OFFSHORE WIND ENERGY IN GREECE

Present status, institutional challenges and prospects

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ΕΛΕΤΑΕΝ
Ελληνική Επιστημονική Ένωση Αιολικής Ενέργειας

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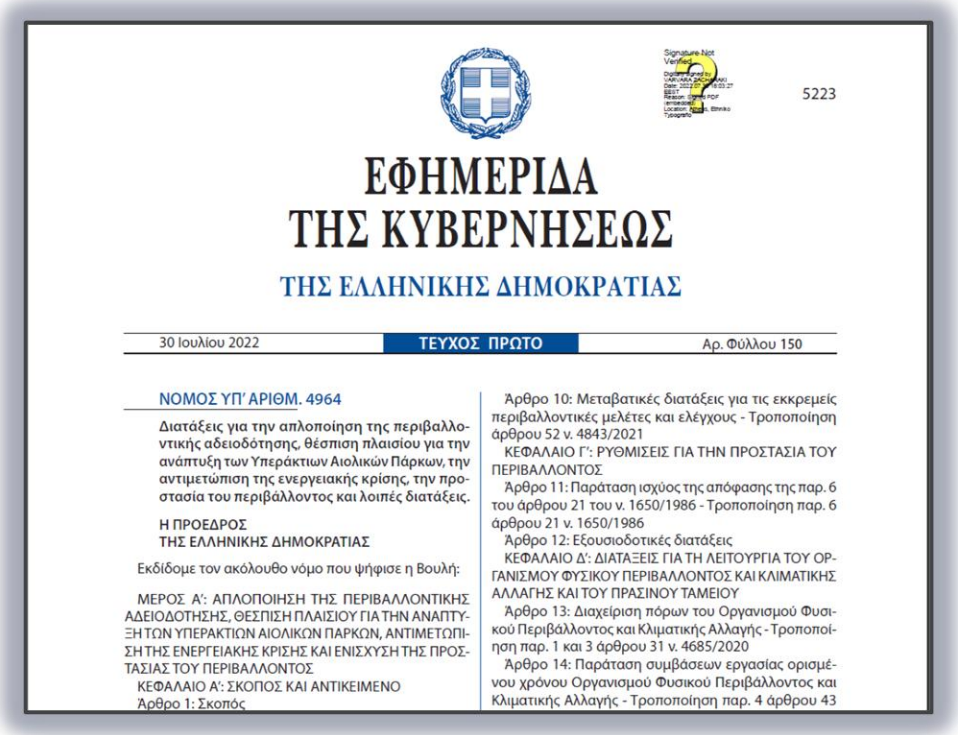
Ελληνική Επιστημονική Ένωση Αιολικής Ενέργειας

Law 4964/2022 opened the offshore wind market – the main clauses

1. **National Program for Offshore Wind Development** after a Strategic Environmental Impact Assessment (SEIA) identifies planned Offshore Wind Farm Organized Development Areas (OWFODA).
2. **Presidential Decree (PD) will define the terms for OWF** development in each approved Development Area OWFODA after a new, specific Strategic Environmental Impact Assessment (SEIA).
3. **Granting of non-exclusive Exploration Licenses** in each Development Area OWFODA to interested parties (on/off technical and financial criteria, submission of letter of guarantee).
4. **Research Period to the permitted parties** (for max 3years right to elaborate measurements and studies within each Development Area OWFODA).
5. **Definition of specific Installation Areas in each Development Area OWFODA** (Ministerial Decision that will include an assessment of the maximum installed capacity in each Installation Area)
6. **Auction for Operational Aid** (CfD type) by Regulatory Authority of Energy (RAE) among entities that have Exploration License (right of permitted entities to submit a bid for each Installation Area within the OWFODA).
7. **Granting of Exclusive Right** to develop each Installation Area to the lowest bidder



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ΕΦΗΜΕΡΙΔΑ
ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ
ΤΗΣ ΕΛΛΗΝΙΚΗΣ ΔΗΜΟΚΡΑΤΙΑΣ

30 Ιουλίου 2022 | ΤΕΥΧΟΣ ΠΡΩΤΟ | Αρ. Φύλλου 150

ΝΟΜΟΣ ΥΠ' ΑΡΙΘΜ. 4964

Διατάξεις για την απλοποίηση της περιβαλλοντικής αδειοδότησης, θέσπιση πλαισίου για την ανάπτυξη των Υπεράκτιων Αιολικών Πάρκων, την αντιμετώπιση της ενεργειακής κρίσης, την προστασία του περιβάλλοντος και λοιπές διατάξεις.

Η ΠΡΟΕΔΡΟΣ
ΤΗΣ ΕΛΛΗΝΙΚΗΣ ΔΗΜΟΚΡΑΤΙΑΣ

Εκδίδομε τον ακόλουθο νόμο που ψήφισε η Βουλή:

ΜΕΡΟΣ Α': ΑΠΛΟΠΟΙΗΣΗ ΤΗΣ ΠΕΡΙΒΑΛΛΟΝΤΙΚΗΣ ΑΔΕΙΟΔΟΤΗΣΗΣ, ΘΕΣΠΙΣΗ ΠΛΑΙΣΙΟΥ ΓΙΑ ΤΗΝ ΑΝΑΠΤΥΞΗ ΤΩΝ ΥΠΕΡΑΚΤΙΩΝ ΑΙΟΛΙΚΩΝ ΠΑΡΚΩΝ, ΑΝΤΙΜΕΤΩΠΙΣΗ ΤΗΣ ΕΝΕΡΓΕΙΑΚΗΣ ΚΡΙΣΗΣ ΚΑΙ ΕΝΙΣΧΥΣΗ ΤΗΣ ΠΡΟΣΤΑΣΙΑΣ ΤΟΥ ΠΕΡΙΒΑΛΛΟΝΤΟΣ

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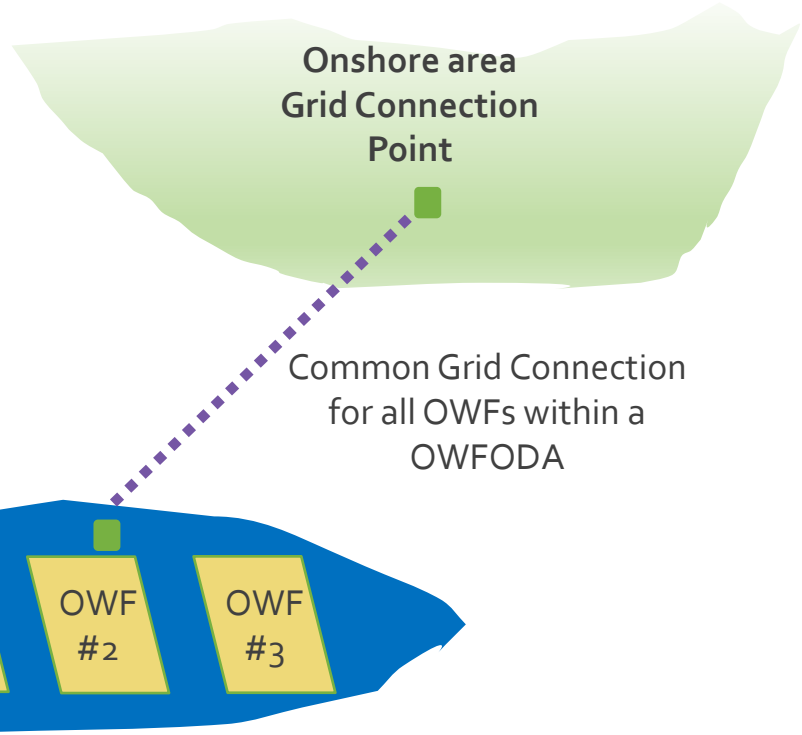
The Basic Stages of the OWF Framework

Note: All areas depicted are indicative for illustration purposes



The Basic Stages of the OWF Framework

NDP-OWF & SEIA

The National Program for the Development of OWF includes the OWFODAs.

HEREMA takes care of the preparation of a Strategic Environmental Impact Assessment.

01

JMD for NDP-OWF

With a Joint Ministerial Decision, the National Offshore Wind Farm Development Program (NDP-OWF) **is approved, together with the Strategic Environmental Impact Assessment.**

02

OWFODA SEIA & Presidential Degree

For each OWFODA, a technical study is prepared which is subject, under the responsibility of HEREMA, to an environmental impact assessment **process through a Strategic Environmental Impact Study.**

Subsequently, OWFODA is established by Presidential Decree.

03

DATA GATHERING

HEREMA will gather data for wind potential and seabed etc, which will be available to the potential investors

03a

EXPLORATION LICENSE

The interested investor submits a request for nonexclusive **Offshore Wind Farm Exploration License** (Research Permit).
By decision of HEREMA, the criteria of professional and technical ability and financial and economic adequacy of the applicants are specified.

04

RAE COMPETITIONS

The Energy Regulatory Authority (RAE) is announcing a **competitive tendering process for the granting of operational support** to the OWF Projects that will be developed within the OWF Installation Areas.

05

Minimum requirements for a developer/investor to apply for Exploration License (art.69 par.5 Law 4964/22)

Minimum requirements of professional and technical capacity:

- Proven *(or borrowed)* experience in the past ten (10) years in the development of offshore wind projects, of which at least one project should be sized more than 100MW; and
- Proven *(or borrowed)* experience in the operation and maintenance of offshore wind projects of a capacity larger than 25MW

Minimum requirements of economic and financial capacity:

- Annual turnover of the applicant (or its shareholders and related parties) exceeding two billion euros (€2,000,000,000) for at least one (1) year within the last three years
- In the case of shareholders of Investment - Holding companies & Funds, the total of the funds managed by these companies may be taken into account as an alternative when calculating the above sum;
- The ratio of equity to debt should be higher than 20%
- Submission of Bank Guarantee (10k€/MW) that can be returned:
  - upon request (exploration license turns invalid)
  - end/ cancellation of exploration license
  - application for Special Project Production License (after auction)

National Energy and Climate Plan 2024 - Targets

Electricity Generation	2022	2025	2030	2035	2040	2045	2050
Total Installed Capacity [GW]	**22,5**	**27,5**	**33,5**	**42,0**	**53,0**	**62,5**	**70,7**
Lignite	1,6	1,3					
Natural Gas	6,3	7,0	7,9	6,3	5,9	5,9	5,9
Oil-based	0,8	0,8	0,1	0,1	0,1	0,1	0,1
Biomass & Biogas	0,2	0,1	0,1	0,1	0,1	0,0	0,0
Photovoltaics	5,4	8,5	13,5	18,5	26,0	30,6	35,1
Onshore Wind	4,7	7,0	8,9	9,5	11,0	13,0	13,0
Offshore Wind	0,0	0,0	1,9	3,9	5,8	8,2	11,8
Hydroelectric	3,4	2,8	3,1	3,6	3,8	4,2	4,5
Total Net Electricity Generation [TWh]	**52,0**	**53,9**	**60,4**	**78,8**	**101,5**	**122,9**	**145,5**
Lignite	5,8	4,5					
Natural Gas	19,1	12,2	10,9	4,7	4,1	2,9	3,8
Oil	5,1	1,8	0,3	0,3	0,2	0,0	0,0
Biomass & Biogas	0,1	0,6	0,4	0,0	0,0	0,1	0,0
Photovoltaics	7,1	13,1	20,9	28,7	40,1	47,1	54,0
Onshore Wind	10,9	16,3	21,1	22,9	27,0	32,0	32,5
Offshore Wind	0,0	0,0	0,6	15,4	22,8	32,4	46,5
Hydroelectric	3,9	5,5	6,1	7,0	7,3	8,3	8,7
Net Electricity Imports [TWh]	**3,5**	**3,0**	**1,8**	**-2,7**	**-6,7**	**-9,3**	**-4,9**
Total Electricity Supply [TWh]	**55,5**	**55,8**	**61,3**	**73,1**	**88,4**	**104,7**	**130,9**
Grid Losses [TWh]	**3,8**	**3,6**	**3,7**	**4,0**	**4,5**	**4,8**	**4,9**
Pumping Losses [TWh]	**0,0**	**0,4**	**1,2**	**2,0**	**2,3**	**2,6**	**2,9**
Rejected Electricity [TWh]	**0,0**	**1,1**	**0,9**	**3,1**	**6,4**	**8,9**	**9,7**

The NECP for Offshore Wind Farms (1/2)

The target for OW is 1.9 GW by 2030.

What is needed:

- ❑ The **typical approval of the National Offshore Wind Farms Development Programme (NDP-OWF)** which determines the total marine area that is in principle suitable for the relevant exploitation. The NDP-OWF has been prepared by HEREMA and will be typically approved with the issuance of a Joint Ministerial Decision. Greece faces significant delay achieving this milestone.
- ❑ The selection of the first **Offshore Wind Farm Organized Development Areas (OWFODA),** in which the first wind farms will be installed. The first OWFODA will be approved by Presidential Decree and will cover the target of 1.9 GW. The marine area south of Alexandroupolis, has already been selected to be OWFODA.
- ❑ The approval by the European Commission of the **aid scheme** and its implementation.

  The scheme provides for operational support through a 20-year Contract for Differences following participation in competitive bidding processes.

The NECP for Offshore Wind Farms (2/2)

- By 2027, the process of selecting and identifying the second OWFODA package should have begun, which will cover the intermediate goal of 2035.
- At the same time, the National Program will be reviewed before 2030 in order to adapt Phase II (after 2035) to new technological and economic circumstances.
- The System Operator has already booked grid capacity for the 2030 target.

The particularities of Greek seas & the status of FOW in Europe

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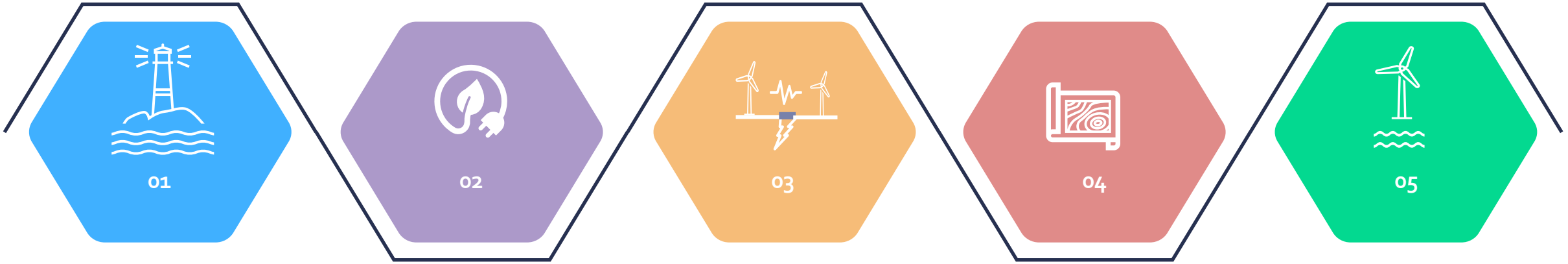
Particularities & Suitability assessment of the Greek Maritime Area for OWF



The first OW projects will be developed within the **territorial sea** (which currently extends to six nautical miles in the Aegean sea and to 12 nautical miles in the Ionian sea)

Non interconnected islands where a large proportion of the wind potential is concentrated.

Greece is a **seismic region** – an issue that has not been encountered in Europe but known in other markets.

Steep seabed slope and **deep waters** close to shore.

Good wind potential in combination with **lower wave heights** facilitating development and operational lifetime.

Floating wind in Europe

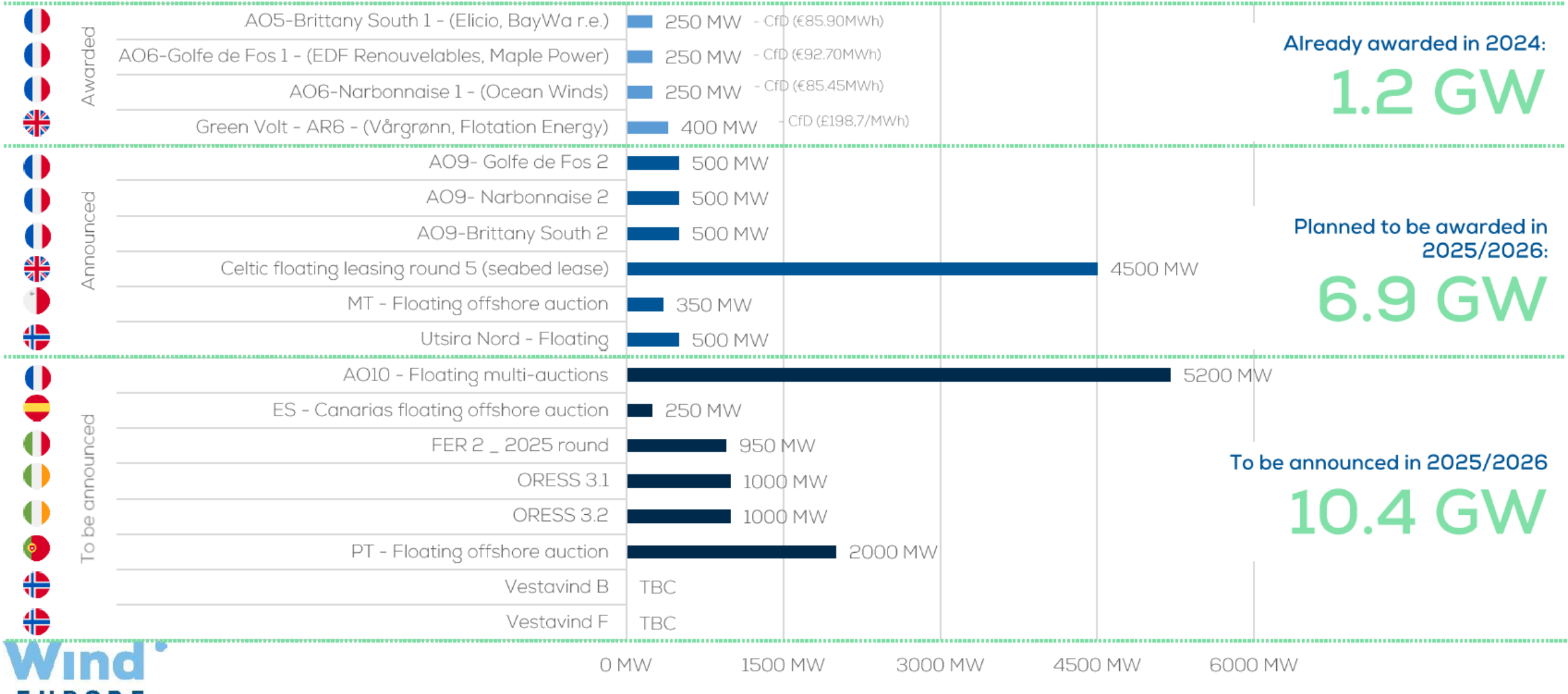
233 MW

<1% of Europe's offshore capacity

- Operating
- Under construction
- Under development

A large volume of floating capacity has already been awarded. An additional 17 GW could be awarded in the next two years.

Annual



Wind EUROPE

FOW in Europe

1. Europe has **233 MW of floating wind today**, with the industry moving from demos to utility-scale based on early project learnings.
2. In 2024, **1.2 GW was awarded in Europe**; over 7 GW more could be auctioned by 2026, with up to 1 GW operational by 2030.
3. Floating wind remains **costly** and needs **public support to scale**, but it will become competitive with the **right auction conditions**.
4. Members stressed the need for a **clear narrative**, **stronger pipelines** and **industrialisation** to reduce costs and unlock supply chain value.
5. The NZIA requires **non-price criteria in auctions** from 2025 to boost EU clean tech manufacturing.

The National Program for OW Development & the MSP

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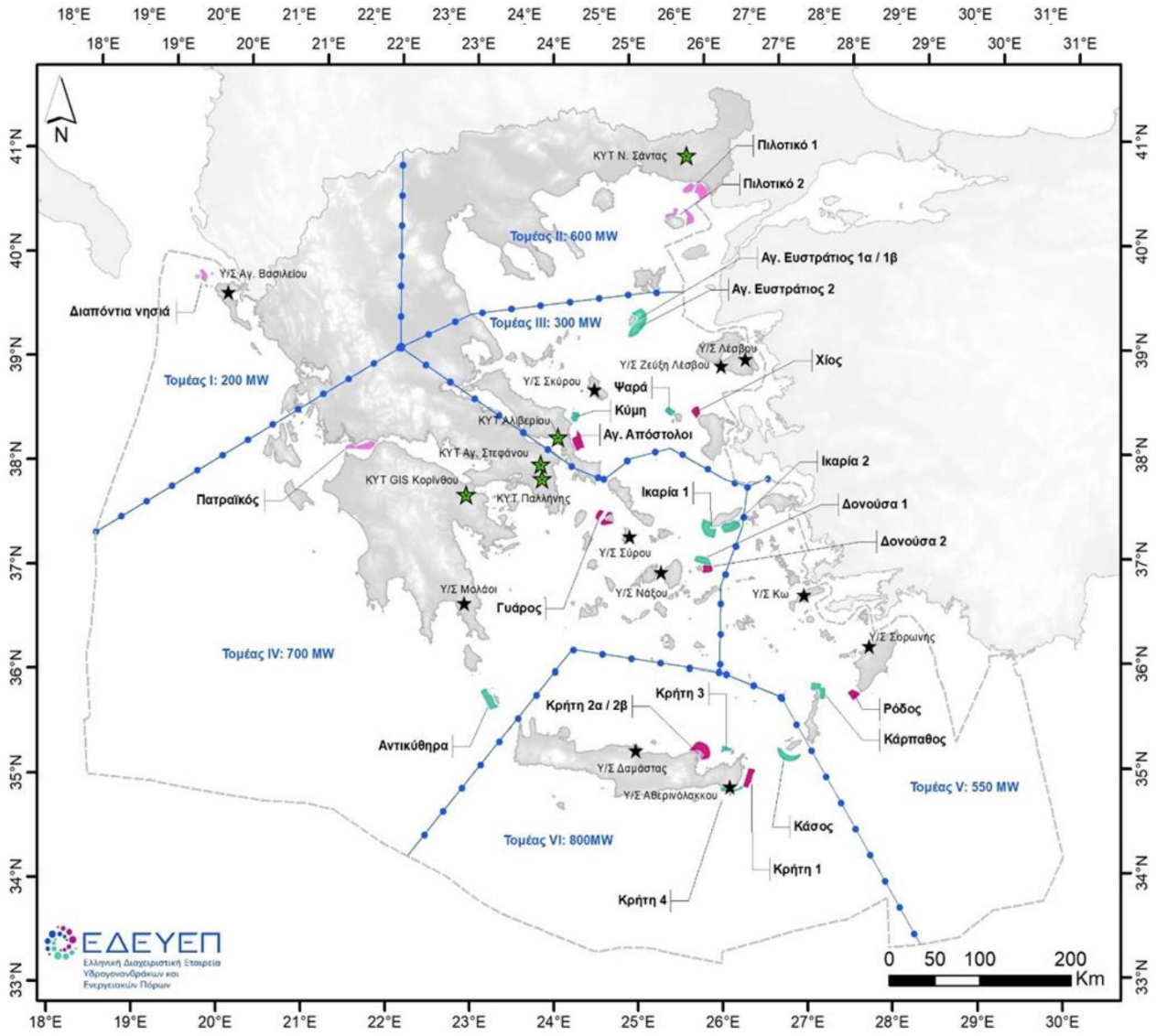
The OW National Program – The potential OWFODAreas

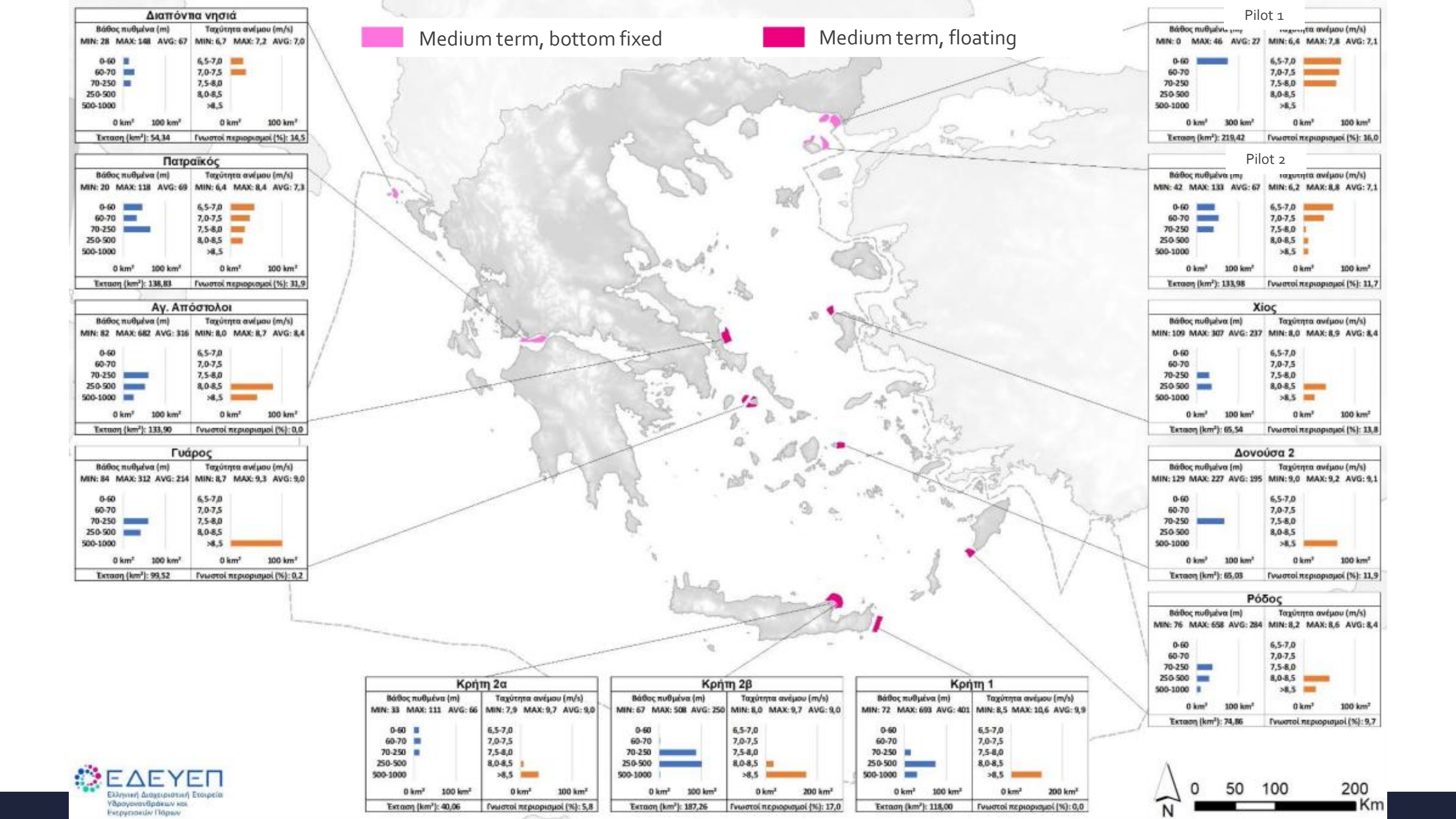


10 areas for medium-term development
4.9 GW / 978 km²
(76% of them for floating wind)

2 Pilot projects (Pilot 1 & 2)
Up to 600 MW / 353 km²

13 areas for long-term development
6.9 GW / 1,381 km²
(96% of them for floating wind)

- ✓ The National Offshore Wind Farm Development Plan, determines the total marine area within the territorial waters that has a potential for exploitation. It has been prepared by HEREMA, it was published in October 2023.


Medium term, bottom fixed
Medium term, floating
Pilot 1
Pilot 2
Διαπόντια νησιά
Βάθος πυθμένα (m)
MIN: 28 MAX: 148 AVG: 67
Ταχύτητα ανέμου (m/s)
MIN: 6,7 MAX: 7,2 AVG: 7,0
0-60
60-70
70-250
250-500
500-1000
6,5-7,0
7,0-7,5
7,5-8,0
8,0-8,5
>8,5
0 km²
100 km²
Έκταση (km²): 54,34
Γνωστοί περιορισμοί (%): 14,5
Πατραϊκός
MIN: 20 MAX: 118 AVG: 69
MIN: 6,4 MAX: 8,4 AVG: 7,3
Έκταση (km²): 138,83
Γνωστοί περιορισμοί (%): 31,9
Αγ. Απόστολοι
MIN: 82 MAX: 682 AVG: 316
MIN: 8,0 MAX: 8,7 AVG: 8,4
Έκταση (km²): 133,90
Γνωστοί περιορισμοί (%): 0,0
Γυάρος
MIN: 84 MAX: 312 AVG: 214
MIN: 8,7 MAX: 9,3 AVG: 9,0
Έκταση (km²): 99,52
Γνωστοί περιορισμοί (%): 0,2
MIN: 0 MAX: 46 AVG: 27
MIN: 6,4 MAX: 7,8 AVG: 7,1
Έκταση (km²): 219,42
Γνωστοί περιορισμοί (%): 16,0
MIN: 42 MAX: 133 AVG: 67
MIN: 6,2 MAX: 8,8 AVG: 7,1
Έκταση (km²): 133,98
Γνωστοί περιορισμοί (%): 11,7
Χίος
MIN: 109 MAX: 307 AVG: 237
MIN: 8,0 MAX: 8,9 AVG: 8,4
Έκταση (km²): 65,54
Γνωστοί περιορισμοί (%): 13,8
Δονούσα 2
MIN: 129 MAX: 227 AVG: 195
MIN: 9,0 MAX: 9,2 AVG: 9,1
Έκταση (km²): 65,03
Γνωστοί περιορισμοί (%): 11,9
Ρόδος
MIN: 76 MAX: 658 AVG: 284
MIN: 8,2 MAX: 8,6 AVG: 8,4
Έκταση (km²): 74,86
Γνωστοί περιορισμοί (%): 9,7
Κρήτη 2α
MIN: 33 MAX: 111 AVG: 66
MIN: 7,9 MAX: 9,7 AVG: 9,0
200 km²
Έκταση (km²): 40,06
Γνωστοί περιορισμοί (%): 5,8
Κρήτη 2β
MIN: 67 MAX: 508 AVG: 250
MIN: 8,0 MAX: 9,7 AVG: 9,0
Έκταση (km²): 187,26
Γνωστοί περιορισμοί (%): 17,0
Κρήτη 1
MIN: 72 MAX: 693 AVG: 401
MIN: 8,5 MAX: 10,6 AVG: 9,9
Έκταση (km²): 118,00
Γνωστοί περιορισμοί (%): 0,0
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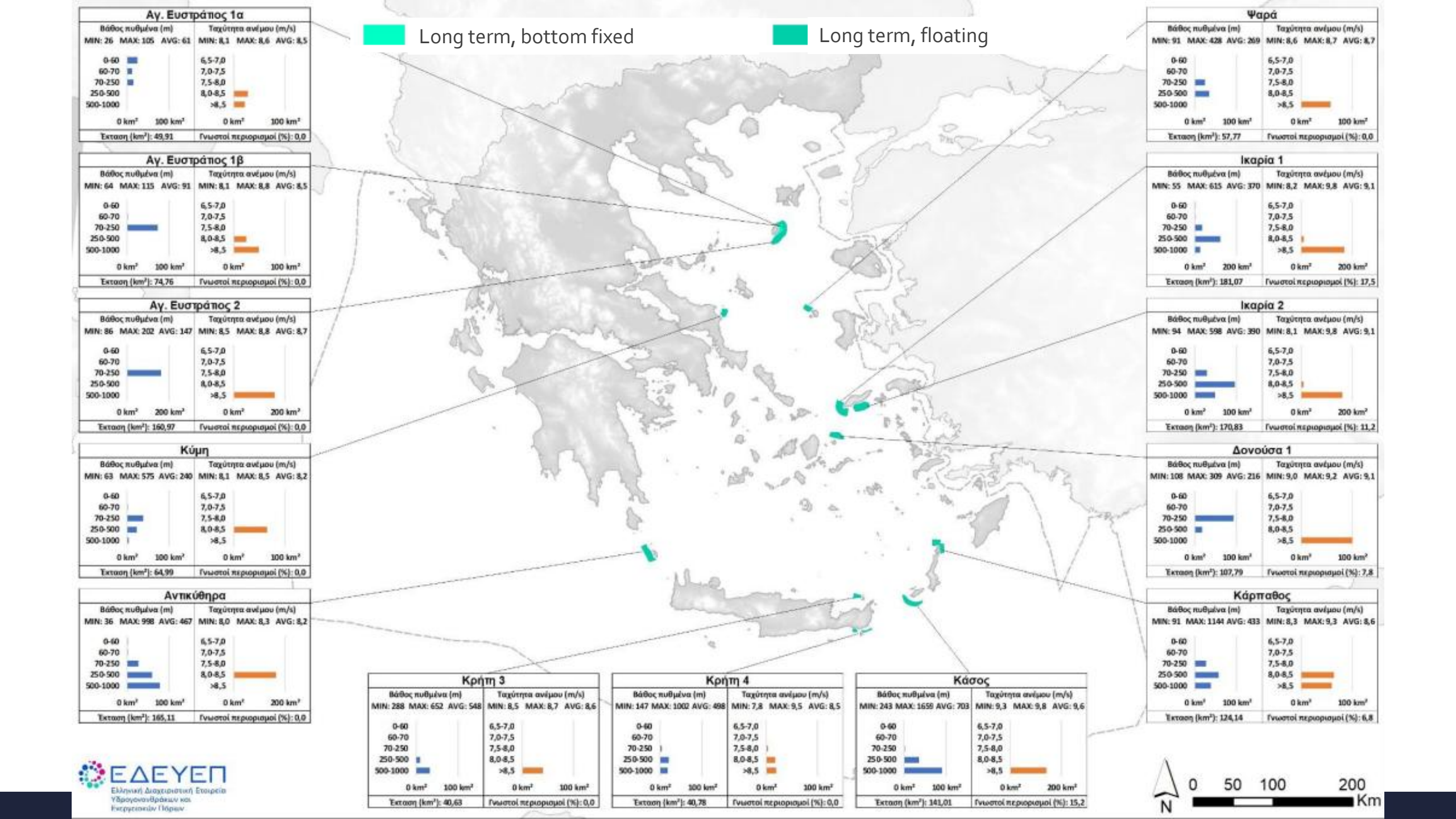
Long term, bottom fixed
Long term, floating
Αγ. Ευστράτιος 1α
Βάθος πυθμένα (m) MIN: 26 MAX: 105 AVG: 61
Ταχύτητα ανέμου (m/s) MIN: 8,1 MAX: 8,6 AVG: 8,5
0-60
60-70
70-250
250-500
500-1000
6,5-7,0
7,0-7,5
7,5-8,0
8,0-8,5
>8,5
0 km² 100 km²
Έκταση (km²): 49,91
Γνωστοί περιορισμοί (%): 0,0
Αγ. Ευστράτιος 1β
Βάθος πυθμένα (m) MIN: 64 MAX: 115 AVG: 91
Ταχύτητα ανέμου (m/s) MIN: 8,1 MAX: 8,8 AVG: 8,5
0 km² 100 km²
Έκταση (km²): 74,76
Γνωστοί περιορισμοί (%): 0,0
Αγ. Ευστράτιος 2
Βάθος πυθμένα (m) MIN: 86 MAX: 202 AVG: 147
Ταχύτητα ανέμου (m/s) MIN: 8,5 MAX: 8,8 AVG: 8,7
0 km² 200 km²
Έκταση (km²): 160,97
Γνωστοί περιορισμοί (%): 0,0
Κύμη
Βάθος πυθμένα (m) MIN: 63 MAX: 575 AVG: 240
Ταχύτητα ανέμου (m/s) MIN: 8,1 MAX: 8,5 AVG: 8,2
0 km² 100 km²
Έκταση (km²): 64,99
Γνωστοί περιορισμοί (%): 0,0
Αντικύθηρα
Βάθος πυθμένα (m) MIN: 36 MAX: 998 AVG: 467
Ταχύτητα ανέμου (m/s) MIN: 8,0 MAX: 8,3 AVG: 8,2
0 km² 200 km²
Έκταση (km²): 165,11
Γνωστοί περιορισμοί (%): 0,0
Ψαρά
Βάθος πυθμένα (m) MIN: 91 MAX: 428 AVG: 269
Ταχύτητα ανέμου (m/s) MIN: 8,6 MAX: 8,7 AVG: 8,7
Έκταση (km²): 57,77
Γνωστοί περιορισμοί (%): 0,0
Ικαρία 1
Βάθος πυθμένα (m) MIN: 55 MAX: 615 AVG: 370
Ταχύτητα ανέμου (m/s) MIN: 8,2 MAX: 9,8 AVG: 9,1
0 km² 200 km²
Έκταση (km²): 181,07
Γνωστοί περιορισμοί (%): 17,5
Ικαρία 2
Βάθος πυθμένα (m) MIN: 94 MAX: 598 AVG: 390
Ταχύτητα ανέμου (m/s) MIN: 8,1 MAX: 9,8 AVG: 9,1
Έκταση (km²): 170,83
Γνωστοί περιορισμοί (%): 11,2
Δονούσα 1
Βάθος πυθμένα (m) MIN: 108 MAX: 309 AVG: 216
Ταχύτητα ανέμου (m/s) MIN: 9,0 MAX: 9,2 AVG: 9,1
Έκταση (km²): 107,79
Γνωστοί περιορισμοί (%): 7,8
Κάρπαθος
Βάθος πυθμένα (m) MIN: 91 MAX: 1144 AVG: 433
Ταχύτητα ανέμου (m/s) MIN: 8,3 MAX: 9,3 AVG: 8,6
Έκταση (km²): 124,14
Γνωστοί περιορισμοί (%): 6,8
Κρήτη 3
Βάθος πυθμένα (m) MIN: 288 MAX: 652 AVG: 548
Ταχύτητα ανέμου (m/s) MIN: 8,5 MAX: 8,7 AVG: 8,6
Έκταση (km²): 40,63
Γνωστοί περιορισμοί (%): 0,0
Κρήτη 4
Βάθος πυθμένα (m) MIN: 147 MAX: 1002 AVG: 498
Ταχύτητα ανέμου (m/s) MIN: 7,8 MAX: 9,5 AVG: 8,5
Έκταση (km²): 40,78
Γνωστοί περιορισμοί (%): 0,0
Κάσος
Βάθος πυθμένα (m) MIN: 243 MAX: 1659 AVG: 703
Ταχύτητα ανέμου (m/s) MIN: 9,3 MAX: 9,8 AVG: 9,6
0 km² 200 km²
Έκταση (km²): 141,01
Γνωστοί περιορισμοί (%): 15,2
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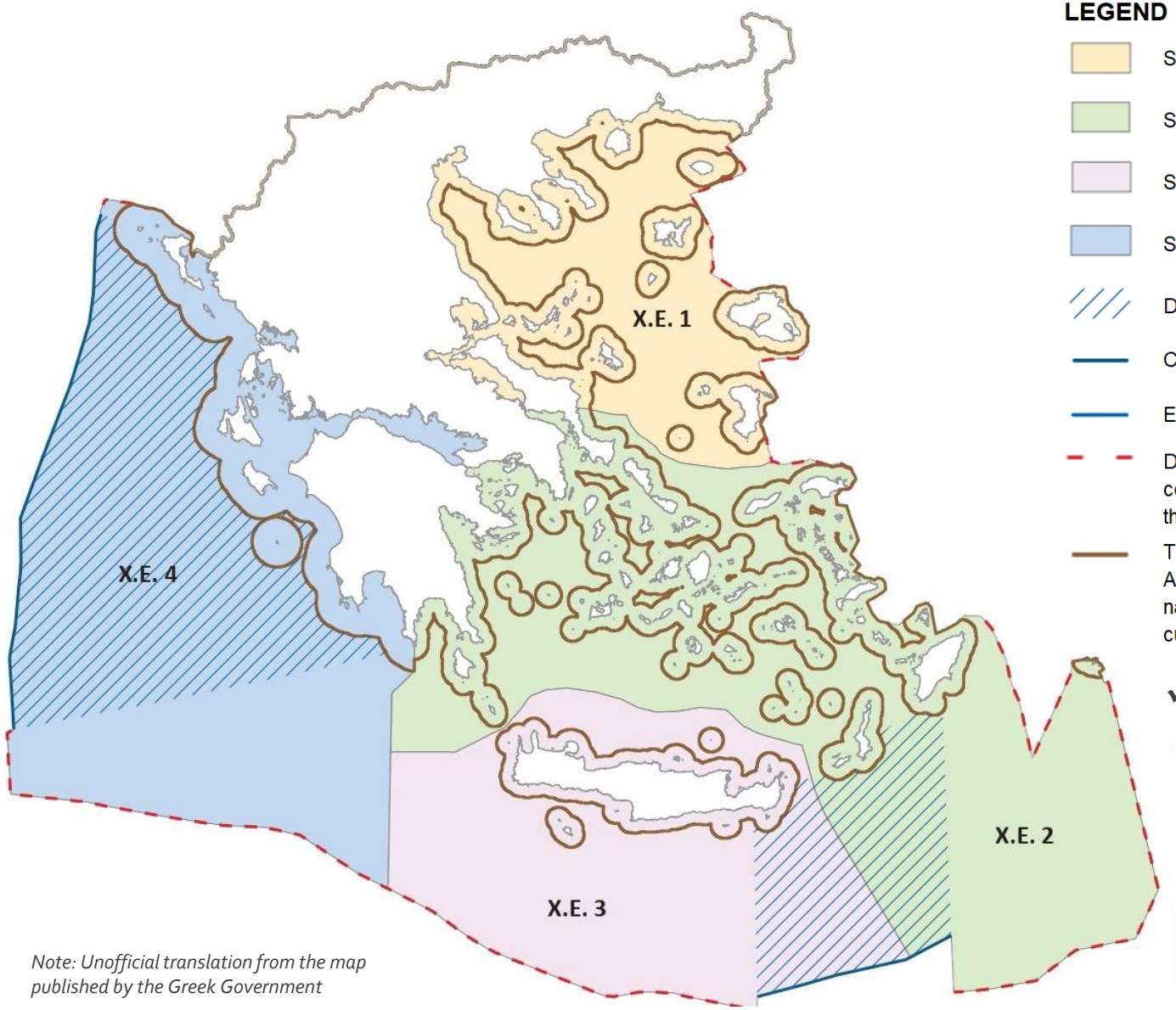
Km

Greece’s National Maritime Spatial Strategy



Note: Unofficial translation from the map published by the Greek Government

LEGEND

- Spatial Unit 1
- Spatial Unit 2
- Spatial Unit 3
- Spatial Unit 4
- Delimitated Exclusive Economic Zone
- Continental Shelf boundaries according to the Greece–Italy Agreements of 1977 and 20
- Exclusive Economic Zone boundaries according to the Greece–Egypt Agreement of 202
- Depiction of the median line defining the outer boundaries of the Greek Continental Shelf, until the conclusion of delimitation agreements with neighboring states whose coasts are adjacent or opposite to the Greek coasts (Law 4001/2011)
- Territorial Sea boundaries (existing national legislation, Greece–Turkey Protocol of 1926, Italy–Turkey Agreement and Protocol of 1932, and without prejudice to the general extension of the breadth up to 12 nautical miles, in accordance with the United Nations Convention on the Law of the Sea, which reflects customary international law)

✓ The National Maritime Spatial Strategy (NMSS), which defines and maps Greece’s Maritime Spatial Planning, was officially published in April 2025 through the initiative of the Ministry of Environment and Energy, in collaboration with the Ministry of Foreign Affairs and other competent Ministries.

Prospects & challenges for the supply chain for OW in Greece

ΕΛΕΤΑΕΝ
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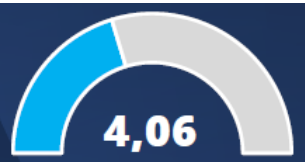
The offshore wind supply chain in Greece

✓ To identify the strengths and weaknesses of OWF development in Greece, at the end of 2023 a survey was conducted by ELEATEN, to report on the status and challenges for the supply chain for Offshore Wind in Greece. Most key players of this potential supply chain were addressed, such as main ports, shipyards, as well as the steel, cement and cables industry.

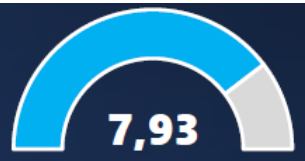
Business opportunities, threats, strengths, and weaknesses of the offshore wind farm sector in Greece



Low level of readiness and several challenges for ports

Main challenges

- Orientation of management to other activities – competition to existing activities, mainly due to limited space
- Management uncertainty due to port privatization plans
- Lack of funds for infrastructure investments
- Master plans define Land use – Will need to be updated
- Licensing issues



Higher level of readiness and waiting attitude for shipyards & industry

- Constant upscaling of design restricts production planning
- Industrialization is a key factor to cost reduction
- Limited available space in ports
- Uncertainty due to lack of confidence that the state tenders will take place on schedule
- Capital expenditures required
- Uncertainty due to unknown tariffs

High level of readiness but also investment needs for maritime and crane services

- Investment needs in new equipment
- Need for long term commitment to invest that will may be used exclusively to such project
- Uncertainty about equipment specifications required until design specifications are finalized
- Staff shortages

***Readiness of the company**, in view of its commercial strategy, to involve with the offshore wind farm sector (score 1-10)*

Status and Challenges for the supply chain

STRENGTHS

- Parts of the supply chain are already developed at some extend.
- Significant wind potential.
- Strategic location.
- Maritime heritage
- Experience in onshore wind.

WEAKNESSES

- Insufficient infrastructure in port space and equipment.
- Lack of assembly know-how in ports.
- Regulatory constraints.
- Uncertainty due to port privatization plans.
- Bureaucracy & licensing process

SWOT

OPPORTUNITIES

- A new innovative technology that may be developed in Greece.
- Novel industrial sector with prospects of at least 30 years of activity.
- Potential high local added value for Greece e.g. Side – activities development: a new industry in offshore wind maintenance.
- Geopolitical factor

THREATS

- Constant design upscaling.
- Risk of delays.
- Limited or lack of social awareness.
- Increasing costs.
- Investments required in infrastructure.
- Staff shortage

What we have done

ELETAEN's promotional and advocacy efforts

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Promotional and advocacy activities by ELETAEN for offshore wind energy development (1/2)

12 April 2019 – *Workshop with the Norwegian Embassy in Athens (Hilton Hotel)*

- Discussion on the strategic importance of floating offshore wind in Greece and the Mediterranean
- With participation from the Ministry of Energy, RAE, Equinor, academics, and major Greek banks

23 February 2021 – *Conference: "Offshore Wind Farms in Greece – Legal Framework, Challenges and Prospects"*

- In-depth analysis of institutional framework and market outlook
- Contributions from ADMIE, CRES, WindEurope, EBRD, and NORWEA

12 December 2022 – *Workshop: "Offshore Wind Energy in Greece: The Way Forward"*

- Co-organized with HEREMA and Grant Thornton, under the auspices of the Ministry of Energy
- Focused on presenting Greece's new offshore wind framework
- Moderation and interventions by ELETAEN's President and Board Members

23 November 2023 – *Conference: "Offshore Wind Supply Chain in Greece"*

- Co-hosted with Norwegian Offshore Wind
- Over 65 companies from Greece, Norway and other countries participated
- Technical and industry studies on the supply chain were presented (iWind Renewables, Samaras & Partners)

Promotional and advocacy activities by ELETAEN for offshore wind energy development (2/2)

5 March 2024 – *Members meeting*

- Presentation of findings from GR-INNO studies on the domestic supply chain for offshore wind
- Launch of special edition on offshore wind's contribution to national energy strategy
- Presentation of the updated ask4wind campaign, addressing myths around wind energy

26 March 2025 – *Workshop: "Wind Energy Made in Greece"*

- Co-organized by ELETAEN, Norwegian Offshore Wind, and Innovation Norway
- Focus on expanding the domestic supply chain and boosting local added value in wind energy
- Presentations by Lykomitros Steel, EMEK, Archer Wind, iWind Renewables, and CRES on current Greek industrial capabilities and international collaborations
- Discussions with over 50 participants from Greek and Norwegian wind energy companies
- Highlighted Greece's strengths in metallurgy, cables, cement, logistics, shipyards, and testing infrastructure

Working Group

- ELETAEN has established a dedicated Working Group focused on the analysis and promotion of issues related to offshore wind energy, aiming to support the sector's structured and sustainable development in Greece.

EU Project Participation

- ELETAEN actively participates in European projects such as SHOREWINNER, contributing to the development of the offshore wind sector through transnational cooperation and knowledge exchange.

Is there room for innovation in Greece?

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Outline of proposals & opportunities for Innovation and R&D for OW in Greece

Greece has both the geographic potential and industrial foundation to play a key role in offshore wind R&D in the Mediterranean. ELETAEN, as the institutional voice of the Greek wind energy sector, is trying to promote public-private partnerships, facilitate industry-academia collaboration, and promote flagship R&D projects that support innovation and local added value.

Key Innovation and R&D Opportunities for Greece:

1. Development and operation of a Floating Wind Test Centre for technology demonstration and certification (inspired by Norway's METCentre

   To cover an existent **market gap** i.e over 80 floating platform designs are in early stages globally; a major shortage exists in available test centres.

2. Promotion / Participation in a national programme for the design of a Greek floating platform adapted to Mediterranean sea conditions

Main policy asks for OW development in Greece

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Ελληνική Επιστημονική Ένωση Αιολικής Ενέργειας

Synopsis of main political asks for OW in Greece

1. Approval of the announced **National Program for Offshore Wind Development**

2. Clarification of the key terms of the **future auctions** e.g. price indexing, grid costs sharing etc.

3. Establishment, through the Presidential Decrees (PD), of the Offshore Wind Farm Organized Development Areas (OWFODA) as **Renewable Acceleration Areas**, as applies to the first pilot offshore wind projects.

4. Initiation of planning for the future development of offshore wind across **all maritime zones of our seas**.

   The part of the EEZ which has been Delimitated with Egypt may be the first to be examined and developed and specifically the part of the Karpathian pelagos between Crete and Kassos.

5. A robust program of **industrial & innovation policy and investments' funding**

   - In the supply chain (metallurgical industry, ports, shipyards, transport, industrial facilities, etc.).
   - In research & technology, aiming at:
     - the development of cheaper floaters for floating wind turbines, suitable for the calmer wave conditions of seas like the Mediterranean
     - the development of a testing centre for FOW in Greece

ΕΛΕΤΑΕΝ

Ελληνική Επιστημονική Ένωση Αιολικής Ενέργειας

www.eletaen.gr

www.ask4wind.gr

https://eletaen.gr/ypotrofia-arthouros-zervos-2025/

GLOBAL WIND DAY 15 JUNE

Competitive advantages and added value to the Greek economy

- Significant Expected Investments > 6 billion € by 2030 and > 28 billion € by 2050 - Attracting foreign investments with high Greek added value (67% expected to be part of the Greek economy and from the rest significant part in the EU)
- More than 8.000 permanent and highly specialized new jobs will be created
- Increase of the exporting manufacturing capabilities (cables, foundation, equipment) and creation of new ones
- Shipyards can manufacture or repair transport vessels (crew transfer, service operations) and specialized installation vessels (component transport, foundation installation, cable installation etc.)
- Training and Research institutions

Grant Thornton at the conference "Offshore Wind Energy in Greece: The way forward", dated December 12*, 2022.*