

Black sea fLoating Offshore Wind

STAKEHOLDERS WORKSHOP

13-14 SEPTEMBER 2023

LOCATION: Constanta Maritime University,
Romania, 104 Mircea cel Batran Street, room
710

ACTIVITIES: WP2, WP3, WP4, WP6, WP7, WP8
CONSTANTA MARITIME UNIVERSITY, ROMANIA

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Outline



01

WP2 Legal Requirements & Cross Border Policy Development

02

WP3- Adaptive design from data collection and specifications

03

WP4 Pilot Set-up

04

WP 6 Multi faceted impact Assesment

05

WP7 – Industrialisation towards mass production and upscaling actions

06

WP7 – Industrialisation towards mass production and upscaling actions

07

WP8 – Dissemination, Communication & Awareness Rising



Target groups and stakeholders are defined:

- Support to Maritime Spatial Planning

- Assessment of barriers and key drivers in the development of floating offshore wind turbines (FOWT) and the mapping of concerns and needs of industrial stakeholders:

1. In order to integrate the FOWT and set up the entire FOWT chain in the context of industrial clusters in the region, IREC in close collaboration with local partners (Eolink, CMU, Beia, CEPS, BUL, DURED, UMG) will conduct a barrier dimension analysis.
2. CEPS in close collaboration with other Consortium partners (IREC, Eolink, CMU, Beia, BUL, DURED, UMG) will analyze needs and concerns of stakeholders associated with industrial offshore wind clusters coupled with other low-carbon activities.
3. A mapping of the local and regional stakeholders of the wider Black Sea will be performed.
4. When possible, stakeholders from the landlocked countries of Central and Southeast Europe will be also consulted. This is key to ensure pan-regional benefits that FOWT can bring in the path towards decarbonisation in the EU and the wider Europe. Each local partner will send the mapping of the involved stakeholders.



A Task Force will be created at the local level for the pilot project: it will be under the overall supervision of CEPS and led by Beia for Romania, DURED for Turkey, and UMG for Bulgaria.

The Task Force will gather representatives from private companies (energy producers, operators, and supply chains organizations) involved in this pilot project, as well as environmental NGOs and relevant research institutions, representatives of EU institutions, EU delegations in third countries, national ministries, regulators and local authorities, among others.

Task Force meetings will be conducted regularly and there will be at least 5 meetings (one per year) throughout the project's course.

The participants will sign a confidentiality agreement, but part of the debates will be made public. Subject to the interest, stakeholders can create local or issue specific sub-task forces.

The local partners will identify potential avenues for discussions, will arrange venues, provide contact lists, contribute to the invitation process, organize the translation if needed.

Policy options for cross-border development of floating offshore wind in the region

In order to address concerns and needs of regional stakeholders identified in task 3, CEPS will carry out the review of (new) policy instruments for FOWT deployment. Also literature on new market creation and radical innovations will be reviewed. This review will be complemented with targeted interviews with relevant stakeholders.

A set of several case studies highlighting the current pilot FOWT projects across the world can be performed by CEPS according to a comparative policy analysis methodology.

3. Based on the ongoing work of two sub-tasks listed above, CEPS will look at how to incentivise FOWT in the region and beyond.

A cross-border nature of offshore wind requires a cross-border bottom-up cooperation between regional stakeholders.



Task 3.1: Local geographical analysis and wind potential assessment

Task leader: CMU

- (1) Wind monitoring equipment will be mounted by CMU on the Petroceltic oil platform, which will be close to the turbine.
- (2) Data will be collected from M2 until M18. After this period, for project replicability, CMU will move the wind monitoring equipment on an oil platform in Romania, for potential replication. Location: will be establish in colaboration with GSP Offshore or one of stakeholders.
- (3) Waves and surface sea currents local measurement will be assessed. CMU will also use Petroceltic's oil platform for mounting the monitoring equipment.
- (4) Eolink will design and optimise the system in the following tasks of this WP (T3.2), based on the local data (wind potential, waves and sea current) measured and the wind database provided by CMU.

Task 3.6: Environmental Water Sensors design- Task leader: **BEIA**



Task leader: GSP

Other partners involved: Eolink, Petroceltic, **CMU**, Beia, Bexco

Action Plan:

(1) To safely ship the nacelle and blades to the harbour where the assembly will be performed.

(2) To safely assemble the float and the turbine onshore (quayside) as per methods of statements and procedures.

Instrumentation and electrical connections are also performed at this stage, which is finalised with functional tests to confirm the performance of the floater-turbine assembly.

(3) To safely install the mooring system and power cable as per methods of statements and procedures.

(4) To safely tow the turbine+float unit from the shipyard to the offshore site as per methods of statements and procedures.

(5) To safely hook up the floating unit to the mooring system and to connect the electrical cable.

(6) To commission the SPM buoy and the wind turbine.

(7) To commission the environmental water sensing system.



The specific objectives of WP6 are:

- 1) an Environmental Impact Assessment;
- 2) a LCOE analysis and Life Cycle Assessment (LCA);
- 3) a Safety and Risk assessment, and
- 4) a Societal impact assessment for public acceptance. A

ll outcomes will be integrated in:

Task 6.2: LCOE analysis & LCA assesment-Task leader: IREC

Other partners involved: Eolink, CMU, AGR.

Task 6.2.1: Initial LCOE Assesment

Task 6.2.3: LCA will focus on the environmental assesment of the FOWT substructures using the LCA methodology.

Task 6.2.3: Updated LCOE and LCA Analysis.

IREC will adapt and prepare questionnaires to developers and providers, making use of the FOWApp tool for the initial assesment, which will consider different use cases and scenarios.



Task 7.4: Exploitation Strategy and Replication Roadmap in the Black Sea

Task leader: SCU

Other partners involved: Eolink, Petroceltic, GSP, CMU, Beia, MCE, DURED, AGR

Studies to integrate alternative business solutions will be performed by SCU, e.g., isolated off-grid systems including floating offshore wind, system management, energy storage system .

In addition, a **replication roadmap in the Black Sea** will be elaborated in order to scale up and replicate the demonstration towards floating offshore wind farms. This task will be conducted in close coordination with **Eolink** and key industrial partners such as **GSP** and **Petroceltic**. It will also use the networks of **Beia, GSP and CMU in Romania** (eg. *OMV, Monsson*, etc.), but also in Turkey with **DURED**, and in other low and medium wind speed areas (the Mediterranean Sea, South Korea) with AGR.



Task 8.1: Communication & Awareness raising activities

- the project visual identity (roll-up, stiker, flyer, badges)
- Press release and **media magazines:**
- **Observator Constanta**

<https://observatorconstanta.ro/2023/01/25/turbine-eoliene-offshore-in-marea-neagra-universitatea-maritima-si-grup-parteneri/>

Focus Press

<https://focuspress.ro/umc-a-demarat-un-proiect-pentru-implementarea-unui-sistem-in-marea-neagra-pentru-producere-plutitoare/>

Logo for Project web site&CMU project web site:

<https://cmu-edu.eu/en/project-blow/>

<https://cmu-edu.eu/proiect-blow/>

TV programs:

Tomis

<https://tomisnews.ro/universitatea-maritima-constantina-implicata-intr-un-proiect-european-privind-energia-eoliana-offshore-la-marea-neagra>

My Constanta online:

<https://mycta.ro/universitatea-maritima-constantina-implicata-intr-un-proiect-european-privind-energia-eoliana-offshore-la-marea-neagra/>

- Participation on international conferences: **TE-RE-RD 2023, MODTECH '23,**

TransNav Poland

Establishment of the Operational Center for Blow stakeholders at the CMU

Nautical Base Constanta

- CMU stakeholders-84 invitations; 15 agreement accept; 2 observers



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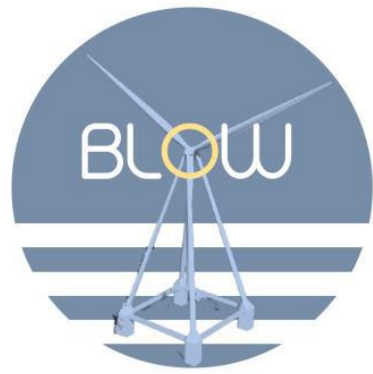


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CENTRU OPERAȚIONAL





Thank you for your attention!



CMU



PANAITESCU MARIANA

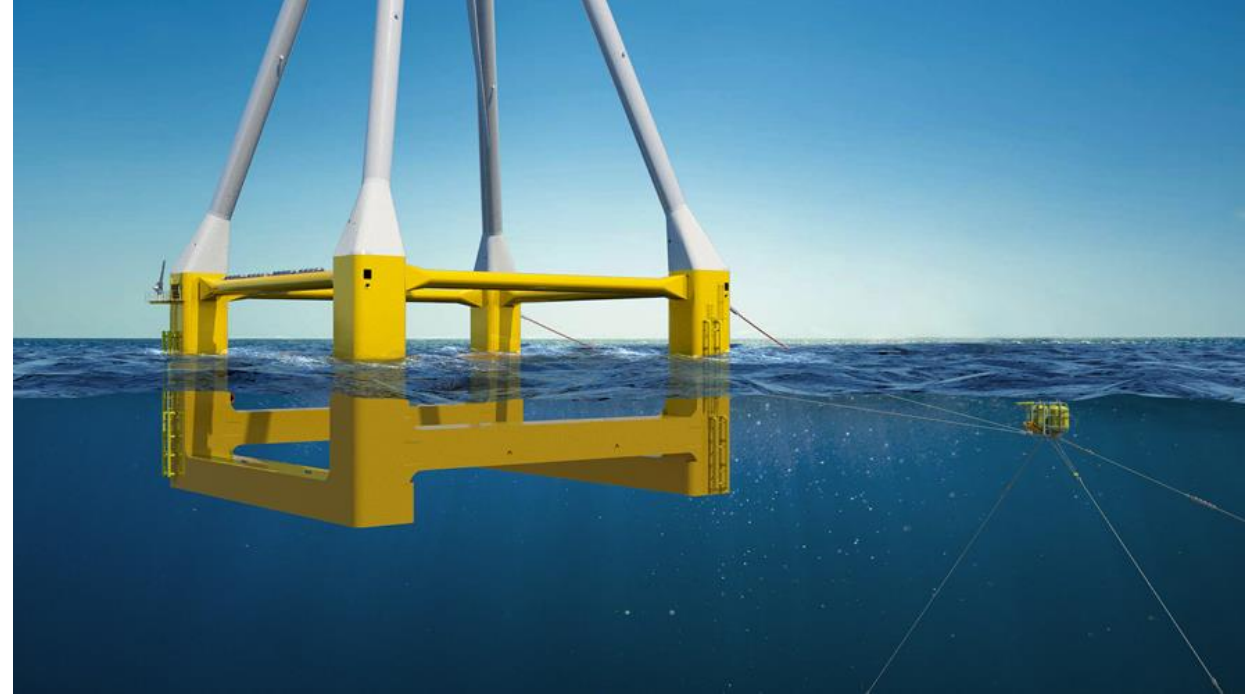


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www.cmu-edu.eu

<https://cmu-edu.eu/en/project-blow/>



**UK Research
and Innovation**

This work was funded by UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding guarantee [grant number 10063692] as part of the Horizon Europe [HORIZON-CL5-2021-D3-03] under grant agreement number [101084323]



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.