

Sustainable Propulsion for Maltese Ports

Background

As a result of ambitious climate targets and the need for more sustainable solutions in our ports and waters, more efforts are required to ensure that port operations also shift to more sustainable, zero-emission solutions.'

Developments in battery technology and electromobility in general have been enormous in recent years, and ensuring efficiency and safety is an important part of the development work. The maritime sector is not spared from such developments and obligations.

On July 14, 2021, the European Commission unveiled its "Fit for 55" package of proposals aimed at reducing total EU greenhouse gas emissions by 55% by 2030, paving the way for full EU decarbonization by 2050. Although Malta has already embarked on an ambitious project to have Onshore Power Supply infrastructure in our main ports, other initiatives are required to promote sustainable propulsion by vessels in ports and territorial waters.

Brief Description of the Project

Project Proposal

In recent years, European alternative fuel policy has driven several EU projects to promote sustainable mobility by enabling electric vehicles not only on land but also at sea.

Currently, the Ports and Yachting Directorate within the Authority for Transport in Malta make use of a diesel-powered vessel to perform the necessary tasks and duties.

The proposed Sustainable Propulsion Project aims to explore and support common solutions for electric vessels in Maltese ports and the Mediterranean by establishing pilot networks for charging infrastructures and evaluating sustainable technologies to meet the energy needs of electric mobility at sea. The Pilot project will be used as a platform to test electric propulsion during the following operations:

- Harbour patrols including compliance inspections.
- Hydrographic surveys.
- Incident and pollution response; and
- Support during port operations.

The project primarily aims to promote the deployment of electric vessels in the existing regional/local area in accordance with international common guidelines and to leverage the experience gained from already tested projects and actions of more advanced EU countries.

In addition, the project will develop pilot actions to test longer connections between different ports with the use of electric marine vehicles by checking possible problems in the driving and charging phases. To achieve the project objectives, the sustainable propulsion project mainly involves regional and local authorities that can plan and implement pilot actions and small investments.

The project will also focus on implementing coordinated strategies through the use of common technologies and standards. Key outputs of the project include the development of a pilot model for a transnational network for maritime electric transport, linking parallel local networks for electric vehicle supply to overcome local and international constraints.

Transport Malta role and relevance to the Project

The Sustainable Propulsion for Maltese waters project falls under Malta's Operational Programme, Priority Axis 7 “Shifting towards a more low carbon transport sector” of the Cohesion Fund - Operational Programme I of Malta (OPI), and in particular on Investment Priority 7c Developing and improving environmentally friendly (including low noise) and low carbon transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility. It is to be noted that Transport Malta on behalf of the Government of Malta had published the Malta National Transport Strategy 2050 and the National Transport Plan as required so that Malta can justify the use of ERDF and Cohesion Funds.

Transport Malta (PYD) deliverables

- Import and learn from Best Practices to be demonstrated throughout the project, including through field visits
- Use the knowledge to update and detail Malta’s policy on maritime green energy
- Compile an Action Plan to be followed to deploy green energy transport in Malta, including feasibility assessment and costing of the actions to be proposed as part of the final action plan
- Stakeholder consultation
- Dissemination of information on maritime electric fuelled transport

National Strategy / Policy Framework

The Alternative Fuels Infrastructure Regulation

This regulation is an update of an existing directive and will require EU member states to ramp up the availability of LNG by 2025 and onshore electrical power supply by 2030 in core EU ports.

The EU regulations will be in addition to the IMO regulations on GHG reduction. From a strategic perspective, customers are advised to start planning their decarbonization efforts as outlined in the latest version of our Maritime Forecast to 2050.

State of Readiness

Proposal Stage / funding Programme

Collaboration / Funding

Interreg Med Programme 2021- 2027. On the 3rd of March of 2021 the Interreg Programme reached consensus on the next programme. This new agreement will see two countries joining the programme, Bulgaria, and North Macedonia and 3 new Spanish regions, Castilla -La Mancha, Comunidad de Madrid and Extremadura

Horizon Europe Grants - 2021-2027 Programme.

Interreg Europe - 2021 – 2027 Programme.

Investment (CapEx)

Price - estimate market value - between €649,000 - €1,000,000 EUR based on the following basic technical data.

Length overall 14.99 metres

Beam 4.80 metres

Draft 0.90 metres

Air draft 4.10 metres

OpEx expenditure not factored in.

Unit Responsible for the implementation of the Project

Marine Operations and Incident Response Unit
Ports and Yachting Directorate