CALL FOR TENDERS – SMARTDEC PROJECT

Recommendations for future actions towards maritime transport decarbonisation

The SMARTDEC project, as part of the European Interreg Atlantic Area, invites qualified consulting firms, research organisations, or expert consortia or individuals to submit proposals for a paid contract to carry out a study on maritime transport decarbonisation. The selected bidder will be responsible for benchmarking existing European research infrastructures and conducting scenario-based forecasting analyses on selected maritime decarbonisation innovations and their potential end user applications.

The table below depicts the information related to this tender:

Contracting Authority	The contract will be awarded and managed by Atlanpole as partner of the SMARTDEC Project, an EU-funded Interreg Atlantic Area initiative. Website: https://smartdec.eu/
	The purpose of this contract is to support decision-making by ports, maritime operators, policymakers, and innovation developers by providing evidence-based analysis on how selected decarbonisation technologies could be deployed in relevant real-world maritime contexts. As part of the SMARTDEC programme, 11 maritime decarbonisation innovations have already been selected (e.g., technologies, services, or operational solutions). The contractor will analyse the future impact and deployment pathways of at least half of these innovations, and preferably all of them. The list of selected innovations is given below with a brief description of the product or service they develop: - PureGlide UVC – Crawler + ROV +UV-C preventive afloat cleaning - Inguru Predict – Optimization of port activities in real time to minimize their relative environmental impact - Windcredible – Small and modular VAWT wind turbines - Dublin Port Company – Developing software to provide a port Wide Green House Gas Emission inventory - Ecomer Data – On-board vessel data optimization for decarbonization - EONSEA – Inspection, monitoring, and processing of underwater data - CORMORAN – Hybrid solar wing for vessel wind propulsion - Suprasys – Bifilar superconducting cable cooled by helium or hydrogen for cold-ironing - APDL – Smart Solar Units for Container Parks and Ships - ATU – Pilot the use of Hydrotreated Vegetable Oil (HVO) as an alternative fuel source used initially on quayside generators of the Killibegs fishing port - Green Navy – Hybrid lightweight vessel for harbour transit, island connectivity and coastal tourism
Main objective	**Benchmarking and scenario analysis of innovative solutions for maritime decarbonization**
Scope of Work	*The contracted organisation will be required to carry out the following two tasks:* 1. ***Benchmarking analysis of research and testing facilities (estimated 20% of the effort)***

	The contractor shall conduct a desk-based benchmarking study of existing European research and testing infrastructures that support maritime decarbonisation technologies, with a focus on facilities located in the Atlantic Area. The scope of the study should focus primarily on:
	- *Dedicated numerical and experimental tools/facilities capable of assessing innovations contributing specifically to the maritime decarbonization (typically TRL1 to TRL5)*
	- *Research infrastructures that can demonstrate the performance of pilots for some of the innovative solutions in a real or representative environment (typically TRL5 to TRL9).*
	
	Examples of such facilities or research infrastructures include wind/wave basins, engine test rooms, marine-worthiness testing facilities, connector testing for loading/charging, hardware-in-the-loop systems, research vessels, etc.
	
	Based on this literature survey, the analysis should highlight the current gaps in the Atlantic Area to support maritime decarbonization innovations. This contribution must conclude by providing recommendations on areas where improvements to existing facilities and investments in new facilities should be made, considering the state-of-the-art research infrastructures already available in nearby EU regions.
	
	2. Scenario forecasting analysis (estimated 80% of the effort)
	The scenario forecasting analysis shall build upon existing SMARTDEC datasets where relevant.
	Previously collected environmental, economic, and social data for the selected innovations may be used as baseline inputs, to be complemented, updated, or refined by the contractor as necessary for the forecasting exercise.
	
	The analysis should encompass:
	- *The selection of a set of at least 6 representative case studies located along the Atlantic Area contributing to the carbon footprint of waterborne transportation. Real or representative data for each scenario must be collected to run the forecasting analysis. Example of relevant scenarios are listed below for illustration purposes:*
	  - *Logistics of the container terminal at Port of Leixões in Portugal*
	  - *Transport of passengers between Roscoff (France) and Cork (Ireland) using cruise ferries*
	  - *Quayside emissions at Port of Bilbao in Spain*
	  - *Maintenance operations at the offshore wind farms of Saint Nazaire*
	  - *Fishing activities in port of Killibegs, Ireland*
	- *A forecasting analysis in a suitable time horizon (e.g 2050) must then be carried out to estimate the environmental and socioeconomic impacts of deploying at least 6 of the 11 selected innovations on one or more of the case studies. Ideally, and preferably, all 11 innovations would be studied for at least one scenario.*
	
	The methodology shall ideally not only allow the appraisal of the sector's overall contribution to decarbonization (CO_2 emissions reduction potential) but also consider other environmental hazards. Results should be presented in quantitative terms, along with a qualitative evaluation of parameters that may be more difficult to measure (e.g biodiversity biomass or habitats impacts).

	In the end, the forecasting results should guide stakeholders involved in developing innovative solutions for decarbonising the maritime transport sector. Starting from the 11 selected solution providers of the SMARTDEC project to their relevant end users, and considering other main parts of the value chain, the guide should: - Draw the route towards operational adoption of new technologies; - Determine the requirements to support relevant stakeholders involved in the decision-making process of adopting these innovations (from prototyping to full-scale demonstrator in real environment); - Highlight the successful conditions and good practices to accelerate the implementation of scalable and impactful solutions.
Contractual Deliverables	*The selected bidder shall deliver the following document outputs:* - *A benchmarking analysis document of available testing infrastructures for maritime decarbonization at the EU level, with recommendations on the current gaps to accelerate the development of innovative solutions* - *A scenario analysis document for the selected innovations covering their decarbonisation potential, environmental and socioeconomic impacts trajectories, together with recommendations for their future developments* *In addition to these reports, the service shall provide all raw data and data analysis files corresponding to the results of the scenario analysis to each selected innovation.* *Finally, an executive summary highlighting the key outcome from the service should be provided in a slideshow format including standalone graphically appealing features. This summary should highlight key recommendations and perspectives to accelerate the deployment of innovative solutions for maritime decarbonization.*
Prices	The total budget for this contract is estimated to be around €35,000 (tax included). The maximum amount allowed to perform this service **cannot exceed €40,000 (Tax included).**
Application files	Organisations wishing to be considered eligible for this contract must submit the following documents as a complete application: - Your detailed invoice - The CV of the key staff who will be involved in the execution of this analysis - A short document describing your methodology and how you intend to achieve the expected results and deliverables (4 or 5 pages or slides maximum)
Selection criteria	Ultimately, the winning bidder will be the one having the best quality/price ratio, where both quality and price will weigh 50% Quality will be evaluated against 3 aspects with equal weight: - Knowledge and references of the staff involved - Relevance of the methodology (tools to be used, strategy to access data, process, etc.) - Added value of expected results and deliverables, including quality control.
Calendar	Deadline to submit your full application: 25/02/2026 Notification of results: 10/03/2026 Deadline to deliver the final report, including all results: 13/10/2026

Contacts	Should you have any questions regarding this opportunity concerning: - The scope and technical matters of the analysis, please reach out: Boris Teillant, Project Developer 'Blue Economy': teillant@atlanpole.fr - Administrative and financial matters , please reach out: Constance Guillotin-de-Corson, Administrative and Financial Manager: guillotin-de-corson@atlanpole.fr