



20 YEARS OF EU MEMBERSHIP

PAPER SERIES

The impact of EU Membership on Malta's Climate Action

CHARLES GALDIES & CLARA GALDIES



The impact of EU Membership on Malta's Climate Action

Charles Galdies & Clara Galdies 1

Abstract

This article analyses how Malta, a Republic since 1974 and a Member State of the European Union (EU) as of 2004, has reacted to a shifting European governance landscape in the area of climate. It does so by analyzing the impact EU membership has had on Malta's legal framework, policy performance, and its approach towards climate change. Despite good progress in some areas such as greenhouse gas emission reporting as well as the formulation of legislation, policies and strategies for climate action and adaptation, the EU framework has had an ambivalent impact on Malta's climate performance. This article mentions how Europeanisation and compliance with EU law can vary across Member States and policy domains and highlights the difficulties of certain Member States to fully accept and adopt EU environmental norms due to, among others, horizontal and vertical fragmentation of their administrative structures and the degree of political activism on the environment. Malta's case is hereby discussed within the context of a rapidly changing climate, with an emphasis on three extreme climate hazards: heatwaves, sea level rise and droughts. The article highlights the urgent need to frame Malta's national policies on factual information that is Malta-specific and not on an assumed theoretical or regional inference. In doing so, the true impact of a changing climate on Maltese assets can be understood. Without Malta-specific knowledge there is a danger that public policies will be less effective or even counterproductive to the country's economic sectors, and ultimately to the quality of life.

Keywords:

EU membership, Climate Action, National policies, Climate change, Climate adaptation.

Background

According to the United Nation's Environment Programme's (UNEP) Emissions Gap Report 2022, in order to keep with the aspirational goal of the Paris Agreement, global warming during this century must be kept below 1.5°C because exceeding this limit would have significant and potentially irreversible consequences for the world and its inhabitants. In practical terms, this means that the world needs to halve its annual CO₂ emissions by 2030 and reach net zero by 2050 (IPCC 2023).

Small island nations such as Malta are particularly vulnerable to climate change impacts. These

¹ Charles Galdies is an Associate Professor with the Division of Environmental Management and Planning within the Institute of Earth Systems, University of Malta. Ms. Clara Galdies M.Adv. (Melit.) is a warranted lawyer, having earned her Master's degree in Advocacy from the University of Malta in 2019. Contact: charles.galdies@um.edu.mt © Charles Galdies (2024) - ISSN: 3006-8983

include more frequent and intense heatwaves, droughts, floods, and storms (MedEEC 2020). These events can have devastating consequences for its inhabitants, ecosystems, and its economic sectors. Since acquiring membership in the European Union (EU) in 2004, Malta's climaterelated legislation and policies have been influenced by EU-wide legislation and initiatives. In order to comply with international agreements on climate change such as the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol (including emission targets applicable for a commitment period which was extended by the Doha Protocol) as well as the Paris Agreement the EU had to adopt ambitious legislation across multiple policy areas. Indeed, in 2019 the European Commission presented the European Green Deal that established two main targets; EU climate neutrality by 2050, as well as the reduction of net emissions by at least 55% by 2030. This is a major step up from the previous 2030 target of reducing emissions by 40%. The European Green Deal aims at transforming the Union into a resourceful, competitive and climate neutral economy by 2050, by boosting its growth and cutting down pollution through green technology and investment in sustainable industries and transportation system. To do so, important EU climate legislation was revised so as to conform with the above targets, such as the EU Emissions Trading System (ETS), the Effort Sharing Regulation, as well as transport and land use legislation.

These targets and proposed legislation were endorsed by European leaders in December 2020, and the subsequent European Climate Law, rendering the above targets legally binding entered into force in June 2021.2 The Law has been created with the aim to ensure that all EU strategies contribute to the same objective. By turning climate and environmental challenges into opportunities, the EU aims at making the transition just and inclusive for all. In this context, the 2021 Just Transition Mechanism has been launched to provide tailored support to regions and sectors that will probably face particular challenges during this climate transition. The EU stresses that climate action should be mainstreamed across all national sectors of European Member States, reiterating its strong commitment to delivering on its pledges. To this effect, financial investments will be needed from both the public and private sector; and this explains why the EU budgets for 2020-2021 have contributed significantly to climate action. Following the approval of the EU long-term budget for 2021-2027, at least 30% of total expenditure will be targeted towards projects that relate to climate change (European Commission 2023a).

Viewed against this backdrop, this article examines the impact of EU membership on the progress made by Malta on its climate policies, focusing on (a) the expected climate change impacts, and on the (b) changes in legislation, regulations, and initiatives that have been implemented since Malta's membership in the EU. It describes how Malta has taken steps to adjust to the evolving European framework related to climate governance. It analyses, albeit briefly, the impact on Malta's policy performance, and its approach to climate change.

While there have been notable advancements in certain aspects such as GHG emission reporting and mitigation efforts, as well as the implementation of policies and strategies for climate change adaptation, it is evident that the EU framework has had a mixed impact on Malta's climate performance. The most striking feature of Malta's approach towards its climate policy in a EU context is its seeming incoherency of its overall strategy to reduce, adapt and become less

² Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law').

vulnerable to the current and future impacts of climate change.

Observed misfits on European policies

Many studies have shown how the degree of Europeanisation and adherence to EU policies varies across Member States and policy areas (Borzel & Buzogany 2010; Knill & Tosun 2009). The compatibility or otherwise between the EU's regulations, systems, and practices with those at the national level has been often used as an explanation for such a shift (Risse et. al. 2001). When the European and national levels are mismatched, there is a greater pressure for modifications needed at the national level in order to compensate for it. This said, the adaptational pressures on Malta's legal framework since 2004 did not automatically generate Europeanisation at the national level. Instead, a range of mediating factors, some of which have also been identified in other EU Member States, can explain such a variation, including weak political institutions that are strongly influenced by the main cultural trends, weak political (European Parliamentary Research Service 2021) and social conviction (Attard 2021), weak transparency in governance, administrative capacity, alienation of main stakeholders and of the civil society in general (Risse et. al. 2001), and the level of policy integration with the EU (European Parliamentary Research Service 2021).

Borzel (2000) detailed various reasons for the difficulty of Member States to fully adopt EU environmental norms in general: complexities arising due to the administrative system being horizontally and vertically fragmented, States lacking the resources and competency to properly execute European policy initiatives, leading to inefficient implementation, poorer economies that can often find it too costly to implement environmental policies due to limited financial resources, weak level of environmental advocacy and activism which is affected by a lack of forward-thinking political action.

As of recent, Europeanisation has come under pressure because of increased politicization of and resistance to such norms at the national, domestic level (Saurugger 2014). There are now new challenges on the horizon compounding that of climate change that may further complicate the EU's goal to set ambitious long-term targets for carbon reduction and renewable energy. This is especially true in times of crisis, such as in 2020 (COVID-19 pandemic, vaccination and internal mobility), 2021 (global transport logistic problems), and post-2022 (conflict in Ukraine, higher rates of inflation, the degree of national reliance on Russian oil and gas and the regional rise in energy tariffs, resistance by some Member States towards harmonized foreign policy and reduced harshness of economic sanctions towards Russia.

The ongoing EU's energy and security crises, as well as the expressed political divergences in foreign policy at the EU level is surely affecting the momentum that has been achieved so far by the European Commission when it comes to its over-arching climate policy. Before these ongoing set of crises, we have witnessed a progressive development of EU-wide climate policies (as in other environmental policies) which since the late 1980s, has gradually shifted European politics toward environmentalism. Over time, the development and expansion of environmental policies in the EU has resulted in a Europe-wide homogeneity of many Member States' respective environmental policies (Liefferink and Jordan 2005). This is testified by the fact that most of the initial empirical research into the Europeanization research agenda mostly focused on related EU-level environmental policy initiatives (Graziano et. al. 2009). Below we consider the case of Malta's climate policies, which we argue has remained rather weak at the implementation level.

The EU's latest climate agenda

On 2 May 2022, the EU's legally agreed common agenda for environment policy until 2030 entered into force. It reaffirms the EU's long-term vision to 2050 of leading a quality life as well as setting up objectives for 2030 and clarifying how those objectives can be achieved. This programme complements other initiatives that contribute towards the achievements of the United Nations 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs).

EU's latest roadmap that concerns climate action is now also defined by its Action Plan on Financing Sustainable Growth, which rests on four main pillars - Sustainable growth - Resource efficiency - Climate action - Innovation and competitiveness. The ESG is being seen as a key driver to change the course of European policy towards effective expenditure on fossil fuels, increased public revenue, and overall reduction of greenhouse gas emissions. In this context, Malta's ESG Platform³ is assisting companies listed on the Malta Stock Exchange to getting ESG credentials by identifying their carbon footprint as they invest in renewable sources of energy as well as incorporating them into their investment decision-making. This is considered as highly timely and topical in virtue of increasing urgency to mitigate and adapt to climate change and attain Malta's goal to become climate neutral by 2050.

The effect of EU membership on Malta's climate legislation and policies

Scholars argue that Malta's membership in the EU has benefited the country in many ways (Pace 2004; Harwood 2014), such as by allowing it to grow its democracy, economy, and general infrastructure. As of 2004, Malta started to transpose into national law all EU Directives which form part of the EU's secondary law. Meanwhile, EU Regulations have also become directly applicable, including the most recent climate-related Regulation (EU) 2023/241 as regards REPowerEU chapters in recovery and resilience plans.

As a result of Malta's accession to the EU, it encountered a significant body of EU climate-related legislation. This legislation encompassed regulations and directives that aligned with international agreements such as the UNFCCC and the Kyoto Protocol and reflected the stricter standards applicable to developed nations, known as Annex I Parties under the UNFCCC. While Malta had ratified the UNFCCC in 1994 and the Kyoto Protocol in 2001, it did so as a non-Annex I Party and was bound by the general commitments common to both developed and developing countries. Consequently, while Malta's accession to the EU did not automatically change its status to Annex I Party, it was still subject to directly apply or transpose EU legislation that reflected the standards of Annex I Parties. In 2010, following Malta's request for recognition in 2009, there was a shift in its status to Annex I Party. As a result, Malta took on the responsibilities associated with Annex I Parties, aligning its legal obligations under international law with those already in place under EU legislation after its accession. So far, Malta has communicated its eighth report on the progress made towards achieving Convention and Kyoto Protocol commitments, together with the mitigation and adaptation efforts implemented during the same reporting period (UNFCCC 2022).

Malta was also among the first EU nation to endorse the Paris Agreement on October 5, 2016. The Agreement builds upon the UNFCCC and the Kyoto Protocol and aims to promote transparency and

accountability among participating nations as they work towards achieving their climate targets.⁴ The Agreement also eliminates the rigid categorization between developed and developing countries when setting long-term objectives, known as Nationally Determined Contributions (Paris Agreement, Article 4).

As a result of both EU and international obligations, Malta enacted various pieces of legislation at a domestic level. However, prior to 2015, there was no single Act consolidating Malta's climate commitments, which created a fragmented approach to climate change legislation at a national level. The enactment in 2015 of the Climate Action Act (CAA), Chapter 534 of the Laws of Malta, provided for an overarching legal framework to mainstream such legislation.

The CAA sets out the responsibilities of various institutions established in Malta to help it meet its commitments, as well as creates a series of obligations and guiding principles that the government must adhere to. Through such provisions, the Act provides a well-organized and efficient administrative, policy-making, and legal structure, which encourages the implementation of measures aimed at adapting to, mitigating and enhancing resilience against climate change. Consequently, this leads to greater clarity regarding the obligations that Malta must fulfill, along with the designated authorities responsible for fulfilling them.

Equally important, the Act outlines several measures that the government is obliged to take to address the mitigation and adaptation of climate change. Such measures include those aimed at (i) reducing anthropogenic GHG emissions, as well as protecting and enhancing GHG sinks and reservoirs and (ii) minimising the negative consequences of climate change, while also promoting greater resilience and adaptability to its impacts (CAA, Article 3). The initial action reflects Malta's overall commitment to restrict its GHG emissions in accordance with international agreements and EU regulations. The subsequent action is also tied to international agreements, specifically through the language utilized in Article 3 of the UNFCCC, which calls for parties to "anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects."

Through the CAA, the government is obliged under national law, to develop policies, programmes, and projects that address and support climate change mitigation, adaptation, and resilience.⁵ In fulfilling this duty, the government is encouraged to participate in and promote international and regional efforts to combat climate change (CAA, Article 5(5)). An example of such participation includes the role played by the Maltese government during its Presidency of the Council of the EU in fostering relations between Member States on climate change issues, such as by organizing in 2017 an international Forum in Malta as part of the Commission's Clean Energy for EU Islands programme.⁶

In the same year of enactment as the Climate Action Act, subsidiary legislation 543.01 was enacted, entitled the National System for the Estimation of Anthropogenic Greenhouse Gas Emissions by Sources and Removals by Sinks Regulations. Other climate-related legislation includes:

⁴ Article 13 and 14 of the Paris Agreement set out the transparency and accountability framework. Through such framework, Parties are bound to report on a regular basis their emissions as well their overall progress in achieving emission targets as set out by their Nationally Determined Contributions. Such information is in turn subject to a collective review as well as an individual expert review.

⁵ Climate Action Act articles 5(3) and (4).

^{6 &#}x27;First Clean Energy For EU Islands Forum: An Integral Part Of Europe's Energy Transition - Energy - European Commission' (*Energy*, 2018), https://ec.europa.eu/energy/en/news/first-clean-energy-eu-islands-forum-integral-part-europes-energy-transition (accessed 8 March 2024).

- (i) subsidiary legislation falling under the Environment Protection Act (Chapter 549)such as the Industrial Emissions (Integrated Pollution Prevention and Control) Regulations (Subsidiary Legislation 549.77), which aim to prevent and control pollution emanating from industrial activities; and the Limitation of Emissions of Certain Atmospheric Pollutants Regulations (Subsidiary Legislation 549.124) which provide for the implementation of Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016, on the reduction of national emissions of certain atmospheric pollutants;
- (ii) subsidiary legislation falling under the Regulator for Energy and Water Services Act (Chapter 545), which include the Electricity Regulations (Subsidiary Legislation 545.34) that transpose Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019, and the Promotion of Energy from Renewable Sources Regulations (Subsidiary Legislation 545.35), transposing in part Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018.

Other climate-specific subsidiary legislation includes the European Union Greenhouse Gas Emissions Trading Scheme for Stationary Installations Regulations (Subsidiary Legislation 423.50); and the European Union Greenhouse Gas Emissions Trading Scheme for Aviation Regulations (Subsidiary Legislation 423.51).

During the third quarter of 2021, Malta started to act on its decadal integrated National Energy and Climate Plan (NECP), as mandated by the EU in order to ensure that overall greenhouse gases emissions targets are met. This Plan addresses all five dimensions of the EU Energy Union: decarbonization, energy efficiency and security, internal energy markets and research, innovation and competitiveness. For example, as part of its Decarbonization plan, Malta's strategy is geared towards ensuring a transition to a low-carbon economy by a reduction of GHG emissions, coupled with an increase in renewable energy sources. Malta is aligned towards gaining energy security by diversifying its energy resources and suppliers, a decision that will bring it one step closer towards its target of secure energy supply.

To ensure Malta's energy integration, the plan establishes policies and measures to increase the flexibility of the energy system. Table 1 shows some of the important targets that Malta's ten-year 2030 NECP has in its action plan as prescribed by Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action.

Climate action targets	30% RES target	2030
	Decrease of GHG emissions by 19%, as compared to their levels in the	2030
	year 2005.	
	Increase by 11.5% the share of renewable energy in gross final energy	2030
	consumption	
	40% reduction in GHG emissions compared to 1990 levels	2030
	An energy efficiency contribution of 0.07 tonnes of oil equivalent per	2030
	thousand euros. compared to 2005	
	Above 15% electricity interconnectivity	2030
	Achieving a 65% rate of municipal solid waste recycling	2035
	Reduce landfilling of MSW to 10%	2035
	11.5% of the gross final energy consumption to be accounted by	2030
	Renewable energy sources.	
	Target above 15% level of electricity interconnectivity	2030
	14% RES share in the transport sector	2030
	An energy intensity of 0.07 toe/€ compared with 2005 levels.	2030

Table 1. A highlight of Malta's climate targets in line with Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action.

In a nutshell, the impact on Malta's climate policies and legislation as a result of its membership to the EU can be mostly seen in (1) the adoption of an increasingly ambitious greenhouse gas emissions reduction target for 2030, (2) the development of a national strategy for adaptation to climate change, (3) the promotion of renewable energy sources, and (4) the transition to a green economy. However, in spite of these clear targets, the European Environmental Agency reports that Malta's change in total GHG emissions for the period 1990-2017 is still very high (0.3 MtCO2e) with respect to the EU-28 average of -1.239.8 MtCO2e (EEA, 2020). At the same time, the change in the carbon intensity of energy between the period 1990-2017 was -11.6% compared to the EU-28 average of -20.5%. However, this compares very well with that of Cyprus (+2.7%), for example.

Current state of the climate in Malta

At this point, one cannot proceed further without referring to the physical changes that we are currently witnessing to Malta's climate. As a result, the enforcement of EU-led legislation and policies is becoming more urgent, in particular with respect to the adaptation measures as stipulated by Malta's National Adaptation Strategy. This is further elaborated below.

This is because the Mediterranean region is one of the most vulnerable regions to climate change. Malta is no exception. The latest *State of the Climate - 2022 - a Multidecadal Report & Assessment of Malta's Climate* (Galdies 2022a) shows that since 1952, Malta's annual mean ambient temperature is about 1.5 °C higher. This is equivalent to an increase of 0.2 °C per decade since that year. Associated with this increase in the ambient mean temperature is the extended number of consecutive drought years, especially noticeable since 2000. In fact, since 1952, during the last 20 years, the year 2016 had the least rainfall (324.8 mm) followed by 2001 (338.2 mm) and 2020 (386.9

mm). Throughout the entire period of analysis: from 1952 to 2020, rainfall amount has decreased by 10.3 mm per decade. Furthermore, the analysis shows an increase of 0.4 °C per decade in the mean sea temperature of Maltese waters since 1978.

We emphasize here on just three major climate change-related challenges that Malta is facing, these being:

- 1) Extreme weather events, such as increased incidences of heat waves. These have increased in frequency over the last few years (Galdies 2022a). Extended heatwaves constitute one of the worst forms of extreme weather because they can cause body dehydration and if not attended, it can lead to morbidity and mortality (Jahan et. al. 2022a-b). The Maltese islands cannot avoid heatwaves because of its geographical location, becoming thus increasingly exposed to enhanced warm air masses originating from Northern Africa. As a result of health-related impacts, Malta is also likely to suffer high welfare losses as percentage of GDP (WHO/UNFCCC 2021). Extended heatwave events do not affect only the health sector but others as well, such as the transportation, energy, agriculture and the construction sector (Orlov et. al. 2020)
- 2) The *rising sea levels* and impact on a number of economic and natural assets, especially those located in coastal areas. This is able to affect many economic sectors such as tourism, transportation, aquaculture, power generation and freshwater availability (Attard et. al. 2018).
- 3) The process of *desertification* resulting from increased drought frequency. Seasonal rainfall is becoming scarcer making the land less fertile and drier in order to sustain its ecosystem. This situation is resulting in lower agriculture output and profitability (Galdies & Meli, 2022), among other impacts. In places where there is a lack of fertile land, the soil cannot produce food to sustain the population, therefore jeopardizing food security in an otherwise volatile and expensive global food market. As a consequence, the local population will experience additional higher food prices and price instability.

National progress in legal and policy, but poor country performance in mitigation and adaptation

The present authors give a positive outlook for Malta's future climate action. The country has now a good legal and technical framework that allows it to take further action in this regard. Indeed, the current legislative framework provides for enough flexibility for the implementation of policies and measures that can lower national emissions and promote the production of renewable energy. Malta's CAA for example, ensures that governmental policies adopted are directly influenced by the legislative targets as set out by such Act, which targets include promoting climate action in line with Malta's international and EU commitments.

This said, the legal framework alone is not sufficient in itself to enable Malta to keep in line with its obligations. Its overall effectiveness depends entirely on how it is implemented. For instance, more work and commitment are still required to reach pre-established targets and obligations. As detailed above, Malta is particularly vulnerable to climate risks, underscoring the need for bespoke climate and environmental policies.

Malta has one of the lowest shares of renewables in energy consumption in the EU. Despite this, the country was able to achieve its 2020 renewable energy target of 10% (Eurostat 2023). However, Malta's national energy and climate plan (NECP) includes a weak contribution from renewable energy of only 11.5%, which falls well short of the EU's 2030 target. It has no installed capacity for wind-generated electricity and in its NECP the deployment of wind onshore or offshore turbines is

not planned due to practical reasons (Energy and Water Agency 2020). So far, EUR 5 million of Malta's Recovery and Resilience Plan (RRP) has already been allocated to renewable energy investments. To take full advantage of Malta's potential for renewable energy, the country could explore various enabling technologies, such as floating offshore technology, promoting local renewable energy generation (such as renewable energy communities), strengthening its electricity network, fostering renewable energy storage, and introducing incentives to reduce energy demand during peak periods. Malta has now committed to a more ambitious target of achieving 30% renewable energy by 2030, which is a significant increase from its previous target of 2020.

From a national GHG inventory point of view, Malta's latest State of the Environment Report showed that its total greenhouse gas emissions rose by 53% from 1990 to 2012. However, these emissions fell to 6% over the period 2012-2016 as Malta managed to significantly decouple its economic activity from emissions generation (Environment Resources Authority 2018). Such a positive momentum has stopped however, since the 2021 national report shows that total emissions since then have risen significantly (UNFCCC 2021). Malta continues to face difficulties in reducing traffic congestion and to decarbonise transport and promoting the energy efficiency initiatives (Maas et. al. 2021). The significant amount of construction and demolition waste and municipal waste produced, together with low rates of recycling, remain major challenges. The European Environment Agency (EEA) has identified Malta as the Member State that is the farthest from meeting its 2030 Effort Sharing Regulation (ESR) emissions reduction target (EEA 2023). To address this challenge, the effective implementation of Malta's Low Carbon Development Strategy (LCDS), which outlines a roadmap to achieve the 2030 ESR target and paves the transition to a low carbon economy, is pivotal. It is important to note that Malta has committed to achieving climate neutrality by 2050.

Malta is now set to receive EUR 316.4 million in grants under the Recovery and Resilience Facility for the period 2021-2026. At the time of writing, a pre-financing amount equivalent to 13% of Malta's financial allocation has already been disbursed (European Commission, 2021). These funds, which are equivalent to 2.3% of Malta's 2019 GDP, will help fund the necessary investments and reforms as outlined in its RRP of 2021. This will ensure that the essential changes can be put into place without delay. Indeed, more than half (54%) of the plan's overall budget is devoted to climate and environmental goals, with a focus on various measures to address Malta's climate-related challenges. These measures aim to reduce greenhouse gas (GHG) emissions and alleviate traffic congestion, while promoting sustainable mobility through the decarbonization of transportation.

Malta's preparedness to adapt to a changing climate

As of 2013, the EU has mandated Member States to formulate their National Adaptation Strategies along three priorities, these being (a) the promotion of adaptation actions, (b) sustain better informed decision-making and (c) the identification of vulnerable sectors (European Commission, 2023b). Malta's strategy was designed using a risk-based approach, which recognizes the potential impacts of climate change across sectors such as agriculture, water, health, tourism, and transport. The strategy identifies priority areas for action, enabling policymakers to allocate resources and prioritize their efforts in an interdependent and coordinated response. This approach is crucial for effective adaptation planning and ensures that the most critical areas are addressed.

However, the authors note certain weaknesses here, such as the lack of specific targets and indicators for measuring progress. This makes it impossible to determine whether the strategy

is achieving its intended results. Also, Malta's strategy does not fully address the social and economic dimensions, as well as impacts of climate change on pivotal economic sectors such as health, tourism and manufacturing. It is also weak in its emphasis on implementation and funding mechanisms, which could impede any effective implementation of the strategy. Local authorities need to focus on a more comprehensive approach that includes social, economic, and environmental dimensions to build resilience and adapt to the impacts of climate change effectively. An important concern was recently communicated to Malta by the United Nations in that the country needs to urgently assess its vulnerability to climate change health risks (WHO/UNFCCC 2021). On a similar note, Malta still needs to commit itself towards climate-resilient, environmentally sustainable health care facilities that can mitigate climate change impacts.

Absence of a national climate observatory to sustain Malta's adaptation strategy

Malta's investment in support of its Climate Policy is now more important than ever. In this regard, the provision of climate services is becoming one of the most important and fastest-growing fields in an era where climate change is happening at a very fast pace. This explains why the European Union is pushing harder to improve the evaluation of pan-European climate services in order to support sustainable development and protect against natural disasters at a Community level.

From the recent international climate change conferences in Paris⁷, Madrid⁸ and Glasgow⁹ to emissions regulations, resilience and adaptation, Malta needs to commit itself even more to forge public policies aimed at managing the impacts of climate change on their primary economic sectors. In this regard, Malta urgently needs to periodically review its climate policies in the face of an ever-changing climate, update and make them more effective. A range of climate services are therefore urgently needed so as to sustain this important action, which can range from assessing the vulnerability of its socio-economic and environmental assets, to the design of Malta-specific adaptation and mitigation strategies. They can also be used for disaster risk management or modelling of future climate impact scenarios.

Galdies (2022b) explains the importance of basing Malta's national policies on factual information that is Malta-specific. In doing so, the true impact of a changing climate on Maltese assets, and not just on an assumed theoretical or Mediterranean-wide regional scale, can be understood. He exposes a number of climate-related governance lacunae and aims at making the public sector aware of the existing limitations in the national infrastructure that deals with the documentation, archiving, provision and understanding of how climate parameters are changing over time and how this information feed can be used to redefine accordingly public policies. Some of his claims have been supported independently by other institutions (WHO/UNFCCC 2021 p.16).

While the CAA does provide for the establishment of a Climate Action Board (CAB), an independent body tasked with *inter alia* a technical advisory role in facilitating the government's adherence to its national and international climate change commitments, Malta-specific knowledge at policy-making level is still lacking. Without Malta-specific knowledge there is a danger that public policies will be less effective or even counterproductive to our economic sectors, and ultimately to the

⁷ The UN Climate Change Conference (COP21), held in December 2015.

⁸ The UN Climate Change Conference (COP25), held in December 2019.

⁹ The UN Climate Change Conference (COP26), held in October 2021.

quality of life of the Maltese people. For example, Malta needs to take full advantage of Climate-KIC, (Knowledge and Innovation Community) because this is aimed at accelerating the transition to a zero-carbon, climate-resilient society. It is also providing funding and support for companies and research organizations in Europe to improve their climate services and best practices.

The need for political accountability and scrutiny

The core philosophy of current climate legislation, particularly the CAA, rests on the fact that it provides for a series of obligations and actions that bind the Maltese government. Together with the reporting and monitoring functions exercised by the CAB, as well as the scrutiny exercised by parliament, such Act is capable of creating a system of transparency, accountability as well as political pressure to make sure the government acts in compliance with the CAA together with the commitments Malta has undertaken under EU and international law. Thus, the only means of ensuring compliance at a national level rests on political accountability, principally through Parliament.

In this light, a further mechanism for ensuring accountability lies within the power of individuals or collective actors to hold the government directly responsible for its actions via recourse to the courts. Indeed, national litigation instituted by the civil society obliging the government to act in relation to its duties stemming from international norms and national statements on climate policy has in certain jurisdictions already found success. For example, the Dutch Courts in a landmark judgment¹⁰ ruled that additional action was needed in line with commitments made at international and national level to lower GHG emission levels thereby protecting the environment of the citizens. Similar actions have also been instituted in jurisdictions including the US, Belgium and Norway (Karlsson-Vinkhuyzen et. al. 2017).

Indeed, such a mechanism can be seen as an opportunity that could have wide-ranging results, which could include the advancement of and the building of momentum for climate action, raising awareness to advance climate action, and perhaps most importantly, to hold governments accountable. The EU has established several legal instruments and institutions to ensure the latter, since it recognizes the right of civil society organizations and individuals to challenge Member States in court if they believe that the government's actions or policies violate EU law.

Conclusion

Malta is facing a number of challenges in relation to climate change, both in meeting its Paris Agreement limit and in regard to the proposed EU targets for 2030 and beyond. For 2030, Malta's reduction targets pose some difficulties for a country with an increasingly large proportion of emissions originating from the transport sector and a slow rate of RES uptake. Meanwhile, the country has made considerable improvement in the mitigation of emissions arising from the energy-generation sector due to both switching to more efficient modes of electricity generation and installation of a submarine connection to Europe's electricity grid.

Further opportunities exist to increase Malta's ability to formulate informed policies to best address climate-related challenges. Continued reductions in the use of fossil fuels, especially by the transport sector coupled with increased generation of energy from renewable sources

¹⁰ Urgenda Foundation v The State of the Netherlands (Ministry of Infrastructure and the Environment) [2016] Hague District Court, Chamber for Commercial Affairs, C/09/456689 / HA ZA 13-1396.

is essential if Malta is to secure its GHG emission targets by 2030 and beyond. Possibilities for development and deployment of new climate-friendly technologies and top-down management systems will also arise. These actions would also be beneficial to the general sustainability of Malta's environment and to its economy.

In conclusion, EU membership has had an enormous impact on the commitment needed as well as on the progress made by Malta on its climate policies, enabling the country to adopt EU legislation, access funding for climate-related projects, and participate in various EU initiatives and programs aimed at addressing climate change. However, there are still challenges that Malta needs to address to achieve its climate goals, such as the limited availability of renewable energy resources and the need for more public awareness and engagement. EU membership has provided Malta with valuable tools and resources to tackle these challenges, and further Europeanisation can help Malta achieve its climate objectives while also contributing to the EU's climate goals.

References

- Börzel, T., & Buzogany, A. (2010) "Environmental Organisations and the Europeanisation of Public Policy in Central and Eastern Europe: The Case of Biodiversity Governance", *Environmental Politics*, Vol. 19 No. 5 (September 2010), pp. 708-735.
- Börzel, T. (2000) "Why there is no 'southern problem'. On environmental leaders and laggards in the European Union", *Journal of European Public Policy*, Vol. 7, No. 1 (Feb 2011), pp. 141–162.
- Energy and Water Agency (2020) "Malta's 2030 National Energy and Climate Plan", December 2019, https://energywateragency.gov.mt/wp-content/uploads/2021/10/MT-NECP-FINAL-2020-10-05_Corrigendum.pdf (accessed 9 March 2024).
- European Commission (2021) "Next Generation EU: European Commission disburses 41.1 Eur million in prefinancing to Malta", 17 December, https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6940 (accessed 9 March 2024).
- European Commission (2023a) "A short outline of the EU Strategy on Adaptation to Climate Change", Com (2023), https://climate.ec.europa.eu/system/files/2018-06/eu_strategy_outline_en.pdf (accessed 9 March 2024).
- European Commission (2023b) "Just Transition Mechanism", Com (2023), https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism_en (accessed 11 March 2024).
- European Environment Agency (2015) "Malta country briefing The European environment state and outlook 2015", EEA (2015), 18 February, https://www.eea.europa.eu/soer-2015/countries/malta (accessed 9 March 2024).
- European Environment Agency (2020) "The European Environment State and outlook 2020", EEA (2020), https://www.eea.europa.eu/publications/soer-2020 (accessed 11 March 2024).
- European Environment Agency (2022) "National progress towards greenhouse gas emission targets under the ESR", EEA (2022), 25 October, https://www.eea.europa.eu/data-and-maps/figures/national-progress-towards-greenhouse-gas (accessed 9 March 2024).
- Environment and Resources Authority (2018) "Chapter 3: Climate Change, State of the Environment Report 2018". Chapter 3: Climate Change. Reporting Status: 2009-2015. https://era.org.mt/topic/soer/ (accessed 11 March 2024).
- European Parliamentary Research Service (2021) "Climate action in Malta Latest State of Play", European Parliament (2021), https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698063/EPRS_BRI(2021)698063_EN.pdf (accessed 9 March 2024).
- Eurostat (2023) "Renewable energy Statistics. Eurostat Statistics Explained", Eurostat (2023), December https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Renewable_energy_statistics#Share_of_renewable_energy_more_than_doubled_between_2004_and_2021 (accessed 9 March 2024).
- Farrugia, K. (2021) "Malta could miss its 2030 targets unless effective action is taken, expert warns", *Malta Independent*, 9 March.
- Galdies, C. (2022a) "The State of the Climate 2022 a multidecadal report and assessment of Malta's climate", Valletta, Malta, 2022.
- Galdies, C. (2022b) "Envisioning a national climate service for Malta", *Institute for the Public Services Journal*, Vol. 3, (February 2022) pp. 17-25.
- Galdies, C., & Meli, A. (2022) "An analysis of the impacts of climate on the agricultural sector in Malta: a climatological and agronomic study", in W. Leal Filho, I. Djekic, S. Smetana, & M. Kovaleva (Eds.), Handbook of Climate Change across the Food Supply Chain, Climate Change Management, Springer.
- Graziano, P., Vink, M. & Ladrech, R. (2009) "Europeanization: New Research Agendas", *Journal of Common Market Studies*, Vol. 47 No. 1 (February 2009), pp. 201-02.

- Harwood, M. (2014) "Ten Years of EU Membership The Maltese Parliament", Occasional Paper 01/2014, the Institute for European Studies, Msida Valletta.
- Intergovernmental Panel on Climate Change (2022) "The evidence is clear: the time for action is now. We can halve emissions by 2030", IPCC (2022) April 4, https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/(accessed 8 March 2024).
- Jahan, S., Cauchi, J.P., Galdies, C., & Wraith, D. (2022a) "Effects of ambient temperatures and extreme weather events on circulatory mortality in a high population density area: Exploring mortality data from Malta" *Climate Risk Management*, Vol. 38, No. 100463 (November 2022).
- Jahan, S., Cauchi, J.P., Galdies, C., England, K., & Wraith, D. (2022b) "The adverse effect of ambient temperature on respiratory deaths in a high population density area: the case of Malta" *Respiratory Research*, Vol. 23, No. 299 (October 2022).
- Karlsson-Vinkhuyzen, S. I. et al. (2017) "Entry into Force and Then? The Paris Agreement and State Accountability", *Climate Policy*, Vol. 1 No. 5 (July 2017), pp. 593-596.
- Knill, C., & Tosun, J. (2009) "Post-accession transposition of EU law in the new member states: A cross-country comparison" *European Integration Online Papers*, Suppl. Special Issue 2, Vol. 13, pp. 1-18.
- Liefferink, D., & Jordan, A. (2005). "An 'ever Closer Union' of National Policy? The Convergence of National Environmental Policy in the European Union", *European Environment*, Vol. 15 No. 2 (March 2005), pp. 102-13.
- Maas, S., Nikolaou, P., Attard, M., & Dimitriou, L. (2021) "Classifying bicycle sharing system use in Southern European island cities: cycling for transport or leisure?" *Transportation Research Procedia*, Vol. 52 (September 2021), pp. 565-572.
- MedECC (2020) Climate and Environmental Change in the Mediterranean Basin Current Situation and Risks for the Future. First Mediterranean Assessment Report, Cramer, W., Guiot, J., Marini, K. (eds.), Union for the Mediterranean, Plan Bleu, UNEP/MAP, Marseille, France.
- Official Journal of the European Union (2023) Regulation (EU) 2023/435 of the European Parliament and of the Council of 27 February 2023 amending Regulation (EU) 2021/241 as regards REPowerEU chapters in recovery and resilience plans and amending Regulations (EU) No 1303/2013, (EU) 2021/1060 and (EU) 2021/1755, and Directive 2003/87/EC, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R0435&qid=168 (accessed 8 March 2024).
- Orlov, A., Sillmann, J., Aunan, K., Kjellstrom, T., & Aaheim, A. (2020), "Economic costs of heat-induced reductions in worker productivity due to global warming", *Global Environmental Change*, Vol. 63, No. 102087 (July 2020).
- Pace, R. (2004) "Malta's EU Membership: Chapter 1 Concluded, Chapter 2 Just Started", *Mediterranean Politics*, Vol. 9, No. 1, pp. 114–121.
- Risse, T., Green Cowles, M., & Caporaso, J. (2001) "Europeanization and domestic change: Introduction" in M. G. Cowles, J. Caporaso, & T. Risse (eds), *Transforming Europe: Europeanization and Domestic Change*, Ithaca: Cornell University Press, pp. 1–20.
- Saurugger, S. (2014) "Europeanisation in times of crisis", *Political Studies Review*, Vol. 12, No. 2 (April 2014), pp.181–192. United Nations Framework Convention on Climate Change (2021), "Malta Low Carbon Development Strategy", 12 November, https://unfccc.int/documents/311041 (accessed 8 March 2024).
- United Nations Framework Convention on Climate Change (2022) "Malta National Communication" (NC). NC 8. https://unfccc.int/sites/default/files/resource/NC8_Malta_2022_V5_final.pdf (accessed 11 March 2024)
- World Health Organization/United Nations Framework Convention on Climate Change (2021), "Health and Climate Change: Country Profile 2021 Malta", WHO/UNFCCC (2021) 24 March, https://www.who.int/publications-detail-redirect/WHO-HEP-ECH-CCH-21.01.12 (accessed 8 March 2024).



