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EUROPEAN CLIMATE, INFRASTRUCTURE AND ENVIRONMENT EXECUTIVE AGENCY (CINEA)

SEANERGY: A PROJECT CREATING A MASTER PLAN TO HELP ACHIEVE ZERO-EMISSION PORTS BY 2050

Press Release n°1

- 12 EUROPEAN ORGANISATIONS COME TOGETHER TO TRANSFORM PORTS INTO CLEAN ENERGY HUBS.
- A PROJECT FINANCED WITH ALMOST €2.5 MILLION UNDER THE HORIZON EUROPE PROGRAMME

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October 7th, 2022 – Magellan Circle (coordinators), World Maritime University, Rina Consulting, Atperon, and Eco Imagination are the European organisations that will lead the execution of the SEANERGY project with the support of Anleg, Atperon, Dafni, Ennschafen, Fundacion Valencia Port, Future Proof Shipping, IHE Delft Institute for Water Education, and Zero Emissions Engineering.

The Sustainability EducationAI programme for greenER fuels and enerGY on ports (SEANERGY) is an initiative financed by the European Union (EU), within the framework of the research and innovation programme Horizon Europe.

For the next 30 months, the 12 European partners will come together to develop a Master Plan to reduce the environmental impact of the port industry.

The kick-off meeting took place virtually and introduced the main actions to be taken under four main stages:

1. Understanding the current EU ports 'situation and stakeholders
2. Gap analysis of the EU port clean energy transition
3. Creation of the SEANERGY Master Plan
4. Implementation of the SEANERGY Master Plan

Problem Statement

The EU ports industry is currently one of the economic pillars of the European community. Although being hit by the economic recession caused by COVID-19's restrictions, on average, around 74% of goods imported and exported, and 37% of exchanges with outside entities, go through seaports. However, these vital infrastructures are **responsible for a significant rise in environmental impacts** in terms of carbon emissions, soil & water pollution, and loss of biodiversity, among others. Not in vain, maritime transport in the EU accounts for approximately 13% of its transport GHG emissions. This fact puts the **greening of the port's emitting activities as a necessary step to achieve the ambitious goals for 2030 (55% reduction) and 2050 (net zero)**. In parallel, the Sustainable and Smart Mobility Strategy, flowing from the European Green Deal, sets as a flagship the achievement of zero-emission ports, becoming **"clean energy hubs for integrated electricity systems, hydrogen and other low-carbon**



fuels, and testbeds for waste reuse and the circular economy”. Consequently, the European Commission (EC) is proposing measures to incentivise the deployment of renewable and low-carbon fuels and feeding stationed vessels with renewable power instead of fossil energy, incentivising the development and use of new, cleaner, and quieter vessels, greening port services and operations, optimisation of port calls, and through wider use of smart traffic management. Many specialized collaborative plans have been developed, increasing Europe’s potential towards a greener future. One of these has especially taken the lead as one of the most promising ways **of exploiting an untapped potential of the energy industry in the following decade: PORTS 2030**. Activities such as **sharing findings, unifying objectives, creating synergies and preparing the next generations**, will become a top priority for the European Economic Zone (EEZ) in the next few years to ensure a steadily increasing and reliable path towards Europe 2050’s goals, **tackling challenges such as co-creation of circular-by-design operative and business models**, as well as **identifying the social and technological challenges associated to meeting the Green Deal priorities**. This is the framework of the SEANERGY project, which aims at **supporting the creation of the best possible setting and conditions for the EU energy transition, through the development and implementation of sustainability and an educational path centred on the port ecosystem**.

SEANERGY presents a solution

The SEANERGY Project aims to provide a solution to this challenge through the **creation of the SEANERGY Master Plan (MP)**, which is meant to be an **aggregator of information and guidelines** that will allow all the port industry's stakeholders, **regardless of their geographical context**, to assess, plan and execute the necessary activities towards **transforming ports into clean energy hubs**. The MP will be therefore the main reference for all port institutions approaching the preparation of environmental and energy planning documents. Activities such as **training, reskilling, awareness spreading and communication channels creation**, will set the basis of the green port transitioning, creating spaces of dialogue and teaching among all agents of the industry (academia, private and public), which will boost the development and integration of these technologies, along with prepared professionals that will be able to manage and implement them promptly, securely, and efficiently.

Parallely, the MP will consider as many variables as possible, such as the resources to be shared in the port region, for example hydrogen, waste, water, electricity, carbon dioxide and steam. Therefore, the MP will identify them, selecting the most promising synergy scenarios between environment, cooperation, and business viability.

Complementarily, the project will develop a SEANERGY Handbook (HB) which will serve as a tool for MP users to help them navigate through the information through video modules, explaining the key relevant aspects of each section, as well as supporting the information’s adaptation to the regional context.



About SEANERGY's partners

Led by the Magellan Circle, the SEANERGY projects bring together the following European partners: Anleg, Atperson, Dafni, Eco Imagination, Ennshafen, Fundacion Valencia Port, Future Proof Shipping, IHE Delft Institute for Water Education, Rina, World Maritime University, Zero Emissions Engineering.

This consortium is composed of stakeholders distributed throughout Europe: PT, ES, IT, SE, AT, GR, NL, FR, & DE.

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About the Horizon Europe programme

Horizon Europe is the EU's key funding programme for research and innovation.

It tackles climate change, helps to achieve the UN's Sustainable Development Goals, and boosts the EU's competitiveness and growth.

The programme facilitates collaboration and strengthens the impact of research and innovation in developing, supporting, and implementing EU policies while tackling global challenges. It supports the creation and better diffusion of excellent knowledge and technologies.

It creates jobs, fully engages the EU's talent pool, boosts economic growth, promotes industrial competitiveness, and optimises investment impact within a strengthened European Research Area