PUBLIC DEBATE

Maritime spatial planning

Eastern Channel - North Sea

Summary of the project management file
Following a request from French government and RTE (Electricity Transmission Network), the National Commission for Public Debate (CNDP), an independent administrative authority responsible for ensuring compliance with the right to public participation, decided to organize a public debate on maritime spatial planning and offshore wind farm mapping. The CNDP has entrusted the running of the debate to a «Special Committee for Public Debate» for each coastline.

«Debating the sea» public debate begins on 20 November 2023 and ends on 26 April 2024. It will consist of multiple events that will take different forms depending on the territories and issues at stake (round tables, cruises, digital tools, etc.). The aim is to inform all audiences, whether or not they live on the coastline, and enable them to participate in the choices that will determine the future of the sea and the place of energy in the sea.

1. Why a public debate on maritime planning?

The sea is a space where numerous environmental and socio-economic uses and challenges coexist. It is home to exceptional biodiversity, provides essential food resources, and hosts economic activities that structure the coastline and beyond.

Today, the sea faces major challenges, including climate change. Climate change has a direct impact on the functioning of the oceans (rising water temperatures, acidification, erosion of marine biodiversity, etc.). The marine environment, the planet’s leading carbon sink and a crucial thermal regulator, plays an essential role in balancing the climate and mitigating the effects of global change.

The latest assessments of the marine environmental status in France give cause for concern. As elsewhere in Europe and around the world, they show that marine biodiversity and the many services provided by the sea, which are essential to humanity, are under threat, particularly due to the many pressures associated with human activities. Protecting them is therefore essential.

The sea is also home to an ever-growing number of economic activities, which coexist in a limited space and contribute to the economic development of coastal areas. Existing activities, such as fishing and transport, are developing and evolving alongside others that are emerging. Marine renewable energy infrastructures, which contribute to climate change mitigation, are one of these.

France’s maritime areas offer major opportunities for offshore wind energy projects. This source of energy is essential to meeting the goal of carbon neutrality, and should account for nearly a quarter of our electricity production by 2050.

France’s maritime areas are currently facing a number of challenges: preserving and restoring their biodiversity, economic development, managing existing and emerging activities, energy and ecological transition... Maritime planning is a major lever for meeting these challenges.
2. How to meet the challenges of maritime planning in the Eastern Channel - North Sea?

The maritime planning process is supported by «strategic coastline documents» (DSF), which implement the guidelines of the national strategy for the sea and coast (SNML). The aim is to build, in consultation with all stakeholders and citizens, a multi-year, shared and evolving vision of the maritime area in terms of ecological, economic and social issues, and local needs. Maritime planning must enable existing and emerging maritime uses and activities to be perpetuated and managed sustainably, while helping to achieve good environmental status for the marine environment.

Public participation is an essential step in co-constructing the objectives of maritime planning, particularly with regard to the following objectives:

- Identify best solutions for reconciling uses;
- Set strategic developments to feed into the updating of the socio-economic and environmental objectives of strategic coastline documents;
- Strengthen protection of the marine environment and identify priority study areas for the development of high protection;
- Contribute to the mapping of priority areas for the installation and connection of offshore wind turbines, 10 years ahead and by 2050, and thus contribute to the work on the French Energy and Climate Strategy.

Public debates will provide input for the updating of the strategic coastline documents, the first parts of which are due to be adopted in early 2025.

Documentation available to the public

Several tools are available to help public understand the project, its context and the issues at stake:

- **public debate website** [https://www.debatpublicfr-la-mer-en-debat](https://www.debatpublicfr-la-mer-en-debat) for information, documentation, debate events and questions;
- **a project owner’s file**, written by French government and RTE, consisting of a basic document and thematic sheets, to provide a detailed understanding of issues and the purpose of public debate;
- **a maritime planning portal** with access to summary data on the marine environment and activities at sea: [https://www.geolittoral.developpement-durable.gouv.fr/portail-de-la-planification-de-la-mer-et-du-a1562.html](https://www.geolittoral.developpement-durable.gouv.fr/portail-de-la-planification-de-la-mer-et-du-a1562.html);
- **an atlas of maps**, including French government’s proposals for zones suitable for offshore wind power development, and for zones of high protection.
3. How to meet the challenges of maritime planning in the Eastern Channel - North Sea?

3.1. Strengthening protection of the marine environment to achieve good environmental status

Preservation of the marine environment is essential to guarantee future generations a viable planet and a welcoming environment for human beings and all the species that make it so rich. It is now necessary to step up efforts to both protect and restore marine ecosystems, so as to preserve the vital ecosystem services associated with them (climate change mitigation, air quality, food, etc.) and thus achieve good environmental status.

To meet these challenges, marine protected areas are a privileged tool. They imply managing human activities where their impact is incompatible with the conservation of marine species and habitats. Certain areas may be subject to a very high level of protection; these are known as «highly protected areas», a label marking the exemplary environmental management of an area - including the restriction or prohibition of activities. The national strategy for protected areas, renewed in 2021, aims, by 2030, to strengthen the network of protected areas to cover 30% of the national territory and marine waters (a target already achieved), including 10% under high protection. The maritime planning process contributes directly to this goal.

• The challenges facing Channel and North Sea

The Eastern Channel - North Sea coastline is home to 75 marine protected areas covering 38% of its marine waters. The coastline also boasts 3 high-protection areas.

In view of the biodiversity issues at stake, as well as the particular characteristics of the Eastern Channel - North Sea coastline in terms of physical features and the high concentration of human activities, French government has set a target of covering at least 1% of the waters along this coastline with high protection.

Thus, public debate should contribute to identify, with regard to the challenges of preserving the coastline’s biodiversity, the network of existing marine protected areas and current activities and uses, the sectors to be prioritized to achieve the target of high protection defined for this coastline. Contributions from the public can be based on the areas of ecological interest identified for the development of high protection. Ecological issues covered include, for example, hermella beds, functional areas for marine mammals (seal resting places, etc.) or remarkable underwater sedimentary habitats.
3.2. Anticipate developments to ensure sustainable management of existing and emerging maritime activities

The sea and its shores are home to an ever-increasing number of activities, which means that we need to rethink the way in which they interact in space and time. Their sustainability and development are major regional and national challenges in terms of energy transition and food sovereignty, of local jobs and of landscape and tourist identity. The aim is both to pursue development and to respect the carrying capacity of marine and coastal environments, which remain fragile and little-known ecosystems.

The sea beyond the beach

The Eastern Channel – North Sea coastline represents a major socio-economic challenge, due first and foremost to its importance in the national and global economy. As a commercial interface between Europe and the rest of the world, this coastline handles a quarter of world trade, freight and passenger traffic across the Channel, and two-thirds of French port traffic. It is also home to one of the highest concentrations of French and European fishing vessels, and Europe’s second-largest shellfish-growing area.

Sea fishing and aquaculture play an important role.

Fishing activities are highly seasonal (scallops, whelks, cuttlefish, etc.), and are mainly concentrated in coastal areas. The coastline boasts Europe’s 1st largest scallop deposit in the Baie de Seine, and the 2nd largest cockle deposit in the Baie des Veyes.

Shellfish farming also plays a significant role in the maritime economy of the Eastern Channel - North Sea.

Foot fishing is present all along the coastline, on sandy, muddy and rocky environments.

Maritime traffic, which is of major importance to the coastline (the world’s busiest strait for merchant ships, but also major ports such as France’s 1st grain port, the country’s 1st container port, etc. or even the country’s number 1 passenger port) must be able to maintain its position as an essential part of the local and national economy, between the development of other activities and the proximity of the coastline. All this while preserving the safety of goods, people and the environment.

Marine aggregates are a resource that essentially meets local needs, or supplies large conurbations linked to the sea by water (beach nourishment, construction, etc.). The Eastern Channel - North Sea coastline, with its 7 deposits, accounts for 1/3 of national sales in marine aggregate production. These activities are all the more important as, in addition to serving local needs, the coastline also supplies the Greater Paris construction sites by river.

Thanks to its openness to Northern Europe, the Eastern Channel - North Sea coastline is particularly well-suited to British and Baltic Sea telecommunications cables. It also carries a growing number of electricity transmission cables.

Despite its small size, the Eastern Channel East – North Sea coastline boasts a large number of major sites of interest. These include Mont Saint Michel and its bay, the cliffs of Etretat, the D-Day landing beaches, the Baie de Somme, and UNESCO World Heritage sites such as the historic city center of Le Havre, the island of Tatihou and the Vauban fortifications at Saint-Vaast la Hougue.
3.3. Developing offshore wind power, at the heart of the energy transition challenge

• Growing demand for carbon-free electricity

Achieving carbon neutrality by 2050 implies considerable efforts to reduce energy consumption, but also a massive increase in the need for decarbonized electricity to replace greenhouse gas-emitting fossil fuels.

To meet this need, we need to develop offshore wind power alongside other low-carbon energy sources. To achieve this, it is necessary to plan the deployment of new production capacity, to give visibility to all stakeholders.

Forecast breakdown of capacities to be identified

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.4 GW</td>
<td>Under development or identified</td>
</tr>
<tr>
<td>3.3 GW</td>
<td>To be identified during the public debate</td>
</tr>
<tr>
<td>2.5 GW</td>
<td>Map 1: at least 15.5 GW* to be identified and awarded over the next 10 years</td>
</tr>
<tr>
<td>4.1 GW</td>
<td>Map 2: 19.1 GW to be identified and commissioned by 2050</td>
</tr>
<tr>
<td>0.5 GW</td>
<td>Identified extensions</td>
</tr>
<tr>
<td></td>
<td>Awarded</td>
</tr>
<tr>
<td></td>
<td>Installed</td>
</tr>
</tbody>
</table>

The 15.5 GW from Map 1 represent a minimum ambition from the French government. The volumes to be awarded by 2050 should be adapted accordingly.

Source: Ministère de la Transition énergétique

• An energy source with many advantages

- Significant electricity production: as the wind is stronger and more regular at sea, offshore wind turbines produce more electricity than on land.
- Locally-produced energy that contributes to France’s energy independence and security of supply.
- An energy that helps diversify the energy mix and make it more robust.
- Low carbon intensity: the lifecycle greenhouse gas emissions of an offshore wind farm are very low, so it contributes to France’s energy transition objective.
- A mature technology: offshore wind energy benefits from extensive experience feedback in Europe and a leading-edge French industrial sector.
- Competitive costs: land-based wind power production costs are falling, and prices are below market levels. Floating wind prices should eventually converge with those of land-based wind.
- A job-creating industry: offshore wind power is expected to create almost 7,000 jobs in France by 2022.
- Significant potential: France has Europe’s second-largest layer of wind

Offshore wind farm projects under development on France’s coasts

Réseaux électriques existants

- Lignes 225kV
- Lignes 400kV

Étapes du projet

- Début public ou concurrence
- Mise en concurrence
- En développement
- Obtention des autorisations
- En travaux
- En service

Eolienn posé A01 et A02 (mise en service à horizon 2025)
Eolienn posé A03 (mise en service à horizon 2020)
Eolienn posé A04 (mise en service à horizon 2020)
Eolienn flottant A05 (mise en service à horizon 2020)
Eolienn flottant A06 (mise en service à horizon 2020)
Eolienn posé A07 (mise en service à horizon 2020)
Eolienn posé A08 (mise en service à horizon 2020)
Eolienn flottant (plats)
Current status and outlook for offshore wind power in the Eastern Channel - North Sea

On the Eastern Channel-North Sea coastline, six offshore wind farm projects have already been awarded or are in the process of being awarded. The Fécamp wind farm is already injecting electricity into the grid, and will be commissioned in early 2024.

The Channel-Centre 2 wind farm project, with a capacity of around 1,500 MW, is currently in the tendering phase, with commissioning scheduled for 2031-2032.

In light of national offshore wind power development objectives, technical potential, and the constraints of the coastline, French government proposes the following objectives at an Eastern Channel-North Sea scale.

These objectives will be presented for public debate. In particular, the public will be invited to give their opinion on the environmental and socio-economic challenges facing the coastline, so that French government can refine its ambitions.

A wind farm consists of a group of wind turbines, either fixed or floating. They are composed of a mast, a nacelle, and blades, respectively installed on foundations fixed in the seabed or on floaters anchored to the seabed. Fixed technology is more suitable for shallow depths, while floating technology, still undergoing development, can be deployed in deeper areas of the continental shelf.

The connection of the wind turbines allows the electricity generated at sea to be transmitted to the onshore power grid. It consists of an offshore substation with an alternating current (HVAC) to direct current (HVDC) converter station, submarine cables and then onshore cables, and a direct current to alternating current converter station near a substation connected to the electricity transmission network.

Characteristics of an offshore wind farm

<table>
<thead>
<tr>
<th>Park</th>
<th>Fécamp AO1</th>
<th>Courseulles-sur-Mer AO1</th>
<th>Dieppe-Le-Tréport AO2</th>
<th>Dunkerque AO3</th>
<th>Centre Manche 1 AO4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provisional year of commissioning</td>
<td>2024</td>
<td>2025</td>
<td>2026</td>
<td>2028</td>
<td>2031</td>
</tr>
<tr>
<td>Capacity in MW</td>
<td>498</td>
<td>450</td>
<td>496</td>
<td>600</td>
<td>1050</td>
</tr>
</tbody>
</table>

Eastern Channel - North Sea

<table>
<thead>
<tr>
<th>Front</th>
<th>Capabilities under development or allocated (excluding extensions)</th>
<th>10-year targets for new capacity to be allocated (including extensions) already identified</th>
<th>Targets to 2050 (including all parks already allocated, in the process of being allocated and identified extensions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Channel - North Sea</td>
<td>4.5 GW</td>
<td>Between 7 and 11 GW</td>
<td>Between 12 and 15.5 GW</td>
</tr>
<tr>
<td>Northwest Atlantic</td>
<td>1.7 GW</td>
<td>Between 6 and 9.5 GW (including 0.5 GW of extensions)</td>
<td>Between 17 and 25 GW</td>
</tr>
<tr>
<td>Mid-Ocean Channel</td>
<td>1.0 GW</td>
<td>Between 2.5 and 5.5 GW (including 1 GW of extensions)</td>
<td>Between 7 and 11 GW</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>0.6 GW</td>
<td>Between 3 and 4.5 GW (including 2x0.5 GW of extensions)</td>
<td>Between 4 and 7.5 GW</td>
</tr>
<tr>
<td>Mediterranean</td>
<td>0.6 GW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.8 GW</td>
<td>Between 18.5 GW and 30.5 GW (including 2.5 GW of extensions)</td>
<td>Between 40 and 59 GW</td>
</tr>
</tbody>
</table>
JOIN THE DEBATE!

Go to the project website for information, documentation and debate events and ask your questions.