

# Last Stop to 2025

A 2022 Action Plan to deliver on the Offshore Strategy's Ocean Energy Target

June 2022



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AUTHORS: Rémi Collombet and Donagh Cagney

DESIGN: JQ&ROS Visual Communications (jqrosvisual.eu)

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# A 2022 Action Plan to deliver on the Offshore Strategy's ocean energy target

## Strengthen EU funds availability and accessibility

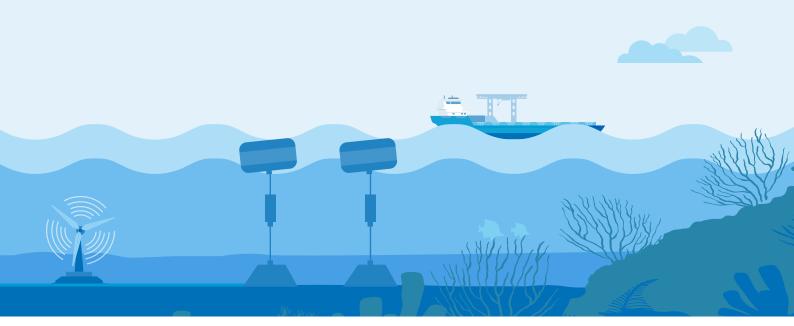
| OPPORTUNITY   | 2022 EUROPEAN COMMISSION ACTIONS   |
|---|--|
| The 2023-24 Horizon Europe Work Programme can channel funds directly to ocean energy deployments.   | <ul> <li>Preserve the 4 draft ocean energy calls in the final Work Programme.</li> <li>Ensure that all 4 calls have sufficient budget to support 2     quality projects each – in line with the position of the SET Plan     Implementation Working Group for Ocean Energy¹.</li> </ul>  |
| Minor modifications to the Innovation Fund's rules can unlock significant funds for ocean energy deployments.   | <ul> <li>Dedicate a substantial share of the 3rd call's mid-sized pilot projects window to renewable energy – to restore confidence in the Fund within the renewable energy sector.</li> <li>Adjust the rules of future calls so that renewable energy projects can compete (see Annex).</li> </ul>  |
| The EIB's 'InnovFin EDP' facility for energy demonstration projects will soon be replaced – its successor can be set up to finance multiple ocean energy deployments. | <ul> <li>Ensure the successor to InnovFin EDP supports at least one tidal stream and one wave energy project contributing to the 100 MW target.</li> <li>Ensure priority access to the InnovFin EDP successor for winners of the Horizon Europe pilot farm calls and Innovation Fund winners.</li> <li>Empower the InnovFin EDP successor to finance EU technology which is being deployed beyond the EU.</li> </ul> |
| The industry has undertaken significant work to design an Insurance & Warranty Fund concept – the Fund can be now readily operationalised.                            | ✓ Launch a €1m call tender to contract experts to enable the private<br>sector to operationalise an Insurance & Warranty Fund for innovative<br>renewables.  |



<sup>&</sup>lt;sup>1</sup> <u>'Position on Horizon Europe 2023-24 Work Programme'</u>, SET Plan Ocean Energy IWG, November 2021.

## **Coordinate with Member States on funding**

| OPPORTUNITY  | 2022 EUROPEAN COMMISSION ACTIONS   |
|--|--|
| There are already several concrete processes & procedures where the European Commission can readily coordinate with national and regional authorities to drive ocean energy deployments. | <ul> <li>In advance of the 2023 NECP revision, provide information on available EU funding and encourage Member States to set deployment targets &amp; support pathways for innovative offshore renewable technologies.</li> <li>Reach out to Member States with shared interest in a specific ocean energy project and propose that they consider supporting a project's application to the Connecting Europe Facility – Energy programme.</li> <li>Where countries are developing common visions/deployment plans for shared sea-basins, engage to propose that these plans reflect Europe's 2025, 2030 and 2050 ambitions for ocean energy.</li> </ul>                  |
| Dedicated discussions on ocean energy between European, national and regional authorities will identify many new cooperation opportunities which are currently unexplored.               | <ul> <li>Organise an event similar to the European Commission's 'Towards 61 GW of Offshore Energy by 2030' event, but which includes and is focused upon wave &amp; tidal energy.</li> <li>Organise 'break-out' sessions for senior civil servants from the countries which have overlapping ocean energy interests, and who are most engaged in multilateral meetings.</li> <li>Use national Representation teams to organise events which bring together energy &amp; innovation-focused civil servants, regulators, industry players and energy system operators to share perspectives and to chart a course for ocean energy's development in each country.</li> </ul> |



# Implementation of the EU Offshore Strategy can no longer be delayed

### 1.1 The clock is ticking

The twin geopolitical and energy crises have thrown into sharp relief the high costs of Europe's continued fossil gas dependency. Rising prices and supply threats clearly highlight the necessity to quickly decarbonise and diversify our energy mix.

#### Ocean energy is now more relevant than ever

When the EU Offshore Renewable Energy Strategy (Offshore Strategy) was released in November 2020, few predicted the crisis that would soon impact Europe's energy systems.

But as the circumstances changed dramatically, the Offshore Strategy only became more and more relevant. Deepening and widening access to Europe's indigenous renewable energy sources is more critical than ever.

The heightened importance of the Offshore Strategy – almost 2 years later – proves the strategic foresight of the European Commission's Green Deal. Prioritising decarbonisation and building of a new prosperity based on sustainable technologies and practices will always be the right path – irrespective of changing circumstances.

This strategic approach is encapsulated in the European Commission's deployment targets for tidal and wave energy: 100 MW by 2025, 1 GW by 2030 and 40 GW by 2050. In its Offshore Strategy, the Commission committed to coordinate with national and regional authorities to fund the 2025 and 2030 targets.

But while the value of the Offshore Strategy has been reaffirmed by recent events, its implementation remains slow and patchy.

As a direct result, Europe is now at risk of missing its 2025 ocean energy deployment target.

The 'Target 2025' pipeline of wave & tidal projects<sup>2</sup> clearly shows how projects need to reach final investment decision by late 2023, if they are to deploy at sea by the end of 2025.



<sup>&</sup>lt;sup>2</sup> European and national policy makers can reach out to <u>OEE</u> to obtain the document.

#### **OCEAN ENERGY WILL...**



#### Accelerate the decarbonisation of Europe's power supply

Wave & tidal can deliver 100 MW by 2025, 1 GW by 2030 and 100 GW by 2050 – equivalent to 10% of Europe's electricity consumption today. With almost 45% of Europe's citizens living in coastal regions, ocean energy can be readily delivered where it is needed.



## Provide much needed diversity to Europe's portfolio of indigenous renewable energy sources

A diverse energy supply is a secure energy supply. Diversity of supply has always been a core principle of energy security. This will not change in the age of renewables. Tidal and wave energy can strengthen the European portfolio of power generation sources.

# Driven by the moon Tidal stream is 100% predictable years in advance



wave energy: complements variable renewables

#### Complement existing variable generation to balance grids

Regulated by the moon, tidal stream is 100% predictable. The time between tides is so short that even a small amount of storage can deliver non-stop tidal power. Wave works particularly well with wind – when the wind dies down, wave energy can step in to maintain power production. Combined, wind and wave together produce an overall power output that is smoother and more reliable.

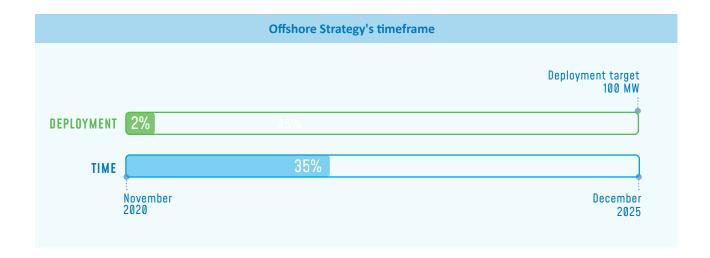


Ocean energy can create **500,000 jobs**by 2050

# Create high-value jobs and contribute to Europe's technological and industrial leadership in the green economy

Ocean energy can create €140 bn euros of GVA and produce 500,000 jobs by 2050³. Many of these jobs will revitalise coastal communities that historically served shipbuilding, fishing and the oil & gas sector.

<sup>&</sup>lt;sup>3</sup> ETIP Ocean, 2021, A study into the potential economic value offered to Europe from the development and deployment of wave and tidal energy to 2050 and ETIP Ocean, 2021, A study into the potential social value offered to Europe from the development and deployment of wave and tidal energy to 2050.



We are now more than a third of the way through the Offshore Strategy's timeframe, but Europe stands below 2% of its 2025 deployment target.

#### However, it is not too late to act. With the right support, several projects can hit the water by late 2025.

And many more projects can reach 'final investment decision' (FID) by the end of 2025. FID practically guarantees subsequent deployment and can be considered as meeting the Commission's target.





## 1.2 Recent ocean energy developments: Slow progress in the EU & increasing support elsewhere



#### WITHIN THE EU



#### **BEYOND THE EU**





#### **France**

Renewed discussions have started between the French administration and the industry in France. The government recently launched a new opportunity for innovative renewable energy developers to discuss revenue support on a bilateral basis with the energy agency and the energy regulator.



## United Kingdom

In late 2021, the British government launched a new Contracts for Difference (CfD) revenue support auction round, with €28.4 m<sup>4</sup> per year for the next 15 years reserved for tidal stream. Support can be up to €300/ MWh<sup>5</sup>. This decision alone is anticipated to bring circa 30 MW online.

New CfD rounds will be launched on an annual basis from 2023 onwards.

At the regional level, both Scotland and Wales recently announced large investments into the ocean energy sector, the latest being a €37 m<sup>6</sup> grant for the Morlais tidal stream site.



#### **Spain**

Spain launched a new Offshore Renewables Roadmap. It contains a 2030 target of 60 MW for wave and tidal energy. Spain will spend at least €200 m by 2023 on the development of offshore renewable technologies including floating wind. To date, OEE is not aware of any of this funding reaching wave or tidal energy projects.



Canada continues to show strong support of the tidal energy sector. The Government allocated several grants and feed-in-tariffs around €350/ MWh for the installation of pilot farms in Nova Scotia. Several European developers have been selected to develop these projects and are now considering locating their manufacturing in Canada.

In May 2020, Canada celebrated the country's first kWh delivered to the grid from floating tidal. The technology provider was European.





#### Italy

Italy's Recovery and Resilience Plan includes a budget of €700 m for the development of innovative renewable energy technologies. Wave energy is explicitly mentioned. However, the plan adopted a technologyneutral & short-term cost basis for the allocation of funding. As a result, OEE is not aware of any of funding for wave, and deployment plans in the Mediterranean have been scaled back.



#### **USA**

The USA is slowly positioning itself as the EU's main competitor in ocean energy, significantly ramping up public investments into the sector. The House of Representatives passed a bill authorising the administration to invest €567 m<sup>7</sup> in the development of ocean energy between 2021 and 2025. In 2021 alone, the government adopted:

- New appropriations to the U.S. Department of Energy 2021 totalling €96 m for the development of ocean energy8.
- The 2021 Bipartisan Infrastructure Bill dedicating €62 m to Marine Energy RD&D; and €35 m for the development of National Marine Energy Centers9.



#### **European Union**

The draft Horizon Europe 2023-24 Work Programme contains 4 calls dedicated to ocean energy with a proposed cumulative budget of €94 m. If preserved, the calls would support the deployment of wave & tidal arrays.



#### China

China pledged in its 2021 'Five Year Plan'\* to promote the large-scale development of ocean energy.

A feed-in-tariff of around €330/MWh is available for tidal energy projects. Several large tidal and wave energy pilot farms and demonstration projects are currently supported.

\*'The Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035'.

<sup>&</sup>lt;sup>4</sup> £20m is in 2011/12 prices – converted to 2021 prices in line with specific UK gov guidance and converted at €1 = £0.849158.

 $<sup>^{5}</sup>$  £211 in 2011/12 prices – same conversion methodology.

<sup>&</sup>lt;sup>6</sup> £31m, May 2022 conversion rate.

<sup>&</sup>lt;sup>7</sup> US \$600 m, Jan 2022 conversion rate.

<sup>&</sup>lt;sup>8</sup> US \$109 m, Jan 2022 conversion rate.

<sup>&</sup>lt;sup>9</sup> US \$70.4 m and \$40 m, Jan 2022 conversion rate.

While there has been progress in the funding of ocean energy deployments in Europe, these lag behind the support levels from other global players. Support in European countries has also been less concrete or committed compared to other global regions.

As a result, Europe's competitive edge in ocean energy has been gradually eroded since the publication of the Offshore

Strategy. And this is happening at a critical time – the first large projects will dictate where ocean energy factories, supply chains and skill centres will put down roots. Europe risks losings its lead just as the industrial benefits are becoming apparent.

Rapid implementation of the Offshore Strategy's commitments is critical to halt this slide and to reassert European global leadership in wave & tidal.

## The Offshore Strategy has helped attract new industrial interest in the sector – but swift implementation is needed to safeguard this progress

Several large industrial players have either entered or expanded their presence in the European ocean energy sector since the Offshore Strategy's publication.

The financial and production capabilities of utilities and Original Equipment Manufacturers (OEMs) will be critical to scale-up ocean energy. This renewed industrial interest in the sector is therefore very welcome, and critical if the Commission's ocean energy ambitions are to be realised.

This participation has taken several forms – for example investing directly in technology developers, signing Memoranda of Understanding to explore future opportunities, or Joint Development Agreements for specific projects.

Experience in the 2010s has shown that continued industrial interest depends upon clear government actions to establish markets. This means that the Offshore Strategy commitments to coordinate funding for deployments need to be delivered upon. Otherwise, this industrial momentum will not be maintained, and new entrants will depart the sector.

The 'halo effect' of the Offshore Strategy helps. But without follow through, it will not be sustained.













#### 1.3 The European ocean energy sector is ready to deliver

The sector welcomed the 2020 launch of the Offshore Strategy and committed to support the European Commission's implementation work. Ocean Energy Europe provided policy makers with detailed information on the European ocean energy project that could reach the water by 2025<sup>10</sup>.

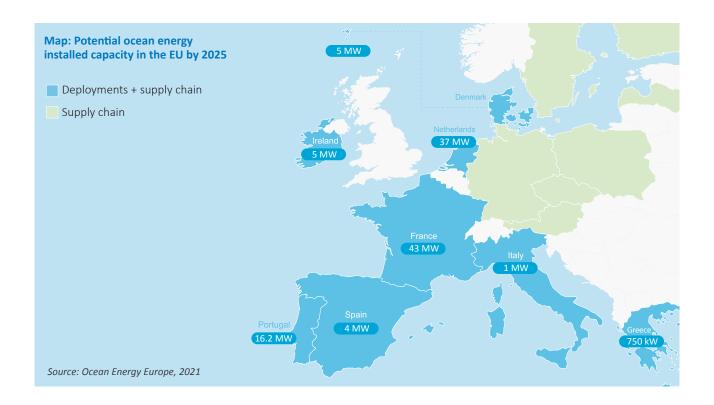
This 'Target 2025' publication offered clear conclusions: there is more than enough tidal and wave energy capacity in the pipeline for the end of 2025, if the right incentives are in place. The developers behind these projects have conducted pre-feasibility studies and are now moving to the permitting phase. However, restricted access to finance is creating a massive bottleneck.

The pipeline also shows that there are multiple coordination possibilities to achieve the Offshore Strategy's deployment

objectives. Ocean energy projects are being developed in all sea basins. Tidal and wave energy devices will be deployed from the Faroe Islands to Portugal, Ireland to Greece – benefitting coastal regions in these countries and tapping into the wider European supply chain.

The slow implementation in the 1.5 years since the Offshore Strategy's publication means that now only some of the projects can hit the water by the 2025 target. But the remainder can reach financial close by this time — meaning that they will be almost certain to enter the water in 2026/27.

The following sections provide an updated assessment of the remaining challenges and propose solutions that can be readily implemented by the European Commission.



<sup>&</sup>lt;sup>10</sup> European and national policy makers can reach out to <u>OEE</u> to obtain the document.

# 1.4 The Offshore Strategy's main ocean energy actions are yet to be implemented

The two main ocean energy key actions of the Offshore Strategy have not yet been delivered:



The Commission will work with Member States and regions, including islands, to make use of available funds in a coordinated manner for ocean energy technologies in order to achieve a total capacity of 100MW across the EU by 2025 and around 1 GW by 2030.

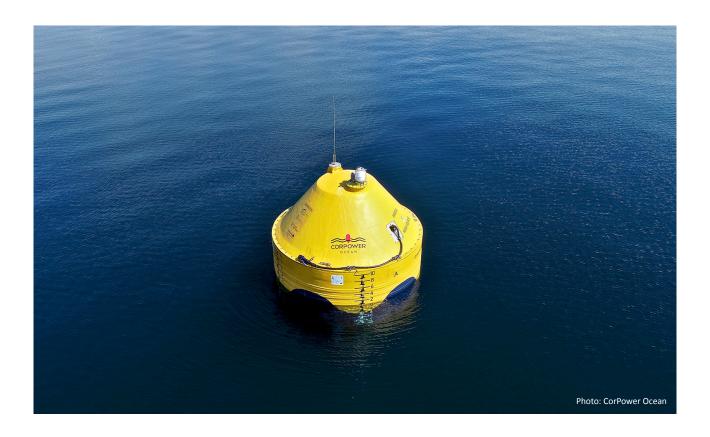


The Commission, the EIB and other financial institutions will work together to support strategic investment in offshore energy through InvestEU, including for higher risk investments that advance EU technological leadership (as of 2021).

Coordination between EU, Member States, regions and islands has not started yet. The Commission organised an Offshore Strategy Conference in October 2021, but it focused almost exclusively on offshore wind.

The ocean energy sector has twice organised exchanges between public authorities (European, national and regional) and industry players, but this is no substitute for the Commission implementing of the Offshore Strategy.

A renewed approach to this question is now needed to achieve the 2025 ocean energy target. Ocean Energy Europe is proposing practical, feasible and rapidly actionable steps to kick-start this coordination.



# 2. Two action streams to reach 100MW by 2025

# 2.1 EU-level support programmes exist but changes are needed to allow access for ocean energy

At European level, three main instruments support innovative renewable energy demonstration projects – Horizon Europe, the Innovation Fund and InnovFin EDP. And at present none can support ocean energy projects

in practice in 2022. The lack of relevant calls and/or disadvantageous selection criteria design are the main blocking points, but these issues could easily be solved.

#### Innovation Fund – revise award criteria to enable renewable projects to compete

The Innovation Fund is the EU's most impactful tool to drive renewable energy demonstration projects. It could allow several transformative tidal and wave energy projects to hit the water by 2025.

However, the Fund's **award criteria** put ocean energy and more generally renewable energy generation projects at **a structural disadvantage**. The results of the 1st large-scale call make this clear. No renewable energy generation project won an award – unless attached to a wider carbon capture project, which will consume all

or the large majority of funding. Just one renewables manufacturing proposal secured funding.

The number of renewable energy applications for the  $2^{nd}$  large-scale call plummeted. This makes it highly likely that the  $2^{nd}$  call will again channel funding predominantly to carbon capture and hydrogen.

It is also a clear sign that the renewable sector has lost confidence in the Fund. The limited prospects of success mean that companies cannot justify the substantial resources needed to apply.

#### Actions



Adjust the rules of future calls so that renewable energy projects can compete – in line with the proposals of the renewables sector<sup>12</sup>.



Dedicate a substantial share of the 3rd call's mid-sized pilot projects window to renewable energy – to restore confidence in the Fund within the renewable energy sector.

<sup>&</sup>lt;sup>12</sup> See Annex and the joint letter of 16 May 2022.

#### InnovFin EDP – make the successor fund less risk averse

Ocean Energy Europe's project pipeline work shows that many ocean energy pilot farms will depend upon publicly backed loans to reach their final investment decision. The EIB's InnovFIN EDP facility was intended to fill this gap for energy demonstration projects – such as those in the pipeline. However, in the 7 years of operations, no ocean energy project has received credit from this facility<sup>13</sup>.

This is the result of a chicken and egg situation: Member States are asking developers to prove that their technology works before launching dedicated revenue support mechanisms while the EIB (and some other EU funding programmes) are requesting visibility on sales / 'high bankability' as a prerequisite to grant loans to demonstration projects.

In its Offshore Strategy, the European Commission committed to 'work(ing) with the EIB and other financial institutions to support strategic investment in offshore energy through InvestEU, including for higher risk investments that advance EU technological leadership' by the end of 2021. So far, this has not happened for ocean energy companies.

#### **Actions**



Ensure the successor to InnovFin EDP supports at least one tidal stream and one wave energy project contributing to the 100 MW target.



Ensure priority access to the InnovFin EDP successor for winners of the Horizon Europe pilot farm calls and Innovation Fund winners.



Empower the InnovFin EDP successor to finance EU technology which is being deployed beyond the EU.



<sup>&</sup>lt;sup>13</sup> A €10 m loan was offered to wave energy developer AW Energy in 2016. The status of that loan is unknown.

#### Horizon Europe – preserve ocean energy calls in the 2023-24 Work Programme

While the current Horizon Europe Work Programme was drafted prior to the adaptation of the Offshore Strategy's 2025 target, the 2023-24 calls could be game changers. The current draft Work Programme contains 4 dedicated calls for ocean energy.

If preserved and adequately funded, these calls will be an important opportunity to scale up ocean energy and consolidate European leadership.

#### Actions



Preserve the 4 draft ocean energy calls in the final Work Programme.



Ensure that all calls have sufficient budget to support 2 quality projects each – and in line with the position of the SET Plan Implementation Working Group for Ocean Energy<sup>14</sup>.

#### An EU Insurance & Warranty Fund for innovative renewables is missing (and needed!)

Commercial insurance that covers the investment risks of ocean energy project does not exist.

cut the cost of capital for the 1 GW of deployment required by 2030.

A European Insurance and Warranty Fund, available to several pre-commercial ocean energy projects can cover technological-related project risks at a reduced cost. This lowers the cost of capital and the overall project cost. It will also reduce the volume of grants that are required. In the medium-term, the Fund will familiarise insurance companies and investors with the sector and dramatically

Experts in offshore renewables insurance have provided detailed recommendations<sup>15</sup> on how such a Fund can operate. The work was commissioned by national and regional authorities active in ocean energy via the SET Plan process. Further desk-based work can finalise the design and negotiate a guarantee from a public financial institution such as the EIB.



renewables.

<sup>&</sup>lt;sup>14</sup> 'Position on Horizon Europe 2023-24 Work Programme', SET Plan Ocean Energy IWG, November 2021.

## 2.2 Exploit existing channels & identify new opportunities to coordinate funding with Member States

Europe is fortunate to have several existing crossgovernmental structures and a deep network of wellestablished contacts between individuals across governments.

This offers a variety of coordination options to the Commission, ranging from actions which will deliver immediate wins, to more exploratory coordination approaches which will uncover new ways for Europe to work together on ocean energy.

#### **Engaging to deliver immediate wins**

#### 2023 NECP revision – encourage Member States to collectively reach the EU deployment targets

The 2023 revision of National Energy & Climate Plans (NECPs) is the perfect opportunity to give market visibility to ocean energy and to trigger the national decisions that can deliver upon the 2025 and 2030 deployment targets.

See the 'Creative ways' box on page 19, for some examples of the different ways in which national governments can support ocean energy deployments.

#### Action



In advance of the 2023 NECP revision, encourage Member States to support innovative offshore renewable technologies and provide information on available EU funding opportunities.



<sup>15 &#</sup>x27;Design Options for an Insurance and Warranty Fund' OceanSET project, July 2021 – pending approval from European Commission.

#### Alert Member States to ocean energy support opportunities via the CEF Energy programme

on ocean energy.

Several tidal and wave energy projects from the Target 2025 pipeline use technology developed and installed in different EU countries. For example, Sweden will supply wave technology to projects in Portugal and Ireland. These projects could therefore be eligible for the Connecting Europe Facility.

Projects need indications of support from 2 (or more) relevant Member States to apply for this fund.

renewable energy projects. Its recent focus on innovation

makes it an interesting channel to accelerate cooperation

This fund offers funding up to 50% of relevant costs for studies or works and has a budget of €100 m per year for

#### Action



Reach out to Member States with shared interests in a specific ocean energy project, and propose that they consider supporting the project's application to the Connecting Europe Facility – Energy programme.

#### Ensure that Member State 'sea basin visions/deployment plans' do not exclude ocean energy

Some EU countries are working together to deliver 'common visions' for their shared sea basins. The European Commission typically has some involvement in these initiatives.

These offer useful opportunities to engage with national governments to consider how wave & tidal energy are being integrated into high-level plans.

For example, the Esbjerg Declaration, signed by four North Sea Member States and launched in the presence of the

European Commission<sup>16</sup>, could have been an excellent opportunity to consider how wave energy and fixed offshore wind can be deployed in an integrated manner.

Member States will also be required to draft joint offshore deployment plans by the Renewable Energy Directive this is another opportunity to engage and make sure these plans collectively match the European deployment targets.



Where countries are developing common visions for shared sea-basins, engage to propose that the vision's reflect Europe's 2025, 2030 and 2050 ambitions for ocean energy.

<sup>16 &#</sup>x27;Esbjerg Declaration on The North Sea as a Green Power Plant of Europe' 18 May 2022, Belgium, Denmark, Germany, the Netherlands.

#### **Engaging to identify new coordination opportunities**

#### Organise a multilateral meeting of senior civil servants working on ocean energy

A meeting between Commission officials and senior civil countries can help to coordinate support and fast track servants from North Sea, Atlantic and Mediterranean ocean energy deployments.

#### Action



Organise an event similar to the Commission's 'Towards 61 GW of Offshore Energy by 2030'17 event, but which includes and is focused upon wave & tidal energy.

#### Organise and facilitate 'break-out' sessions between countries with overlapping ocean energy interests

There are several groupings of EU countries which share a common interest in developing ocean energy. For example, countries with large ocean energy resources, or

countries who are rolling out floating offshore wind, or countries with critical elements of Europe's ocean energy supply chain.

#### Action



Organise 'break-out' sessions for senior civil servants from these countries which have overlapping ocean energy interests, and who are most engaged in multilateral meetings.

#### Organise ocean energy workshops in national capitals using the European Commission's Representations

In many cases there is limited awareness within national administrations of the potential that wave & tidal can deliver. This is because national capitals are often a long distance from coastal regions, and because the limited size of the sector makes it challenging for its voice to be heard.

'Ocean energy days' organised with the Commission's Representation teams, would provide opportunities to raise awareness about the decarbonisation, industry and energy security benefits that ocean energy can potentially offer.

#### Action



Use national Representation teams to organise events which bring together energy & innovation-focused civil servants, regulators, industry players and energy system operators to share perspectives and to chart a course for ocean energy's development in each country.

<sup>&</sup>lt;sup>17</sup> 'Towards 61 GW of offshore energy by 2030: sharing experiences throughout the EU' 12 October 2021.

#### Many creative ways exist to accelerate projects at national level

There are different ways to finance pilot farms. While the larger farms typically need a feed-in tariff to reach financial close and attract investors, larger grants or Public Procurement of Innovation could ensure the achievement of the 2025 target in time.

The following case studies highlight positive actions that countries inside and aside the EU have taken to accelerate ocean energy's deployment:



#### FRANCE

A bespoke bundle of Feed-In-Tariff and repayable grants for individual projects

The French 'Programme Investissements d'Avenir', an innovation funding programme, is currently elaborating a strategy for innovative renewables and energy systems. Project developers can get in touch directly with the French energy agency (ADEME) to present their projects and discuss potential support on a bilateral basis. The agency can provide some of the support needed to fund ocean energy pilot farms: feed-in-tariffs, grants and/ or repayable loans.



#### SPAIN

**Public Procurement of Innovation** 

Public Procurement of Innovative Solutions (PPI) is a mechanism that allows 100% funding. It can be a way of bypassing the need for revenue support – since all capital and operating costs of an ocean energy pilot farm are covered. PPI is a quick and simple means of funding the first projects.

This mechanism is being used by the Basque Country to repower its Mutriku wave power plant<sup>18</sup> and could be used at a national level to finance larger scale ocean energy demonstration projects.



#### THE UNITED KINGDOM

Replicating the success of offshore wind with ring-fenced capacity auctions

As part of the fourth allocation round of its 'Contracts for Difference' (CfD) framework, the UK government will ringfence almost €30 m per year for tidal stream projects, giving the sector a chance to follow offshore wind's path of technology development and cost reduction.

History illustrates the CfD scheme's effectiveness in reducing costs – between the first allocation round in 2015 and the most recent round in 2019, the price per unit (MWh) of offshore wind fell by around 65%.

The maximum payment of €300/MWh for tidal will finance the installation of about 30MW of capacity.

<sup>18 &</sup>lt;u>TurboWave</u> – Public Procurement of Innovation of air turbines for the wave energy sector.

# 3. Annex

# Making the Innovation Fund accessible to innovative offshore renewables

The below is an abridged version of a position signed by 9 renewable energy association heads on 16 May 2021.

| CHALLENGE  | SOLUTION  |
|--|---|
| The Innovation Fund rewards the scale of individual projects above all else, to the detriment of a technology's longer-term scalability. | Dedicate a substantial share of the 3 <sup>rd</sup> call's mid-sized pilot projects window to renewable energy – to restore confidence in the Fund within the renewable sectors.  |
| The Fund's rules underestimate the volume of GHGs avoided from renewables.   | Ocean Energy is partnering with the University of Edinburg to deliver updated GHG avoidance figures based on verified electricity generation patterns and grid modelling. This work should inform the GHG avoidance criteria for the upcoming innovation fund calls.  |
| The assessment of projects' 'maturity' has tended to be very exacting – particularly on measures of financial maturity.                  | A 100% grade should be allocated to the top project.  |
| The Fund does not appropriately separate different renewable technologies.   | Create two separate categories for ocean energy and hydropower.   |
| Greater sector-specific expertise is needed to inform the assessment of 'Degree of Innovation'.  | Ahead of the 3rd call evaluation process, efforts should be made to ensure that there is at least 1 expert on each renewable sector, represented amongst the evaluators.  The Commission could also provide additional guidance on the nature of innovation within each renewable sector, based on the expertise which it has within the Joint Research Centre. |





#### **About Ocean Energy Europe**

Ocean Energy Europe (OEE) is the largest network of ocean energy professionals in the world. Our mission is to create a strong environment for the development of ocean energy, improve access to funding, and enhance business opportunities for our members.

Over 120 organisations, including Europe's leading utilities, industrialists and research institutes, trust OEE to represent the interests of Europe's ocean energy sector. If you're active in the ocean energy sector, we can help your business grow.

As a not-for-profit organisation, every euro invested in OEE is used to promote the European ocean energy industry.

#### www.oceanenergy.eu

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