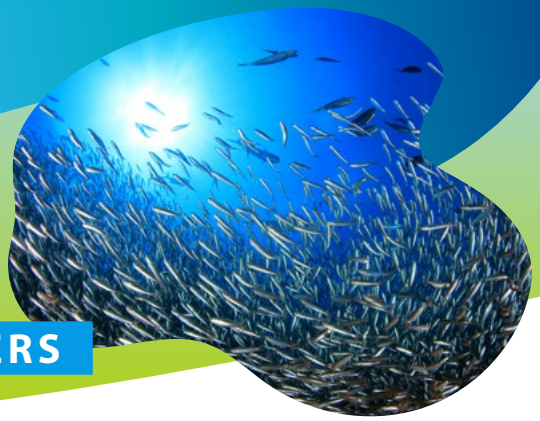
EUROPEAN UNION

EU MISSIONS

RESTORE OUR OCEAN AND WATERS



Baseline study - Baltic and North Sea Lighthouse

Mission Ocean and Waters lighthouses serve as sites to pilot, demonstrate, develop, and deploy Mission activities across EU seas and river basins. The objective of the Baltic and North Sea Lighthouse focuses on Mission objective 3: 'Make the sustainable Blue economy carbon neutral and circular', through the following two specific targets:

Eliminate greenhouse gas emissions from maritime economic activities in the EU and sequester those emissions that cannot be avoided (net zero maritime emission)

Develop zero-carbon and low-impact aquaculture, and promote circular, low carbon multi-purpose use of marine and water space

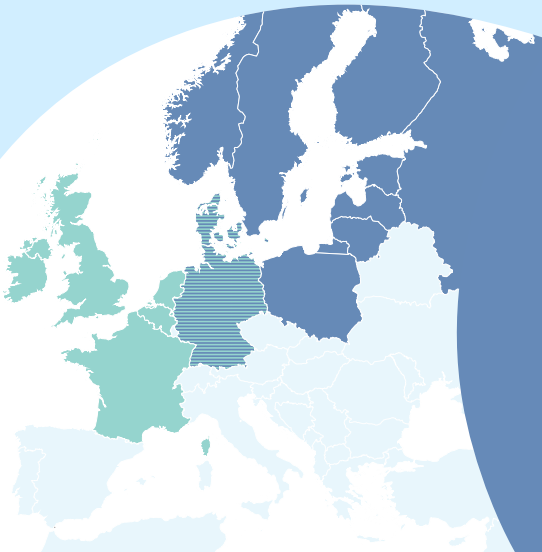
A baseline study was carried out in 2021-2022 and proposed a draft set of indicators to measure Mission progress towards its targets. It also analysed various elements and actions crucial for achieving Mission objectives, including:

- Governance structures, institutions, stakeholder initiatives and networks, key projects
- Regional, national and macro-regional and Smart Specialisation Strategies, National Recovery and Resilience Plans
- Activities supporting citizen engagement and ocean literacy

The overall objective of the baseline study for the Baltic and North Sea basins, was to focus on and analyse six Blue Economy sectors, namely:

- Maritime transport (with a focus on passenger ferry transport)
- Maritime ports and facilities
- Offshore renewable energy facilities
- Offshore renewable energy storage facilities
- Multipurpose platforms
- Aquaculture.

With a 2030 target, the EU Mission "Restore our Ocean and Waters" aims to protect and restore the health of our ocean and waters through research and innovation, citizen engagement and blue investments.



BALTIC SEA BASIN

85 million inhabitants

Area coverage **415 266 km²**

Coastline **8 000 km**

NORTH SEA BASIN

80 million inhabitants

Area coverage **575 000 km²**

Coastline **7 800 km**

BASELINE STATE OF PLAY 2021 – 2022

Maritime Transport & Ports

- There are different types of alternative fuels and propulsion systems that can support decarbonisation of the maritime transport, including batteries/electricity, LNG, ammonia, methanol, hydrogen, biofuels, and Power to X (PtX).

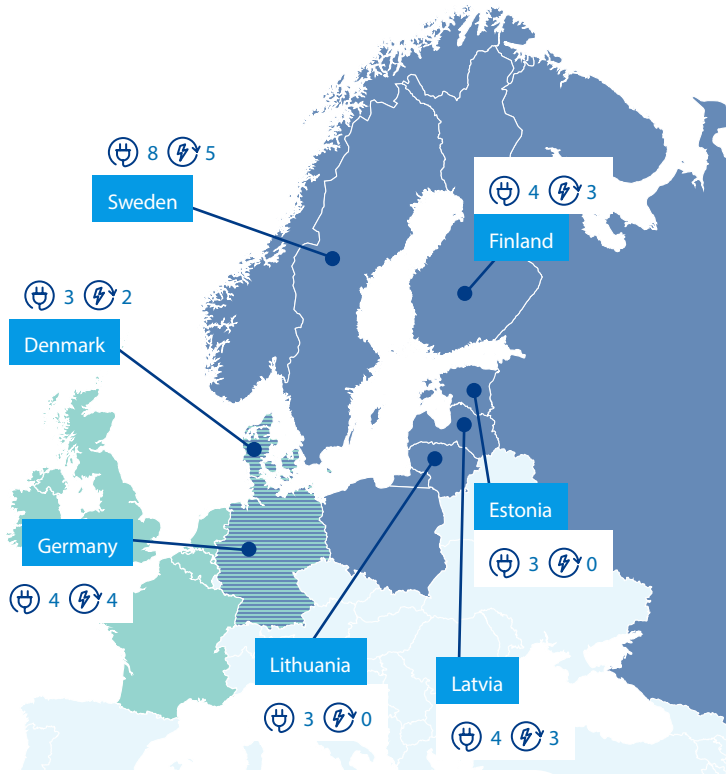
Number of operational ferries using alternative fuels, by fuel type, out of all ferries operating in the lighthouse area :

In the North Sea (2020)

- Norway: 49 electric ferries in operation, 24 are operational in 2022 and 10 planned for beyond 2022.
- Norway: 23 LNG car/passenger ferries

In the Baltic Sea (2020)

- Total: 425 passenger vessels of the IMO registered ships in 2015
- Electric ferries identified: 11
- LNG ferries identified: 7



Number of onshore power supply facilities in the Baltic Sea and amount of which are high voltage facilities

Onshore Power Supply
No. of High Voltage

Offshore Renewable Energy facilities (RE)

- Wind is the largest source of offshore RE in Europe.
- The Commission aims at having an installed capacity of at least 60 GW of offshore wind and at least 1 GW of ocean energy by 2030, with a view of reaching respectively 300 GW and 40 GW of installed capacity by 2050.
- The main barrier to offshore wind energy is related to permitting.

EU Strategy for Baltic and North Sea basins

Strategy for the Baltic basin

- The EU strategy for the Baltic Sea region (EUSBSR) is a macro-regional strategy aiming to strengthen cooperation between the countries bordering the Baltic Sea to meet the common challenges and to benefit from common opportunities facing the region. Four key challenges have been identified as requiring urgent attention:
- Enable a sustainable environment
- Enhance the region's prosperity
- Increase accessibility and attractiveness
- Ensure safety and security in the region

Strategy for the North Sea basin

- The North Sea Region Strategy 2030, jointly defined by regional authorities across the North Sea, defines the most pressing issues and topics where transnational cooperation and action is of added importance. The four new priority areas for cooperation until 2030 are:
- Productive and sustainable North Sea
- Climate neutral North Sea
- Connected North Sea region
- Smart North Sea region

Data sources

- Data were extracted from reputable data sources such as Eurostat, OECD, the World Bank, the Blue Economy report, the World Factbook CIA, the European Environment Agency, and the Office for National Statistics (UK).

Data gaps

- Limited data is available on supporting infrastructure for hydrogen, methanol, ammonia, which is also linked to limited usage of these fuels.
- The low number of operational offshore RE energy storage has produced little data, which is not centrally stored.
- There is a lack of a harmonised practice for the collection, processing, and publication of indicators and data tracking for offshore wind farms.
- The data gaps for aquaculture are significant due to lack of distinction between way of production.

Link to the report

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