

Position: 100,000 homes powered by ocean energy and global leadership by 2025

The next five years are critical to consolidate Europe's leadership in ocean energy. Deploying 100 MW will enable the sector to progress towards the commercial phase and boost the European green recovery.

Such a target is both attainable and valuable: Attainable, as a large pipeline of projects already exists, and several sites have been pre-consented along European coasts. Valuable, as unlocking these projects will de-risk the technology and push the sector towards industrialisation.

To reach it, four actions should be prioritised in the EU Strategy on Offshore Renewable Energy.

4 actions to deliver a new European industry by 2025

Launch an Ocean Energy Alliance to support deployments

An alliance gathering the European Commission, Member States, and the industry, can accelerate the sector's development, coordinating the deployment of 100 MW by 2025. Such an initiative would accelerate cost reductions and decrease the overall need for public funding. It should focus on two main topics:

- **Revenue support:**
 - Access to ringfenced revenue support at national level is needed to attract private investments and enable the technology to reach the commercial stage.
 - Coordinating the timing and frequency of tenders would allow developers to prepare for bidding processes with sufficient time, minimising parallel processes in different countries.
- **Access to the sea and permitting.**
 - Align MSPs with the strategy's objectives regarding the timely availability of sites for tidal and wave energy farms.
 - Speed up permitting, regulatory alignment and harmonisation of technical standards. For example, establishing one stop shops for permitting projects based on successful operating models.

Earmark €300m to ocean energy R&I to 2025

Based on the findings of the [Ocean Energy Strategic Innovation and Research Agenda](#), investing €300m in ocean energy at EU level will leverage about €335m of private investments. Frontloading this investment over the next three years will ensure a faster delivery and support the Commission's green recovery objective.

First in line, pilot and pre-commercial farms are essential to decrease the costs of wave and tidal stream and establish these technologies. Several existing EU programs could support these projects: Horizon 2020/Europe, Innovation Fund and InnovFin EDP. However, the design or **number of calls**

under those programmes is **currently insufficient to finance enough projects to reach 100 MW of ocean energy by 2025.**

We thus call for:

- **An increased budget for the H2020 Green Deal Call on offshore renewables**
- **The launch of yearly calls providing grants for ocean energy pilot farms.**

Blending these calls with InnovFin EDP loans and an Insurance and Guarantee Fund can also help developers to leverage private finance and reach financial close.

Launch a European Insurance and Guarantee Fund

Commercial **insurance products covering innovative offshore technology simply do not exist.** And if they did, insurance premiums would be prohibitive. Similarly, manufacturer guarantees cannot cover all technological risks before the device has matured to 'off-the-shelf' status. This means that risks remain with investors, who are unable to commit or require very high returns.

A European Insurance and Guarantee Fund, covering several pilot / pre-commercial projects can cover and mutualise the technological risks of these projects, at minimal cost. This will reduce risk for private investors and thus lower the cost of capital. It will also facilitate access to finance in general.

This Fund does not need to be a permanent construct and would aim to de-risk technologies and spur insurance products to make itself obsolete. It should insure project revenues in the early years – three to five years at most. Once enough knowledge for a given project or technology is generated, the project developer would be in a position to leverage commercial debt or re-insure his project commercially, thus freeing the Insurance and Guarantee Fund award for the next project, and creating a revolving fund.

A Fund in the order of €70m of underwriting risk capital should be sufficient for use and potential re-use across multiple projects, starting with about 10. This estimate is based on the finances and risk profiles of existing projects such as MeyGen. A sectoral pan-EU approach, covering many demonstration and pre-commercial farms could absorb a large share of the risks and help those project realise.

Such a fund could be mutualised for both ocean energies and floating wind, given the similarities in risk profiles.

Launch an offshore renewables export strategy

Europe is home to the most advanced companies in both tidal and wave energy. European technology developers currently hold 66% of global tidal energy patents, and 44% for wave energy. The vast majority of projects currently planned or built around the globe uses European devices.

The competition is waking up, however. Canada and China both launched Feed-in-Tariffs at around €350/MWh to encourage the development of pilot farms in their national waters. The US has lately been investing up to €100m per year to support its domestic champions.

A clear export strategy can accelerate the development of European technologies and help **Europe secure leadership in a market worth up to €53bn annually by 2050¹**

European developers already have a large pipeline of export projects. The following measures can enable these projects to reach financial close:

- **Mandate the EIB to explicitly finance the construction of devices in Europe for deployment internationally – the added value and knowledge will stay in the EU**
- **Provide EU guarantees for export projects**
- **Provide funding for feasibility studies in export markets**
- **Encourage certification of ocean energy technologies**

100MW - a sensible target benefiting Europe as a whole

A supply chain spreading from the coasts to landlocked countries

Tidal and wave energy devices are currently being deployed from Norway to Portugal, as well as in the Mediterranean and coastal regions will be host to assembly, installation and maintenance activities.

Yet ocean energy offers significant economic opportunities beyond deployment sites. Northern and Central European countries are already manufacturing components today and will increasingly do so as supply chains specialise, as seen for offshore wind. Some have even developed leading full-scale devices and are already exporting their technologies.

A pipeline of projects is already in place in all European sea basins

Ocean energy technologies can be deployed in all European sea basins. A pipeline of over 290 MW of tidal stream, wave energy and OTEC/SWAC could be installed by 2025, with the right incentives in place.

Atlantic and North Sea basins

- **Tidal:** Several pilot projects are planned in France, the Netherlands and the Faroe Islands. Total capacity: 185 MW
- **Wave:** Ireland has a target for wave in its NECP and a farm is planned in France. Total capacity: 30 MW
- **SWAC:** A multi-MW plant is planned in the North of France

Mediterranean basin

- **Wave:** Portugal and Spain both included wave energy in their NECPs. Total capacity: 55 MW. A pilot farm is also planned in Italy.
- **SWAC:** Several multi-MW projects are planned on the Southern coast of France

EU Oversea Countries and Territories

- **OTEC and SWAC:** two 10 MW + demonstration plants in French and Dutch OCTs.

¹ 'Marine Renewables Green Growth Paper' Carbon Trust, 2011