EU policy development on offshore renewable energy

NWWAC/PeIAC Webinar fisheries and offshore renewable energy
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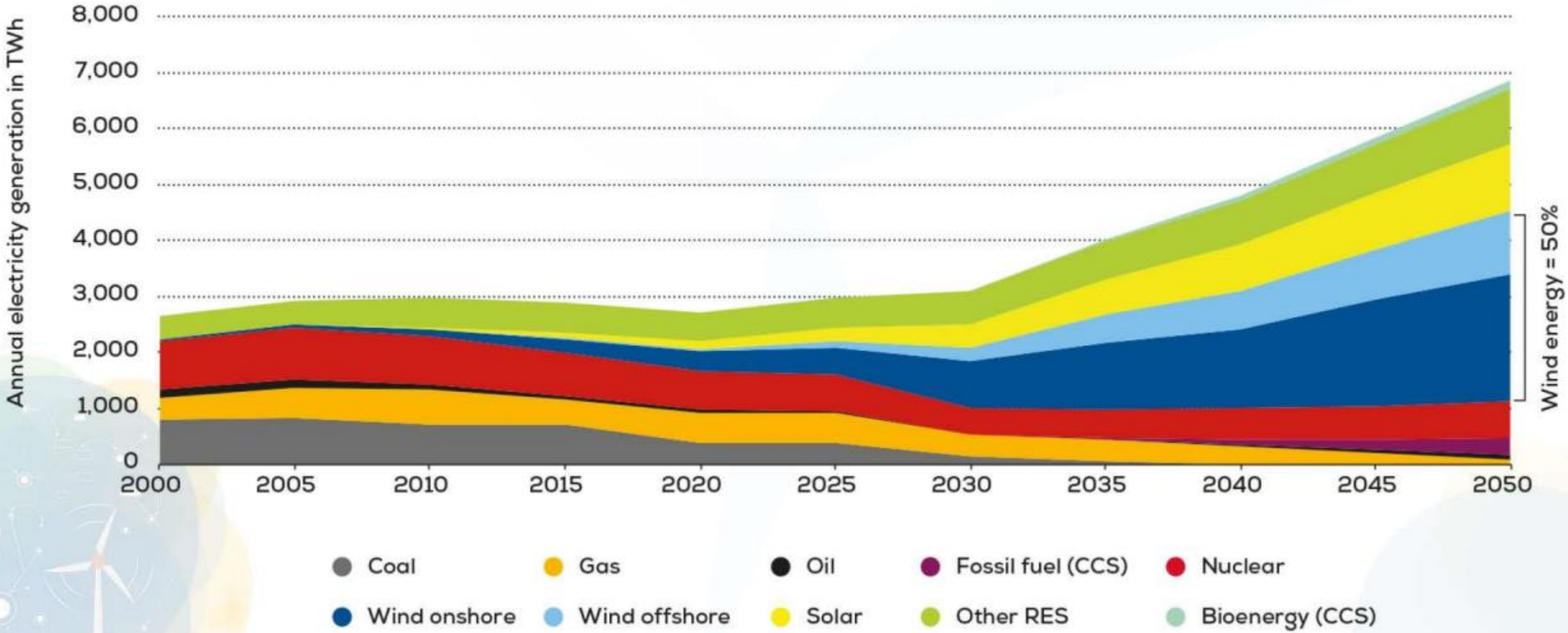
EU energy transition and renewable energy

- 20% of the EU energy **consumption** from renewable sources by 2020

- **At least 42,5% by 2030 (RepowerEU - 2022)**
  => large increase in electricity production
  => mainly from wind and solar photovoltaic
  => offshore renewable energy: marginal today: 3% of the EU electricity production, large potential

ETIP Wind
EUROPEAN TECHNOLOGY & INNOVATION PLATFORM ON WIND ENERGY

Demand for electricity will more than double by 2050 with wind energy meeting 50%



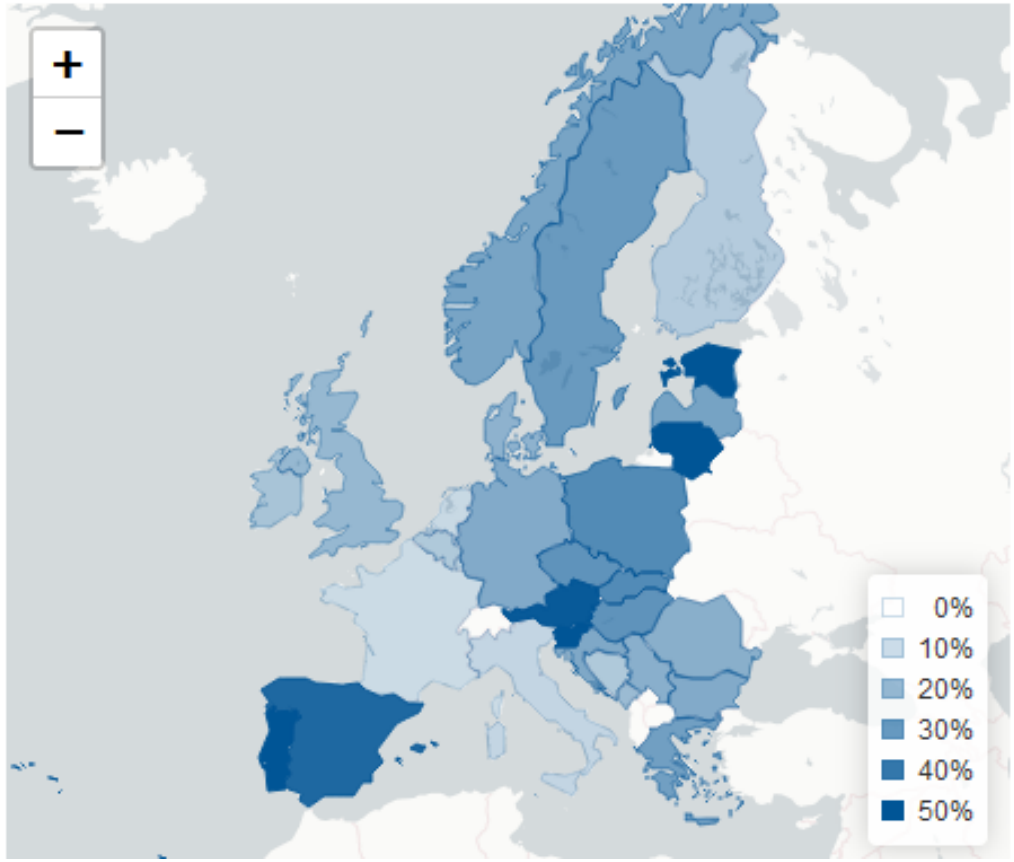
Source: WindEurope based on European Commission Impact Assessment, COVID MIX scenario, 2020

Few European countries have offshore wind installations

Capacity factor much higher offshore (= average power generated divided by its peak capacity)

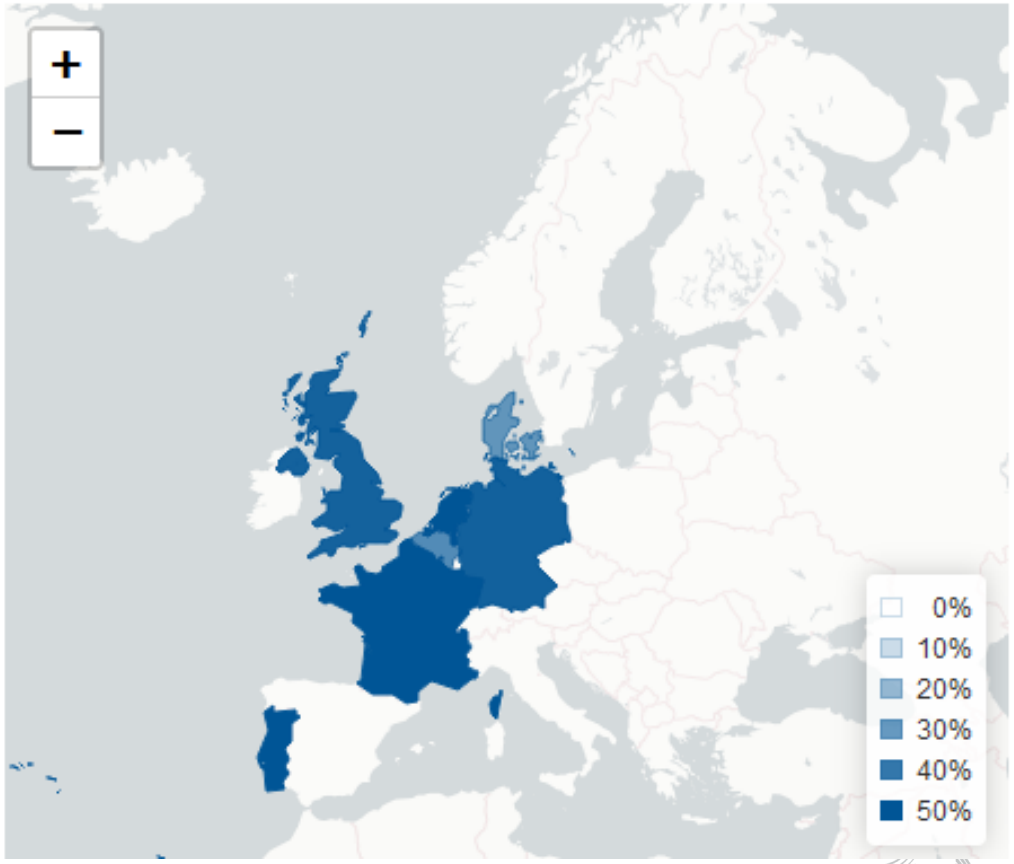
Onshore wind

25.9%



Offshore wind

46.2%



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Several technologies that are complementary and at different stages of maturity

Bottom-fixed

Floating

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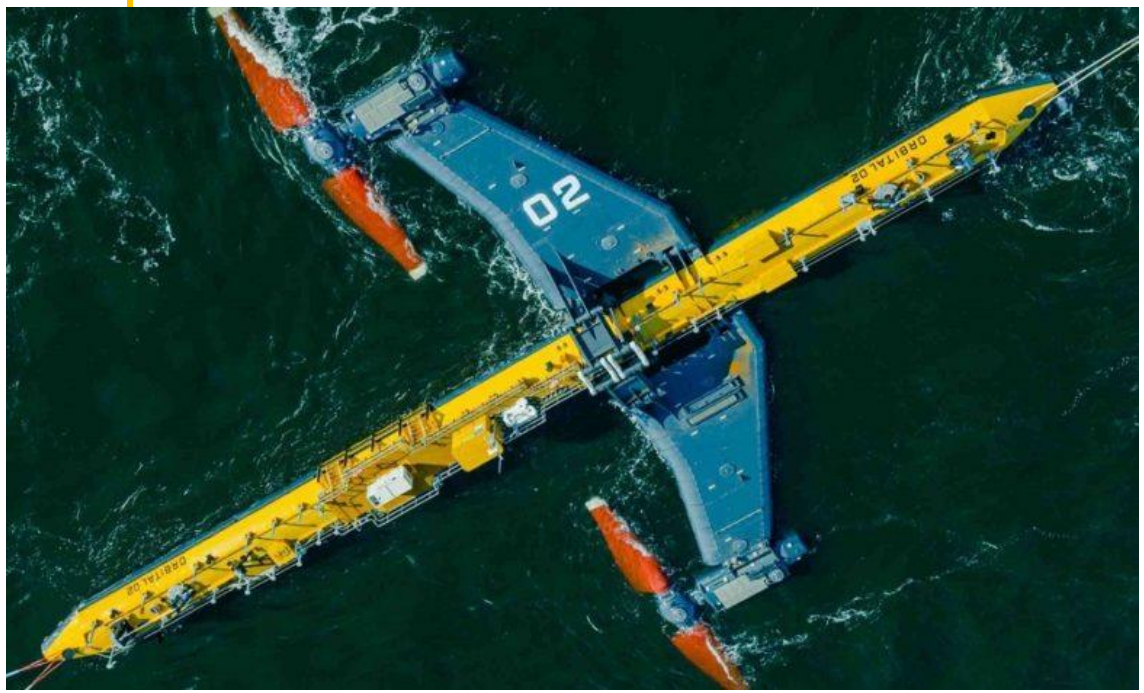
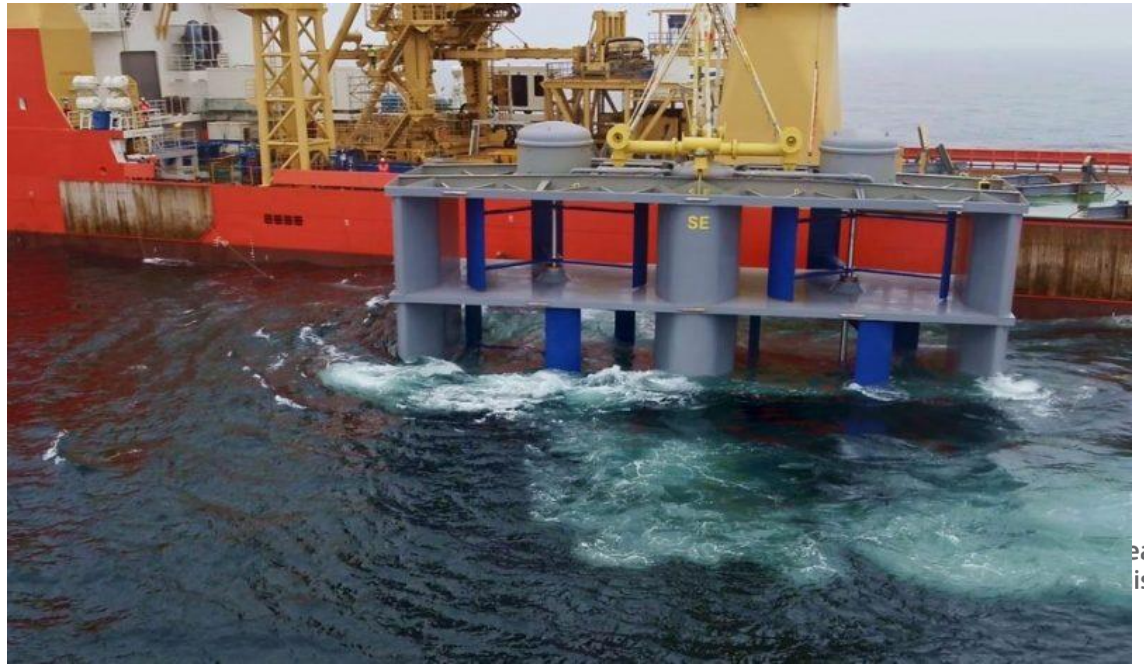
Tidal energy





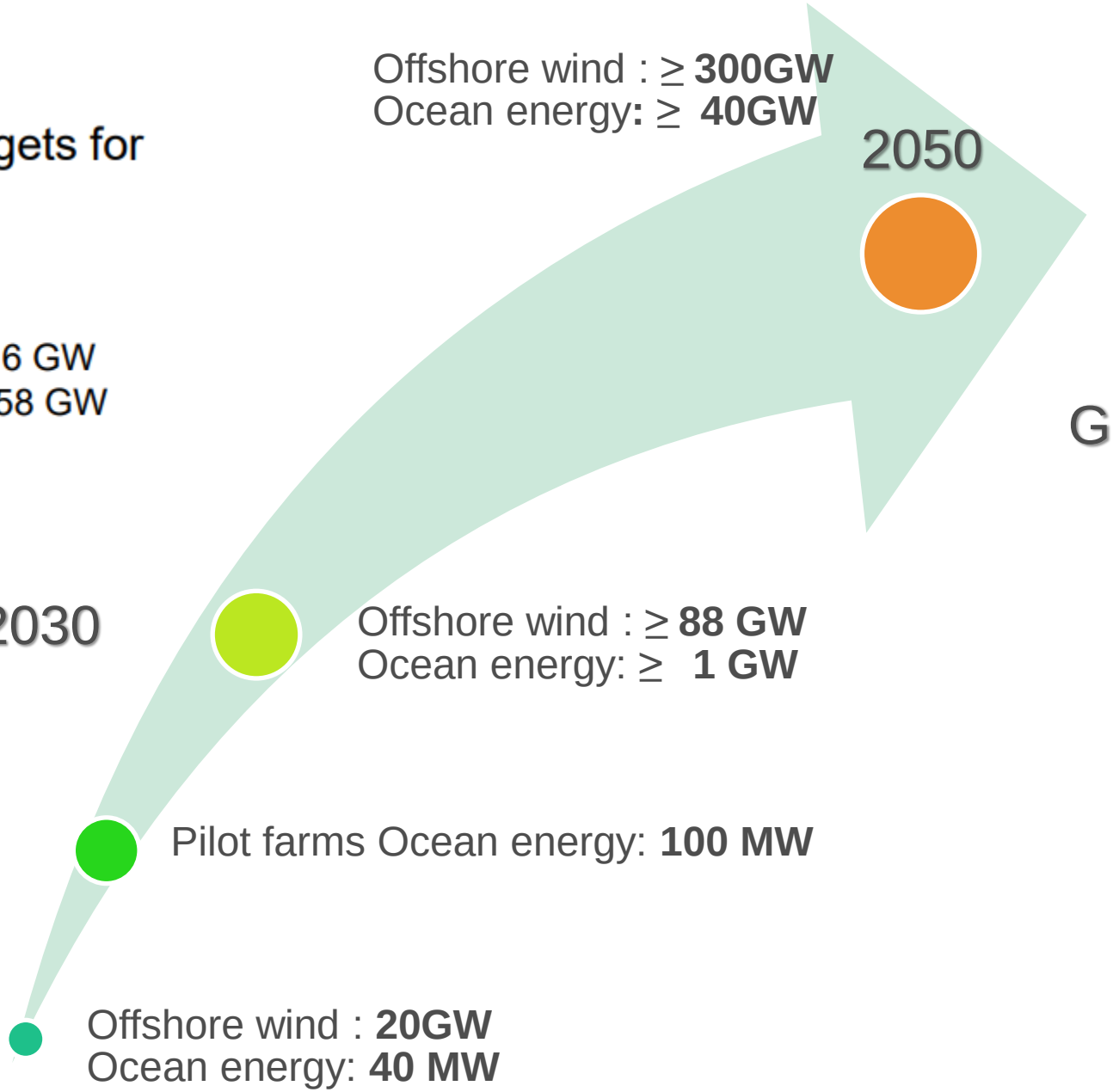
Wave energy

EU ambition for offshore renewable energy

National and regional EU targets for offshore wind (2024) by 2030/2040/2050

- North Seas: 56 GW, 168 GW, 216 GW
- Baltic Sea: 20 GW, 41 GW and 58 GW
- Atlantic 5 GW, 25 GW, 50 GW
- Mediterranean and Black Sea: 6 GW, 26 GW and 36GW

Tenders for 40 GW between 2024-2026



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High political support and ambition for offshore wind

⇒ energy security and fight against climate change

⇒ rapid upscaling of renewable energy offshore; co-existence

⇒ increase the security of offshore and underwater infrastructure

Ostend North Sea Summit – 26 May 2023 - final declaration

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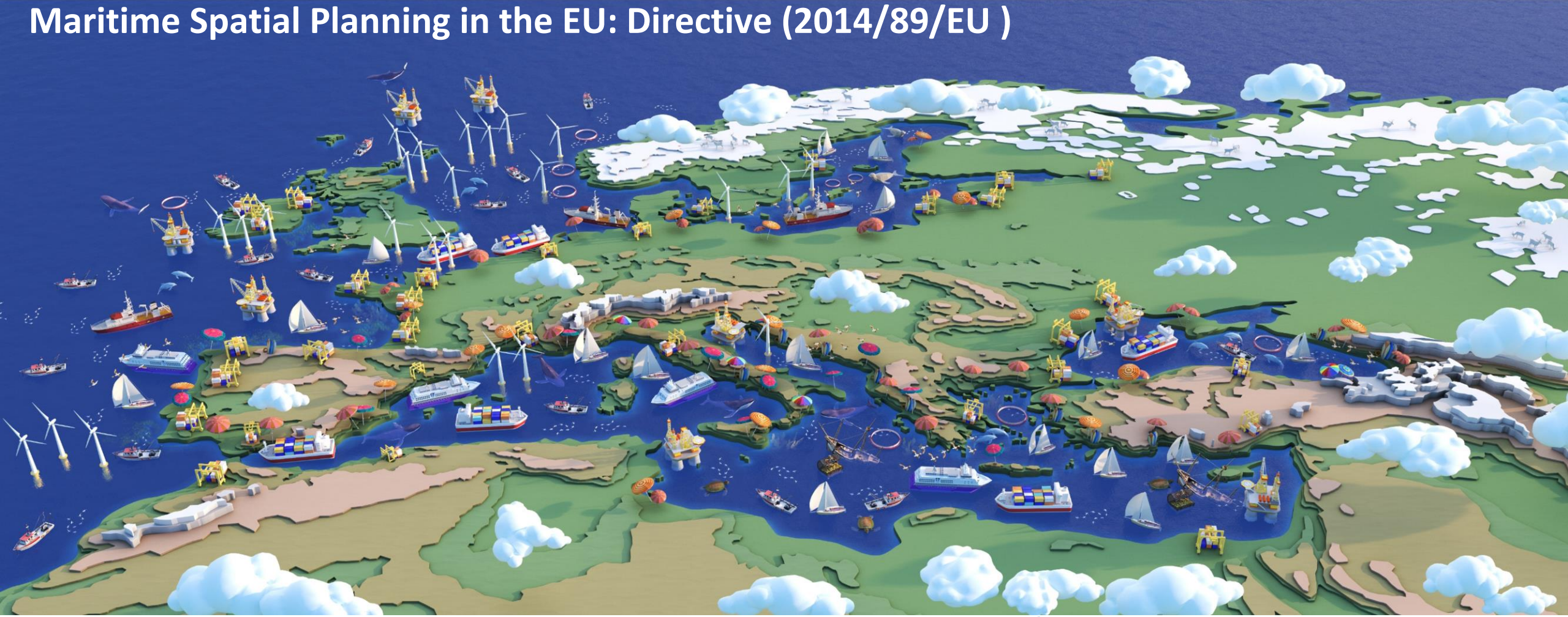
Maritime Spatial Planning in the EU: Directive (2014/89/EU)



Member States experts group, knowledge sharing: EU MSP platform – European Blue Forum for sea users – Compendium of multiple uses at sea, international cooperation with IOC UNESCO - 30 regional and cross-border projects – EUR 40+ million (EMFAF)

Anticipating current and future use of the sea by 2030 and beyond: 30% marine protected areas, restoration areas, 88 GW offshore wind, co-existence with fishing

Next implementation report: Q1 2026

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EU Member States have identified space for offshore wind

- Most coastal EU countries have a maritime spatial plan (20 out of 22)
- Need to ensure **integrated maritime spatial planning**:
  - Call to move from purely national plans with cross-border consultations to **regional** planning within the respective **sea basins**.
  - Strong emphasis on **co-existence and multiple use** of the marine space and promotion of best practices. The Commission calls to coordinate at early stage with other economic activities, including **fisheries**, when **allocating space** for offshore wind.
- Assess and address the effects that offshore renewable energy installations have on **ecosystems and biodiversity**, including the **cumulative** effects at sea basin level.

Priorities and challenges

- Offshore grid development
- Industrial and supply chain capacity, competitiveness
- Permitting
- Maritime spatial planning, co-existence, regional cooperation
- Research and innovation
- Resilience of offshore renewable infrastructure and maritime security

Seabasin cooperation

- North Seas Energy Cooperation

- Greater North Sea Basin Initiative (GNSBI) launched in 2023
  => Ministerial declaration (Nov 2024): focus on nature, food and energy.

  - **spatial**: how to ensure there is space for all uses and transitions in our shared sea?

  - **ecological**: the marine ecosystem is significantly affected by human activities and in a dire state (OSPAR's 2023 Quality Status Report).

  - Working groups on: Multi-use and co-use, Nature conservation, Cumulative impacts assessment, Long term perspectives fisheries, Knowledge sharing
  - Cooperation with OSPAR and ICES
  - Engagement with regional stakeholders

Thank you

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