

TWIND

Twinning for an Offshore Wind Energy Partnership

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D4.2 – Report with materials from the workshops



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1 EXECUTIVE SUMMARY

The main objective of the TWIND project is to create a network of excellence to dynamize a pool of specialized research professionals and trainees in the domain of offshore wind energy to support an emerging industry in Portugal in a field with a very strong anticipated growth and no dedicated training curriculum.

These objectives were fulfilled through a set of strategic activities well-structured throughout the project including workshops with stakeholders. The “Stakeholder Engagement Plan” (SEP) was produced in the scope of Task 4.1: “Set-up a working group with stakeholders “, of Work Package (WP) 4: Stakeholders Engagement.

As part of the SEP, the consortium agreed on the organization of workshops, with the aim of gathering and generating relevant information. Once the main stakeholders were identified, the workshops were organized as a tool to share relevant information about funding opportunities with stakeholders and generate a forum where they could share their experience, capabilities, interests and vision about offshore wind. The workshops were organized under Task 4.2: “Supply chain development” of WP4.

The COVID pandemic led to several lockdowns and important travelling restriction, so TWIND consortium decided to organize the first workshops as online events. Despite COVID restrictions, the objective of the task was fulfilled, organizing 4 workshops:

- Funding opportunities for Offshore Wind projects in Europe. Wednesday, September 30th, 2020. Online.
- Horizon Europe: Funding opportunities for Offshore Wind projects in Europe. Friday, May 14th, 2021. Online.
- Offshore wind supply chain in Portugal - WindEurope 2022. Wednesday, April 6th, 2022. Hybrid: presential and online.
- Seminar WavEC 2022 – Offshore Wind in Iberia: Innovation & Perspectives. TWIND Final Event. Thursday, 10th November 2022, Lisbon. Presential.

Deliverable D4.2: “Report with materials from the workshops” summarizes all the relevant information gathered and shared during the workshops, providing the links to the presentations and recordings of the sessions.



2 INTRODUCTION

The work summarized in this report, D4.2: “Report with materials from the workshops”, summarizes all the relevant information gathered and shared during the workshops, providing the links to the presentations and recordings of the sessions organized in the framework of Task 4.2: “Supply chain development”.

To maximise the number of participants, the workshops were promoted within the stakeholders distribution list, but also using the partner’s social networks, like LinkedIn.

2.1 TWIND workshops as a tool to engage with the stakeholders

The Portuguese Government approved in 2017, the Industrial Strategy for Ocean Renewable Energies (EI-ERO¹) with the aim of developing the country’s offshore wind potential. According to EI-ERO, offshore renewable energies have the potential to supply 25% of the electricity consumed annually in Portugal and create a new export chain in these new technologies. The government envisages that potential exports in this field could increase up to ten times the current employment in the active sectors, with the greatest potential for exports seen in the development of the floating wind technology.

With this strategy in mind, WP4 of TWIND project aims at disseminating R&D opportunities and challenges among offshore wind stakeholders in Portugal, identifying how they can benefit from R&D in early stages and which are the main barriers. WP4 also aims to identify business opportunities, in particular for SMEs, based on R&D and innovation and will help capacity building of the whole supply-chain involving key actors in Portugal (utilities, manufacturers, engineering companies, suppliers...). These objectives were fulfilled through a set of strategic activities well-structured throughout the project, including workshops with stakeholders.

The TWIND project acts as an initiative to promote the development of offshore wind energy in Portugal. As such it behaves differently than other projects that are focused on a specific technology, or act within the scope of a company or cluster. In the latter, stakeholders would be directly involved in the development and execution of the technology, whilst in TWIND, the focus is on identifying those stakeholders that in the future could, and would, become developers and investors of offshore wind projects in Portugal acquiring a position that allows them to develop projects worldwide.

The workshops organized by TWIND consortium during the project had two main objectives: (i) to collect and share information about R&D funding opportunities with the stakeholders and (ii) to promote the activities, interests, and vision of the stakeholders in the offshore wind sector.

¹ Resolução do Conselho de Ministros n.º 174/2017.
(<https://data.dre.pt/eli/resolconsmin/174/2017/11/24/p/dre/pt/html>)



2.2 Definitions and scope of the SEP

For the purpose of TWIND, we define Stakeholder as “any person/company/institution who has interest in offshore wind in Portugal”. And, Stakeholder Engagement, as “the process of entering into a respectful constructing dialogue with the stakeholders”.

The objectives of stakeholder engagement are:

- to listen to their views and concerns,
- to learn from their experience in the sector,
- to consult on their opinions on what is needed for the promotion of new projects,
- to present them the opportunities of the offshore wind sector in Portugal and worldwide,
- to inform on the results obtained.

The workshops were organized to support the work of the consortium to accomplish the abovementioned objectives in the process of stakeholder engagement. The aim of the consortium was to organize three presential workshops during the project, taking advantage of relevant conferences and specific TWIND events. Finally, four workshops were organized for both, presenting relevant R&D funding opportunities in H2020 and Horizon Europe framework programmes and generate a forum where stakeholders can present their activities, capabilities and interest in the offshore wind supply chain in Portugal.

2.3 COVID restrictions

The COVID pandemic led to several lockdowns and important travelling restrictions, so TWIND consortium decided to organize the first workshops as online events. In the first months of 2020 the partners used different online tools and got familiar with them, to ensure that the online workshops and communications had the expected impact.

Once the traveling restriction disappear, the workshops were organized as hybrid events, allowing participants to participate physically or connect online.

3 MATERIALS FROM THE WORKSHOPS

The consortium organized 4 workshops during the project:

- Workshop 1: Funding opportunities for Offshore Wind projects in Europe – H2020, Green Deal. Wednesday, September 30th, 2020. Online.
- Workshop 2: Horizon Europe: Funding opportunities for Offshore Wind projects in Europe. Friday, May 14th, 2021. Online.
- Workshop 3: Offshore wind supply chain in Portugal – Side event of WindEurope 2022 conference. Wednesday, April 6th, 2022. Hybrid: presential and online.
- Workshop 4: Final workshop stakeholders engagement – Annual seminar WAVEC. Thursday, November 10th, 2022. Presential.

In the following sections it will be described each of the workshops, including the aim, the relevant information and the links to the presentations and recordings.



3.1 Workshop 1: funding opportunities, H2020

The first workshop organized in TWIND was an online event, using GotoWebinar tool, on 30th September 2020. The aim was to present the project activities and the information about the Green Deal call, the last one under the H2020 framework programme. 98 stakeholders registered to the workshop and 58 participated online.

The agenda and presentations of the workshop are summarized below.

- **The TWIND project** (José Cândido, WavEC) Introduction to the objectives and work programme of the project.
- **The Consortium and funding opportunities in key countries.** Short presentation of the partners, their main activities in offshore wind and the funding opportunities in their countries.
 - WavEC Offshore Renewables, Portugal (José Cândido and Amorina Armayor)
 - TU Delft, The Netherlands (Axelle Viré)
 - ORE Catapult, UK. (Thomas Wildsmith)
 - Tecnalía, Spain (José Luis Villate)
- **TWIND's first approach to funding options: "A project plan for funding applications"** (José Luis Villate, TECNALIA). Summary of deliverable D2.1 "A project plan for funding applications".
- **Funding mechanisms: the European Green Deal call** (Germán Pérez, TECNALIA). Description of the Green Deal call under H2020 programme and identification of the most relevant topics related to offshore wind.
- **Q&A** (José Cândido as moderator, WavEC).



Time	Topic / Presenter
10:00 AM*	The TWIND project (José Cândido).
10:05 AM*	The Consortium and funding opportunities in key countries. - WavEC Offshore Renewables, Portugal (José Cândido and Amorina Armayor). - TU Delft, The Netherlands (Axelle Viré) - ORE Catapult, UK. (Thomas Wildsmith) - Tecnalía, Spain (José Luis Villate).
10:45 AM*	TWIND's first approach to funding options: "A project plan for funding applications" (José Luis Villate).
10:50 AM*	Funding mechanisms: the European Green Deal call (Germán Pérez).
11:20 AM*	Q&A (José Cândido as MODERATOR).

*Please note all times are in BST

Figure 1. Agenda and presenters of the first workshop

A survey was sent to the participants after the webinar. Some of the results obtained are listed below:

- Question: Would you like to have more webinars related to Funding options for Offshore Wind? Answers: 100% answered "Yes".



- Question: Could you suggest a field of research/technology development related to offshore wind you would like us to explore in future webinars? Answers:
 - o Floating offshore wind
 - o Energy storage, Batteries, synergies with Hydrogen
 - o Biofouling, marine communities
 - o The use of metocean data to establish the site
 - o Construction and Maintenance technicians certified training

The material -presentations- is available online, on the Downloads section of the project web site https://twindproject.eu/wp-content/uploads/2020/10/Webinar20200930_slides.zip. The session recording is also available <https://youtu.be/iLlOM6spK9g>.

3.2 Workshop 2: funding opportunities, Horizon Europe

The first workshop was a success in terms of participants and feedback to the survey. As all the participants in the survey answered positively to have more webinars related to funding options for Offshore Wind, the consortium decided to organise a second workshop once the first call for the Horizon Europe (HEU) programme was published. The aim was to present the main changes and considerations of the new framework programme and present the first calls and topics related to offshore wind. The workshop was held on 14th May 2021 and 79 stakeholders registered to the workshop.

The workshop was organized in collaboration with GRRIP project “Sustainable Responsible Research and Innovation (RRI) practices” and the agenda and presentations of the workshop are summarized below.

- **The TWIND project** (Amorina Armayor, WavEC) Introduction to the objectives and work programme of the project.
- **The GRRIP project** (Ana Brito e Melo, WavEC) Introduction to the GRRIP project, Sustainable Responsible Research and Innovation (RRI) practices.
- **Global review on Horizon Europe calls for renewable energy** (José Luis Villate, Tecnalia) Introduction to the Horizon Europe framework programme: pillars, clusters and work programme 2021-2022 destinations.
- **HORIZON-CL5-2021-D3-02-12: Innovation on floating wind energy deployment optimized for deep waters and different sea basins** (Germán Pérez, Tecnalia) Description of the topic and main considerations for the preparation of a proposal for HEU. Differences with H2020.
- **Introduction and Overview of Floating Offshore Wind Centre of Excellence** (Roberts Proskovics, ORE Catapult)
- **Q&A Session**, Moderated by WavEC Offshore Renewables (Amorina Armayor, WavEC)



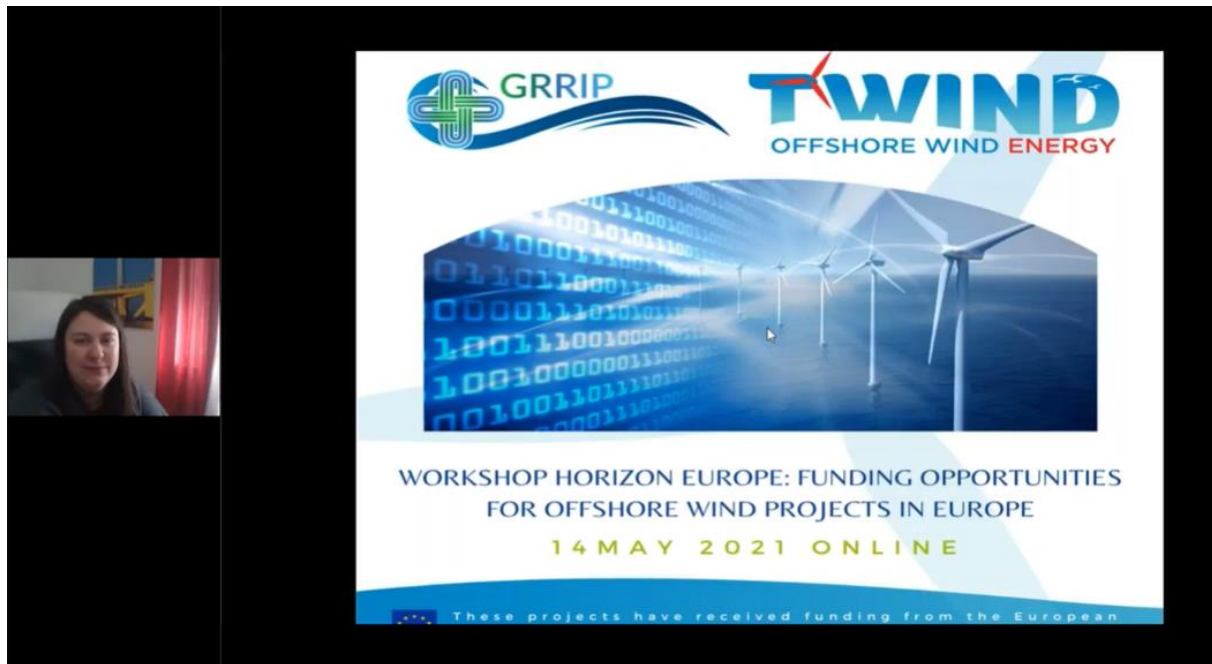


Figure 2. Second workshop presentation

The material -presentations- is available online, on the Downloads section of the project web site https://twindproject.eu/wp-content/uploads/2021/06/Webinar20210514_slides.zip. The session recording is also available <https://www.youtube.com/watch?v=4M7K52SaL3M>.

3.3 Workshop 3: Offshore wind supply chain in Portugal

The third workshop was focused on stakeholder promotion. It was organized as a side event in the official program of WindEurope 2022 conference, held at Bilbao Exhibition Centre (BEC), 6th April 2022. In this case, after a short introduction to the project and a description of the stakeholders matrix, four of them presented their companies, activities and interests in offshore wind. The session finished with an interesting discussion about the future of offshore wind, with the focus on the challenges of floating technologies.

To maximize the impact, the event was hybrid, with presential and online (ZOOM) attendees. A meeting room was booked at BEC with all the audio-visual means for the online connection. The event got 32 in person participants, and 42 connected online.

To define the agenda and the presenters, an email was sent to all the stakeholders who are part of the matrix. Four of them answered with their interest to participate as presenter in the event: DNV, EDP Renewables, SENER and ENDIPREV. The agenda and the presentations are summarized below.

- **Welcome to the participants** (Germán Pérez, TECNALIA)
- **TWIND Project introduction** (José Cândido, WavEC) Introduction to the objectives and work programme of the project. Connected online.
- **Stakeholders matrix** (Germán Pérez, TECNALIA) Details about the stakeholders engagement plan and the stakeholders matrix.
- **Stakeholder presentations.** Short description of the companies and their activities in offshore wind.



- **DNV** (Daniela Ribeiro) Drivers for floating wind cost reduction.
- **EDP NEW** (João Formiga) The experience of WindFloat Atlantic.
- **SENER** (Albert Monclus) Description of SENER’s HiveWind floating technology.
- **ENDIPREV** (Tiago Ornelas) Services for the whole offshore wind life cycle.
- **Q&A Session**, Moderated by Germán Pérez (Tecnalia) and Janete Gonçalves (WavEC)
- **Networking lunch**.



Figure 3. Stakeholders workshop promotion on WindEurope’s web site -left- and event organisers Janete Gonçalves (WavEC) and Germán Pérez (Tecnalia) -right-



Figure 4. Stakeholders workshop presenters





Figure 5. Stakeholders workshop in person participants

The material -presentations- is available online, on the Downloads section of the project web site <https://twindproject.eu/documentation/>. Unfortunately, due to a technical problem the session was not recorded.

3.4 Workshop 4: final event for stakeholders engagement

The last event was organised together with WavEC's annual seminar, to maximise the impact: Seminar WavEC 2022 – Offshore Wind in Iberia: Innovation & Perspectives. It was held on Thursday 10th November 2022, in Lisbon, and it was a presential event. It was organised by WavEC Offshore Renewables in collaboration with the Embassy of Spain in Portugal and co-sponsored by TWIND project. The aim was to discuss the prospects of offshore wind development in the Iberian coast, supply chain and innovative projects. There was a specific session to present the European TWIND project.



Figure 6. Final workshop banner





Figure 7. Final workshop partners and sponsors

With the background of the Portuguese Government ambition to install up to 10 GW of offshore wind by 2030, and the Spanish Government roadmap on offshore renewables which includes 1 to 3 GW of offshore wind, the sessions and presenters went through the needs, challenges and opportunities for the supply chain. The focus was on the Iberian market, understanding that there will also be important opportunities for the European market.

The programme is summarised below:

- **OPENING SESSION 09:00-09:30**
 - António Sarmiento, President of the Board of WavEC Offshore Renewables
 - Marta Betanzos Roig, Ambassador of Spain to Portugal
 - José Maria Costa, Secretary of State for Maritime Affairs
- **SESSION I – Roundtable: Perspectives on Floating Offshore Wind Industry in the Iberian Region 9:30-11:00**
 - Moderator: Pedro Amaral Jorge, **APREN**
 - Carmen María Roa Tortosa, **IDAE - Institute for Energy Diversification and Saving** - "The Roadmap for Offshore Wind & Marine Energy in Spain"
 - Filipe Pinto, **DGEG - Directorate General for Energy and Geology**
 - José Pinheiro, **Ocean Winds**
 - Ricardo Rocha, **BayWa**
 - Adrian de Andres, **Iberblue Wind**
 - Pablo Alcón Valero, **Capital Energy**
- **SESSION II – Technology Innovation and Research 11:30-13:00**
 - Moderator: Carlos Pinho, **Companhia de Energia Oceânica**
 - João Neves, **X1 Wind** - "An innovative single point mooring system to reduce the LCOE of Floating Offshore Wind"
 - David Carrascosa, **SAITEC Offshore Technologies** - "Saitec - We envision a better future harnessing the power of the wind"
 - Alex Fairtlough, **EnerOcean** - "W2Power – Sea Proven Technology for Cost Effective Floating Wind Power, Now."



- Misael Goicoechea, **ACCIONA Construcción** - “Serial Manufacturing of concrete foundations: A roadmap for scalability of offshore wind”
- Lúcio Rodrigues, **Principle Power** - “WindFloat®: ready to bring floating offshore wind forward onto utility-scale in Iberia”
- Miguel Silva, **Corpower Ocean** - “Wave power. To power the planet.”
- SESSION III – Iberian Supply Chain Readiness for Floating Offshore Wind Commercialization 14:00-15:30
 - Moderator: Ricardo Morgado, **WAM**
 - Andreia Fernandes, **EIT InnoEnergy** - “Iberian supply chain readiness for floating offshore wind comercialization”
 - José Cândido, **WavEC** - “Realising the offshore wind targets in Portugal”
 - Germán Pérez Morán, **TECNALIA** - “TWIND project activities for the stakeholders engagement in the offshore wind supply chain”
 - Tiago Ornelas, **ENDIPREV** - “Endiprev, a global offshore supplier Today”
 - Antonio Sánchez Pérez, **Navantia** - “Navantia: The Global supplier”
 - Nuno Vaz, **TechnipFMC** - “Local Capabilities with Global Reach”
- SESSION IV - Making Marine Renewables a Competitive and Reliable Option for Clean Power Supply 16:00-17:00
 - Moderator: Luísa Carrilho, GAP - Gómez-Acebo & Pombo Abogados
 - Emilio Nieto Gallego, Centro Nacional del Hidrógeno - “OCEAN-H2 - Generation, storage and supply of green hydrogen produced onshore”
 - Bruno Miguel Pacheco Correia, Oceanic Platform of the Canary Islands (PLOCAN) - "The ocean: PLOCAN - Co-locating Wind Projects and Hydrogen production."
 - Carlos Pinho, INESC TEC
 - José Oliveira, Ørsted - “Floating offshore wind – roadmap to competitiveness”
- CLOSING SESSION 17:00-17:15
 - João Galamba, **Secretary of State of Energy** (Video)

Session III included two presentations about TWIND project, summarizing the general aim and results of the project -Jose Candido, project coordinator, WavEC- and the supply chain matrix -German Perez, project coordinator with TECNALIA.



Figure 8. Jose Candido -WavEC- and German Perez -TECNALIA- presenting TWIND during WavEC annual seminar

The [report](#) of the seminar highlights the impact of the event. 30 speakers from Europe took part in the sessions, representing 30 Companies, R&D Centres, Embassy and Ministries; 302 registrations with a final number of 230 participants at Museu do Oriente.





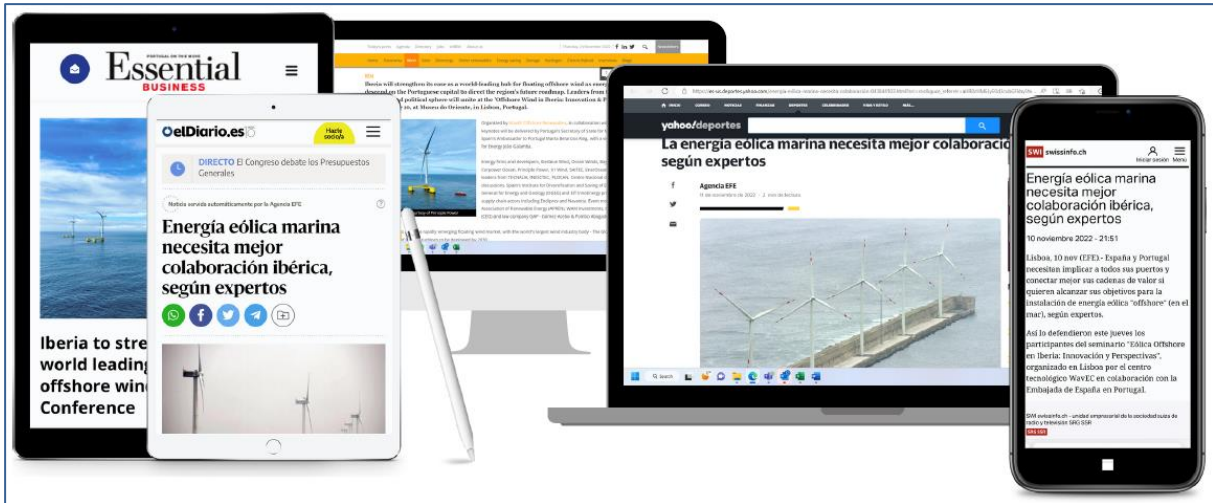
Figure 9. Auditorium at Museu do Oriente during the seminar.

The participants represented 19 countries and 190 organizations, with some 44% representing industry.

Media coverage included not only offshore wind specialised media, but also general public.

- Workboat 365
- Essential Business
- Renewable Energy Magazine
- SWI Swissinfo
- El Diario
- Yahoo/Deportes
- 25 posts on LinkedIn with 5,257k impressions on the 10 November; 4 press releases sent and more than 4k contacts.





Awareness activity to promote the TWIND Project and its objectives

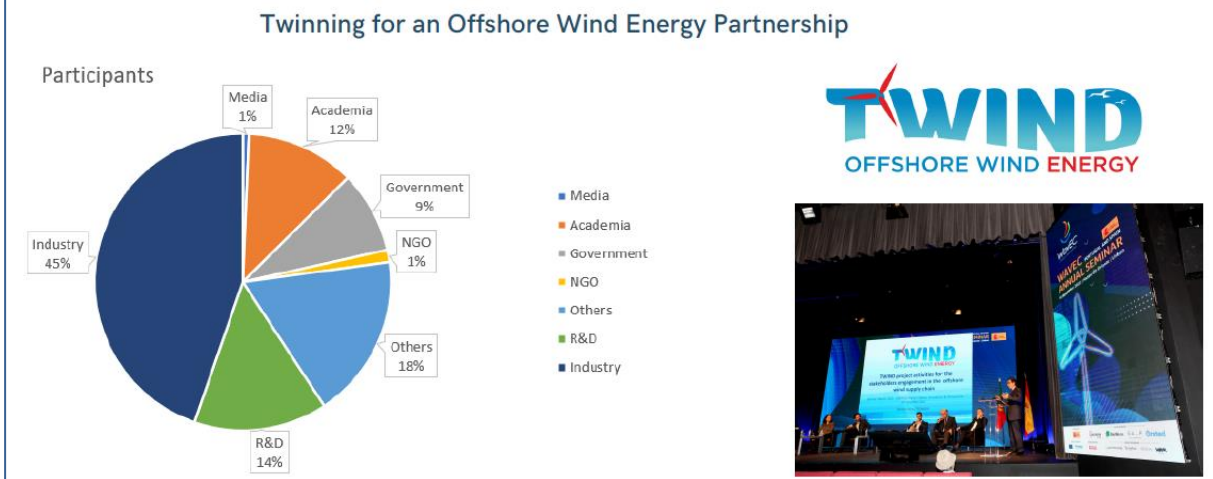


Figure 10. Media coverage of the seminar

The material -presentations and videos- is available online, on WavEC’s web site [WavEC - Offshore Renewables - Events](https://www.wavec.com/en/offshore-renewables-events).

