | P                             | Well definitely, I think, the charging, outside in the street, has to improve  |  |                       |                         |                       |
| 56          | R                             | So the infrastructure  |  |                       |                         |                       |
| 57          | P                             | The infrastructure has to improve...I've been in forums and communities where people do actually need to charge their cars, and a lot of people find that there are chargers that don't work, you know you actually go up to a charger, you try to plug in your car and it doesn't work. And, I mean, it's not only a problem here in Malta, I've heard it's also abroad, but some sort of indication of, I don't know, a map saying, look this charger, there are five chargers here, numbers one, two, three and five work, number four isn't working. So, you know, also, the occupancy of chargers | "The infrastructure has to improve...I've been in forums and communities where people do actually need to charge their cars, and a lot of people find that there are chargers that don't work" | Inadequate            | Infrastructure          | Additional Incentives |
| 88          | R                             | -----<br>..the challenges, which is the next question, the challenges you said, charging stations?   |  |                       |                         |                       |
| 90          | P                             | Possibly the charging stations.  | "the charging stations"  | Inadequate            | Infrastructure          | Additional Incentives |
| 99          | R                             | -----<br>And compared to the ICE vehicles you just mentioned, what are the advantages of owning a PEV, an electric vehicle?  |  |                       |                         |                       |
| 101         | P                             | I actually find not having so many noises, engine noises, relaxing.  | "not having so many noises, engine noises, relaxing"   | Eco-friendly          | Environmental           | Purchase motivators   |
| 106         | R                             | -----<br>And what are the disadvantages of owning a PEV?   |  |                       |                         |                       |
| 107         | P                             | I think mostly the infrastructure, if you don't have a garage where you can charge or somewhere where you can charge on a regular basis at work for example or at home.  | "somewhere where you can charge on a regular basis"  | Inadequate            | Infrastructure          | Additional Incentives |
| 108         |                               | That's I think, a major disadvantage. Given also the question that we had above where the infrastructure is not that great. I think that is a major disadvantage.  | "major disadvantage"   |                       |                         |                       |

Participant EC 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme    | Organizing theme | Global theme          |
|-------------|-------------------------------|---|---|----------------|------------------|-----------------------|
| 115         | R                             | Why has the take up been so slow when compared to ICE vehicles? You think it's like something cultural, Is it a change of perception, change of mentality?  |   |                |                  |                       |
| 118         | P                             | I think people are a bit worried, one, so, not everyone has a garage, so I think if you don't have a garage, people don't think about getting an EV   | "I think if you don't have a garage, people don't think about getting an EV"  | Inadequate     | Infrastructure   | Additional Incentives |
| 123         | P                             | ...there aren't too many cars with a decent price.  | "there aren't too many cars with a decent price."   | Expensive      | Selling Price    | Additional Incentives |
| 132         | R                             | Imagine the below are incentives that are available when purchasing a PEV. Which, if any, would motivate your purchase?   |   |                |                  |                       |
| 140         | P                             | ...Interesting. I think one, would be the rebate at the time of purchase.   | 'the rebate at the time of purchase'  | Duration       | Grant process    | Additional Incentives |
| 141         | R                             | So rather than forking out the 11,000 you had previously mentioned, it's deducted on purchase.  |   |                |                  |                       |
| 143         | P                             | It's deducted on purchase. I think I would say the discounted electricity rate because that is an ongoing, a recurring fee for the life of the car  | "discounted electricity rate because that is an ongoing, a recurring fee for the life of the car"   | Electricity    | Monetary         | Additional Incentives |
| 156         | P                             | ..priority parking for electric vehicles. I would say, here in Malta, I would say, probably, parking is important. I think I would say parking.   | "priority parking for electric vehicles. I would say, here in Malta, I would say, probably, parking is important."  | Parking        | Priority         | Additional Incentives |
| 166         | R                             | The last question is what is your opinion about introducing variable monetary amounts when purchasing a BEV versus a PHEV? So currently, let's say, people who buy a PHEV still get the grant although they applied last year, and they used to be the same amount, so both of them were 11,000. Both electric vehicle and PHEV. In my opinion that creates a disadvantage because obviously a PHEV has a much lower range than a battery electric vehicle. What do you feel about creating a variable monetary amount between the two proportionate to the range they drive? |   |                |                  |                       |
| 173         | P                             | Ok, all right. I think it's only fair to be honest. If you're looking at something, you're either doing this for something monetary, or you're doing it for a greener environment. If you're doing it for a greener environment, go with something that is actually greener, you know? It is true that with a PHEV you have a bit less range anxiety, and that sort of thing, you know, there are advantages to it.   |   |                |                  |                       |
| 178         | R                             | But it's not about range anxiety in your opinion, it's about actually making our world greener  |   |                |                  |                       |
| 179         | P                             | Yes. That's the main reason why I went for an electric vehicle in the first place. I think a lot of people see a monetary gain from it you know, the 11, or 12,000, and obviously that's a very good incentive, you know. However, my main incentive was to be more eco friendly. So yes, I do agree that a BEV should have a better monetary incentive than a PHEV.  | "That's the main reason why I went for an electric vehicle in the first place. I think a lot of people see a monetary gain from it you know, the 11, or 12,000, and obviously that's a very good incentive, you know. However, my main incentive was to be more eco friendly. So yes, I do agree that a BEV should have a better monetary incentive than a PHEV." | Prioritisation | Distinct Grants  | BEV & PHEV Grants     |

Participant SM 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme | Organizing theme    | Global theme          |
|-------------|-------------------------------|--|---|-------------|---------------------|-----------------------|
| 14          | R                             | What were your main reasons for purchasing a plug in electric vehicle?   |   |             |                     |                       |
| 19          | P                             | ...By far, purchasing an EV would pay back more than investing in a diesel car or investing in a PHEV car. That was my main rationale about it.  | "purchasing an EV would pay back more than investing in a diesel car or investing in a PHEV"  | Savings     | Running Costs       | Purchase Motivators   |
| 23          | R                             | -----<br>what are the main advantages of the current government grant scheme?  |   |             |                     |                       |
| 27          | P                             | ...the advantage that the government gives you an 11,000 grant in terms of purchasing an EV car, is obviously enticing to buy an EV car and invest in an EV car.   | "the government gives you an 11,000 grant in terms of purchasing an EV car, is obviously enticing"  | Rebate      | Monetary Incentives | Purchase Motivators   |
| 30          | R                             | And now what are the disadvantages of the current government grant scheme?   |   |             |                     |                       |
| 31          | 32                            | P  | I would suggest that the government would consider subsidising or granting or issuing, extending the grant also on the purchase of the charging system of the home box, of the wall box.  | Charging    | Monetary            | Additional Incentives |
| 42          | P                             | ...I would, if I were in the government's shoes, definitely consider subsidising, or at least, at least subsidising, or granting also this type of charging system.  | "granting also this type of charging system."   | Charging    | Monetary            | Additional Incentives |
| 43          |                               |  |   |             |                     |                       |
| 59          | P                             | ...So the process in terms of giving the grant back to those who purchased an EV car is somewhat lengthy, exactly, that's the word, lengthy.   | "the process in terms of giving the grant back to those who purchased an EV car is somewhat lengthy"  | Duration    | Grant process       | Additional Incentives |
| 62          | R                             | So how would you improve it? How can it be improved?   |   |             |                     |                       |
| 63          | P                             | I would, definitely, I would, put in a commitment, say, within three months, the funds will be immediately allocated back to the purchaser of the car definitely. That is the only way how you improve and how, because, it's not easy   | " I would, put in a commitment, say, within three months, the funds will be immediately allocated back to the purchaser of the car definitely"  |             |                     |                       |
| 66          | R                             | You need a timeline  |   |             |                     |                       |
| 67          |                               |  |   |             |                     |                       |
| 68          | P                             | You need a timeline, exactly! It's not easy for anyone to fork out 11,000, 12,000 Euro in purchasing a car straightaway. Mind you, there's also a scheme where, I don't know if it's mentioned further on, but there's also the scheme of the loans from the bank, whereby EV cars are granted a ten year repayment period at zero interest rate from the local banks. So that is obviously an incentive in itself | "there's also a scheme where, I don't know if it's mentioned further on, but there's also the scheme of the loans from the bank, whereby EV cars are granted a ten year repayment period at zero interest rate from the local banks. So that is obviously an incentive in itself" | Rebate      | Monetary Incentives | Purchase Motivators   |
| 76          | R                             | -----<br>What other incentive would you introduce to motivate individuals to purchase a PEV? So both PHV and EV  |   |             |                     |                       |
| 79          | P                             | ...definitely more commitment from the government in introducing charging points. Charging points are somewhat lacking on our island.  | " more commitment from the government in introducing charging points. Charging points are somewhat lacking on our island"   | Inadequate  | Infrastructure      | Additional Incentives |
| 86          | P                             | ...I would make it mandatory for public buildings for example, garages within office blocks, to have these types of charging points...   | "I would make it mandatory for public buildings for example, garages within office blocks, to have these types of charging points"  | Inadequate  | Infrastructure      | Additional Incentives |
| 90          | P                             | ...This has to be mandatory, mandatory within every new application, from Planning Authority, but even mandatory by, let's say, 2025, in existing office spaces, within the buildings. Why? Because a person who goes to work with his car, having his car idle for eight hours, can easily charge it at work, and when I say charge it, even at a cost, I'm not saying free of charge...                          | "having his car idle for eight hours, can easily charge it at work"   | Inadequate  | Infrastructure      | Additional Incentives |
| 92          |                               |  |   |             |                     |                       |

Participant SM 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme           | Organizing theme           | Global theme          |
|-------------|-------------------------------|---|--|-----------------------|----------------------------|-----------------------|
| 98          | R                             | ...would you recommend others to purchase a PEV? Please state your reasons.   |  |                       |                            |                       |
| 100         | P                             | ...consumption wise, so if we have to compare what we're paying for petrol and diesel, versus what you will be paying for electricity, servicing, licensing fees and everything, obviously the car will be much more valuable to purchase an electric car rather than, that's number one.   | "the car will be much more valuable to purchase"   | Savings               | Running Costs              | Purchase Motivators   |
| 102         |                               | -----   |  |                       |                            |                       |
| 120         | R                             | What are the advantages of owning a PEV?  | "the consumption"  | Savings/Eco-friendly  | Running Costs/Enironmental |                       |
| 123         | P                             | the consumption, comfort in itself, I mean, the various comforts being offered today with cars, obviously you can find it also in ICE vehicles now, however   | "the various comforts being offered today"   | Comfort & Performance | Vehicle Characteristics    | Purchase Motivators   |
| 134         | R                             | ...in your opinion, why do you think the take up of electric vehicles has been slow when compared to ICE vehicles?  | "there has to be a shift or a change in mentality"   | Knowledge & Awareness | Education                  | Additional Incentives |
| 140         | P                             | ...there has to be a shift or a change in mentality. There also has to be the infrastructure ready to cater for a huge influx, or at least, a considerable influx for electric vehicles   | "There also has to be the infrastructure ready"  | Inadequate            | Infrastructure             | Additional Incentives |
| 152         | R                             | Imagine the below are incentives that are available when purchasing a PEV. Which, if any, would motivate your purchase? ... A rebate which is deducted at the time of purchase, so as you were saying this would eliminate waiting for the grant to reach you...Then, a free rapid charger to install at home rather than the standard charger, discounted electricity rates, so, at home, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, and lastly, priority parking for electric vehicles. So you can choose up to three. | "rebate that is deducted at the time of purchase"  | Duration              | Grant process              | Additional Incentives |
| 161         | P                             | So definitely I would choose a rebate that is deducted at the time of purchase, no registration tax upon purchase, and the discounted electricity. Here if I may include though, both at home and even at charging points.  | "both at home and even at charging points."  | Electricity           | Monetary                   | Additional Incentives |
| 162         |                               | -----   |  |                       |                            |                       |
| 164         | R                             | So as you might know, currently the PHEV and BEV, so the PHEV they extended the grant because of the delay in the delivery throughout this year. And battery operated vehicles and PHEV receive currently the same amount of grant.   | "I would make a huge difference between them"  | Prioritisation        | Distinct Grants            |                       |
| 178         | P                             | ...I would make a huge difference between them. I mean, let's not kid ourselves, the difference is huge, I mean having a fully electric vehicle compared to something which gives you 50kms and then goes on combustion, they definitely don't have to have the same amount of grant, definitely.   | "the difference is huge, I mean having a fully electric vehicle compared to something which gives you 50kms and then goes on combustion" | Misallocation         | Equivalent Grants          | BEV & PHEV Grants     |
| 179         |                               |   |  |                       |                            |                       |

Participant WF 1/1

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme   | Organizing theme    | Global theme          |
|-------------|-------------------------------|---|---|---------------|---------------------|-----------------------|
| 9           | R                             | The advantages of the current government grant scheme?  |   |               |                     |                       |
| 10          | P                             | ...I found it helpful because, my car was already a bit costly and with it I reduced the cost overall   | "I found it helpful because, my car was already a bit costly and with it I reduced the cost overall"  | Rebate        | Monetary Incentives | Purchase Motivators   |
| 35          | R                             | So, what other incentive would you introduce to motivate individuals to purchase a PEV?   |   |               |                     |                       |
| 36          | P                             | Possibly, I mean, more ahead, more charging points, because if there isn't that, I mean it's quite useless to roll out these initiatives...   | "more charging points, because if there isn't that, I mean it's quite useless to roll out these initiatives"  | Inadequate    | Infrastructure      | Additional Incentives |
| 66          | R                             | And the disadvantages of an electric vehicle versus a combustion engine?  |   |               |                     |                       |
| 67          | P                             | ...in Malta, to my knowledge, there aren't many at all, fast chargers. If there are I'm not aware of them...if I truly would be with my back against a wall I don't know where I would be, unless I wait four to five hours to charge the car.  | "there aren't many at all, fast chargers. "   | Inadequate    | Infrastructure      | Additional Incentives |
| 76          | R                             | And in your opinion, why do you think the take up of electric vehicles has been so slow when compared to ICE vehicles?  |   |               |                     |                       |
| 79          | P                             | ...given that electric cars are very expensive, the infrastructure, as we said, is very limited, and also, one thing that I didn't mention about the infrastructure, but it relates to it is that people that I know who wanted it and who don't have a garage I think I'd tell them not to get an electric car right away because right now the infrastructure is so limited that for them to park kilometres away just to charge their car, while if you had a garage you'd have that luxury...so if we didn't have our garage, we'd have that issue. | " given that electric cars are very expensive"  | Expensive     | Selling Price       |                       |
| 81          | P                             | The next question has seven answers and I need you to chose a maximum of three responses. So imagine that these are incentives which may already be in place, when purchasing an electric vehicle. Which if any, would motivate your purchase? ...a rebate which is deducted at the time of purchase...A free rapid charger to install at home rather than the standard charger, discounted electricity rates, , no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, priority parking for electric vehicles.  | "people that I know who wanted it and who don't have a garage I think I'd tell them not to get an electric car right away because right now the infrastructure is so limited" | Inadequate    | Infrastructure      | Additional Incentives |
| 92          | R                             | ...The rebate I think, for sure, at this point in time it will incentivise for sure.  | "The rebate I think, for sure, at this point in time it will incentivise for sure. "  | Rebate        | Monetary Incentives | Purchase Motivators   |
| 101         | P                             | ...The discounted electricity rates, the electricity rates for sure, yes, because I feel like, if I didn't have that I'd end up paying as much as a diesel car if not more, and I think, possibly the tax.  | "The discounted electricity rates, the electricity rates for sure"  | Electricity   | Monetary            | Additional Incentives |
| 111         | R                             | What is your opinion about the introduction of variable monetary amounts when purchasing a BEV versus a PHEV?   |   |               |                     |                       |
| 134         | P                             | ...I just feel like if you're going to do the step, might as well do the full step than half a step. I feel like the hybrid provides you with 40kms, so in reality I don't see it really as an electric car, it has an electric component, but it's not a fully electric car.   | " I feel like the hybrid provides you with 40kms, so in reality I don't see it really as an electric car"   | Misallocation | Equivalent Grants   | BEV & PHEV Grants     |
| 148         | P                             | ...if you're giving incentives for a half electric car you're only prolonging the inevitable, as in, instead of just changing   | "if you're giving incentives for a half electric car you're only prolonging the inevitable"   | Misallocation | Equivalent Grants   | BEV & PHEV Grants     |

Participant ESK 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme | Organizing theme    | Global theme          |
|-------------|-------------------------------|---|---|-------------|---------------------|-----------------------|
| 9<br>11     | R                             | What were your main reasons for purchasing a plug in electric vehicle, so, a battery electric vehicle in your case.   | "one of the reasons was the grant"  | Rebate      |                     |                       |
| 12          | P                             | Well, ok, so one of the reasons was the grant...so having to travel from Mellieha to Gzira every day, I was encountering quite a lot of petrol consumption, I was approximately paying 35, sometimes even 40 Euro a week. And obviously, you know, times that by four, and keep doing it, you know it's quite a bit of money...I started looking into the possibility of buying a fully electric car, for one reason, obviously to eliminate that weekly, monthly, you know, expense...the grant, being, you know, quite a substantial amount, made it very easy for me to make the decision... | "having to travel from Mellieha to Gzira every day, I was encountering quite a lot of petrol consumption, I was approximately paying 35, sometimes even 40 Euro a week. And obviously, you know, times that by four, and keep doing it, you know it's quite a bit of money. So obviously when my favourite car became available in electric, I started looking into the possibility of buying a fully electric car, for one reason, obviously to eliminate that weekly, monthly, you know, expense" | Savings     | Monetary Incentives | Purchase Motivators   |
| 19          |                               |   | "the grant, being, you know, quite a substantial amount, made it very easy for me to make the decision."  | Rebate      |                     |                       |
| 24          | P                             | ...So the grant bridged the gap for me from going to any second hand car to a brand new, fully electric vehicle...  | "the grant bridged the gap"   | Rebate      | Monetary Incentives | Purchase Motivators   |
| 26          | P                             | ...for an electric car you need a garage, so that was the first step. So we obviously had to invest in a property basically, it has a garage for us to be able to buy an electric car.  | "for an electric car you need a garage, so that was the first step"   | Inadequate  | Infrastructure      | Additional Incentives |
| 30          | P                             | ...you have to have a garage because you're going to be dependent on the range that it's going to give you.   | "you have to have a garage because you're going to be dependent on the range"   | Inadequate  | Infrastructure      | Additional Incentives |
| 35          | P                             | ...if the grant wasn't there, I would have probably kept my car for a couple more years, or if I really wanted to change, I would have probably gone for another car, you know, maybe not in that price range that I went for this time.  | "if the grant wasn't there, I would have probably kept my car"  | Rebate      | Monetary Incentives | Purchase Motivators   |
| 39          | R                             | ...What are the main advantages of the current government grant scheme?...  |   |             |                     |                       |
| 43          | P                             | ...The grant right now is probably bridging the gaps that people before weren't able to bridge...   | "The grant right now is probably bridging the gaps that people before weren't able to bridge"   | Rebate      | Monetary Incentives | Purchase Motivators   |
| 49          | R                             | ...the negative qualities of the process of the grant application?  |   |             |                     |                       |
| 51          | P                             | ...another negative part of the process is that there isn't a system where you can actually follow your application...it should be in the process of the E-ID for example, you know it's a government thing and it should be incorporated in it...  | "there isn't a system where you can actually follow your application"   |             |                     |                       |
| 71          | R                             | What other incentives both monetary, or non monetary, would you introduce to motivate individuals to purchase such vehicles?  |   |             |                     |                       |
| 73          | P                             | Incentive, can it be, like, let me just say it so maybe you can explain it better. One of the problems is that there isn't  | P:"One of the problems is that there isn't".<br>R:"Infrastructure?"   | Inadequate  | Infrastructure      | Additional Incentives |
| 75          | R                             | Infrastructure?   |   |             |                     |                       |
| 76          | P                             | Yes that's one, infrastructure...   | P:"Yes that's one, infrastructure"  |             |                     |                       |
| 91          | R                             | ...So, what are the advantages of owning an electric vehicle when compared to ICE vehicles?   |   |             |                     |                       |

Participant ESK 2/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|--|--|-----------------------|-------------------------|-----------------------|
| 93          |                               |  | "the electricity is much cheaper"  | Savings               |                         |                       |
| 93          |                               |  | "Servicing as well, there is minimal servicing"  | Savings               | Running Costs           |                       |
| 94          | P                             | ..your consumption is out, the electricity is much cheaper. Servicing as well, there is minimal servicing. My case, power, gaining on the power of the car...The licence, the other one, it was over, nearly 200Euro per year, and this one obviously I'm not paying anything...   | "gaining on the power of the car"  | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 98          |                               |  | "The licence, the other one, it was over, nearly 200Euro per year, and this one obviously I'm not paying anything..."  | Savings               | Running Costs           |                       |
| 110         | R                             | -----<br>...why do you think the take up of electric vehicles has been so slow when compared to the sales of ICE vehicles?   |  |                       |                         |                       |
| 112         | P                             | Mentality unfortunately. There are a lot of petrol heads here and probably electric is like an abomination for them.   | "Mentality unfortunately"  | Knowledge & Awareness | Education               | Additional Incentives |
| 117         | P                             | ...they are taken aback, that's why I said mentality, because if they actually pushed themselves they would change their minds.  | "if they actually pushed themselves they would change their minds. "   | Knowledge & Awareness | Education               | Additional Incentives |
| 119         | R                             | -----<br>So the below are incentives which may already be in place when purchasing an electric vehicle. Which would most motivate your purchase of an electric vehicle? Give a reason for your answer and you have a maximum of three responses. And the first one is a rebate which is deducted at the time of purchase, rather than you having to wait eight months  |  |                       |                         |                       |
| 123         | P                             | Yes, that would be very good. I think that's the simplest, most efficient way of doing it, yes   | "most efficient way of doing it"   | Duration              | Grant process           | Additional Incentives |
| 124         | R                             | A free rapid charger to install at home rather than the standard charger, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon charging, priority parking for electric vehicles.  |  |                       |                         |                       |
| 129         | P                             | ...The priority parking for electric vehicles, I think it's a very good incentive, you probably have, if for example, you're going to Valletta, and you know that parking is a problem, if there are specific parking places for electric cars, maybe I'd be more relaxed going there, knowing that I'll find parking, so, that one...   | "The priority parking for electric vehicles, I think it's a very good incentive, you probably have, if for example, you're going to Valletta, and you know that parking is a problem, if there are specific parking places for electric cars, maybe I'd be more relaxed going there, knowing that I'll find parking, so, that one" | Parking               | Priority                | Additional Incentives |
| 135         | R                             | -----<br>...What is your opinion on the introduction of variable monetary amounts when purchasing a BEV versus a PHEV?...  |  |                       |                         |                       |
| 141         |                               |  | "I don't think that the grant should have been the same for fully electric cars and plug in hybrid cars"   | Misallocation         | Equivalent Grants       |                       |
| 143         | P                             | So, I don't think that the grant should have been the same for fully electric cars and plug in hybrid cars. I still think that there should be something, for plug in hybrid, as you're saying, if for example it's of a certain range you get a number whilst if it's under a certain number you get nothing, or you get less. The reason is this, most people that bought a plug in hybrid electric vehicle bought it for the simple reason of the grant and the grant alone. And when I say for the grant alone, they weren't even bothered to try to understand how the electric part of it actually worked. | "I still think that there should be something, for plug in hybrid, as you're saying, if for example it's of a certain range you get a number whilst if it's under a certain number you get nothing, or you get less"   | Prioritisation        | Distinct Grants         | BEV & PHEV Grants     |
| 145         |                               |  | "most people that bought a plug in hybrid electric vehicle bought it for the simple reason of the grant and the grant alone"   | Misallocation         | Equivalent Grants       |                       |
| 157         | P                             | ...I also don't think that it's fair to have the grant on certain types of cars, that are of a certain price and above. Yes, I think there should be a cap, there should be a cap of, say, 40,000 Euro, which I would maybe say, be the average range of a normal earning person, but you know, certain types of vehicles that are, I don't know, 90, 100,000  | "I think there should be a cap, there should be a cap of, say, 40,000 Euro"  | Prioritisation        | Distinct Grants         | BEV & PHEV Grants     |

Participant ASK 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|---|--|-----------------------|-------------------------|-----------------------|
| 8<br>12     | R                             | ...what were your main reasons for purchasing a battery electric vehicle?   | "the main reason, is the grant, obviously"   | Rebate                | Monetary Incentives     |                       |
| 16          | P                             | ...the main reason, is the grant, obviously, also because BOV also just brought out the Eco loan, which is basically, you get the proportion of the loan, not including the grant, is at zero interest. It's been out for four months, so it's obviously a very good incentive for people who want to purchase an electric vehicle, so those two are my main reasons, my third one is because I want a fast car. And you can't get much faster than an electric.                                | "my third one is because I wanted a fast car. And you can't get much faster than an electric"  | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 18          | R                             | ...What are the main advantages of the current government grant scheme?   | "Obviously I hope that many people who are not in a position to purchase such cars, will be able to, you know, 11,000 is a lot of money."  | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 20          | P                             | Pretty much what I've just said about the monetary value of it. Obviously I hope that many people who are not in a position to purchase such cars, will be able to, you know, 11,000 is a lot of money.   | "it bridges the gap"   | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 26          | P                             | ...Yes, as I said before, it bridges the gap, between what you can't possibly afford and what you can afford with the help of the government grant scheme.  |  |                       |                         |                       |
| 29          | R                             | And any disadvantages in your opinion?  | "One thing that was brought up was, to be able to check on the application, that would obviously be a very good idea, to know kind of where you stand, you get a kind of time frame and you try to go by that."                                |                       |                         |                       |
| 32          | P                             | ...One thing that was brought up was, to be able to check on the application, that would obviously be a very good idea, to know kind of where you stand, you get a kind of time frame and you try to go by that.  |  |                       |                         |                       |
| 44          | R                             | ...So, what other incentive, both monetary and non monetary would you introduce to motivate individuals to purchase an electric vehicle?  | "Like, for example at my work, they installed two electric charging stations inside of our private garage. I think that all companies, maybe if it's given by the government maybe as an incentive"  | Charging              | Monetary                | Additional Incentives |
| 47          | P                             | Like, for example at my work, they installed two electric charging stations inside of our private garage. I think that all companies, maybe if it's given by the government maybe as an incentive, like all companies should have it for their employees to have access to have charging stations at work. More than that there need to be a hell of a lot of charging stations round the island as well, because they are very few and far between.  | "all companies should have it for their employees to have access to have charging stations at work. More than that there need to be a hell of a lot of charging stations round the island as well, because they are very few and far between." | Inadequate            | Infrastructure          | Additional Incentives |
| 49          | P                             |   |  |                       |                         |                       |
| 56          | R                             | And would you recommend others to purchase such vehicles?   | "massive positive for the environment, which is pretty much why electric vehicles are here... you're actually helping out the environment as well"   | Eco-friendly          | Environmental           | Purchase Motivators   |
| 57          | P                             | ...it's also a massive positive for the environment, which is pretty much why electric vehicles are here because we're trying to lower the emissions, so that's one of the many reasons why you should purchase an electric vehicle, and not just because you get money off it, but you're actually helping out the environment as well. So anyone who's very health conscious, or conscious about global warming, that would be good for them, so, and as I said the money is a big incentive. | "the money is a big incentive"   | Rebate                | Monetary Incentives     |                       |
| 64          | R                             | ...And you drive the car, any challenges you've experienced?  | "They're great, I love them, they're great fun, very sensitive to your foot"   | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 66          | P                             | ...They're great, I love them, they're great fun, very sensitive to your foot   | "very sensitive to your foot"  | Technology            |                         |                       |

Participant ASK 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme           | Organizing theme  | Global theme          |
|-------------|-------------------------------|---|---|-----------------------|-------------------|-----------------------|
| 70          | R                             | ...what are the advantages of owning an electric vehicle versus a combustion engine vehicle in your opinion?  |   |                       |                   |                       |
| 72          | P                             | So for me it would obviously be no road tax, no petrol per week, so, saving money basically. If you have priority on places to park obviously because Malta's a very small place and parking is quite difficult, so if you have certain preferences if you can get parking first because you're an electric vehicle, that's obviously, an advantage as well.  | "no petrol per week, so, saving on money basically"   | Savings               | Running Costs     | Purchase Motivators   |
| 76          | R                             | And, any disadvantages when compared to a combustion engine vehicle?  |   |                       |                   |                       |
| 84          | P                             | ...You can't just rely on charging the vehicle outside because it's impossible. Actually when you have such a small range of a car, you need to have that security that you have, obviously somewhere to charge it personally.  | "You can't just rely on charging the vehicle outside because it's impossible"   | Inadequate            | Infrastructure    | Additional Incentives |
| 92          | R                             | In your opinion why has the take up of electric vehicles been so slow when compared to ICE vehicles?  |   |                       |                   |                       |
| 94          | P                             | I absolutely agree with the mentality aspect because Malta's very car, lots of enthusiasts with their car...so I think it's the mentality   | "I absolutely agree with the mentality aspect"  | Knowledge & Awareness | Education         | Additional Incentives |
| 113         | R                             | So imagine the below are incentives that are available when purchasing a PEV. Which, if any, would motivate your purchase? Give a reason for your answer. So, we have a rebate which is deducted at the time of purchase, a free rapid charger to install at home rather than the standard charger, discounted electricity rates at home, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, priority parking for electric vehicles. So let me go back to the discounted electricity rates, to charge the vehicle. |   |                       |                   |                       |
| 121         | P                             | I would go with the rebate which is deducted at the time of purchase, because it avoids loads of hassle of having to apply, I mean you're eligible for it anyway so why go through the hassle of having to apply and wait for such a long time? And obviously you have to put that money up front, which a lot of people don't actually have...And I would definitely want the priority parking, because parking is like, you know, gold here. It is, so if you know that you've got parking for your car, it's perfect.                                      | "you're eligible for it anyway so why go through the hassle of having to apply and wait for such a long time?"  | Duration              | Grant process     | Additional Incentives |
| 128         | P                             |   | "I would definitely want the priority parking, because parking is like, you know, gold here."   | Parking               | Priority          |                       |
| 131         | R                             | ...what is your opinion about the introduction of variable monetary amounts when purchasing a BEV versus a PHEV?  |   |                       |                   |                       |
| 142         | P                             | ...It just doesn't make sense. So I would never myself opt for a hybrid vehicle. And I don't think that they deserve the same monetary amounts given to them because one is fully electric and the other is like a part time electric car. So maybe it should have half the amount given to it since it's half an electric car.   | "It just doesn't make sense...I don't think that they deserve the same monetary amounts given to them because one is fully electric and the other is like a part time electric car" | Misallocation         | Equivalent Grants | BEV & PHEV Grants     |
| 144         | P                             |   | "So maybe it should have half the amount given to it since it's half an electric car"   | Prioritisation        | Distinct Grants   |                       |

Participant KM 1/3

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|--|--|-----------------------|-------------------------|-----------------------|
| 22          | R                             | So, what were your main reasons for purchasing an electric vehicle?  |  |                       |                         |                       |
| 24          | P                             | ...Even if I had to make a choice, if it was my own vehicle, I was purchasing, very likely I would have gone for an electric just the same   |  |                       |                         |                       |
| 59          | P                             | it has been a very comfortable car, and it's performance has been very satisfactory throughout...  | "it has been a very comfortable car, and it's performance has been very satisfactory throughout"   | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 70          | R                             | ...What other incentives would you introduce to motivate other individuals to purchase an electric vehicle?  |  |                       |                         |                       |
| 72          | P                             | ...I mean my views on the current scheme of the 11K I believe it is at this moment? I think that itself is a very, very good incentive...  | "I think that itself is a very, very good incentive"   | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 92          | R                             | How would you incentivise those customers, to answer this question, the sixth one, what would you introduce to motivate these individuals?   |  |                       |                         |                       |
| 99          | P                             | I think the incentive, or some form of, I don't know how to put it, what has to be a bit more clear, I would say, is the actual charging, the charging infrastructure. Now I know that recently, over the last year or so, the government has more than doubled the amount of public charging stations, which is again, a step in the right direction, by all means, however I know that for a fact, because I've experienced it myself, that there are certain technical glitches which is persistent with them, with the software, with the app and what have you. The parking, but that again, is an issue of culture, which, I would say, we are still miles away from having the right mindset to embrace this technology and the concept itself. But then you have other issues, you know, for example many people don't own a garage, and yes, that is a valid argument which I would see that not having your own personal garage where to park a car during the night or whenever, that might be a bit of a limitation. | "I think the incentive, or some form of, I don't know how to put it, what has to be a bit more clear, I would say, is the actual charging, the charging infrastructure...there are certain technical glitches which is persistent with them, with the software, with the app and what have you...many people don't own a garage, and yes, that is a valid argument which I would see that not having your own personal garage where to park a car during the night or whenever, that might be a bit of a limitation" | Inadequate            | Infrastructure          | Additional Incentives |
| 105         |                               |  | "that again, is an issue of culture, which, I would say, we are still miles away from having the right mindset to embrace this technology and the concept itself."   | Knowledge & Awareness | Education               |                       |
| 131         | P                             | ...the environmental advantages of no emissions, I mean the drive is actually much more enjoyable in the sense that you don't hear the engine, you hardly realise you're actually driving.   | "the environmental advantages of no emissions"   | Eco-friendly          | Environmental           | Purchase Motivators   |
| 134         | R                             | ...would you recommend others to purchase an electric vehicle?   | "I mean the drive is actually much more enjoyable in the sense that you don't hear the engine"   | Comfort & Performance | Vehicle Characteristics |                       |
| 148         | P                             | ...the environmental benefits of it, I mean, I have young children. My least concern, least worry, is that I'm actually reversing my car, or taking my car out of the garage, and obviously I don't, my children or myself, we're not exposed to those fumes and toxic gases which come out from an internal combustion engine..   | "the environmental benefits of it, I mean, I have young children. My least concern, least worry, is that I'm actually reversing my car, or taking my car out of the garage, and obviously I don't, my children or myself, we're not exposed to those fumes and toxic gases which come out from an internal combustion engine"  | Eco-friendly          | Environmental           | Purchase Motivators   |
| 217         | P                             | An ICE engine would have a zero to sixty in nine point five seconds, ten seconds, whilst in an electric you would have that in six point five seconds. Because it's obviously more responsive, the drive is smoother...  | "An ICE engine would have a zero to sixty in nine point five seconds, ten seconds, whilst in an electric you would have that in six point five seconds. Because it's obviously more responsive"  | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 219         |                               |  | "the drive is smoother"  |                       |                         |                       |

Participant KM 2/3

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|---|---|-----------------------|-------------------------|-----------------------|
| 220<br>222  | P                             | ...I would say, the limitation is more there, in the actual operation of it, day to day, vis a vis charging, so yes, not having a garage that is a bit of a limitation.   | "a bit of a limitation"   | Inadequate            | Infrastructure          | Additional Incentives |
| 233         | P                             | ...the models were screaming I'm electric, you know. But then, to me there was a very very big improvement between the latest model Nissan Leaf and the previous, because you would hardly realise that it is electric.   | "you would hardly realise that it is electric."   | Technology            | Vehicle Characteristics | Purchase Motivators   |
| 242         | R                             | ...when compared to ICE vehicles, I mean, internal combustion engines, obviously they sell much more than electric vehicles. In your opinion, why has the take up been slow so far?   |   |                       |                         |                       |
| 248         | P                             | ...I hardly see any campaign actually promoting electric vehicles themselves you know.  | "I hardly see any campaign actually promoting electric vehicles themselves you know"  | Knowledge & Awareness | Education               | Additional Incentives |
| 254         | P                             | ...the government has to be more pro active I would say, possibly, yes, run marketing campaigns, so that anyone considering purchasing a vehicle, should consider purchasing an electric vehicle over an ICE vehicle.   | "the government has to be more pro active I would say, possibly, yes, run marketing campaigns, so that anyone considering purchasing a vehicle, should consider purchasing an electric vehicle over an ICE vehicle"   | Knowledge & Awareness | Education               | Additional Incentives |
| 262         | P                             | ...there has to be a change of culture, which has to come with a bit of a more concrete, hands on, approach, you know.  | "there has to be a change of culture, which has to come with a bit of a more concrete, hands on, approach, you know"  | Knowledge & Awareness | Education               | Additional Incentives |
| 268         | P                             | ...if we truly believe that we want to embrace the technology and we want people to go for it, I think that much more has to be done in that respect of promoting the whole concept of EV, and make strides towards having a truly cultural change, you know, that almost, EV becomes a natural choice.   | "make strides towards having a truly cultural change, you know, that almost, EV becomes a natural choice"   | Knowledge & Awareness | Education               | Additional Incentives |
| 274         | P                             | ...one other thing which goes hand in hand with what I'm saying, there are a lot of misconceptions, but you hear a lot of views about, you know, the durability, the lifetime of a battery, and everyone is being bombarded with information  | "there are a lot of misconceptions"   | Knowledge & Awareness | Education               | Additional Incentives |
| 277         | R                             | Misinformation  |   |                       |                         |                       |
| 278         | P                             | With social media, and internet and what have you, and nobody knows, there doesn't seem to be one channel, again, which probably has to come from the government, which can be truthful and more factual, you know, because a lot of misconceptions are being created, which are, in effect, not helping at all.  | "has to come from the government, which can be truthful and more factual, you know, because a lot of misconceptions are being created, which are, in effect, not helping at all"  | Knowledge & Awareness | Education               | Additional Incentives |
| 291         | P                             | ...it's not just about purchasing an electric vehicle, the whole infrastructure, being the charging infrastructure, being the infrastructure in private residences, you know. Because obviously the electrical distribution would have to cater for this additional load as well at some point, and we know that there are limitations in that respect as well locally. Even the actual repairs and servicing infrastructure, be it by the car manufacturers, be it by self employed mechanics... | "the electrical distribution would have to cater for this additional load as well at some point, and we know that there are limitations in that respect as well locally. Even the actual repairs and servicing infrastructure, be it by the car manufacturers, be it by self employed mechanics." | Inadequate            | Infrastructure          | Additional Incentives |
| 313         | P                             | I think if the government wants to get it right, and truly wants to go in this direction, the infrastructure has to be updated before, you know. And if they're going to make way for new buildings, building requirements have to outlay fully, having parking spaces and private garages with charging stations, you know. So it would actually be a requirement to be granted a permit by the Planning Authority.  | "if they're going to make way for new buildings, building requirements have to outlay fully, having parking spaces and private garages with charging stations"  | Inadequate            | Infrastructure          | Additional Incentives |

Participant KM 3/3

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme    | Organizing theme | Global theme          |
|-------------|-------------------------------|--|---|----------------|------------------|-----------------------|
| 324         | R                             | ...So imagine the below are incentives that are available when purchasing a PEV. Which if any, would motivate your purchase?   |   |                |                  |                       |
| 335         | P                             | The rebate which is deducted at the time of purchase, no, that, I would say is the prime motivator   | "The rebate which is deducted at the time of purchase, no, that, I would say is the prime motivator"  | Duration       | Grant process    | Additional Incentives |
| 338         | P                             | ...Discounted electricity rates, yes, that I would say is a very good incentive...   | "Discounted electricity rates, yes, that I would say is a very good incentive"  | Electricity    | Monetary         | Additional Incentives |
| 367         | P                             | ...my third would be priority parking for electric vehicles because parking has become a huge problem everywhere and residential areas...having that guarantee that you're going to a place and avoiding having to spend twenty minutes going round every block to find a parking spot, I think that would help. | " priority parking for electric vehicles because parking has become a huge problem everywhere and residential areas"                                  | Parking        | Priority         | Additional Incentives |
| 392         | R                             | What is your opinion about the introduction of variable monetary amounts when purchasing a BEV versus a PHEV?  |   |                |                  |                       |
| 397         | P                             | ...Plug in hybrids, it seems that plug in hybrids have been introduced as a transition, so that the market itself gradually moves from ICE to electric so obviously the hybrid went in between.  |   |                |                  |                       |
| 406         | P                             | ...I mean, if you want to curb completely on emissions I mean you go for the full electric you know. I'd incentivise people to go for the full electric.   | "I mean if you want to curb completely on emissions I mean you go for the full electric you know. I'd incentivise people to go for the full electric" | Prioritisation | Distinct Grants  | BEV & PHEV Grants     |

Participant AS 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|---|---|-----------------------|-------------------------|-----------------------|
| 10          | P                             | ...you know there was the budget, you know it was enticing twelve thousand, eleven thousand Euro grant, so I bit the bullet and just bought it basically.   | "it was enticing twelve thousand, eleven thousand Euro grant"   | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 12          | R                             | ...And what was your main reason for buying a PHEV?...  |   |                       |                         |                       |
| 17          | P                             | ...the price was only 24,000 Euro, including the grant, so I thought it was a good deal.  | "the price was only 24,000 Euro, including the grant, so I thought it was a good deal"  | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 19          | P                             | ...To be fair if I had had the budget I would have gone for full electric, I still have my doubts to be fair, about the full electric as a consideration.   | "if I had had the budget I would have gone for full electric"   | Expensive             | Selling Price           | Additional Incentives |
| 27          | R                             | And what are the main advantages of the current government scheme?...   |   |                       |                         |                       |
| 30          | P                             | The grant is a contributor towards the decision but it's not the primary contributor. It facilitates people buying an electric vehicle, or a PHEV.  | "The grant is a contributor towards the decision...It facilitates people buying an electric vehicle, or a PHEV."  | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 58          | R                             | Any incentives you would introduce to motivate individuals to purchase such vehicles?   |   |                       |                         |                       |
| 59          | P                             | Yes, I would recommend first of all make that software work for charging stations. If you go to Mater Dei, to find those pillars that don't work, if you go to Birkirkara, simply it just throws you out abruptly and you have to log in again. A lot of factors, that in my opinion, they're trying to introduce these electric vehicles, but the infrastructure is not ready yet... | "I would recommend first of all make that software work for charging stations"<br>"the infrastructure is not ready yet"   | Inadequate            | Infrastructure          | Additional Incentives |
| 65          | P                             | ...The infrastructure is definitely not prepared. I would expect for example you go to the supermarket for shopping. You stopped for an hour and a half, why don't you, for an extra cost, plug in at the supermarket?  | "The infrastructure is definitely not prepared. I would expect for example you go to the supermarket for shopping. You stopped for an hour and a half, why don't you, for an extra cost, plug in at the supermarket?" | Inadequate            | Infrastructure          | Additional Incentives |
| 77          | R                             | ...And would you recommend others to purchase such vehicles?  |   |                       |                         |                       |
| 79          | P                             | Yes, why not, if you have a garage. If you don't have a garage, definitely not. It's not worth it unless you, unless they make it easy for people to charge and have the infrastructure ready you know with these charging points that work   | "If you don't have a garage, definitely not"  | Inadequate            | Infrastructure          | Additional Incentives |
| 87          | R                             | Here's the part where I compare a hybrid, in your case, and an ICE vehicle, an internal combustion engine vehicle. What are the advantages? When we compare both?   | "Economy"   | Savings               | Running Costs           |                       |
| 89          | P                             | Economy, silence, it's basically lovely to travel without sounds...The comfortable ride in my case,   | "silence, it's basically lovely to travel without sounds...The comfortable ride in my case"   | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 105         | R                             | In your opinion, why do you think the take up of electric vehicles has been so slow when compared to ICE vehicles?  |   |                       |                         |                       |
| 111         | P                             | ..People are scared of the shelf life of the battery...   | "People are scared of the shelf life of the battery"  | Fear & Uncertainty    | Education               | Additional Incentives |
| 113         | P                             | ...but again, the infrastructure. People are not ready, the infrastructure is not ready...  | "the infrastructure is not ready"   | Inadequate            | Infrastructure          | Additional Incentives |
| 116         | P                             | ...Where will you charge your car if you don't have a garage? You know, so, it is challenging, you need good infrastructure. Even petrol stations nowadays, you need to invest in charging points.  | "Where will you charge your car if you don't have a garage? You know, so, it is challenging, you need good infrastructure. Even petrol stations nowadays, you need to invest in charging points"                      | Inadequate            | Infrastructure          | Additional Incentives |

Participant AS 2/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme    | Organizing theme | Global theme          |
|-------------|-------------------------------|--|---|----------------|------------------|-----------------------|
| 122         | R                             | So, question number twelve is a list of seven items which may be incentives that are already be in place. Imagine the below are incentives when purchasing such a vehicle. Which, if any, would motivate your purchase?...   |   |                |                  |                       |
| 145         | P                             | ...before I had my electric vehicle, I used to pay six hundred Euro licence fee, licence fee...  | "before I had my electric vehicle, I used to pay six hundred Euro licence fee"  | Savings        | Running Costs    | Purchase Motivators   |
| 152         | P                             | ...and even priority parking for electric vehicles. It adds value...   | "priority parking for electric vehicles. It adds value"   | Parking        | Priority         | Additional Incentives |
| 154         | P                             | They don't always work the charging stations, they don't always work...  | "they don't always work the charging stations"  | Inadequate     | Infrastructure   | Additional Incentives |
| 157         | P                             | For example, at Mater Dei, next to SAMOC, there is a charging point. It doesn't work and I realised that there are two, there's a pillar in between, there's a space for another car on the other side. The cable is short to plug in, if you had to charge your car in front, it's short it doesn't reach. Even if it worked, this pillar, it's useless you know... | "The cable is short to plug in, if you had to charge your car in front, it's short it doesn't reach. Even if it worked, this pillar, it's useless you know" | Inadequate     | Infrastructure   | Additional Incentives |
| 165         | R                             | So, based on last year's incentives. So as you know electric vehicles and PHEV have got the same grant. What is your opinion about the introduction of variable monetary amounts when purchasing an electric vehicle versus a PHEV?  |   |                |                  |                       |
| 169         | P                             | Let me be fair, if I had the budget I would have bought an electric vehicle...   | "if I had the budget I would have bought an electric vehicle"   | Expensive      | Selling Price    | Additional Incentives |
| 172         | P                             | ..I must say that there must be a difference between a PHEV and full electric. Full electric is cleaner ok, so...  | "there must be a difference between a PHEV and full electric."  | Prioritisation | Distinct Grants  | BEV & PHEV Grants     |
| 176         | P                             | ...I still believe that the grant should be for fully electric vehicles.   | "the grant should be for fully electric vehicles."  | Prioritisation | Distinct Grants  | BEV & PHEV Grants     |

Participant LD 1/3

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme | Organizing theme    | Global theme          |
|-------------|-------------------------------|--|---|-------------|---------------------|-----------------------|
| 8           | R                             | ...What were your main reasons for purchasing an electric vehicle?   |   |             |                     |                       |
| 10          | P                             | Because I hate mechanics and I hate booking time with companies for a mechanic that is going to charge me too much money for something that I can do myself. I have a garage so an electric vehicle made sense. I plug it in, no more servicing  | "I hate booking time with companies for a mechanic that is going to charge me too much money"   | Savings     | Running Costs       | Purchase Motivators   |
| 15          | R                             | ...What are the main advantages of the current government scheme?  |   |             |                     |                       |
| 17          | P                             | The main advantage for me was a massive discount on the car. So originally the car was worth forty minus eight, it cost me thirty two, so that's a massive discount. It was a big incentive for me.  | "massive discount on the car"   | Rebate      | Monetary Incentives | Purchase Motivators   |
| 18          | P                             | ...What are the main advantages of the current government scheme?  | "It was a big incentive for me."  | Rebate      | Monetary Incentives | Purchase Motivators   |
| 27          | R                             | ...What were the positive qualities of that process?...  |   |             |                     |                       |
| 34          | P                             | ...I paid for my car outright, and I was expecting the refund after a number of weeks, but it took five months. That could be a problem for others.  | "I paid for my car outright, and I was expecting the refund after a number of weeks, but it took five months. That could be a problem for others."  | Duration    | Grant process       | Additional Incentives |
| 37          | R                             | Are there any incentives, both monetary and non monetary, that you would introduce to motivate persons to purchase such a vehicle?   |   |             |                     |                       |
| 40          | P                             | In terms of incentives I can't think of any right now. I think the biggest blocker for purchasing EV's, for moving into EV's are obviously the charging facilities   | "I think the biggest blocker for purchasing EV's, for moving into EV's are obviously the charging facilities"   | Inadequate  | Infrastructure      | Additional Incentives |
| 45          | P                             | ...it's inconvenient having to go and plug your car outside and waiting there...   | "it's inconvenient having to go and plug your car outside and waiting there"  | Inadequate  | Infrastructure      | Additional Incentives |
| 49          | P                             | ...I think the biggest incentive for plug ins, or at least hybrids or plug in EV's, would be better charging facilities but it's not a case of putting more plugs on the roads, or in the streets, it needs to be easier...  | "the biggest incentive for plug ins, or at least hybrids or plug in EV's, would be better charging facilities"  | Inadequate  | Infrastructure      | Additional Incentives |
| 60          | R                             | Would you recommend others to purchase an electric vehicle?  |   |             |                     |                       |
| 61          | P                             | Only if they have charging facilities. I wouldn't recommend anyone buying an EV and not having a garage. Or a plug somewhere by their house where they can charge it.  | "Only if they have charging facilities. I wouldn't recommend anyone buying an EV and not having a garage"   | Inadequate  | Infrastructure      | Additional Incentives |
| 67          | R                             | And any challenges you've experienced since owning an electric vehicle?  |   |             |                     |                       |
| 68          | P                             | The only one is when I desperately need to charge outside and I don't find a charging station available, which is not a problem realistically because I can just go to the next station, but it's a pain looking for stations on the app and obviously the car doesn't read where the stations are because they haven't been mapped etc        | "I desperately need to charge outside and I don't find a charging station available"  |             |                     |                       |
| 69          | P                             | ...it's a pain looking for stations on the app and obviously the car doesn't read where the stations are because they haven't been mapped  | "it's a pain looking for stations on the app and obviously the car doesn't read where the stations are because they haven't been mapped"  | Inadequate  | Infrastructure      | Additional Incentives |
| 75          | R                             | And what are the advantages of owning an electric vehicle when compared to a combustion engine vehicle?  |   |             |                     |                       |
| 77          | P                             | I never have to change the oil, I never have to service the engine, I never have to change the spark plugs, I never have to change filters, I never have to change any of these things. Once every two years I take it to BMW they charge me fifty Euro, they put some water in my windscreen wipers and I'm out. And that's it, very cheap... | "I never have to change the oil, I never have to service the engine, I never have to change the spark plugs, I never have to change filters, I never have to change any of these things. Once every two years I take it to BMW they charge me fifty Euro, they put some water in my windscreen wipers and I'm out. And that's it, very cheap" | Savings     | Running Costs       | Purchase Motivators   |
| 88          | P                             | ...it's cheap to service an electric car.  | "it's cheap to service"   | Savings     | Running Costs       | Purchase Motivators   |

Participant LD 2/3

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme                                  | Organizing theme                   | Global theme                                     |
|-------------|-------------------------------|---|--|--|------------------------------------|--|
| 89          | R                             | And the disadvantage of owning an electric vehicle when compared to a combustion engine?  | "other disadvantage I see is arguing with middle aged men explaining to me that my battery might die and it will cost me too much money to replace it...after a couple of years I've decided that I've lost interest in trying to justify and explain to gas guzzlers and petrol heads that an EV makes more sense." | Fear & Uncertainty                           | Education                          | Additional Incentives                            |
| 90          | P                             | The disadvantage, personally, other than the charging side, the only other disadvantage I see is arguing with middle aged men explaining to me that my battery might die and it will cost me too much money to replace it...after a couple of years I've decided that I've lost interest in trying to justify and explain to gas guzzlers and petrol heads that an EV makes more sense. It's cheaper to run, it's cheaper in every way other than buying it obviously because the technology is pretty new. But at some point EV's will become cheaper than combustion ones. It's just the way technology goes.   | "It's cheaper to run, it's cheaper in every way"<br><br>"it's cheaper in every way other than buying it obviously because the technology is pretty new. But at some point EV's will become cheaper than combustion ones. It's just the way technology goes. "  | Savings<br><br>Expensive                     | Running Costs<br><br>Selling Price | Purchase Motivators<br><br>Additional Incentives |
| 103         | P                             | ... considering I paid forty thousand for a little Mini, it's very expensive.   | "considering I paid forty thousand for a little Mini, it's very expensive."  | Expensive                                    | Selling Price                      | Additional Incentives                            |
| 109         | R                             | ...why do you think the take up of electric vehicles has been so slow when compared to combustion engines?  | "one of them is obviously cost. They are more expensive, I think we can all agree on that "  | Expensive                                    | Selling Price                      |  |
| 111         | P                             | Ignorance. Well I think one of them is obviously cost. They are more expensive, I think we can all agree on that and the second is ignorance, a lack of knowledge on EV's and the view that your battery could die and it would be very expensive to replace, which realistically is not a valid argument, especially when you have an eight year warranty on your car.   | " a lack of knowledge on EV's and the view that your battery could die and it would be very expensive to replace, which realistically is not a valid argument, especially when you have an eight year warranty on your car"  | Knowledge & Awareness/<br>Fear & Uncertainty | Education                          | Additional Incentives                            |
| 117         | R                             | In the twelfth question I present a list of seven items, seven incentives, which may already be in place. So imagine the below are incentives that are available when purchasing an electric vehicle. Which if any would motivate your purchase? You can choose a maximum of three responses. A rebate which is deducted at the time of purchase, rather than you having to wait months for the grant, it's deducted straight away from the price of the car. A free rapid charger to install at home rather than the standard charger, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, and priority parking for electric vehicles. |  |  |                                    |  |
| 126         | P                             | ...a rebate which is deducted at the time of purchase. I don't think it's done correctly currently, so I have to pay the full price and get my refund, x number of weeks after I've paid or received the car or whatever. It shouldn't be done like that because the initial cost of the car is very expensive especially nowadays with the twelve thousand rebate. So that twelve thousand rebate should be deducted from the cost of the car at point of sale, not refunded to you after you've paid and waited for months. That way you would definitely incentivise more people to buy EV's.  | "a rebate which is deducted at the time of purchase. I don't think it's done correctly currently, so I have to pay the full price and get my refund"   | Duration                                     | Grant process                      | Additional Incentives                            |

Participant LD 3/3

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme    | Organizing theme  | Global theme      |
|-------------|-------------------------------|--|---|----------------|-------------------|-------------------|
| 152         | R                             | ...What is your opinion about the introduction of variable monetary amounts when purchasing an electric vehicle versus a PHEV?...  |   |                |                   |                   |
| 157         | P                             | I agree with you 100%. PHEV's should not be included, sorry, yes, PHEV's, so plug in hybrids should not be included in this grant. I know roughly five people that own PHEV's and none of them charge them. They fill them with petrol or diesel and obviously the engine charges up the battery as it is being used. None of them use the charger at home, none of them plug it in. They all benefitted from a discount of twelve thousand Euro on their brand new car which is ridiculous, it's defeating the purpose. | "plug in hybrids should not be included in this grant."                 | Misallocation  | Equivalent Grants | BEV & PHEV Grants |
| 161         |                               | "They all benefitted from a discount of twelve thousand Euro on their brand new car which is ridiculous, it's defeating the purpose. "   |   |                |                   |                   |
| 180         | P                             | ...A three hundred and fifty kilometre range for an EV in Malta, for me it doesn't make any sense unless it's commercial, it's commercial yes absolutely, agreed. Then there should be incentives for commercial vehicles or companies using EV's for commercial purposes. They should be incentivised to get batteries which have longer ranges...  | "They should be incentivised to get batteries which have longer ranges" | Prioritisation | Distinct Grants   | BEV & PHEV Grants |

Participant CM 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|--|---|-----------------------|-------------------------|-----------------------|
| 7           | R                             | What were your main reasons for purchasing a plug in hybrid?   |   |                       |                         |                       |
| 8           | P                             | First of all I like a lot new technology and so on. Plug in struck the balance of what was newly available at that time and my actual requirement...   | "First of all I like a lot new technology and so on. Plug in struck the balance of what was newly available at that time"   | Technology            | Vehicle Characteristics | Purchase Motivators   |
| 11          | R                             | And the current government scheme, what are the main advantages of the incentives in your opinion?   |   |                       |                         |                       |
| 15          | P                             | ...I see that it regressed a little bit because now I see that it's forcing people to buy fully electric vehicles for which, you know, in my humble opinion, the infrastructure is not ready for it in Malta...  | "the infrastructure is not ready for it in Malta"   | Inadequate            | Infrastructure          | Additional Incentives |
| 17          | P                             | ...we had ordered a car for my wife actually, for the simple reason to benefit from the grant back then, you know...   | "we had ordered a car for my wife actually, for the simple reason to benefit from the grant"  | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 25          | P                             | ...we just ordered it to get the grant before it's discontinued, you know.   | "we just ordered it to get the grant before it's discontinued"  | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 29          | P                             | What other incentives would you introduce to motivate individuals to purchase an electric vehicle or a PHEV?   |   |                       |                         |                       |
| 42          | R                             | I think the most important would be to make it, it sounds contradictory, but to make off peak hourly rates available more during the day I mean, because currently off peak is available between noon and four in the afternoon and between midnight and six am. So if you have an electric vehicle which requires a lot of electricity to charge up, you know, and you're limited to charge it just six hours a night, and four hours during the day, you're just topping it up, you cannot charge it fully you know... | "make off peak hourly rates available more during the day "   | Electricity           | Monetary                | Additional Incentives |
| 44          | P                             | ...I believe the infrastructure is still not ready for, not fully functional and not adequate to cater for fully electric vehicles   | "the infrastructure is still not ready for, not fully functional and not adequate to cater for fully electric vehicles"   | Inadequate            | Infrastructure          | Additional Incentives |
| 49          | P                             | Do you need a garage for such a vehicle?   |   |                       |                         |                       |
| 68          | R                             | It's ideal.  |   |                       |                         |                       |
| 69          | P                             | Not everyone can and not everyone has one  |   |                       |                         |                       |
| 70          | R                             | Not everyone, yes, but that's also part of the infrastructure thing, it's not just the electricity supply, it's the way we have managed to build all sorts of apartments everywhere with almost no access to anyone, so  | "that's also part of the infrastructure thing"  | Inadequate            | Infrastructure          | Additional Incentives |
| 71          | P                             | Would you recommend others to purchase such vehicles?...   |   |                       |                         |                       |
| 79          | R                             | I mean the grant obviously helps to make the decision of what kind of car you're purchasing because the car for my wife was around thirty six, thirty eight thousand, the purchase price, and she'll end up paying eleven thousand less, so that makes a whole difference when buying a car or not.  | "the grant obviously helps to make the decision of what kind of car you're purchasing because the car for my wife was around thirty six, thirty eight thousand, the purchase price, and she'll end up paying eleven thousand less, so that makes a whole difference when buying a car or not" | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 84          | P                             | So that's an advantage of owning a plug in hybrid  |   |                       |                         |                       |
| 97          | R                             | Yes, the range, and the comfort that the electric motor gives you, and silent, it's completely silent...deep down you still feel you're sort of greener than before without an engine running...   | "the comfort that the electric motor gives you, and silent, it's completely silent"   | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 98          | P                             |  | "deep down you still feel you're sort of greener than before without an engine running"   | Eco-friendly          | Environmental           | Purchase Motivators   |
| 99          | P                             |  |   |                       |                         |                       |

Participant CM 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme    | Organizing theme  | Global theme          |
|-------------|-------------------------------|---|---|----------------|-------------------|-----------------------|
| 155         | R                             | ...In your opinion, why do you think the take up of electric vehicles, so, just electric vehicles, has been slow when compared to the sales of ICE vehicles, internal combustion engine vehicles...   |   |                |                   |                       |
| 159         | P                             | Yes, but it's the same thing, the reasons would be a place where to charge, because not everyone has the facility to charge it at home, the infrastructure, definitely yes, that's one of it...And maybe, I don't know, that the grant is given afterwards not beforehand. You know, so people have to fork out the full amount then wait to receive the refund which some people are not happy to do you know... | "the reasons would be a place where to charge, because not everyone has the facility to charge it at home, the infrastructure, definitely yes, that's one of it"                    | Inadequate     | Infrastructure    | Additional Incentives |
| 162         |                               |   | "the grant is given afterwards not beforehand. You know, so people have to fork out the full amount then wait to receive the refund which some people are not happy to do you know" | Duration       | Grant process     |                       |
| 165         | R                             | ...I have a list of seven incentives that may already be in place but imagine the below are incentives that are available when purchasing such a vehicle, so plug in hybrid or electric vehicle. Which if any, would motivate your purchase...  |   |                |                   |                       |
| 176         | P                             | ...the rebate deducted at the time of purchase for some people that could be a deal breaker, you know, because if you don't have the full amount you cannot actually go ahead. The discounted electricity rates are there already but they're not available, you know, widely during the day, so, if someone wants to buy an electric vehicle it was here...  | "the rebate deducted at the time of purchase for some people that could be a deal breaker, you know, because if you don't have the full amount you cannot actually go ahead"        | Duration       | Grant process     | Additional Incentives |
| 177         |                               |   | "The discounted electricity rates are there already but they're not available, you know, widely during the day"   | Electricity    | Monetary          |                       |
| 190         | R                             | What is your opinion about introducing a variable monetary amount when purchasing an electric vehicle versus a PHEV?...   |   |                |                   |                       |
| 194         | P                             | I mean, that would hit the aim of why the grant is given in the first place. I mean it's useless giving a grant to someone to buy a PHEV and he uses the combustion engine only, you know.  | "that would hit the aim of why the grant is given in the first place"   | Prioritisation | Distinct Grants   | BEV & PHEV Grants     |
|             |                               |   | "it's useless giving a grant to someone to buy a PHEV and he uses the combustion engine only"   | Misallocation  | Equivalent Grants |                       |

Participant AM 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme                         | Organizing theme             | Global theme          |
|-------------|-------------------------------|--|---|-------------------------------------|------------------------------|-----------------------|
| 8           | R                             | ...what were your main reasons for purchasing a plug in hybrid?  |   |                                     |                              |                       |
| 10          | P                             | My issue was becoming spending quite a lot on fuel, so I was trying to find an alternative to reducing my expenses every month on fuel.  | "I was trying to find an alternative to reducing my expenses every month on fuel"   | Savings                             | Running Costs                | Purchase Motivators   |
| 12          | R                             | So, the grant scheme, what are the main advantages, the incentive you were given.  |   |                                     |                              |                       |
| 16          | P                             | ...The thing was going for a hybrid car it was quite expensive. So for me, even though I had the eight thousand grant, it was still beyond my expected budget or what I had in mind to do...   | "it was still beyond my expected budget or what I had in mind to do"  | Expensive                           | Selling Price                | Additional Incentives |
| 20          | P                             | ...it helped obviously, I would never have managed to pay that amount of money   | "it helped obviously, I would never have managed to pay that amount of money"   | Rebate                              | Monetary Incentives          | Purchase Motivators   |
| 22          | R                             | Without the grant  |   |                                     |                              |                       |
| 23          | P                             | Of course, definitely not  |   |                                     |                              |                       |
| 46          | R                             | What other incentives, both monetary and non monetary, would you introduce to motivate individuals to purchase such vehicles?  |   |                                     |                              |                       |
| 49          | P                             | First and foremost it's the clean technology...  | "clean technology"  | Eco-friendly/Technology             | Environmental/Vehicle Charac | Purchase Motivators   |
| 56          | P                             | ...going around in Malta, you don't find many places where you can charge your car.  |   |                                     |                              |                       |
| 64          | P                             | ...Sometimes also, the infrastructure is not well supported. I work at Smart City and I've spent two or three years asking when are we getting a charging point, when are we getting a charging point? I used to go near Esplora, but then I had a long walk, I had to ask people to drive me back to my office. It was really annoying and then I had to give up. | "the infrastructure is not well supported."   | Inadequate                          | Infrastructure               | Additional Incentives |
| 71          | P                             | ..the incentive is this, the technology has a big effect, it's a very silent car...  | "the incentive is this, the technology has a big effect"<br>"it's a very silent car"  | Technology<br>Comfort & Performance | Vehicle Characteristics      | Purchase Motivators   |
| 79          | R                             | ...would you recommend others to purchase a hybrid or an electric vehicle?   |   |                                     |                              |                       |
| 81          | P                             | Yes, yes, definitely. However they have to be aware that they have to have provision at home to charge it because there are people who rent flats who have a rented garage and they don't have the supply of electricity so that would definitely be an issue and also the burden on the units of the house.   | "they have to be aware that they have to have provision at home to charge it"   | Inadequate                          | Infrastructure               | Additional Incentives |
| 143         | R                             | And the disadvantages of the PHEV over the combustion engine?  |   |                                     |                              |                       |
| 150         | P                             | ...More infrastructure, there's a need for far more infrastructure. More charging points...  | "there's a need for far more infrastructure. More charging points"  | Inadequate                          | Infrastructure               | Additional Incentives |
| 169         | R                             | ...why do you think the take up of electric vehicles has been slow when compared to a combustion engine vehicle?   |   |                                     |                              |                       |
| 172         | P                             | ...It's the cost, quite an expensive cost. It is, it is a big big big budget, I mean the cars are quite expensive...   | "It's the cost, quite an expensive cost. It is, it is a big big big budget, I mean the cars are quite expensive"  | Expensive                           | Selling Price                | Additional Incentives |
| 180         | P                             | ..But yes, for people, it's like, how am I going for a thirty plus thousand car? And that fear of the lifetime of the battery, you know, the lifetime, will the investment be worth it?  | "yes, for people, it's like, how am I going for a thirty plus thousand car? And that fear of the lifetime of the battery, you know, the lifetime, will the investment be worth it?" | Fear & Uncertainty                  | Education                    | Additional Incentives |

Participant AM 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme             | Organizing theme               | Global theme          |
|-------------|-------------------------------|---|--|-------------------------|--------------------------------|-----------------------|
| 184         | R                             | ...Imagine the below are incentives available when purchasing a PHEV or an electric vehicle. Which if any, would motivate your purchase?...   |  |                         |                                |                       |
| 193         | P                             | ...So definitely, the rebate, discounted electricity rates and the registration tax upon purchase.  | "discounted electricity rate"  | Electricity             | Monetary                       | Additional Incentives |
| 200         | R                             | What is your opinion about the introduction of variable monetary amounts when purchasing an electric vehicle, so a car with only a battery, versus a PHEV which you own.  |  |                         |                                |                       |
| 203         | P                             | ...I would definitely give more priority as benefits, monetary benefits, to those choosing fully electric, definitely...  | "I would definitely give more priority as benefits, monetary benefits, to those choosing fully electric, definitely"   | Prioritisation          | Distinct Grants                | BEV & PHEV Grants     |
| 214         | P                             | ...I would still support hybrid though, enough to make it obvious that you'd still go for a cleaner technology rather than the fuel engine ones. Even the fact that my road tax is what, I believe ten Euro when compared | "I would still support hybrid though, enough to make it obvious that you'd still go for a cleaner technology rather than the fuel engine ones."                        | Prioritisation          | Distinct Grants                | BEV & PHEV Grants     |
| 221         | P                             | I mean my Honda Fit was much more expensive, I mean it was becoming ridiculous, you know. Having a third party insurance, and paying the circular tax was about five hundred, like what?? You know it doesn't make sense. | "it was becoming ridiculous, you know. Having a third party insurance, and paying the circular tax was about five hundred, like what?? You know it doesn't make sense" | Savings                 | Running Costs                  | Purchase Motivators   |
| 225         | P                             | ...my consumption of fuel is still very low, so I'm still helping the environment.  | "consumption of fuel is still very low"<br>"I'm still helping the environment."  | Savings<br>Eco-friendly | Running Costs<br>Environmental | Purchase Motivators   |
| 243         | P                             | ...There has to be a whole push, because at the beginning, I remember writing to the Minister, listen, I invested x amount of money, which is way beyond what I could afford...   |  | Inadequate              | Infrastructure                 | Additional Incentives |
| 244         | P                             | ...to find myself in an environment where I can't support this technology because I can't find anywhere to charge my car...   | "to find myself in an environment where I can't support this technology because I can't find anywhere to charge my car"  | Inadequate              | Infrastructure                 | Additional Incentives |

Participant SG 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme           | Organizing theme | Global theme          |
|-------------|-------------------------------|---|---|-----------------------|------------------|-----------------------|
| 10          | R                             | What were your main reasons for purchasing an electric car?   |   |                       |                  |                       |
| 15          | P                             | ...I work in Valletta and it's a big problem of parking. So I opted for an electric car so that I would be able to park in Valletta and to be more economical.  | "So I opted for an electric car so that I would be able to park in Valletta and to be more economical"  | Savings               | Running Costs    | Purchase Motivators   |
| 17          | R                             | ...what are the main advantages of the current government grant scheme? So the incentives the government has at the moment.   |   |                       |                  |                       |
| 28          | P                             | ...And even the charging stations in Valletta, sometimes they don't work, or you don't find, they're not a lot.   | "the charging stations in Valletta, sometimes they don't work, or you don't find, they're not a lot"  | Inadequate            | Infrastructure   | Additional Incentives |
| 30          | R                             | So it's the infrastructure  |   |                       |                  |                       |
| 31          | P                             | If they want more electric cars going into Valletta they have to increase the charging stations in Valletta.  | "they have to increase the charging stations in Valletta"   | Inadequate            | Infrastructure   | Additional Incentives |
| 43          | R                             | ...The negative qualities of that process (Grant application).  |   |                       |                  |                       |
| 47          | P                             | ...It's a good grant but I think it's taking too long to process.   | "It's a good grant but I think it's taking too long to process"   | Duration              | Grant process    | Additional Incentives |
| 53          | P                             | ...I think they're increasing the price of electric cars when compared to the normal cars. And people will say, I don't care, I'll buy a normal car then.   | "I think they're increasing the price of electric cars when compared to the normal cars. And people will say, I don't care, I'll buy a normal car then"                             | Expensive             | Selling Price    | Additional Incentives |
| 57          | R                             | You already mentioned the fact that you want more parking stations for electric vehicles in Valletta. Is this one of the motivations you would introduce to motivate  |   |                       |                  |                       |
| 61          | P                             | ...put some parking spaces in the public parking, in the public parking available, they put it only for electric cars.  | "put some parking spaces in the public parking, in the public parking available, they put it only for electric car"   | Parking               | Priority         | Additional Incentives |
| 80          | P                             | There is space for charging stations. Maybe they incentivise people who go into Valletta with an electric car and they put some parking or else they give access to those who have an electric car to park in the green bays maybe. | "incentivise people who go into Valletta with an electric car and they put some parking or else they give access to those who have an electric car to park in the green bays maybe" | Parking               | Priority         | Additional Incentives |
| 98          | P                             | ...you have other advantages, because you don't have to, before I used to give petrol, thirty, forty Euro a week. Now I'm charging twice a week and it comes to less than ten Euro. So it makes a difference.                       | "before I used to give petrol, thirty, forty Euro a week. Now I'm charging twice a week and it comes to less than ten Euro. So it makes a difference."                              | Savings               | Running Costs    | Purchase Motivators   |
| 101         | R                             | Your answers are perfectly timed because the next question is the advantages over a combustion engine. So fuel, much less obviously   |   |                       |                  |                       |
| 103         | P                             | Yes, much less, yes. And even like, servicing, when it pops up, it will pop up next year to give a service to the car. With a combustion engine you have to give a service every six months   | "much less, yes"  | Savings               | Running Costs    | Purchase Motivators   |
| 118         | R                             | ...why do you think the take up of electric vehicles has been so slow when compared to combustion engine vehicles?  |   |                       |                  |                       |
| 120         | P                             | I think the mentality, to change the mentality of the people it's very difficult  | "to change the mentality of people's it's very difficult"   | Knowledge & Awareness | Education        | Additional Incentives |

Participant SG 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme    | Organizing theme  | Global theme          |
|-------------|-------------------------------|---|---|----------------|-------------------|-----------------------|
| 156         | R                             | ...So I present a list of seven items, seven incentives, which may already be in place, but imagine you're purchasing a vehicle, and you can choose a maximum of three from this list. Which would motivate your purchase the most? You can choose up to three. A rebate which is deducted at the time of purchase, rather than you having to wait six months or more |   |                |                   |                       |
| 161         | P                             | Yes, I think that's good  | Yes, I think that's good"   | Duration       | Grant process     | Additional Incentives |
| 172         | P                             | ...priority parking for electric vehicles.  | "priority parking for electric vehicles."   | Parking        | Priority          | Additional Incentives |
| 182         | R                             | What is your opinion about the introduction of variable monetary amounts when purchasing an electric vehicle versus a plug in hybrid?   |   |                |                   |                       |
| 187         | P                             | ...No, I think it's fair. If you buy an electric vehicle, a fully electric you get the incentive, if you buy a hybrid, so you're getting both ways, so it doesn't make sense to get an incentive also, if we're going the way to be more clean.   | " I think it's fair. If you buy an electric vehicle, a fully electric you get the incentive, if you buy a hybrid, so you're getting both ways, so it doesn't make sense to get an incentive also" | Prioritisation | Distinct Grants   | BEV & PHEV Grants     |
| 192         | R                             | ...Sometimes people argue that you're incentivising a hybrid so you're not really going green because   |   |                |                   |                       |
| 194         | P                             | That's it, if you're giving plug in hybrids, you're not going green, you're still stuck there.  | " if you're giving plug in hybrids, you're not going green"   | Misallocation  | Equivalent Grants | BEV & PHEV Grants     |

Participant NC2 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme                           | Organizing theme                         | Global theme                                 |
|-------------|-------------------------------|---|---|---------------------------------------|--|--|
| 7           | R                             | ...what were your main reasons for purchasing an electric vehicle?  |   |                                       |  |  |
| 11          | P                             | ...environmental awareness has gone up on the agenda and I thought that I should replace my car and eventually I went for an electric, a full electric vehicle.   | "environmental awareness has gone up on the agenda and I thought that I should replace my car and eventually I went for an electric, a full electric vehicle"   | Eco-friendly                          | Environmental                            | Purchase Motivators                          |
| 13          | R                             | ...And the current grant scheme, what are the main advantages in your opinion?  |   |                                       |  |  |
| 15          | P                             | ...electric cars are still more expensive than, you know, the traditional combustion engine which has been traditional for so many years. So given that the price of the car is relatively more expensive, at least the grant can help cushion a bit and justify you know, going for an electrical and not for a combustion, so there are advantages to it.   | "electric cars are still more expensive than, you know, the traditional combustion engine"<br>" So given that the price of the car is relatively more expensive, at least the grant can help cushion a bit and justify you know, going for an electrical" | Expensive<br>Rebate                   | Selling Price<br>Monetary Incentives     | Additional Incentives<br>Purchase Motivators |
| 20          | R                             | And any disadvantages in your opinion?  |   |                                       |  |  |
| 23          | P                             | ...it was not even waiting for the money, there was even a waiting time to fill in, to do the paperwork, to fill in, to apply for the grant.  |   |                                       |  |  |
| 25          | R                             | So it's more the process  |   |                                       |  |  |
| 26          | P                             | It's the administrative process, it has its disadvantages, plus it takes long to get the grant.   | "it takes long to get the grant"  | Duration                              | Grant process                            | Additional Incentives                        |
| 43          | R                             | ...what other incentives would you introduce to motivate individuals to purchase such vehicles? Both monetary and non monetary.   |   |                                       |  |  |
| 47          | P                             | ...the government should offer, for instance, schemes where you can charge free in the public spaces, at least for the first twelve months, and obviously, the government should increase these public spaces for charging because in my opinion, they are still lacking, too little.   | "the government should offer, for instance, schemes where you can charge free in the public spaces"<br>"the government should increase these public spaces for charging because in my opinion, they are still lacking, too little"                        | Charging<br>Inadequate                | Monetary<br>Infrastructure               | Additional Incentives                        |
| 51          | R                             | And, since you've had your car, would you recommend others to purchase an electrical vehicle?   |   |                                       |  |  |
| 53          | P                             | Yes, I think on a conscious point of view, the simple fact that you're not polluting the environment, makes you feel good about it  | "the simple fact that you're not polluting the environment, makes you feel good about it"   | Eco-friendly                          | Environmental                            | Purchase Motivators                          |
| 67          | R                             | What are the advantages when you compare your ICE vehicle and your electric vehicle?...   |   |                                       |  |  |
| 69          | P                             | In terms of comfort, I would say it's practically the same. Obviously the advantage is you are not polluting...The performance of an electric car is incredible when compared to a combustion engine...   | "the advantage is you are not polluting"<br>"The performance of an electric car is incredible when compared to a combustion engine"   | Eco-friendly<br>Comfort & Performance | Environmental<br>Vehicle Characteristics | Purchase Motivators                          |
| 79          | R                             | ...the disadvantages of owning an electric vehicle compared to a combustion engine vehicle?   |   |                                       |  |  |
| 81          | P                             | I go again back to the charging. I think there are too little charging stations in Malta, the infrastructure is not prepared, and the availability of fast chargers. I think once there is the availability of a faster infrastructure, you can literally plug in, have a coffee and your car is from twenty percent to eighty percent, in ten minutes, that would be a game changer in my opinion. | "I think there are too little charging stations in Malta, the infrastructure is not prepared"   | Inadequate                            | Infrastructure                           | Additional Incentives                        |

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme           | Organizing theme  | Global theme          |
|-------------|-------------------------------|--|---|-----------------------|-------------------|-----------------------|
| 86          | R                             | And in my opinion, the private sector should start providing.  |   |                       |                   |                       |
| 87          | P                             | Yes, definitely. We had even spoken to the Minister about it that he should start giving incentives, for instance, to offices, to office blocks like PWC for example, it's a very clear example. PWC employs five hundred, six hundred people. They have a huge parking space, I think it should be mandatory that in certain spaces that there, certain companies, commercial, need to have facilities for charging. It has to be made easy, I think the minute, with the grants that are being given, I think the minute government makes a bit life easier for the owner of an electric car to have where to charge it, and maybe in a shorter time frame, I think it will make a whole difference on the roads, I would say we will see a surge, in the number of electric cars on the island. | "We had even spoken to the Minister about it that he should start giving incentives, for instance, to offices, to office blocks like PWC for example, it's a very clear example. PWC employs five hundred, six hundred people. They have a huge parking space, I think it should be mandatory that in certain spaces that there, certain companies, commercial, need to have facilities for charging" | Charging              | Monetary          | Additional Incentives |
| 96          | R                             | ...In your opinion, why do you think the take up of electric vehicles has been slow when compared to internal combustion engine vehicles?...   |   |                       |                   |                       |
| 99          | P                             | ...I think the pricing of electric vehicles, even with the grant, is still on the high side especially when compared to ICE engines...   | "I think the pricing of electric vehicles, even with the grant, is still on the high side especially when compared to ICE engines"  | Expensive             | Selling Price     | Additional Incentives |
| 103         | P                             | ...I think it's a change in mentality, so when you come with an electric car it's a complete change in mentality...  | "I think it's a change in mentality, so when you come with an electric car it's a complete change in mentality"   | Knowledge & Awareness | Education         | Additional Incentives |
| 108         | P                             | ...the infrastructure in Sicily is even worse than in Malta when it comes to charging...   | "the infrastructure in Sicily is even worse than in Malta when it comes to charging"  | Inadequate            | Infrastructure    | Additional Incentives |
| 110         | P                             | ...but yes, the lack of facilities, I mean I live in Zebbug. Within a radius of a kilometre there's only two spaces, which no one enforces them and a lot of different cars park which are not there to be charged. And that is, the government should enforce that because it's not fair.   | "but yes, the lack of facilities"   | Inadequate            | Infrastructure    | Additional Incentives |
| 118         | R                             | So, question number twelve, presents a list of seven items that are incentives that may already be in place. But imagine that these are just new and you're buying a new car. Which would motivate your purchase the most? You can choose a maximum of three. I have an idea of which one you will choose first.   |   |                       |                   |                       |
| 122         | P                             | I would choose first number two, a free rapid charger  | "free rapid charger"  | Charging              | Monetary          | Additional Incentives |
| 123         | R                             | So, a rebate that is deducted at the time of purchase.   |   |                       |                   |                       |
| 124         | P                             | That is obviously another...   | "that is obviously another"   | Duration              | Grant process     | Additional Incentives |
| 128         | P                             | ...Priority parking for electric vehicles...   | "Priority parking for electric vehicles"  | Parking               | Priority          | Additional Incentives |
| 132         | R                             | What is your opinion on the introduction of variable monetary amounts when purchasing both vehicles?...  |   |                       |                   |                       |
| 135         | P                             | So I don't think they should have been the same and I think when government removed them I think he removed them too much in a rush because people could not plan etc, But it didn't make sense to have an eleven thousand Euro grant for an electric and a PHEV. Why? Because a PHEV ultimately gives you an electric range of about fifty, sixty kilometres, the rest you have to fill up your fuel tank...  | "I don't think they should have been the same... it didn't make sense to have an eleven thousand Euro grant for an electric and a PHEV. Why? Because a PHEV ultimately gives you an electric range of about fifty, sixty kilometres, the rest you have to fill up your fuel tank"   | Misallocation         | Equivalent Grants | BEV & PHEV Grants     |
| 143         | P                             | Giving a grant on a PHEV makes sense but I don't think it should have been for the same amount. So I don't think government solved much of the environmental issues we have with PHEV's because I think people were buying PHEV's simply for the grant because a fifty kilometre range doesn't make a difference to anyone and I know people who literally don't even charge it, but they got eleven thousand Euro grant just the same. I think it was a bit foolish to treat them the same.   | "Giving a grant on a PHEV makes sense but I don't think it should have been for the same amount"  | Prioritisation        | Distinct Grants   |                       |
| 145         | P                             | Giving a grant on a PHEV makes sense but I don't think it should have been for the same amount. So I don't think government solved much of the environmental issues we have with PHEV's because I think people were buying PHEV's simply for the grant because a fifty kilometre range doesn't make a difference to anyone and I know people who literally don't even charge it, but they got eleven thousand Euro grant just the same. I think it was a bit foolish to treat them the same.   | "I think people were buying PHEV's simply for the grant because a fifty kilometre range doesn't make a difference to anyone and I know people who literally don't even charge it, but they got eleven thousand Euro grant just the same. I think it was a bit foolish to treat them the same"   | Misallocation         | Equivalent Grants | BEV & PHEV Grants     |

Participant MB 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|---|---|-----------------------|-------------------------|-----------------------|
| 8           | R                             | ...What were your main reasons for purchasing a plug in hybrid?   |   |                       |                         |                       |
| 10          | P                             | More environmental conscious and I believe that's the way that the world is going, that the world should be going in the future...  | "more environmental conscious"  | Eco-friendly          | Environmental           | Purchase Motivators   |
| 12          | R                             | ...what are the main advantages of the current government grant scheme?...  |   |                       |                         |                       |
| 14          | P                             | ...it will ease a bit off the the expense of buying an expensive car.   | "it will ease a bit off the the expense of buying an expensive car"   | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 16          | P                             | ...you still have to fork out the whole amount of the car, but you will have something back other than the car. A monetary, financial help.   | "you still have to fork out the whole amount of the car"  | Duration              | Grant process           | Additional Incentives |
| 19          | R                             | The disadvantage of the government scheme? Are there any disadvantages?   |   |                       |                         |                       |
| 21          | P                             | ...I got my car in August and up till today in March, I still don't have the money back. And when I enquired this week I was told a couple of weeks ago they had a six months time frame, for payment, but now that time frame is being ignored because they are taking longer to process the paperwork it seems. | "I got my car in August and up till today in March, I still don't have the money back"  | Duration              | Grant process           | Additional Incentives |
| 36          | R                             | ...So what other incentives would you introduce to motivate individuals to purchase both an electric vehicle and a plug in hybrid?  |   |                       |                         |                       |
| 38          | P                             | First of all monetary, I think the monetary aspect I think the grant being paid out before, because I believe that the word of mouth goes around, the grapevine is very fast...   | "First of all monetary, I think the monetary aspect I think the grant being paid out before, because I believe that the word of mouth goes around, the grapevine is very fast"      | Duration              | Grant process           | Additional Incentives |
| 42          | P                             | ...I believe, why shouldn't as a person who invested so much money in such a car, not being provided with, I'm not saying a particular parking space for my car, but why not reserve  | "I believe, why shouldn't as a person who invested so much money in such a car, not being provided with, I'm not saying a particular parking space for my car, but why not reserve" | Parking               | Priority                | Additional Incentives |
| 44          | R                             | Priority for electric vehicles  |   |                       |                         |                       |
| 45          | P                             | Priority, exactly, for example you have an hour free of charge in this car park for example...  | "Priority, exactly, for example you have an hour free of charge in this car park for example"   | Parking               | Priority                | Additional Incentives |
| 49          | P                             | ...for example in Birkirkara here we have that type of parking, but unfortunately you can only use it whilst charging your car. And there's only one, there are three parking spaces but there's only one charger. So it's no use having three parking spaces but only one car can use it.                        | "in Birkirkara here we have that type of parking, but unfortunately you can only use it whilst charging your car"   | Parking               | Priority                | Additional Incentives |
| 53          | R                             | ...And would you recommend others to purchase such vehicles?  |   |                       |                         |                       |
| 54          | P                             | Yes, I do because first of all it's a very smooth drive, it's very comfortable. I feel that I am responsible not only for the people I am carrying but also for the car, one due to the expense,  | "it's a very smooth drive, it's very comfortable"   | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 59          | P                             | ...It's a very smooth drive, it's quiet.  | "It's a very smooth drive, it's quiet"  | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 100         | R                             | ...In your opinion, why has the take up of electric vehicles been so slow when compared to the sales of combustion engine vehicles?   |   |                       |                         |                       |
| 102         | P                             | Definitely the price, definitely the price...as I told you before, even though there's the grant, initially you have to fork out the full amount.   | "Definitely the price, definitely the price"  | Expensive             | Selling Price           | Additional Incentives |
| 103         | P                             |   | "even though there's the grant, initially you have to fork out the full amount"   | Duration              | Grant process           | Additional Incentives |

Participant MB 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme           | Organizing theme                | Global theme                                 |
|-------------|-------------------------------|---|---|-----------------------|---------------------------------|--|
| 106         | R                             | I present a list of seven items, seven incentives, that may already be in place, but imagine they are all available and they're new, when you go to purchase a plug in hybrid or an electric vehicle. Which will motivate your purchase the most? You can choose a maximum of three. The first one is a rebate which is deducted at the time of purchase, rather than you having to wait six months, eight months, so it's deducted straight away from the price. A free rapid charger to install at home rather than the standard charger, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, and priority parking for electric vehicles. |   |                       |                                 |  |
| 114         | P                             | So I would go for the first one, a rebate, the discounted electricity rates even though they are already discounted, however I had to go through another process for that   | "I would go for the first one, a rebate"<br>"the discounted electricity rates"  | Rebate<br>Electricity | Monetary Incentives<br>Monetary | Purchase Motivators<br>Additional Incentives |
| 124         | R                             | ...What is your opinion about the introduction of variable monetary amounts when purchasing one (BEV) over the other (PHEV)?  |   |                       |                                 |  |
| 130         | P                             | .... I'm very sure that in the future there will be other incentives that most probably will be paying higher so that people will be more encouraged to pay...  |   |                       |                                 |  |
| 134         | P                             | ...I believe that there should be incentives for people who are, in five, seven years' time, this process will start, people will start changing the batteries of the car because it has a lifespan...  | "there should be incentives for people who are, in five, seven years' time, this process will start, people will start changing the batteries of the car" | Charging              | Monetary                        | Additional Incentives                        |
| 148         | P                             | ...Yes, I know, my car, that's a plug in obviously when it finishes the battery it consumes fuel and that's not environmentally friendly. However, the prices of the cars didn't differ, being a PHEV or BEV. So I believe that was the reason why the grant was still the same. The intention I believe is more for the government to incentivise people to start somewhere.   | " I know, my car, that's a plug in obviously when it finishes the battery it consumes fuel and that's not environmentally friendly"                       | Misallocation         | Equivalent Grants               | BEV & PHEV Grants                            |

Participant BB 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|---|--|-----------------------|-------------------------|-----------------------|
| 9           | R                             | ...so what were your main reasons for purchasing an electric vehicle?   |  |                       |                         |                       |
| 11          | P                             | Because I want to reduce the carbon print   | "I want to reduce the carbon print"  | Eco-friendly          | Environmental           | Purchase Motivators   |
| 12          | R                             | ...What are the main advantages of the current government grant scheme?...  |  |                       |                         |                       |
| 16          | P                             | ...if it wasn't for the grant I wouldn't have found it so easy to purchase it. Per se, they're quite expensive  | "if it wasn't for the grant I wouldn't have found it so easy to purchase it"   | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 17          | P                             | ...So the grant gives you the push to go for an EV.   | "they're quite expensive"  | Expensive             | Selling Price           | Additional Incentives |
| 20          | R                             | So it bridges the gap   |  |                       |                         |                       |
| 21          | P                             | It does. It does, because like I said, it's pretty pricey and they've gone up. So I was thinking about getting an EV for a long time. The question was can I afford it?   | "it's pretty pricey and they've gone up"   | Expensive             | Selling Price           | Additional Incentives |
| 28          | R                             | And the current government grant scheme, are there any disadvantages?   |  |                       |                         |                       |
| 29          | P                             | Yes, they take long to pay you back. It took me eight months to get my money... (the salesperson) told me it's taking so long that people are taking loans to be able to afford an electric vehicle. They take a loan against the grant of twelve thousand.                     | "they take long to pay you back. It took me eight months to get my money"  | Duration              | Grant process           | Additional Incentives |
| 33          | R                             | All right. So they know they have to fork out.  |  |                       |                         |                       |
| 34          | P                             | Literally, because like that they would be able to afford purchasing an EV  |  |                       |                         |                       |
| 106         | R                             | ...what other incentive both monetary or non monetary, would you introduce to motivate individuals to purchase an electric vehicle?   |  |                       |                         |                       |
| 109         | P                             | Very simple. More plug in stations around the country, there aren't enough...I can only think of two places where I know there are, which is Sliema and, I think, Mellieha. I don't know of any other places to be honest, where I can go in and charge my vehicle if needs be. | "More plug in stations around the country, there aren't enough"  | Inadequate            | Infrastructure          | Additional Incentives |
| 114         | R                             | This is the general consensus that the infrastructure lacks when it comes to  |  |                       |                         |                       |
| 115         | P                             | We're not ready Owen. The grant is not enough, the country is not ready. We don't have the infrastructure.  | "The grant is not enough, the country is not ready. We don't have the infrastructure"  | Inadequate            | Infrastructure          | Additional Incentives |
| 117         | R                             | So the technology of these cars are very advanced and then you have a system in Malta, the infrastructure which is totally the opposite. They have to be at par   |  |                       |                         |                       |
| 119         | P                             | Absolutely. And they keep promising everybody, every budget, that in five years' time we're going to have five hundred stations. Where are they?  | "they keep promising everybody, every budget, that in five years' time we're going to have five hundred stations. Where are they?" | Inadequate            | Infrastructure          | Additional Incentives |
| 128         | P                             | ...And unless a person has a garage at his disposal, where he can plug in his EV, he can't get an electric vehicle. Because there's simply nowhere he can plug it in. You know? So you need to have a garage.   | "unless a person has a garage at his disposal, where he can plug in his EV, he can't get an electric vehicle"                      | Inadequate            | Infrastructure          | Additional Incentives |
| 151         | R                             | And what are the advantages of owning an electric vehicle versus a combustion engine vehicle?   |  |                       |                         |                       |
| 153         | P                             | ...the first thing that comes to mind is the smoothness of the engine. There's no engine really just a battery, so when you put down the window you don't hear that noise.  | "the first thing that comes to mind is the smoothness of the engine"   | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 154         | P                             | Noise is pollution. It's so smooth, it's so quiet.  | "when you put down the window you don't hear that noise. Noise is pollution. It's so smooth, it's so quiet"                        | Eco-friendly          | Environmental           | Purchase Motivators   |

Participant BB 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme        | Organizing theme    | Global theme          |
|-------------|-------------------------------|---|--|--------------------|---------------------|-----------------------|
| 223         | R                             | ...why do you think the take up of electric vehicles has been slow when compared to combustion engine vehicles?   |  |                    |                     |                       |
| 228         | P                             | ...people are scared of the challenge of owning, you know an electric vehicle and not getting used to it. That scares people ok, some people will tell you I don't have a garage so for me it's not going to work...  | "people are scared of the challenge of owning, you know an electric vehicle and not getting used to it"  | Fear & Uncertainty | Education           | Additional Incentives |
| 245         | P                             | ...there aren't many stations either even in Sicily. In Sicily unfortunately in this respect they're very much like Malta. There aren't enough stations.  | "there aren't many stations either even in Sicily. In Sicily unfortunately in this respect they're very much like Malta. There aren't enough stations" | Inadequate         | Infrastructure      | Additional Incentives |
| 255         | R                             | ...Imagine the below are incentives that are available when purchasing an electric vehicle. Which if any would motivate your purchase?...number one a rebate which is deducted at the time of purchase rather than you having to wait months for the rebate. A free rapid charger to install at home rather than the standard charger, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase and priority parking for electric vehicles. |  |                    |                     |                       |
| 262         | P                             | Difficult, but the rebate for sure, no registration tax, and discounted electricity rates. Plus the priority parking I like, but it's ok. I wish I had four but you said three so it's ok.  | "the rebate for sure"  | Rebate             | Monetary Incentives | Purchase Motivators   |
| 267         | P                             | ...priority parking is very important to me so basically I would give up the discounted electricity rates and go for the priority parking.  | "priority parking is very important to me so basically I would give up the discounted electricity rates and go for the priority parking"               | Parking            | Priority            | Additional Incentives |
| 273         | R                             | ...So, the last question. So last year you had two types of electric vehicles which had the same grant, which was eleven thousand. So a plug in hybrid, which has like forty or fifty kilometres of range, of electric range, had the same grant as a fully electric vehicle. And some people argue, and rightly so, that that is unfair because an electric vehicle should have priority over a PHEV. Why are you giving them the same incentive?  |  |                    |                     |                       |
| 279         | P                             | One hundred percent agree. One hundred percent. I don't think a plug in hybrid should have an electric grant on it. Or at least a minimal one, because ultimately they still have a combustion engine and they're still harming the environment.  | "I don't think a plug in hybrid should have an electric grant on it."  | Misallocation      | Equivalent Grants   | BEV & PHEV Grants     |
| 282         | R                             | Which defeats the whole purpose of the scheme in my opinion.  |  |                    |                     |                       |
| 283         | P                             | They want the best of both worlds, why should they be rewarded? They always have Plan B, I never have Plan B if I'm without a battery.  | "They want the best of both worlds, why should they be rewarded?"  | Misallocation      | Equivalent Grants   | BEV & PHEV Grants     |

Participant GB 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme          | Organizing theme            | Global theme          |
|-------------|-------------------------------|--|---|----------------------|-----------------------------|-----------------------|
| 7           | R                             | What were your reasons for purchasing a PHEV?  |   |                      |                             |                       |
| 8           | P                             | From my side, it was the next way forward because I wasn't ready to go for electric and I'll tell you why. With an electric car I would be full of anxiety and looking at the battery all the time to make sure it had enough charge. So with a plug in hybrid I felt safe but at the same time it is not a diesel or a full petrol, although my hybrid has a petrol engine as well. That was my reason in making a step towards getting rid of my diesel engine and getting a plug in. There was also the government grant and that helped too          | "I wasn't ready to go for electric and I'll tell you why. With an electric car I would be full of anxiety and looking at the battery all the time to make sure it had enough charge. So with a plug in hybrid I felt safe but at the same time it is not a diesel or a full petrol" | Fear & Uncertainty   | Education                   | Additional Incentives |
| 12          |                               |  | "There was also the government grant and that helped too"   | Rebate               | Monetary Incentives         | Purchase Motivators   |
| 14          | R                             | ...What is the advantage of the grant in your opinion?   |   |                      |                             |                       |
| 16          | P                             | ...the electric cars are still way too expensive. Next door is a showroom and an MG is selling for forty thousand, which is not a joke for an MG 4   | "the electric cars are still way too expensive."  | Expensive            | Selling Price               | Additional Incentives |
| 19          | P                             | With the government incentive you can go for a better car and when you eventually receive them back, you'll be on the same scale, and yet owning a good brand of car, without going for, for example, a French car.  | "With the government incentive you can go for a better car"   | Rebate               | Monetary Incentives         | Purchase Motivators   |
| 47          | R                             | ...And are there any other incentives that you would introduce to motivate people to buy an electric vehicle? Any other incentive, both monetary and non monetary? Not necessarily monetary.   |   |                      |                             |                       |
| 55          | P                             | ...Maybe more charging points, those yes, more public charging points which should also be free of charge. All of them cost money, there are only about two that are free of charge, one in Ta' Xbiex I think, and one in Cirkewwa.  | "Maybe more charging points, those yes, more public charging points which should also be free of charge"  | Inadequate           | Infrastructure              | Additional Incentives |
| 90          | R                             | What are the advantages of the vehicle you have now, to the one you had before?...   |   |                      |                             |                       |
| 92          | P                             | ...fuel and the noise. Listen, it's true! Once you get used to it you start to realise just how noisy the other cars are.  | "fuel and noise"  | Eco-friendly/Savings | Environmental/Running Costs | Purchase Motivators   |
| 103         | R                             | In your opinion why do you think that the take up of electric vehicles has been slow, although now admittedly sales have picked up   |   |                      |                             |                       |
| 105         | P                             | To electric vehicles?  |   |                      |                             |                       |
| 106         | R                             | Yes  |   |                      |                             |                       |
| 107         | P                             | They will remain slow because the Maltese are not ready to make the change to full electric...   | "the Maltese are not ready to make the change to full electric"   | Fear & Uncertainty   | Education                   | Additional Incentives |
| 112         |                               |  | "are not ready to make the change, not now and not in the near future either"   | Fear & Uncertainty   | Education                   |                       |
| 113         | P                             | ...But you still find people who are not ready to make the change, not now and not in the near future either. And we get a lot of customers who don't have the means to charge at home. People living in Sliema, St Julians, in apartments which only have a car space which does not have electricity...  | "don't have the means to charge at home. People living in Sliema, St Julians, in apartments which only have a car space which does not have electricity"  | Inadequate           | Infrastructure              | Additional Incentives |
| 122         | R                             | ...Now the next question lists seven incentives, that may already be available. But imagine that you go into a showroom and you don't know about them. You will be asked which you prefer the most and you will have to choose three. A rebate to be deducted at the time of purchase, without having to wait months for the money. A free rapid charger to be installed at home, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase and priority parking for electric vehicles. |   |                      |                             |                       |

Participant GB 2/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme    | Organizing theme    | Global theme          |
|-------------|-------------------------------|--|--|----------------|---------------------|-----------------------|
| 133         | P                             | ...The rebate is a good incentive so yes, I would say yes to that. The bus lane, electric cars can drive in the bus lane, but not plug in hybrids, so that would be an option that I would choose.   | "The rebate is a good incentive so yes"  | Rebate         | Monetary Incentives | Purchase Motivators   |
| 137         | P                             | I could have that if I got a separate meter, so it's my fault that I don't have it.  |  |                |                     |                       |
| 138         | R                             | There are some people who say that getting a separate meter is expensive in itself.  |  |                |                     |                       |
| 139         | P                             | The separate meter must be installed next to your existing meter and I didn't want them to use the chaser at home, and I decided to do without. However, if I were given the option and it would not need to be next to the existing meter, then I would go for it, yes...   | "The separate meter must be installed next to your existing meter and I didn't want them to use the chaser at home, and I decided to do without"                       | Electricity    | Monetary            | Additional Incentives |
| 145         | R                             | ...What is your opinion on the introduction of variable monetary incentives, a pro rata rate according to the range of the car?  |  |                |                     |                       |
| 147         | P                             | In the current situation, where there is no grant at all on PHEV's I believe that yes, there should be some sort of incentive. Even if it is tied to the car's range, it would be quite fair as it would be calculated on a pro rata basis. At least it would be helping people to purchase the vehicle, knowing that they will be getting back some of the money. | "In the current situation, where there is no grant at all on PHEV's I believe that yes, there should be some sort of incentive. Even if it is tied to the car's range" | Prioritisation | Distinct Grants     | BEV & PHEV Grants     |

Participant YSC 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme           | Organizing theme            | Global theme          |
|-------------|-------------------------------|--|---|-----------------------|-----------------------------|-----------------------|
| 7           | R                             | What were your main reasons for purchasing an electric vehicle?  |   |                       |                             |                       |
| 8           | P                             | One of the reasons for purchasing an electric vehicle is that it is more economical than fuel.   | "the reasons for purchasing an electric vehicle is that it is more economical than fuel"  | Savings/Eco-friendly  | Running Costs/Environmental | Purchase Motivators   |
| 9           | R                             | What are the main advantages of the current government grant scheme?   |   |                       |                             |                       |
| 11          | P                             | ...getting the money back, it was a good incentive in itself, and it brings down the cost of buying a new electric car.  | "getting the money back, it was a good incentive in itself"   | Rebate                | Monetary Incentives         | Purchase Motivators   |
| 14          | R                             | ...and any disadvantages of the grant scheme?  |   |                       |                             |                       |
| 15          | P                             | One of the disadvantages is that you would not know how much funds are left from the scheme.   | "One of the disadvantages is that you would not know how much funds are left from the scheme"   |                       |                             |                       |
| 24          | R                             | ...the negative qualities of the grant process?  |   |                       |                             |                       |
| 25          | P                             | I think one of the negative qualities is that you have to pay the total price of the car up front and then you get refunded but you don't know actually when so it might be a few weeks or months, it depends.   | "you have to pay the total price of the car up front and then you get refunded but you don't know actually when so it might be a few weeks or months, it depends" | Duration              | Grant process               | Additional Incentives |
| 28          | R                             | And what other incentives both monetary and non monetary, would you introduce to motivate individuals to purchase such vehicles?   |   |                       |                             |                       |
| 30          | P                             | I think having a better infrastructure would definitely help and motivate others to buy an electric vehicle. Providing more charging pillars and schemes, membership with pay per use, not membership, sorry, not a monthly membership but a pay per use. And they have to be reliable as well. And also offering home chargers with a special rate.   | "I think having a better infrastructure would definitely help and motivate others to buy an electric vehicle"   | Inadequate            | Infrastructure              | Additional Incentives |
| 33          |                               |  | " also offering home chargers with a special rate"  | Charging              | Monetary                    |                       |
| 39          | R                             | Would you recommend others to purchase electric vehicles?  |   |                       |                             |                       |
| 40          | P                             | Yes, I would, I find it, as I said, more economical, and the fact that you can charge your car while you are at home, in your garage, or while you are at work, sometimes I do that as well, and for me not going to the petrol station is a plus.   | "I find it, as I said, more economical"   | Savings/Eco-friendly  | Running Costs/Environmental | Purchase Motivators   |
| 45          | R                             | Any challenges you've experienced since owning an electric vehicle?  |   |                       |                             |                       |
| 49          | P                             | ...challenges I find when charging outside, is that sometimes the parking places are taken up by ICE cars, and charging pillars are not functioning properly.  | "charging pillars are not functioning properly"   | Inadequate            | Infrastructure              | Additional Incentives |
| 52          | R                             | ...what are the advantages of owning an electric vehicle when compared to a combustion engine?   |   |                       |                             |                       |
| 53          |                               |  | "I like how smooth it is"   | Comfort & Performance | Vehicle Characteristics     |                       |
| 53          | P                             | I like how smooth it is and also the fact that I'm cutting on emissions, that's something positive I think from owning an EV car. The maintenance costs of an EV have been very little when compared to maintenance costs of an ICE car, such as oil changes, and spark plugs, fuel filters. And also, driving on the bus lane, sometimes, if there's a bus lane, and also when going, finding parking bays for electric vehicles obviously whilst you're charging them. | "also the fact that I'm cutting on emissions, that's something positive I think from owning an EV car"  | Eco-friendly          | Environmental               | Purchase Motivators   |
| 54          |                               |  | "The maintenance costs of an EV have been very little when compared to maintenance costs of an ICE car"   | Savings               | Running Costs               |                       |
| 58          | R                             | And the disadvantages of owning an electric vehicle when compared to an ICE vehicle?   |   |                       |                             |                       |
| 59          | P                             | As I mentioned before, the infrastructure in Malta needs to be much much better...   | "the infrastructure in Malta needs to be much much better"  | Inadequate            | Infrastructure              | Additional Incentives |

Participant YSC 2/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme        | Organizing theme  | Global theme          |
|-------------|-------------------------------|--|--|--------------------|-------------------|-----------------------|
| 70          | R                             | And in your opinion, why do you think the take up of electric vehicles has been so slow when compared to ICE vehicles?   |  |                    |                   |                       |
| 72          | P                             | I think people are not keen on changing to electric vehicles, they fear that they may end up without battery, obviously the cost of an electric vehicle is not cheap...  | "people are not keen on changing to electric vehicles, they fear that they may end up without battery"                               | Fear & Uncertainty | Education         | Additional Incentives |
| 73          |                               |  | "obviously the cost of an electric vehicle is not cheap"   | Expensive          | Selling Price     |                       |
| 77          | R                             | -----<br>So I present a list of seven incentives that may already be in place, but imagine going into a showroom and these seven incentives are available for you to buy. Which, if any would you choose that would motivate your purchase?...   |  |                    |                   |                       |
| 85          |                               |  | "I would go for the rebate which is deducted at the time of purchase"  | Duration           | Grant process     |                       |
| 85          | P                             | ...as I mentioned, I would go for the rebate which is deducted at the time of purchase, a free rapid charger to install at home, because I have a standard charger, but it takes like ten hours for it to be fully charged. And, either discounted electricity rates or priority parking. Between the two I think I would choose priority parking. | "a free rapid charger to install at home, because I have a standard charger, but it takes like ten hours for it to be fully charged" | Charging           | Monetary          | Additional Incentives |
| 88          |                               |  | "I would choose priority parking"  | Parking            | Priority          |                       |
| 89          | R                             | ...So what is your opinion about the introduction of variable monetary amounts when purchasing an electric vehicle versus a plug in hybrid?...   |  |                    |                   |                       |
| 93          | P                             | I think it would make more sense, because driving an electric vehicle you can't really do otherwise if you don't have, I mean you can't change to fuel like the PHEV, so   | "It would make more sense"   | Prioritisation     | Distinct Grants   | BEV & PHEV Grants     |
| 95          | R                             | So you find it unfair that they have the same amount?  |  |                    |                   |                       |
| 96          | P                             | The same amount, yes of course.  | The same amount, yes of course"  | Misallocation      | Equivalent Grants | BEV & PHEV Grants     |

Participant JG 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme                 | Organizing theme              | Global theme          |
|-------------|-------------------------------|---|--|-----------------------------|-------------------------------|-----------------------|
| 11          | R                             | What were your main reasons for purchasing a plug in hybrid?  |  |                             |                               |                       |
| 12          | P                             | One of the main points was the reason for the grant, two, the technology also the advanced technology...the grant was the selling point.  | "the technology also the advanced technology"  | Rebate                      | Monetary Incentives           | Purchase Motivators   |
| 14          |                               | -----   | "the grant was the selling point"  | Technology                  | Vehicle Characteristics       |                       |
| 17          | R                             | ...what was the advantage of the scheme, what was the incentive   |  |                             |                               |                       |
| 19          | P                             | The advantage was because getting refunded the twelve thousand was, I could emphasise more on the specs of the vehicle  | "getting refunded the twelve thousand was, I could emphasise more on the specs of the vehicle"   | Rebate                      | Monetary Incentives           | Purchase Motivators   |
| 35          | R                             | What other incentives, both monetary and non monetary would you introduce to motivate individuals to purchase such vehicles, both electric and PHEV   |  |                             |                               |                       |
| 37          | P                             | Incentives like more electric points in my opinion.   | "Incentives like more electric points"   | Charging                    | Monetary                      | Additional Incentives |
| 38          | R                             | More charging stations?   |  |                             |                               |                       |
| 39          | P                             | Yes. Unfortunately in Malta only if I'm aware of three locations and very limited.  | "Unfortunately in Malta only if I'm aware of three locations and very limited"   | Inadequate                  | Infrastructure                | Additional Incentives |
| 43          | R                             | And would you recommend others to purchase such vehicles?   |  |                             |                               |                       |
| 44          | P                             | The main point I would but with conditions. Like, they have to be garaged, they have to have a charging point at home because I know people who bought a hybrid and they don't have the access to charging their vehicles so they leave it on petrol  | "they have to have a charging point at home because I know people who bought a hybrid and they don't have the access to charging their vehicles" | Inadequate                  | Infrastructure                | Additional Incentives |
| 53          | R                             | ...question number eight, which is the challenges you experienced, so you would prefer more range.  |  |                             |                               |                       |
| 55          | P                             | Definitely, definitely, especially if you go overseas, in Sicily there are no charging points   | "in Sicily there are no charging points"   | Inadequate                  | Infrastructure                | Additional Incentives |
| 56          | R                             | Really? The infrastructure is worse than Malta? Kind of?  |  |                             |                               |                       |
| 58          | P                             | ...I've been to Sicily with the car and just one place I found where to charge it. In one particular hotel.   | "I've been to Sicily with the car and just one place I found where to charge it"   | Inadequate                  | Infrastructure                | Additional Incentives |
| 98          | R                             | ...In your opinion why do you think the take up of electric vehicles has been so slow when compared to internal combustion engine vehicles?   |  |                             |                               |                       |
| 100         | P                             | I think they need to market it more, they need to do more marketing, more points  | "I think they need to market it more, they need to do more marketing"  | Knowledge & Awareness       | Education                     | Additional Incentives |
| 101         | R                             | Points as in more charging points?  |  |                             |                               |                       |
| 102         | P                             | Charging points yes, because it's an issue in Malta. And automatically people will be encouraged to, sort of, you know, to go for them.   | "Charging points yes, because it's an issue in Malta"  | Inadequate                  | Infrastructure                | Additional Incentives |
| 104         | R                             | ...question number twelve, I present seven incentives. So imagine you go into a showroom to buy a PHEV or an electric vehicle, and you have these seven incentives. Some of them may already be in place but imagine they're all available and all new. You have a choice of three, which three would you choose? A rebate which is deducted at the time of purchase, one, a free rapid charger to install at home rather than the standard charger, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase and priority parking for electric vehicles. |  |                             |                               |                       |
| 112         | P                             | ...one of them would be the rebate deducted at the time of purchase. Two, something that is ongoing, is discounted electricity rates...and the third one if possible no registration tax on purchase. Those are all of them expensive, but the others all make sense.   | "the rebate deducted at the time of purchase"<br><br>"something that is ongoing, is discounted electricity rates"                                | Duration<br><br>Electricity | Grant process<br><br>Monetary | Additional Incentives |

Participant JG 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme    | Organizing theme | Global theme      |
|-------------|-------------------------------|---|---|----------------|------------------|-------------------|
| 119         | R                             | ...What is your opinion about the introduction of variable monetary amounts between the two (BEV & PHEV)?...  |   |                |                  |                   |
| 133         | P                             | ...Pro rata. I think yes I agree with your point, because the higher the range, the more they should get some incentive...  | "Pro rata. I think yes I agree with your point"   | Prioritisation | Distinct Grants  | BEV & PHEV Grants |
|             |                               |   | "the higher the range, the more they should get some incentive"   | Prioritisation |                  |                   |
| 139         | P                             | ...they (PHEV drivers) have peace of mind that they have a few days without charging it. So that I think would, if the government had to look into this consideration, give advantage to the mileage... | "So that I think would, if the government had to look into this consideration, give advantage to the mileage" | Prioritisation | Distinct Grants  | BEV & PHEV Grants |

Participant SA 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme                          | Organizing theme                             | Global theme          |
|-------------|-------------------------------|---|--|--------------------------------------|--|-----------------------|
| 12          | R                             | ...What were your main reasons for purchasing a plug in hybrid?   |  |                                      |  |                       |
| 14          | P                             | Basically because of sustainability reasons. It was always at the back of my mind that at some point in time I had to move forward and start giving a contribution to society and also hopefully to make some savings to my fuel costs as well. | "Basically because of sustainability reasons"  | Eco-friendly                         | Environmental                                | Purchase Motivators   |
| 15          |                               |   | "also hopefully to make some savings to my fuel costs as well"   | Savings                              | Running Costs                                |                       |
| 17          | R                             | And the grant scheme itself, what were the advantages of it? As in, the incentives?   |  |                                      |  |                       |
| 18          | P                             | Obviously it brought me to a situation where I could financially afford the car...  | "it brought me to a situation where I could financially afford the car"  | Rebate                               | Monetary Incentives                          | Purchase Motivators   |
| 20          | R                             | ...any disadvantages? Of the incentives?  |  |                                      |  |                       |
| 21          | P                             | The incentives themselves I don't see any disadvantages but I would have liked it to be of a higher value considering the total value of the car I purchased.   | "I would have liked it to be of a higher value considering the total value of the car I purchased"   | Expensive                            | Selling Price                                | Additional Incentives |
| 23          | R                             | Ok, so you wanted it like a pro rata rate for a bigger car?   |  |                                      |  |                       |
| 24          | P                             | Like a pro rata or percentages  |  |                                      |  |                       |
| 33          | R                             | ...what other incentives, both monetary or non monetary, would you introduce to motivate individuals to purchase such vehicles?...  |  |                                      |  |                       |
| 38          | P                             | ...Maybe some incentive related to servicing, maintenance of the vehicle, might also be an incentive itself...  |  |                                      |  |                       |
| 40          | R                             | And do you recommend others to purchase such vehicles?  |  |                                      |  |                       |
| 41          | P                             | Yes, definitely, definitely. It is an efficient vehicle and it gives you much more, for example, than the previous vehicle that I had, functionality, smooth drive, noiseless and obviously, the main reason, it emits, less emissions, yes.    | "it gives you much more, for example, than the previous vehicle that I had, functionality, smooth drive"   | Technology/Comfort & Performance     | Vehicle Characteristics                      | Purchase Motivators   |
| 42          |                               |   | "noiseless and obviously, the main reason, it emits, less emissions, yes"  | Eco-friendly                         | Environmental                                |                       |
| 50          | R                             | And when you're comparing the PHEV and a combustion engine, you previously owned, what are the advantages?...   |  |                                      |  |                       |
| 59          | P                             | ...other advantages I practically mentioned, the noise, the efficiency of the car, the fact that I'm contributing to society from a sustainability point of view.   | "the efficiency of the car"<br>"I'm contributing to society from a sustainability point of view"   | Savings/Eco-friendly<br>Eco-friendly | Running costs/Environmental<br>Environmental | Purchase Motivators   |
| 61          | R                             | And any disadvantages when you compare it to your previous combustion engine vehicle?   |  |                                      |  |                       |
| 62          | P                             | The other disadvantage is that there are not enough, and it is not so clear where you can charge your vehicle...  | "not so clear where you can charge your vehicle"   | Inadequate                           | Infrastructure                               | Additional Incentives |
| 66          | R                             | And in your opinion, why do you think the take up of electric vehicles has been so slow when compared to combustion engines?  |  |                                      |  |                       |
| 68          |                               |   | "The cost probably"  | Expensive                            | Selling Price                                |                       |
| 69          | P                             | The cost probably, and the second one, the education... Probably the education is also an issue. I don't think there are enough people understanding the repercussions and the consequences of using non-electric vehicles...                   | "Probably the education is also an issue. I don't think there are enough people understanding the repercussions and the consequences of using non-electric vehicles" | Knowledge & Awareness                | Education                                    | Additional Incentives |

Participant SA 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme             | Organizing theme     | Global theme          |
|-------------|-------------------------------|---|--|-------------------------|----------------------|-----------------------|
| 118         | R                             | I present a list of seven incentives that may already be in place, but imagine that you go into a showroom and they are offered to you for the first time. Which if any, would you choose, would motivate you the most to purchase the vehicle? You can choose a maximum of three. So, a rebate which is deducted at the time of purchase, rather than you having to wait to get the rebate after a few months. A free rapid charger to install at home, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, priority parking for electric vehicles, or a PHEV. |  |                         |                      |                       |
| 125         | P                             | A rebate which is deducted at the time of purchase, discounted electricity rates...   | "A rebate which is deducted at the time of purchase"                                     | Duration                | Grant process        | Additional Incentives |
| 132         | P                             | ...a free rapid charger then.   | "discounted electricity rates"<br>"a free rapid charger"                                 | Electricity<br>Charging | Monetary<br>Monetary | Additional Incentives |
| 138         | R                             | ...What is your opinion on introducing variable monetary amounts when purchasing the two (PHEV or BEV)?...  |  |                         |                      |                       |
| 143         | P                             | ...So, at this stage we are in I would definitely have a grant for PHEV as well because it's a very good step forward...  | "I would definitely have a grant for PHEV as well because it's a very good step forward" | Prioritisation          | Distinct Grants      | BEV & PHEV Grants     |
| 153         | P                             | ...A PHEV should have a base itself as well of incentive...   | "A PHEV should have a base itself as well of incentive"                                  | Prioritisation          | Distinct Grants      | BEV & PHEV Grants     |

Participant HC 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|--|---|-----------------------|-------------------------|-----------------------|
| 18          | R                             | So, what were your main reasons for purchasing an electric vehicle?  |   |                       |                         |                       |
| 19          | P                             | I had a couple of reasons. First of all it was the experience of driving an electric car.  |   |                       |                         |                       |
| 21          | R                             | You have to drive an electric car to know what I'm talking about.  |   |                       |                         |                       |
| 22          | P                             | Yes exactly<br>It's exciting to drive an electric car. It's suave. Secondly I'm a gadget guy, I like new things and I like to try out these gadgets and stuff so I was enthusiastic about an electric car.   | "It's exciting to drive an electric car. It's suave"  | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 25          | P                             | ...I wanted to minimise expenses, mostly the licence, and of course the running costs, which of course were achieved.  | "I'm a gadget guy, I like new things and I like to try out these gadgets and stuff so I was enthusiastic about an electric car"   | Technology            |                         |                       |
| 28          | R                             | And the advantage of the incentive of the government?  | "I wanted to minimise expenses, mostly the licence, and of course the running costs"  | Savings               | Running Costs           | Purchase Motivators   |
| 29          | P                             | Yes, of course, that also motivated me, yes, it was a big help as well.  | "Yes, of course, that also motivated me"  | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 62          | R                             | So, what other incentives both monetary and non monetary, would you introduce to motivate individuals to purchase electric vehicles?   |   |                       |                         |                       |
| 65          | P                             | ...What I would improve is the charging facilities, the public charging facilities and, myself I have never charged on a public charger because I have a drive in, I just park and plug into the wall charger which was supplied free of charge with the car, or at least it was part of the cost of the car which is really good. That is a point which I should have mentioned actually. That the agents who sell the EV's should offer the wall charger as part of, or a very reduced price on the wall charger. Because it's so practical and so comfortable | "What I would improve is the charging facilities, the public charging facilities"   | Inadequate            | Infrastructure          |                       |
| 69          | P                             | And faster to charge as well.  | "the agents who sell the EV's should offer the wall charger as part of, or a very reduced price on the wall charger"  | Charging              | Monetary                | Additional Incentives |
| 71          | R                             | Obviously it's much faster, yes...   |   |                       |                         |                       |
| 72          | P                             | ...And the second thing is, it's ridiculous almost, it almost makes me angry that when I installed the EV meter at twelve cents nine, which is a good rate, they charge you a monthly fee for having that meter there, it defeats the purpose.   | "it's ridiculous almost, it almost makes me angry that when I installed the EV meter at twelve cents nine, which is a good rate, they charge you a monthly fee for having that meter there, it defeats the purpose" | Electricity           | Monetary                | Additional Incentives |
| 83          | P                             | ...Enemalta, there was an offer, which is good, that off peak, at certain hours, you can charge the car, this is from noon to four o'clock in the afternoon every day, and from midnight to six am every day, and Sundays all day.   |   |                       |                         |                       |
| 88          | P                             | ...another incentive would be of course, if they could increase the off peak hours or say Saturday, for example, why not have Saturday all day as well?  | "another incentive would be of course, if they could increase the off peak hours"   | Electricity           | Monetary                | Additional Incentives |
| 90          | R                             | Increase off peak, ok. I've had this comment as well, before. Especially the meter fee and the off peak hours.   |   |                       |                         |                       |
| 92          | P                             | But mostly the meter fee. Because at this point I'm considering of returning it...   | "But mostly the meter fee. Because at this point I'm considering of returning it"   | Electricity           | Monetary                | Additional Incentives |
| 101         | R                             | And any challenges you've experienced since owning these vehicles?   |   |                       |                         |                       |
| 105         | P                             | ...it's a breeze, very easy to drive, very comfortable, no stress  | "it's a breeze, very easy to drive, very comfortable, no stress"  | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 106         | R                             | ...the next question asks what is the advantage of owning these vehicles, in your case electric and even a hybrid, when compared to an ICE vehicle...  |   |                       |                         |                       |
| 109         | P                             | The advantages are the response, the acceleration, the performance of the car itself...  | "The advantages are the response, the acceleration, the performance of the car itself"  | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |

Participant HC 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme           | Organizing theme | Global theme          |
|-------------|-------------------------------|---|---|-----------------------|------------------|-----------------------|
| 120         | P                             | ...what's better in an EV or a PHEV than an ICE car, is obviously as I said the performance, the economy, the overall running economy...  | "the economy, the overall running economy"  | Savings               | Running Costs    | Purchase Motivators   |
| 127         | P                             | ...the actual service which normally the EV is much less because you don't have oil changes and filters and all that, so it will be much less...  | "the actual service which normally the EV is much less because you don't have oil changes and filters and all that, so it will be much less"  | Savings               | Running Costs    | Purchase Motivators   |
| 133         | P                             | ...So the financial economical side of it also comes into play. Recently I told my brother to purchase an EV and he actually purchased it last week. And when he worked it out, because a bank, a local bank, BOV is offering an interest free loan on the car, absolutely, So it's ten years, you pay zero interest. He worked it out at just below two hundred Euro a month to pay back over ten years. |   |                       |                  |                       |
| 138         | R                             | You pay that in fuel sometimes with an ICE vehicle.   |   |                       |                  |                       |
| 139         | P                             | That's probably the same amount of fuel you would spend in a month, but instead of giving them to the guy at the petrol station you're purchasing a new vehicle. But anyway, that's a calculation everybody needs to do.  | "instead of giving them to the guy at the petrol station you're purchasing a new vehicle"   | Savings               | Running Costs    | Purchase Motivators   |
| 142         | R                             | And the next question asks, any disadvantage when owning, let's say an electric vehicle compared to an ICE vehicle?   |   |                       |                  |                       |
| 145         | P                             | ...I don't think there are, definitely not as many knowledgeable people you know not many experts so to say who are qualified to work on EV's but comparatively speaking, much less, so.  | "definitely not as many knowledgeable people you know not many experts so to say who are qualified to work on EV's"                           | Knowledge & Awareness | Education        | Additional Incentives |
| 154         | P                             | And if you speak to mechanics in general they're opposed to EV's for the simple reason that you know, you're taking away their bread and butter because they don't know how to fix an EV. I mean give them oil and muck and they're happy to pull an ICE engine apart and if you put an EV in front of them they don't know where to start from.  | "if you speak to mechanics in general they're opposed to EV's for the simple reason that you know, you're taking away their bread and butter" | Fear & Uncertainty    | Education        | Additional Incentives |
| 157         |                               |   | "if you put an EV in front of them they don't know where to start from"   | Knowledge & Awareness |                  |                       |
| 160         | R                             | ...And in your opinion why do you think the take up of electric vehicles has been so slow when compared to ICE vehicles?  |   |                       |                  |                       |
| 162         | P                             | It's incredible how many misconceptions there are about battery life. I speak to a lot of people, I mean a lot of people, well, I speak to people   | "how many misconceptions there are about battery life"  | Fear & Uncertainty    | Education        | Additional Incentives |
| 165         | P                             | They tell me but you know it's not worth it to throw away the car after eight years,  |   |                       |                  |                       |
| 171         | P                             | ...So I think that is a major stumbling block. That there's this misinformation.  | "a major stumbling block."  | Knowledge & Awareness | Education        | Additional Incentives |
| 183         | R                             | ...So, in the next question I present seven incentives. Imagine that you're going into a showroom and these incentives are new. So some of these incentives are already in place. I'm going to present a list of seven incentives. Which if any would you choose and would motivate your purchase the most?...  |   |                       |                  |                       |
| 211         | R                             | The second one is a free rapid charger which you alluded to earlier, the wall box   |   |                       |                  |                       |
| 212         | P                             | ...I would go for that, yes   | "I would go for that"   | Charging              | Monetary         | Additional Incentives |
| 215         | P                             | ...So between the priority parking and the road tax, I think priority parking...  | "I think priority parking"  | Parking               | Priority         | Additional Incentives |
| 219         | P                             | ...The reduced rates, the charger and the parking   | "The reduced rates"   | Electricity           | Monetary         | Additional Incentives |
| 220         | R                             | Discounted electricity rates?   |   |                       |                  |                       |
| 221         | P                             | Yes, yes  |   |                       |                  |                       |

Participant LZ 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme             | Organizing theme               | Global theme          |
|-------------|-------------------------------|---|--|-------------------------|--------------------------------|-----------------------|
| 7           | R                             | What were your main reasons for purchasing an electric vehicle?   |  |                         |                                |                       |
| 12          | P                             | ...For a number of reasons, for cost, for the environmental impact as well, but I think cost, running cost would be the primary driver.   | "For a number of reasons, for cost...running cost would be the primary driver."<br>"the environmental impact as well"  | Savings<br>Eco-friendly | Running Costs<br>Environmental | Purchase Motivators   |
| 14          | R                             | And moving on to the scheme itself, the initiatives, what were the advantages of the grant scheme?  |  |                         |                                |                       |
| 16          | P                             | Well the advantages are that it makes the price point a lot more reasonable, especially when compared to a gasoline powered vehicle. So I think that is the primary advantage.  | " it makes the price point a lot more reasonable, especially when compared to a gasoline powered vehicle"  | Rebate                  | Monetary Incentives            | Purchase Motivators   |
| 18          | R                             | And the grant itself, are there any disadvantages you would highlight? Not the process.   |  |                         |                                |                       |
| 19          | P                             | I think the disadvantage is that you have to pay the car in full up front and then receive the grant afterwards, and another disadvantage is that it might take a few months after you register it to receive the money.  | "I think the disadvantage is that you have to pay the car in full up front and then receive the grant afterwards, and another disadvantage is that it might take a few months after you register it to receive the money." | Duration                | Grant process                  | Additional Incentives |
| 27          | R                             | And moving on to the negative qualities, you've mentioned that you have to wait a couple of months so that would be listed as the negative quality of that process?   |  |                         |                                |                       |
| 29          | P                             | ...I'd say that that is a negative point, the fact that you have to, that there is a delay, the fact that it has to be paid up front nonetheless by the consumer, and possibly the fact that it is limited...   | "there is a delay, the fact that it has to be paid up front nonetheless by the consumer"   | Duration                | Grant process                  | Additional Incentives |
| 33          | R                             | So, what other incentives, both monetary and non monetary, would you introduce to motivate individuals to purchase such vehicles?   |  |                         |                                |                       |
| 35          | P                             | I think other incentives could include grants for the installation of charging bays, both at home and at the private businesses' car parks. Other incentives could be preferred car parks for electric vehicles, whether charging or not. I think those are the two that we are missing in Malta, that can influence sales. Because the road toll is something we don't have which other countries have subsidised for EV's, ferries, some countries have cheaper or free rates, to us there is just the Gozo ferry, perhaps that is an idea. | "other incentives could include grants for the installation of charging bays, both at home and at the private businesses' car parks"   | Charging                | Monetary                       | Additional Incentives |
| 36          | R                             | ...any challenges you've experienced so far since owning an electric vehicle? Maybe infrastructure wise in Malta?   | "Other incentives could be preferred car parks for electric vehicles, whether charging or not"   | Parking                 | Priority                       |                       |
| 44          | R                             | I think the public network in Malta leaves a lot to be desired especially after experiencing the greater European network, to be honest. But I think for anybody with the facility to charge at home it is a no brainer.  |  |                         |                                |                       |
| 46          | P                             | And what are the advantages of owning an electric vehicle when compared to an ICE vehicle?  | "I think the public network in Malta leaves a lot to be desired especially after experiencing the greater European network, to be honest"  | Inadequate              | Infrastructure                 | Additional Incentives |
| 49          | R                             | ...the significant reduction in running costs in terms of fuel savings and licence cost savings. The removal essentially, of poisonous gases from where one lives, which in electrical vehicles are obviously removed. I think those would be the primary reasons.  | "the significant reduction in running costs in terms of fuel savings and licence cost savings"   | Savings                 | Running Costs                  | Purchase Motivators   |
| 51          | P                             |   | "The removal essentially, of poisonous gases from where one lives, which in electrical vehicles are obviously removed"   | Eco-friendly            | Environmental                  |                       |
| 52          | R                             |   |  |                         |                                |                       |

Participant LZ 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme                       | Organizing theme          | Global theme          |
|-------------|-------------------------------|---|--|-----------------------------------|---------------------------|-----------------------|
| 59          | R                             | And in your opinion, why do you think the take up of electric vehicles has been relatively slow when compared to ICE vehicles?  |  |                                   |                           |                       |
| 62          | P                             | I think it is a lack of education, and misinformation, and possibly lack of incentives aimed at increasing the charging architecture from the private sector.   | "I think it is a lack of education, and misinformation"<br>"possibly lack of incentives aimed at increasing the charging architecture from the private sector" | Knowledge & Awareness<br>Charging | Education<br>Monetary     | Additional Incentives |
| 65          | R                             | ...now I present a list of seven incentives that, some of which are already in place, or most of them. But imagine these are, you go into a showroom, you're going to buy an electric vehicle and you're presented with these seven incentives, but you can choose a maximum of three. Which one would motivate your purchase the most? A rebate which is deducted at the time of purchase, a free rapid charger to install at home rather than the standard charger, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, and priority parking for electric vehicles. |  |                                   |                           |                       |
| 72          | P                             | ...I would choose the grant at the time of purchase, the rapid charger...and no yearly circular tax.  | "I would choose the grant at the time of purchase"<br>"the rapid charger"  | Duration<br>Charging              | Grant process<br>Monetary | Additional Incentives |
| 73          |                               | -----   | "no yearly circular tax"   | Savings                           | Running costs             | Purchase Motivators   |
| 77          | R                             | ...What is your opinion about the introduction of variable monetary amounts when purchasing a BEV versus a PHEV?...   |  |                                   |                           |                       |
| 83          | P                             | ...I think it should have been at a lesser rate rather than the same rate. I am glad that it's been changed. I am very happy with the way it was discontinued, in the sense that they set up a cut off date, so people weren't left hanging, not knowing whether they would get a rebate or not...  | "I think it should have been at a lesser rate rather than the same rate"   | Misallocation                     | Equivalent Grants         | BEV & PHEV Grants     |
| 91          | P                             | ...I think it should be strictly for electric vehicles.   | "I think it should be strictly for electric vehicles"  | Prioritisation                    | Distinct Grants           | BEV & PHEV Grants     |

Participant AC1 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme           | Organizing theme            | Global theme          |
|-------------|-------------------------------|---|---|-----------------------|-----------------------------|-----------------------|
| 10          | R                             | ...what were the reasons that you bought a plug in hybrid?  |   |                       |                             |                       |
| 14          | P                             | ...The efficiency of the fuel was the major reason that made me decide on a plug in hybrid. That and the grant were the reasons that I made the decision to go for it which wouldn't have been the case if there had been no grant.   | "The efficiency of the fuel was the major reason that made me decide on a plug in hybrid"   | Savings/Eco-friendly  | Running costs/Environmental | Purchase Motivators   |
| 15          |                               |   | "the grant were the reasons that I made the decision to go for it which wouldn't have been the case if there had been no grant"   | Rebate                | Monetary Incentives         |                       |
| 17          | R                             | ...what is the advantage of the grant?  |   |                       |                             |                       |
| 18          | P                             | The fact that it lowers the price of the car is an incentive for you to purchase.   | "The fact that it lowers the price of the car is an incentive for you to purchase"  | Rebate                | Monetary Incentives         | Purchase Motivators   |
| 19          | R                             | And as a scheme, not the process, are there any disadvantages?  |   |                       |                             |                       |
| 21          | P                             | ...I've spoken to people who said that the amount of the grant is deducted right away from the price of the car, by the dealer. Not in Malta I believe, but abroad, that's what they do and if that were the case it would incentivise a person more to make the decision to take the step...   | "I've spoken to people who said that the amount of the grant is deducted right away from the price of the car, by the dealer. Not in Malta I believe, but abroad, that's what they do and if that were the case it would incentivise a person more to make the decision to take the step" | Duration              | Grant process               | Additional Incentives |
| 30          | R                             | The positive qualities of the grant application process. As a process, what is the positive attribute?  |   |                       |                             |                       |
| 32          | P                             | The fact that I'm still waiting for my money is not a very positive attribute...  | "The fact that I'm still waiting for my money is not a very positive attribute"   | Duration              | Grant process               | Additional Incentives |
| 37          | R                             | And the negative quality therefore is that you need to wait.  |   |                       |                             |                       |
| 38          | P                             | It's a very long wait. If the money had to be deducted from the price, many more people would be interested in buying electric vehicles. Speaking to people I know, especially in my age group, they all say that it would be a problem to fork out the whole sum.  | "It's a very long wait. If the money had to be deducted from the price, many more people would be interested in buying electric vehicles"   | Duration              | Grant process               | Additional Incentives |
| 47          | R                             | What other incentives would you introduce, both monetary and non monetary, to motivate individuals to purchase these types of vehicles?   |   |                       |                             |                       |
| 49          | P                             | I think first and foremost we need to start by educating the public, raising awareness about the benefits of purchasing these types of cars. These vehicles have only come on the market in recent years, and people need to know about how and from what they stand to benefit. People also need to be made aware of the advantages of these vehicles, how they are ideal for Malta. This would go a long way to attracting more purchasers, especially those who, I don't want to use the word antiquated, but especially people who are of the mentality that fuel based cars are the best. And if the rebate were deducted from the price, that would be a big plus to incentivise people to buy. | "I think first and foremost we need to start by educating the public, raising awareness about the benefits of purchasing these types of cars. These vehicles have only come on the market in recent years, and people need to know about how and from what they stand to benefit"         | Knowledge & Awareness | Education                   | Additional Incentives |
| 51          |                               |   | "People also need to be made aware of the advantages of these vehicles, how they are ideal for Malta"   | Knowledge & Awareness |                             |                       |
| 55          |                               |   | "if the rebate were deducted from the price, that would be a big plus to incentivise people to buy"   | Duration              | Grant process               |                       |
| 58          | R                             | Would you recommend others to purchase this type of car?  |   |                       |                             |                       |
| 62          | P                             | ...plug in hybrids are ideal, taking into consideration the present infrastructure, and knowing that it is not easy for those who do not own a garage...  | "taking into consideration the present infrastructure, and knowing that it is not easy for those who do not own a garage"   | Inadequate            | Infrastructure              | Additional Incentives |

Participant AC1 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme           | Organizing theme            | Global theme          |
|-------------|-------------------------------|---|--|-----------------------|-----------------------------|-----------------------|
| 72          | R                             | And what challenges have you experienced since owning a PHEV?   |  |                       |                             |                       |
| 78          | P                             | ... if someone doesn't own a garage it's a problem unless there is a charging station close to his house.   | "if someone doesn't own a garage it's a problem unless there is a charging station close to his house"               | Inadequate            | Infrastructure              | Additional Incentives |
| 83          | R                             | And the advantages of owning a PHEV versus owning an ICE vehicle?   |  |                       |                             |                       |
| 87          | P                             | ...The biggest advantage I've seen is the fuel efficiency. My decision was based on economy and efficiency because I use it every day and it's charge is a very efficient one. When calculating the cost of fuel and comparing to the cost of electricity there is a very big difference, so it is much more cost efficient to use it as a plug in. There are many advantages, one of them being that there is no smell of exhaust when putting into the garage   | "My decision was based on economy and efficiency because I use it every day and it's charge is a very efficient one" | Savings/Eco-friendly  | Running costs/Environmental | Purchase Motivators   |
| 90          | P                             | ...I believe that if the price had to be lower, and the grant maybe more attractive, and the waiting time for the grant money would be shorter, it would be a plus and sales would increase. Apart from that the infrastructure is lacking, there are many chargers which do not work...  | "it is much more cost efficient to use it as a plug in"  | Savings               | Running Costs               |                       |
| 119         | R                             | In your opinion, why do you think the take up of electric vehicles has been slow when compared to ICE vehicles?   |  |                       |                             |                       |
| 121         | P                             | I think sales have been slow because, as I said before, people are not aware of all the advantages or else they don't yet believe in them...  | "people are not aware of all the advantages or else they don't yet believe in them"                                  | Knowledge & Awareness | Education                   | Additional Incentives |
| 125         | P                             | ...I believe that if the price had to be lower, and the grant maybe more attractive, and the waiting time for the grant money would be shorter, it would be a plus and sales would increase. Apart from that the infrastructure is lacking, there are many chargers which do not work...  | "I believe that if the price had to be lower, and the grant maybe more attractive"                                   | Expensive             | Selling Price               |                       |
| 126         | P                             | ...I believe that if the price had to be lower, and the grant maybe more attractive, and the waiting time for the grant money would be shorter, it would be a plus and sales would increase. Apart from that the infrastructure is lacking, there are many chargers which do not work...  | "the waiting time for the grant money would be shorter, it would be a plus and sales would increase"                 | Duration              | Grant process               | Additional Incentives |
| 127         | P                             | ...I believe that if the price had to be lower, and the grant maybe more attractive, and the waiting time for the grant money would be shorter, it would be a plus and sales would increase. Apart from that the infrastructure is lacking, there are many chargers which do not work...  | "Apart from that the infrastructure is lacking, there are many chargers which do not work"                           | Inadequate            | Infrastructure              |                       |
| 134         | R                             | Question number twelve. Just this and another question left. In this question I present a list of seven incentives, some of which are already in place. But imagine that these are incentives you've never heard of and you're in a showroom to buy a car and there are these seven incentives. You can only choose three of them, so yes, it's a bit difficult to choose three out of seven. I think you're going to like this one. A rebate which is deducted at the time of purchase, a free rapid charger to install at home rather than the standard charger, discounted electricity rates, no yearly circular tax, which would be the round one. Access to driving in the bus lane, no registration tax upon purchase and priority parking for electric vehicles. |  |                       |                             |                       |
| 142         | P                             | Too difficult. So, the rebate deducted from the purchase price for sure...  | "the rebate deducted from the purchase price for sure"   | Rebate                | Monetary Incentives         | Purchase Motivators   |
| 143         | P                             | ...The circular tax every year would be another help...   | "The circular tax every year would be another help"  | Savings               | Running Costs               | Purchase Motivators   |
| 146         | P                             | ...And the electricity rates, if they are at a good rate, then one can save even on the day to day costs...   | "And the electricity rates, if they are at a good rate, then one can save even on the day to day costs"              | Electricity           | Monetary                    | Additional Incentives |
| 157         | R                             | As you know, last year, the incentive was the same for both an electric vehicle and for a PHEV, it was eleven thousand for both types. There were people who argued that the whole point of the incentive was to go completely green or fully electric. What is your opinion about the introduction of variable monetary amounts...   |  |                       |                             |                       |
| 164         | P                             | ...The more the range increases, the more expensive the car would be...   |  |                       |                             |                       |
| 168         | P                             | ...The greater the incentive, the more attractive and the easier it becomes for people to purchase electric cars that would make their life easier and more comfortable...  | "The greater the incentive, the more attractive and the easier it becomes for people to purchase electric cars"      | Prioritisation        | Distinct Grants             | BEV & PHEV Grants     |

Participant SB 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme           | Organizing theme        | Global theme          |
|-------------|-------------------------------|--|--|-----------------------|-------------------------|-----------------------|
| 7           | R                             | ...What were your reasons for purchasing an electric vehicle?  |  |                       |                         |                       |
| 8           | P                             | In my case it was more, I was influenced by political and regulatory decisions, so I know that the way forward from a political aspect and even from the EU that they're promoting more battery powered vehicles rather than the traditional fuel engine. So I decided that now I needed a car and my old car was broken down, so the wise choice was to go for a battery powered vehicle in my case, since that's the way forward for most governments. |  |                       |                         |                       |
| 13          | R                             | And the scheme itself, what were the advantages of it?   |  |                       |                         |                       |
| 14          | P                             | Of course it's a nice boost so for me getting eleven thousand Euro from the final total was a very nice incentive. We're talking, almost one fourth, so it was a very good total for me, to buy  | "eleven thousand Euro from the final total was a very nice incentive"  | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 16          | R                             | A lump sum   |  |                       |                         |                       |
| 17          | P                             | Exactly, to buy such a vehicle, it was an additional plus for me.  |  |                       |                         |                       |
| 20          | R                             | And any disadvantages of the scheme? The grant, the incentive not the process  |  |                       |                         |                       |
| 21          | P                             | Well, it did influence my purchasing decision because I had waited, I did wait for the grant to be announced before actually I placed my order, so it did influence my purchase  | "I did wait for the grant to be announced before actually I placed my order, so it did influence my purchase"  | Rebate                | Monetary Incentives     | Purchase Motivators   |
| 39          | R                             | ...What other incentives, both monetary and non monetary, would you introduce to motivate individuals to purchase electric vehicles?   |  |                       |                         |                       |
| 42          | P                             | Definitely what I mentioned that the way forward for most governments and the EU is that they want battery, electric powered vehicles, so that means heavier taxes on the current types of engines. So whoever is thinking of buying a new car, that would be the argument from my end.  |  |                       |                         |                       |
| 46          | R                             | Would you recommend others to purchase electric vehicles?  |  |                       |                         |                       |
| 48          | P                             | .... In my case I have a charging station in my drive in so it's very easy to keep and maintain a battery powered vehicle. Other individuals may not have such commodities in their own home, so that might be a limitation.   | "Other individuals may not have such commodities in their own home, so that might be a limitation"   | Inadequate            | Infrastructure          | Additional Incentives |
| 56          | R                             | ...What are the advantages of owning an electric vehicle when compared to an ICE vehicle, so a petrol powered vehicle?   |  |                       |                         |                       |
| 58          |                               |  | "it's environmental friendly, that's number one"   | Eco-friendly          | Environmental           |                       |
| 58          |                               |  | "the drive is much smoother"   |                       |                         |                       |
| 59          | P                             | it's environmental friendly, that's number one...the drive is much smoother...it's much quicker than a normal car...it requires much less services and upkeep than a normal engine, whereas a normal engine I have to service it every year, this one, the next service is in two years at the very least. So that's very good   | "it's much quicker than a normal car"  | Comfort & Performance | Vehicle Characteristics | Purchase Motivators   |
| 60          |                               |  | "it requires much less services and upkeep than a normal engine. whereas a normal engine I have to service it every year, this one, the next service is in two years at the very least. So that's very good" | Savings               | Running Costs           |                       |
| 65          | P                             | ...you don't pay road tax at the moment, so that's also very good.   | "you don't pay road tax at the moment, so that's also very good"   | Savings               | Running Costs           | Purchase Motivators   |
| 66          | R                             | The disadvantage of owning an electric vehicle versus owning an ICE vehicle?   |  |                       |                         |                       |
| 67          | P                             | ...I got a charging station at my own home but if the power is out and I have to charge my car, then I have to look somewhere else...  | "I got a charging station at my own home but if the power is out and I have to charge my car"  | Inadequate            | Infrastructure          | Additional Incentives |

Participant SB 2/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme           | Organizing theme | Global theme          |
|-------------|-------------------------------|---|---|-----------------------|------------------|-----------------------|
| 71          | R                             | ...in your opinion why has the take up of electric vehicles been so slow when compared to ICE vehicles?   | <p>"people wouldn't change from the normal engine to an electric engine because they think that the electric engines are less powerful. I think that is one of the main misconceptions that there are in Malta"</p> <p>"Definitely the priority parking, that's number one"</p> <p>"Then right after it the rebate which is deducted at the time of purchase"</p> <p>"the discounted electricity rates"</p> | Knowledge & Awareness | Education        | Additional Incentives |
| 73          | P                             | Most Maltese people wouldn't change from the normal engine to an electric engine because they think that the electric engines are less powerful. I think that is one of the main misconceptions that there are in Malta. I can see from my own family, when I tried to promote the use of electric cars, most of my family were like, no, I won't go for an electric car... |   |                       |                  |                       |
| 80          | R                             | ...imagine you go into a showroom and you have these incentives, you have seven incentives, and you can choose a maximum of three. Which would motivate your purchase the most?...  |   | Parking               | Priority         |                       |
| 86          | P                             | Definitely the priority parking, that's number one. Then right after it the rebate which is deducted at the time of purchase, and the discounted electricity rates. Those would be the top three for me.  |   | Duration              | Grant process    |                       |
| 87          |                               |   |   | Electricity           | Monetary         | Additional Incentives |

Participant JM 1/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme  | Organizing theme        | Global theme          |
|-------------|-------------------------------|--|---|--------------|-------------------------|-----------------------|
| 7           | R                             | ...What were your main reasons for purchasing an electric vehicle?   |   |              |                         |                       |
| 9           |                               | The environment thing plays a big role, going forward I believe that what's good for the environment is good for us at the end of the day...apart from that I love trying new technologies and the EV is my kind of toy kind of thing.   | "The environment thing plays a big role"  | Eco-friendly | Environmental           | Purchase Motivators   |
| 11          | P                             |  | " I love trying new technologies and the EV is my kind of toy kind of thing"  | Technology   | Vehicle Characteristics |                       |
| 12          | R                             | ...what are the advantages of the grant scheme itself? Not the process, the incentive.   |   |              |                         |                       |
| 16          | P                             | ...the grant, it's helping a lot. It's helping a lot making an easier decision kind of thing   | "the grant, it's helping a lot. It's helping a lot making an easier decision"   | Rebate       | Monetary Incentives     | Purchase Motivators   |
| 18          | R                             | And are there any disadvantages of the incentives or the grant scheme?   |   |              |                         |                       |
| 20          | P                             | ...I think from my understanding it's like a five to a seven month process and you obviously have to fork out the money before you get the grant but once they come, once you get them back I think it's nice  | "I think from my understanding it's like a five to a seven month process and you obviously have to fork out the money before you get the grant"   | Duration     | Grant process           | Additional Incentives |
| 35          | R                             | ...what other incentives both monetary and non monetary, would you introduce to motivate individuals to purchase electric vehicles?  |   |              |                         |                       |
| 38          | P                             | ...For sure there has to be a big push where it comes to charging spots, charging stations. I believe that even pumping stations realistically should have an EV spot  | "there has to be a big push where it comes to charging spots, charging stations. I believe that even pumping stations realistically should have an EV spot"                                 | Inadequate   | Infrastructure          | Additional Incentives |
| 52          | P                             | ...if you have a proper pillar and if you have three phase electricity at each pumping station which most probably they already have, and that would benefit a lot for EV owners.  |   |              |                         |                       |
| 60          | R                             | ...any challenges you've experienced so far?   |   |              |                         |                       |
| 61          | P                             | No, as long as you plan the charging and everything, realistically it's quite plain sailing because you go home, just plug it to the wall. Obviously if you have a garage or a drive in, you have a wall socket, you know it's easier to charge.   | "if you have a garage or a drive in, you have a wall socket, you know it's easier to charge"  | Inadequate   | Infrastructure          | Additional Incentives |
| 68          | R                             | ...what are the advantages you've experienced of owning an electric vehicle versus a combustion engine vehicle?  |   |              |                         |                       |
| 70          | P                             | ...biggest advantage is cost, running cost. First of all fuel, there's no fuel and charging per se is much cheaper.  | "biggest advantage is cost, running cost. First of all fuel, there's no fuel"   | Savings      | Running Costs           | Purchase Motivators   |
| 71          |                               |  | "charging per se is much cheaper"   | Savings      |                         |                       |
| 80          | P                             | ...Furthermore, even, I mean, running costs, there's no engine fuel, there's no wear and tear in certain components of the normal engine...  | "running costs, there's no engine fuel, there's no wear and tear in certain components of the normal engine"  | Savings      | Running Costs           | Purchase Motivators   |
| 85          | P                             | ...the maintaining costs are much lower than a normal machine. No oil, no brake fluid, and all the other stuff relating to normal cars. Realistically the ownership of the car is cheaper. Obviously there's a bigger cost when it comes to purchase but over x amount of years it will become more convenient and cheaper to run. | "Realistically the ownership of the car is cheaper. Obviously there's a bigger cost when it comes to purchase but over x amount of years it will become more convenient and cheaper to run" | Savings      | Running Costs           | Purchase Motivators   |
| 90          | R                             | And moving on to the disadvantages, any disadvantages you see when comparing the two?  |   |              |                         |                       |
| 91          | P                             | Clinging to my previous points, the issue with the charging spots basically.   | "the issue with the charging spots basically"   | Inadequate   | Infrastructure          | Additional Incentives |
| 92          | R                             | Charging spots in Malta?   |   |              |                         |                       |
| 93          | P                             | Yes, yes, in Malta. Although even abroad, it's still a bit of an issue. I mean we look at America, Tesla for example they have their own network, but if you stay in Europe it's not that massive, the infrastructure per se   | "Yes, yes, in Malta. Although even abroad, it's still a bit of an issue"  | Inadequate   | Infrastructure          | Additional Incentives |

Participant JM 2/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme        | Organizing theme  | Global theme          |
|-------------|-------------------------------|--|---|--------------------|-------------------|-----------------------|
| 96          | R                             | ...why do you think the take up of electric vehicles has been so slow when compared to internal combustion engines? In Malta   |   |                    |                   |                       |
| 98          |                               |  | "Yes, I think it's global actually. First of all it's a question of cost most probably"   | Expensive          | Selling Price     |                       |
| 98          | P                             | Yes, I think it's global actually. First of all it's a question of cost most probably and the question of uncertainty, what will happen? As I said there are new technologies being developed but besides that, a question of charging. I hear a lot of people how are we going to charge ...?   | "the question of uncertainty, what will happen?"  | Fear & Uncertainty | Education         | Additional Incentives |
| 100         |                               |  | "a question of charging. I hear a lot of people how are we going to charge"   | Inadequate         | Infrastructure    |                       |
| 102         | R                             | ...I present seven incentives that some of them are already in place but imagine you go into a showroom and you have these seven incentives and you can only choose three, which would motivate your purchase the most? A rebate which is deducted at the time of purchase, a free rapid charger to install at home, discounted electricity rates, no yearly circular tax, access to driving in the bus lane, no registration tax upon purchase, priority parking for electric vehicles. |   |                    |                   |                       |
| 111         |                               |  | "we'll do the first one, you know it's nicer to get it than pay for it, getting it there and then, so that's definitely one"  | Duration           | Grant process     |                       |
| 112         | P                             | So we'll do the first one, you know it's nicer to get it than pay for it, getting it there and then, so that's definitely one. Discounted electricity rates, because that's much more in the long term. The rapid charger is not cheap, a good one costs around eight hundred nine hundred Euro, I think the first three. Yes, the first three, yes.   | "Discounted electricity rates, because that's much more in the long term"   | Electricity        |                   | Additional Incentives |
| 113         |                               |  | "The rapid charger is not cheap, a good one costs around eight hundred nine hundred Euro"   | Charging           | Monetary          |                       |
| 119         | R                             | .... What is your opinion about the introduction of variable monetary amounts when purchasing a battery electric vehicle versus a PHEV? ...  |   |                    |                   |                       |
| 125         | P                             | ...Realistically there should be much more incentive on the battery because if you're trying to go green, and you're trying to decrease the footprint you should incentivise much more the battery operated engine...  | "Realistically there should be much more incentive on the battery because if you're trying to go green, and you're trying to decrease the footprint you should incentivise much more the battery operated engine" | Prioritisation     | Distinct Grants   | BEV & PHEV Grants     |
| 130         | P                             | ...But if the intention is to go for eco, eco green, it didn't make sense at all realistically. Perhaps it should have been a little bit less, eight, four perhaps. The other way for the battery operated ones.   | "But if the intention is to go for eco, eco green, it didn't make sense at all realistically. Perhaps it should have been a little bit less, eight, four perhaps"   | Misallocation      | Equivalent Grants | BEV & PHEV Grants     |

Participant LC 1/1

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme                     | Organizing theme                            | Global theme                                 |
|-------------|-------------------------------|--|--|---------------------------------|---|--|
| 8           | R                             | ...what were your main reasons for purchasing a battery electric vehicle?  |  |                                 |   |  |
| 10          | P                             | To be honest the grant was a very big part of the reason actually.   | "To be honest the grant was a very big part of the reason actually"  | Rebate                          | Monetary Incentives                         | Purchase Motivators                          |
| 11          | R                             | ...So what is the main advantage of the current government grant scheme?...  |  |                                 |   |  |
| 15          | P                             | Yes, electric cars, at a par with the others are more expensive I think and obviously the grant helps as an incentive. At least for us it was an incentive   | "electric cars, at a par with the others are more expensive I think and obviously the grant helps as an incentive" | Rebate                          | Monetary Incentives                         | Purchase Motivators                          |
| 27          | R                             | ...what other incentives would you introduce to motivate individuals to purchase electric vehicles?  |  |                                 |   |  |
| 29          | P                             | I think there need to be more charging stations especially for people who don't have a garage it's very important, you need to have an alternative where to charge your car and I don't think the ones that there are are enough actually. | "there need to be more charging stations especially for people who don't have a garage it's very important"        | Inadequate                      | Infrastructure                              | Additional Incentives                        |
| 34          | R                             | ...Would you recommend others to purchase an electric vehicle? Please state your reasons.  |  |                                 |   |  |
| 36          | P                             | I would if that person had their own garage, because I would never have purchased a car if I had to charge it on the streets. It's not practical at all I think.   | " I would never have purchased a car if I had to charge it on the streets. It's not practical at all I think"      | Inadequate                      | Infrastructure                              | Additional Incentives                        |
| 43          | R                             | ...what are the advantages of owning an electric vehicle when compared to an internal combustion engine vehicle?...  |  |                                 |   |  |
| 46          | P                             | ...And obviously when you consider the impact of the other cars on the environment.  | "And obviously when you consider the impact of the other cars on the environment"                                  | Eco-friendly                    | Environmental                               | Purchase Motivators                          |
| 53          | R                             | ...why do you think the take up of electric vehicles has been so slow when compared to the sales of internal combustion engine vehicles?   |  |                                 |   |  |
| 55          | P                             | I think, first of all I think they're more expensive, people I think, that's one of the main reasons people don't buy them and secondly I think, the practicality of charging it as well.  | "one of the main reasons people don't buy them"  | Expensive                       | Selling Price                               | Additional Incentives                        |
| 56          | P                             | ...the practicality of charging it as well.  | "the practicality of charging it as well"  | Inadequate                      | Infrastructure                              | Additional Incentives                        |
| 58          | R                             | ... Question number twelve I present a list of seven incentives that some of them are already in place. But imagine you can go into a showroom and you can choose up to three. Which three would motivate your purchase the most?...       |  |                                 |   |  |
| 65          | P                             | So, first one, second one and last one.  | "first one"<br>"second one"<br>"last one"  | Rebate<br>Charging<br>Parking   | Monetary Incentives<br>Monetary<br>Priority | Purchase Motivators<br>Additional Incentives |
| 67          | R                             | What is your opinion on the introduction of variable monetary amounts when purchasing a fully electric vehicle versus a plug in hybrid electric vehicle?   |  |                                 |   |  |
| 80          | P                             | ...No I agree with it, it should be variable, I don't agree that it should be the same. It's not fair, it should be less I think the hybrid.   | "I don't agree that it should be the same"<br>"It's not fair, it should be less I think the hybrid"                | Misallocation<br>Prioritisation | Equivalent Grants<br>Distinct Grants        | BEV & PHEV Grants                            |

Participant AC2 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts  | Basic theme                            | Organizing theme                          | Global theme          |
|-------------|-------------------------------|---|---|--|---|-----------------------|
| 9           | R                             | ...what were your main reasons for purchasing an electric vehicle?  |   |  |   |                       |
| 10          | P                             | I already had an electric vehicle and I liked the advantages of it...   |   |  |   |                       |
| 12          | R                             | ...the current government grant scheme, what are the main advantages of it?   |   |  |   |                       |
| 13          | P                             | With the grant obviously the grant comes cheaper so it makes you eager to buy it more...Electric cars tend to cost more although some are small cars so with the grant it helps you financially.  | "the grant comes cheaper so it makes you eager to buy it more"  | Rebate                                 | Monetary Incentives                       | Purchase Motivators   |
| 16          | R                             | And moving on to the disadvantages of the scheme, not the process. Are there any disadvantages?   |   |  |   |                       |
| 18          | P                             | Of the scheme there isn't a disadvantage, but to apply for the scheme there's a lot. There's a lot of paperwork, the actual grant from November till now (May 2023) we still didn't receive it yet. I don't know, there's a backlog I think, I don't know, but it's taking months.  | "but to apply for the scheme there's a lot. There's a lot of paperwork, the actual grant from November till now (May 2023) we still didn't receive it yet"            | Duration                               | Grant process                             | Additional Incentives |
| 35          | R                             | So what other incentives, would you introduce to motivate individuals to purchase electric vehicles?  |   |  |   |                       |
| 37          | P                             | Maybe, if we had more parking spaces designed for electric vehicles, I think that would make more people buy because it would make it easier...   | "would make more people buy because it would make it easier"  | Parking                                | Priority                                  | Additional Incentives |
| 48          | R                             | ...very convenient to charge at home  |   |  |   |                       |
| 49          | P                             | At home yes, it's very convenient, although it takes time because we don't have the fast charger like, we have the normal one. Not like abroad, abroad if you go to a petrol station they have the very fast charging that in twenty, thirty minutes you're ready, you know, you have a full charge and you can proceed.  | "it takes time because we don't have the fast charger like, we have the normal one. Not like abroad"  | Inadequate                             | Infrastructure                            | Additional Incentives |
| 57          | R                             | ...would you recommend others to buy an electric vehicle?...  |   |  |   |                       |
| 59          | P                             | I love an electric vehicle, because I love that you drive without a sound, I love the feeling, even the feel of it, like if you push the gas it goes faster, I like it and I like that it doesn't make a sound. I don't know why, at first I found it very strange I didn't know whether it was on or not, but now I love the feeling that there's no sound, it's silent, I just love it. | "I love the feeling, even the feel of it, like if you push the gas it goes faster"  | Comfort & Performance/<br>Eco-friendly | Vehicle Characteristics/<br>Environmental | Purchase Motivators   |
| 62          | R                             | Any challenges you've experienced since owning an electric vehicle?   |   |  |   |                       |
| 72          | P                             | ...In Sicily once we were trekking, and there isn't a lot to charge in Sicily yet, so it's a bit of a problem...  | "there isn't a lot to charge in Sicily yet, so it's a bit of a problem"   | Inadequate                             | Infrastructure                            | Additional Incentives |
| 77          | R                             | What are the advantages of owning an electric car when compared to an internal combustion engine vehicle?   |   |  |   |                       |
| 79          | P                             | Obviously you save money.   |   |  |   |                       |
| 80          | R                             | Save money on fuel?   |   |  |   |                       |
| 83          | P                             | Yes, obviously you save money on fuel...  | "obviously you save money on fuel"  | Savings                                | Running Costs                             | Purchase Motivators   |
| 86          | P                             | ...you save money out of it, obviously you're helping the environment so that's another thing. Even like I told you, the noise, not a lot of noises, but the money, most of it the money...   | "obviously you're helping the environment so that's another thing"  | Eco-friendly                           | Environmental                             | Purchase Motivators   |
| 102         | R                             | In your opinion why do you think the take up of electric vehicles has been slow when compared to the sale of internal combustion engine vehicles?   |   |  |   |                       |
| 104         | P                             | I think some people are still a bit scared like. They're still a bit hesitant and don't know exactly, I think there's still a lot of question marks still around it. I think people are still scared to buy an electric car.  | "I think some people are still a bit scared like. They're still a bit hesitant and don't know exactly, I think there's still a lot of question marks still around it" | Fear & Uncertainty                     | Education                                 | Additional Incentives |
| 107         | R                             | A lot of uncertainty  |   |  |   |                       |

Participant AC2 2/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts  | Basic theme           | Organizing theme  | Global theme          |
|-------------|-------------------------------|--|---|-----------------------|-------------------|-----------------------|
| 108         | P                             | Yes. Once there was a question, in the rain can I go out in an electric car? Imagine! So yes, people, there's a lot of lack of knowledge   | "Once there was a question, in the rain can I go out in an electric car? Imagine! So yes, people, there's a lot of lack of knowledge"   | Knowledge & Awareness | Education         | Additional Incentives |
| 117         | R                             | Question number twelve...I present a list of seven incentives...imagine you're going into a showroom and these seven incentives are new, you've never heard of them before. So you can choose a maximum of three. Which would motivate your purchase the most?   |   |                       |                   |                       |
| 121         | P                             | Priority parking for electric vehicles, like I told you before, that would be really good and I think people really like that, especially in Valletta...   | "Priority parking for electric vehicles, like I told you before, that would be really good and I think people really like that"   | Parking               | Priority          | Additional Incentives |
| 131         | P                             | ...if they deduct it (the rebate) immediately that's better instead of paying the full amount and then receive the money. So that will help a lot..  | "if they deduct it (the rebate) immediately that's better instead of paying the full amount and then receive the money. So that will help a lot"                                  | Duration              | Grant process     | Additional Incentives |
| 135         | P                             | ...a free rapid charger, that would be great. So if you forget to charge your car, at least you don't wait three hours you just wait thirty minutes.   | "a free rapid charger, that would be great"   | Charging              | Monetary          | Additional Incentives |
| 139         | R                             | ...What is your opinion about the introduction of variable monetary amounts when purchasing an electric vehicle versus a PHEV?...  | "I don't think they should be the same"   | Misallocation         | Equivalent Grants | BEV & PHEV Grants     |
| 143         |                               |  |   |                       |                   |                       |
| 144         | P                             | ...I don't think they should be the same in a way, but then again, owning a hybrid is better than owning a fully diesel, a petrol, whatever. So in a way I still believe there should be a government, like, the government gives you something, but I don't think it should be the same amount as a fully electric vehicle. Or an electric vehicle would have more benefits maybe, they make it like that instead of the money, but I think if we're going greener it should be a fully electric car that wins, you know what I mean. |   |                       |                   |                       |
| 146         |                               |  | "an electric vehicle would have more benefits maybe, they make it like that instead of the money, but I think if we're going greener it should be a fully electric car that wins" | Prioritisation        |                   |                       |

Participant MSG 1/2

| Line number | R=Researcher<br>P=Participant | Text  | Basic Concepts   | Basic theme           | Organizing theme            | Global theme          |
|-------------|-------------------------------|---|--|-----------------------|-----------------------------|-----------------------|
| 12          | R                             | What were your main reasons for purchasing an electric vehicle?   |  |                       |                             |                       |
| 13          | P                             | Personally I feel it revolves around sustainability, environmental, it's definitely the way forward.  | "it revolves around sustainability, environmental, it's definitely the way forward"  | Eco-friendly          | Environmental               | Purchase Motivators   |
| 15          | R                             | ...What are the main advantages of the current government grant scheme?...  |  |                       |                             |                       |
| 18          | P                             | ...essentially makes them more affordable because they do tend to be higher priced than the normal diesel or petrol vehicles, potentially even hybrids, in my case anyway.  | "essentially makes them more affordable because they do tend to be higher priced than the normal diesel or petrol vehicles"                    | Rebate                | Monetary Incentives         | Purchase Motivators   |
| 20          | R                             | And any disadvantages of the scheme?...   |  |                       |                             |                       |
| 21          | P                             | ...a collateral disadvantage would be maybe they have become so affordable that we can't keep up with the infrastructure...   | "they have become so affordable that we can't keep up with the infrastructure"   | Inadequate            | Infrastructure              | Additional Incentives |
| 33          | R                             | ...so the negative qualities of the grant process, and how can it be improved?  |  |                       |                             |                       |
| 37          | P                             | ...You tend to forget that you're due a grant...  | "You tend to forget that you're due a grant"   | Duration              | Grant process               | Additional Incentives |
| 45          | R                             | ...what other incentives would you introduce to motivate individuals to purchase an electric vehicle?   |  |                       |                             |                       |
| 47          | P                             | ...one of the biggest issues there is out there that needs to be overcome is a lack of education that there is in relation to electric vehicles...  | "one of the biggest issues there is out there that needs to be overcome is a lack of education that there is in relation to electric vehicles" | Knowledge & Awareness | Education                   | Additional Incentives |
| 55          | P                             | ...it needs to be relative in the sense of more promotional of the infrastructure if you know what I mean.  | "more promotional of the infrastructure if you know what I mean"   | Inadequate            | Infrastructure              | Additional Incentives |
| 59          | P                             | ...in my case it was and still is, pretty much like a treasure hunt for outdoor charging stations.  | "pretty much like a treasure hunt for outdoor charging stations"   | Inadequate            | Infrastructure              | Additional Incentives |
| 72          | R                             | Would you recommend others to purchase such vehicles?   |  |                       |                             |                       |
| 74          | P                             | ...although there are counter arguments to the sustainability, I still think they are cleaner and much more efficient even in terms of Eco-Friendly than other vehicles.  | "still think they are cleaner and much more efficient even in terms of Eco-Friendly than other vehicles"                                       | Savings/Eco-friendly  | Running Costs/Environmental | Purchase Motivators   |
| 87          | R                             | And what are the advantages of owning an electric vehicle when compared to the combustion engine vehicle?   |  |                       |                             |                       |
| 89          | P                             | Servicing is significantly cheaper, less expensive, so areas, I don't know, consumables such as brake pads are rarely affected because in most cases you're using the   | "Servicing is significantly cheaper, less expensive"   | Savings               | Running Costs               | Purchase Motivators   |
| 91          | R                             | Regeneration  |  |                       |                             |                       |
| 92          | P                             | The regeneration, exactly, it's obviously much cleaner for the environment. And obviously much more cost effective when it comes to you know, the monetary value that you pushed into ICE vehicles versus the petty cash that you would need to recharge an electric vehicle. | "exactly, it's obviously much cleaner for the environment. And obviously much more cost effective"   | Eco-friendly/Savings  | Environmental/Running Costs | Purchase Motivators   |
| 95          | R                             | And on the other hand, any disadvantages of owning an electric vehicle versus a combustion engine?  |  |                       |                             |                       |
| 97          | P                             | Whilst they are still costly, insurance tends to be expensive. That's something I've seen, so although you almost don't pay anything for your road licence, insurance tends to be a bit silly...  |  |                       |                             |                       |

Participant MSG 2/2

| Line number | R=Researcher<br>P=Participant | Text   | Basic Concepts   | Basic theme           | Organizing theme | Global theme          |
|-------------|-------------------------------|--|--|-----------------------|------------------|-----------------------|
| 105         | R                             | In your opinion, why do you think the take up of electric vehicles has been slow when compared to ICE vehicles?...   |  |                       |                  |                       |
| 108         | P                             | Well I think it's definitely relevant to the start up cost you know, investing in one...   |  |                       |                  |                       |
| 110         | P                             | ...probably people are just waiting for them to become less expensive...   | "people are just waiting for them to become less expensive"  | Expensive             | Selling Price    | Additional Incentives |
| 112         | P                             | ...It will eventually happen but I still think there's an element of lack of education...  | "I still think there's an element of lack of education"  | Knowledge & Awareness | Education        | Additional Incentives |
| 125         | R                             | Now question twelve I present a list of seven incentives some of which may already be in place but imagine you go into a showroom and you have a choice of three. Which would motivate your purchase the most?...  |  |                       |                  |                       |
| 131         | P                             | ...I think the three would be the rapid charger, discounted electricity rates which is something I have at home and I think it makes a lot of sense, and the priority parking for electric vehicles...   | "the rapid charger"  | Charging              | Monetary         |                       |
| 132         | P                             |  | "discounted electricity rates"   | Electricity           | Monetary         | Additional Incentives |
| 133         | P                             |  | "the priority parking for electric vehicles"   | Parking               | Priority         |                       |
| 1139        | R                             | ...what is your opinion on the introduction of variable monetary amounts when purchasing an electric vehicle versus a PHEV?...   |  |                       |                  |                       |
| 149         | P                             | Personally, without wanting to sound biased I think that the biggest incentive should be given to those who went all out and are driving a hundred percent electric. Because technically speaking the plug in hybrid still has a small dependence on engine fuel of sorts...                               | "I think that the biggest incentive should be given to those who went all out and are driving a hundred percent electric"  | Prioritisation        | Distinct Grants  | BEV & PHEV Grants     |
| 154         | P                             | ...There's also probably an element of the capital cost so if you're comparing models and one is one hundred percent and one is plug in, someone has brought out more money for the hundred percent versus the plug in so he should, in theory, be incentivised further because he took that extra step... | "if you're comparing models and one is one hundred percent and one is plug in, someone has brought out more money for the hundred percent versus the plug in so he should, in theory, be incentivised further" | Prioritisation        | Distinct Grants  | BEV & PHEV Grants     |