



HWEA
Hellenic Wind Energy Association

Onshore & Offshore Wind Energy in Greece Present status and the way forward

Panagiotis Ladakakos, Chairman of HWEA



UNIC ATHENS

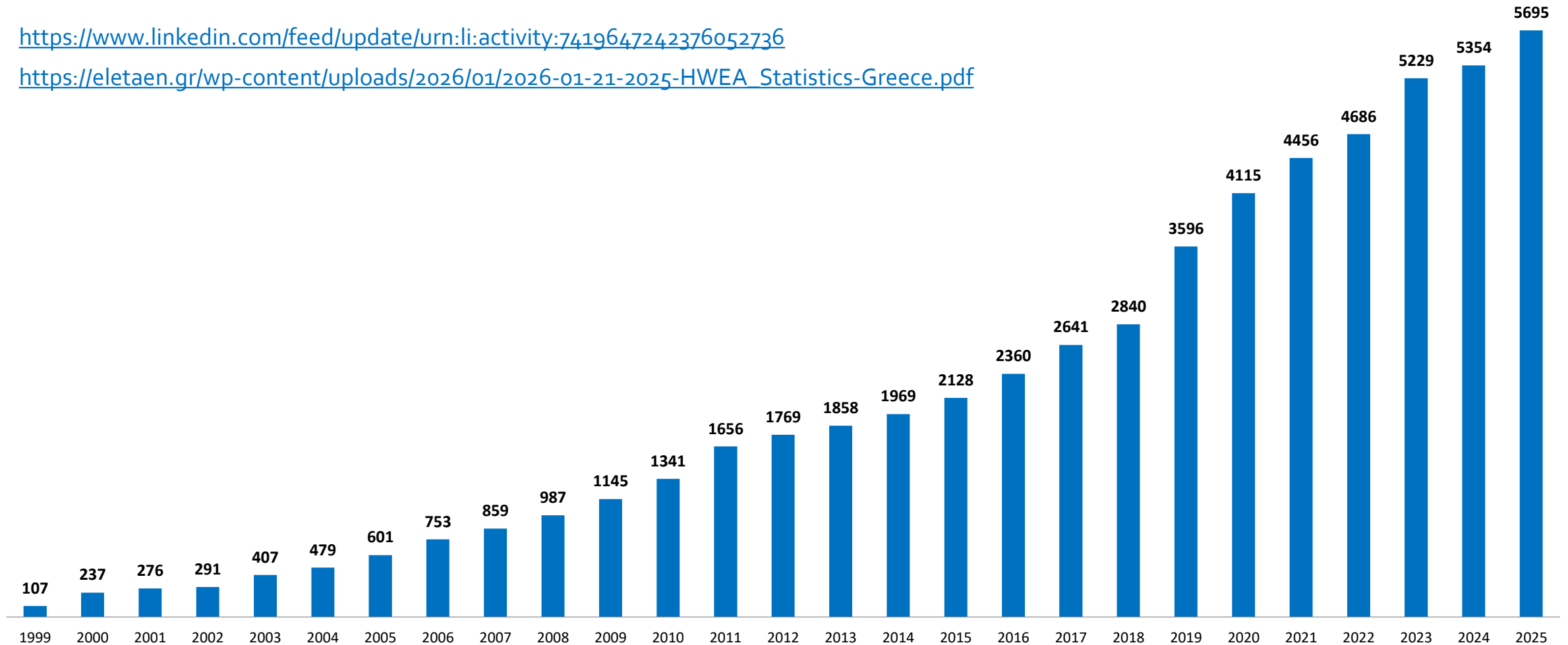
Energy Conference, 24 June 2026, Athens (Greece)



Total capacity to the grid (MW) per year

<https://www.linkedin.com/feed/update/urn:li:activity:7419647242376052736>

https://eletaen.gr/wp-content/uploads/2026/01/2026-01-21-2025-HWEA_Statistics-Greece.pdf

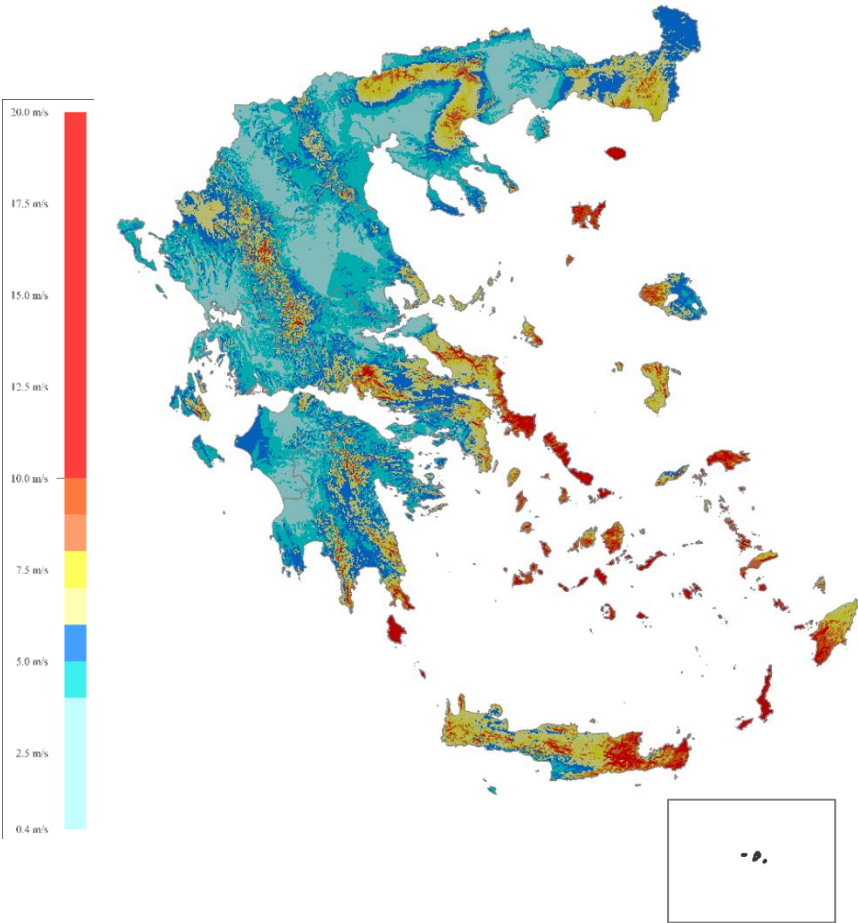
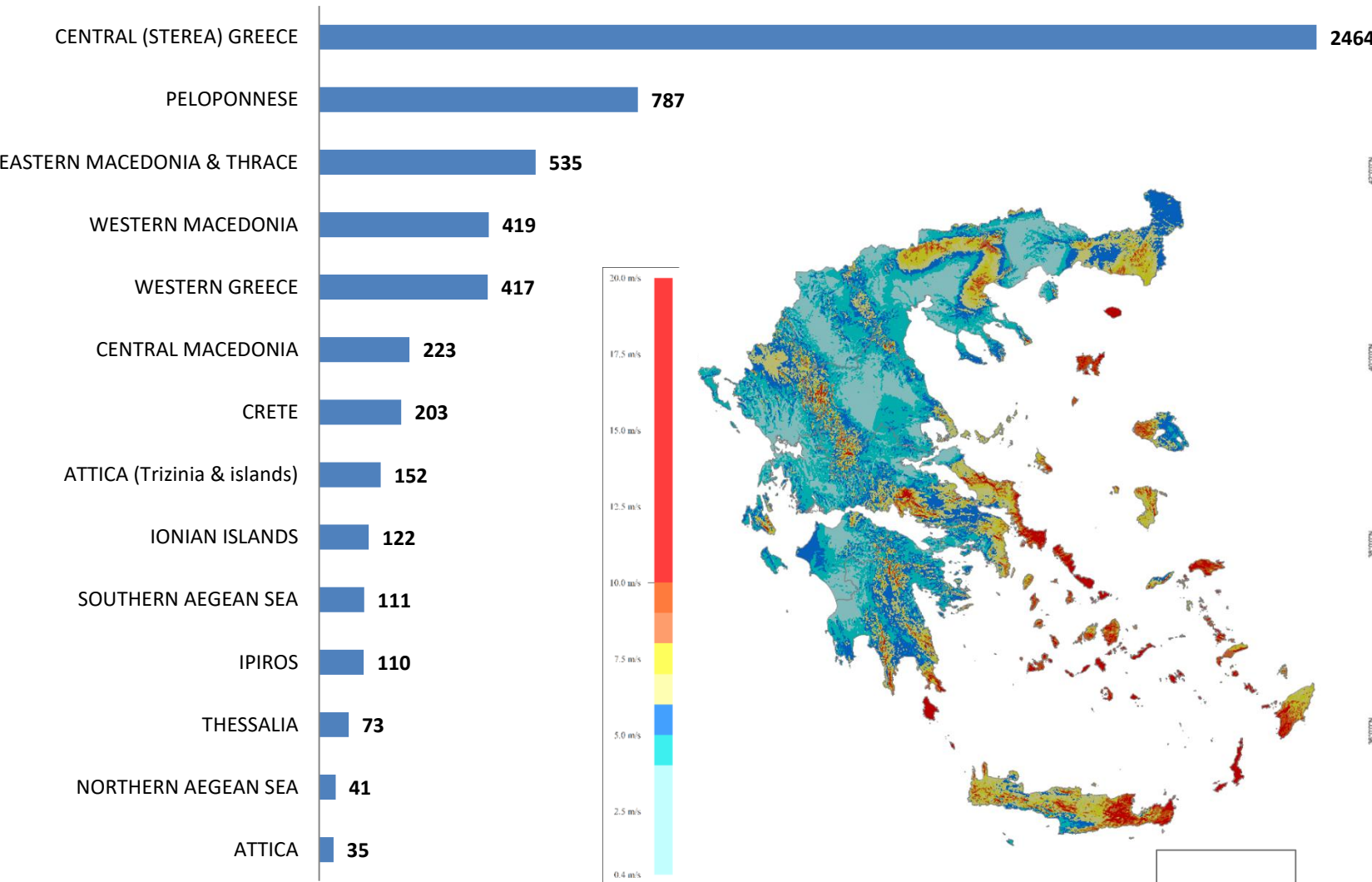


The HWEA Wind Energy Statistics take into account the wind capacity which is in commercial or test operation in Greece and are based on sources from the market actors. HWEA has made effort to crosscheck and confirm the data. However, HWEA does not guarantee the accuracy of them and do not undertake any relevant liability.

HWEA Wind Energy Statistics – 2025



Capacity (MW) per region

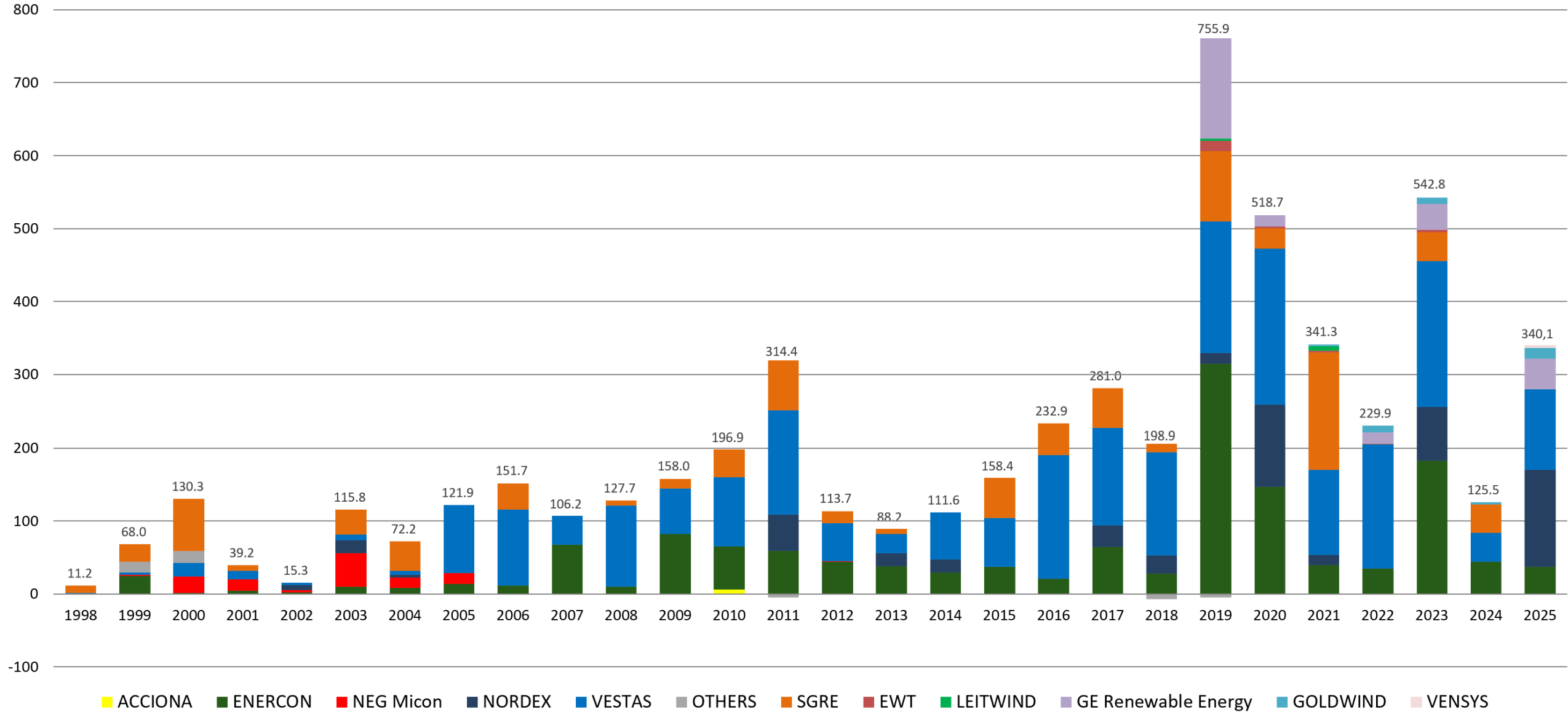




HWEA Wind Energy Statistics – 2025

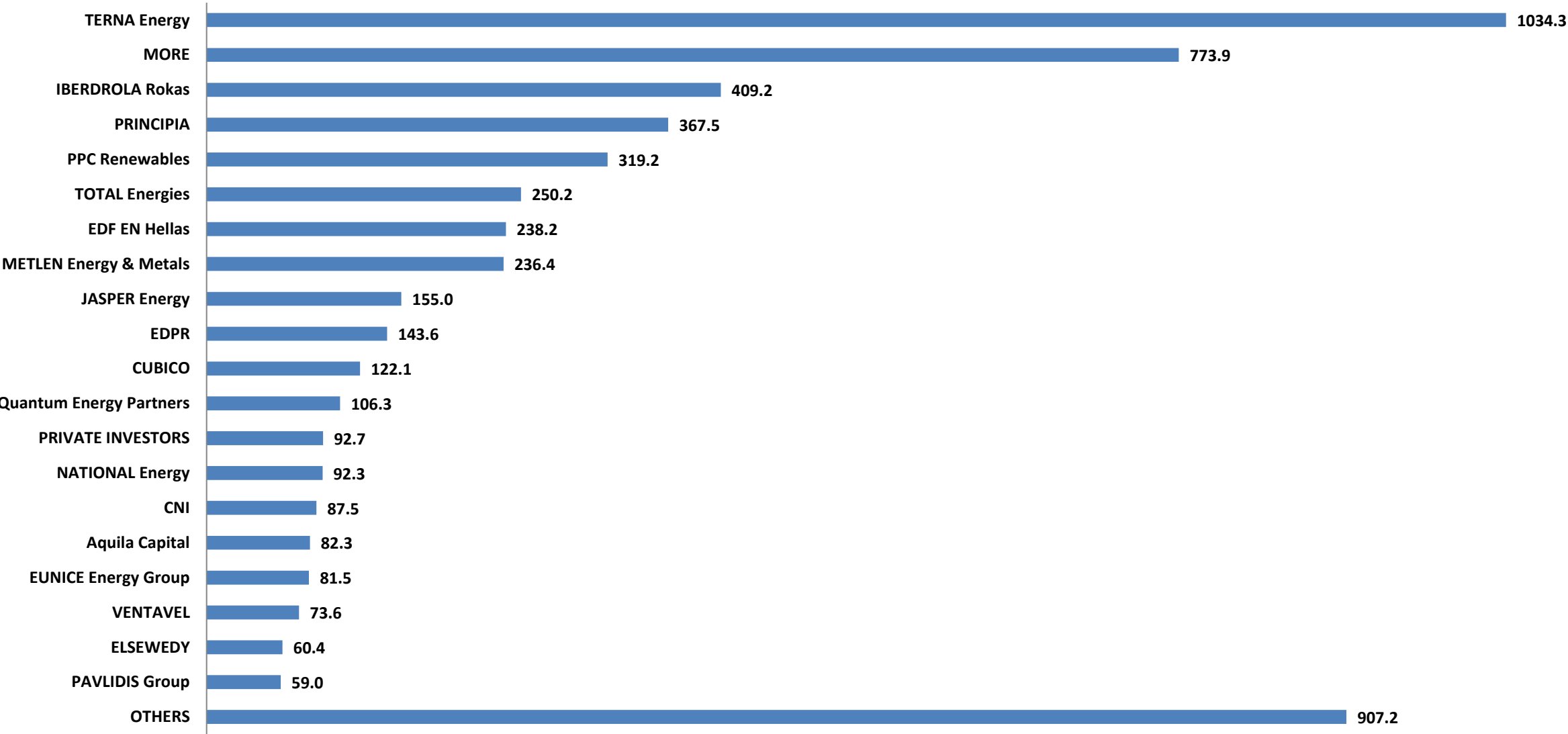


Capacity (MW) per year per manufacturer



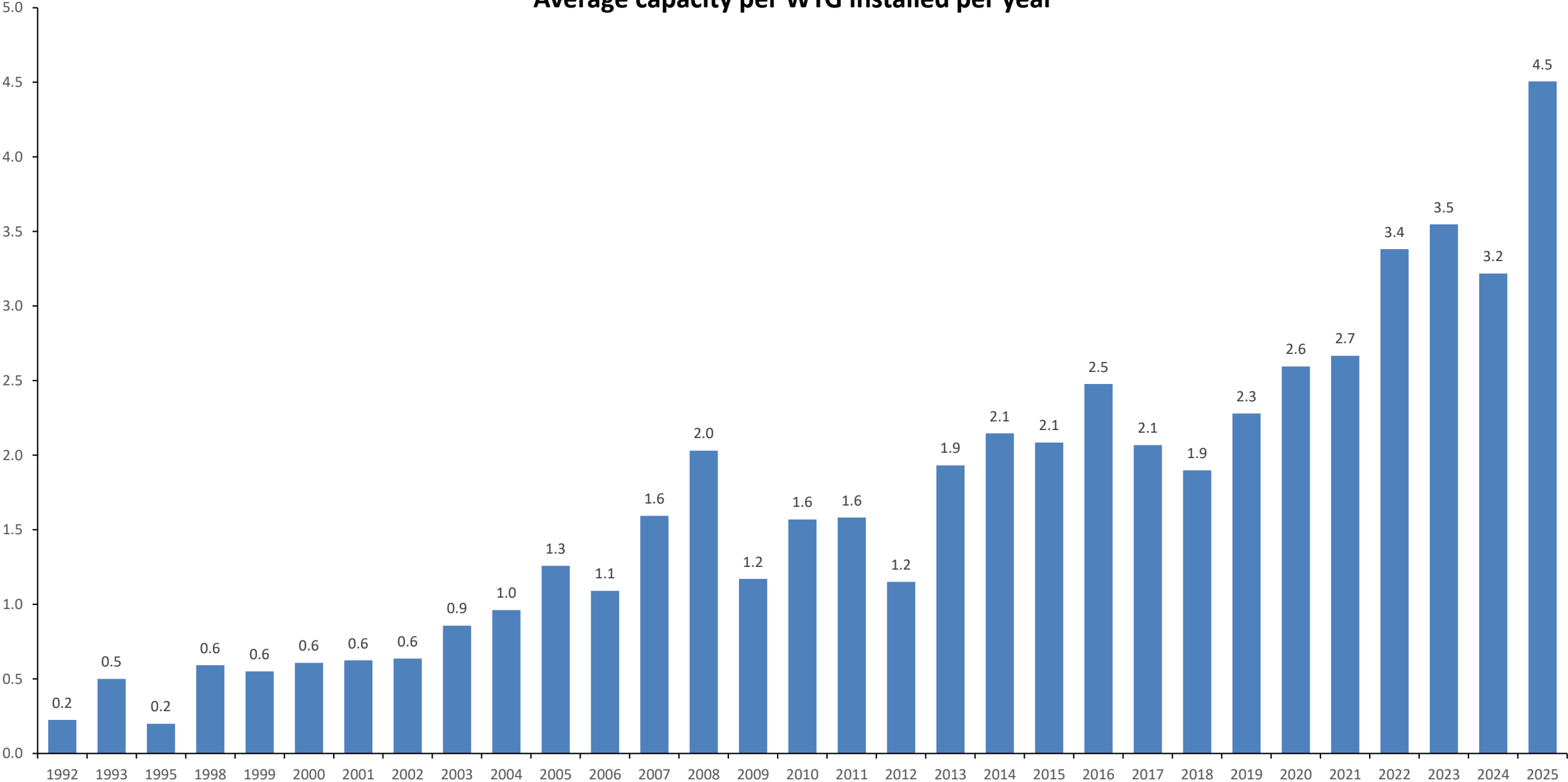


Capacity (MW) per wind energy producer (Top-20)





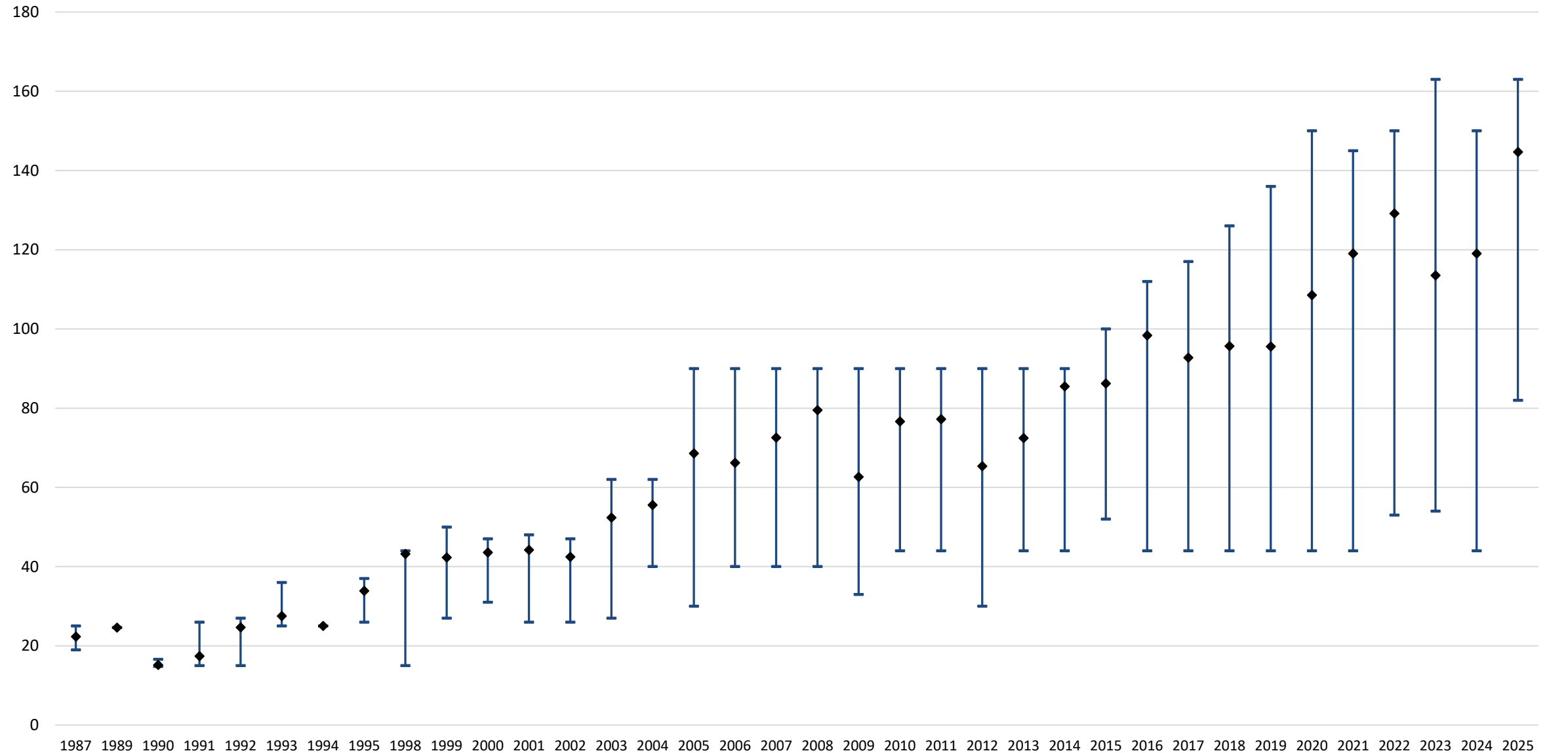
Average capacity per WTG installed per year



HWEA Wind Energy Statistics – 2025



Min / Max / Weighted average - Rotor Diameter Per Year

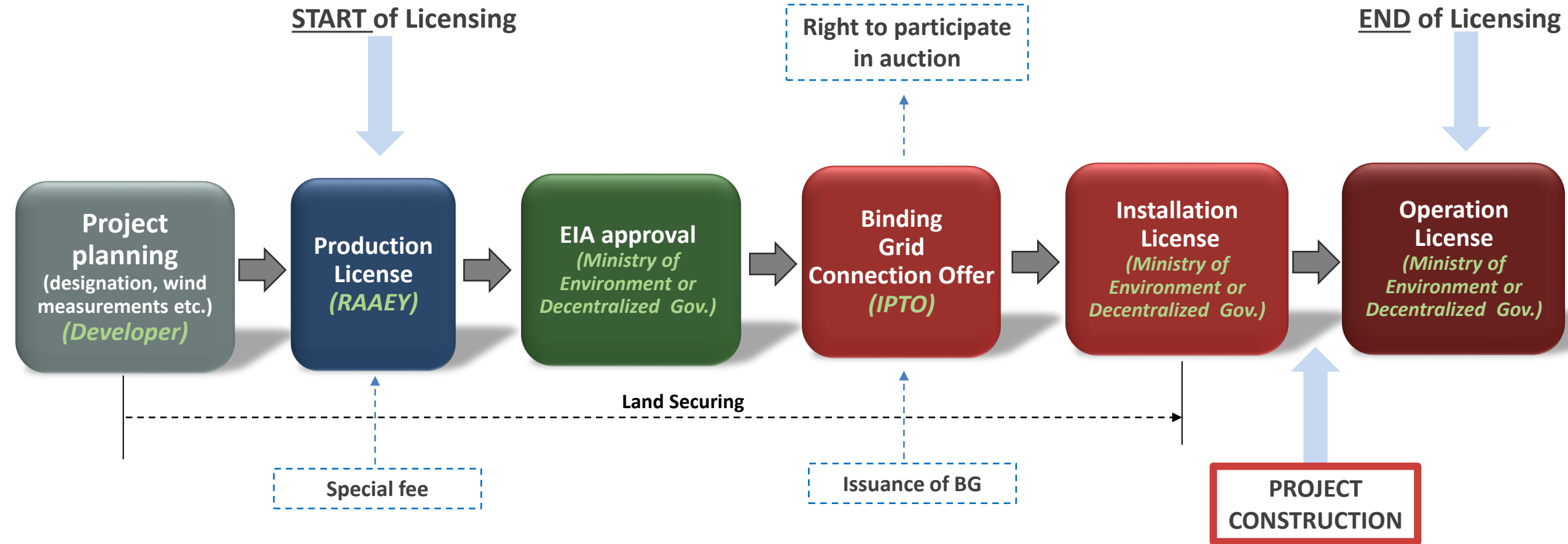




Installed capacity of power generation units by technology (MW)*

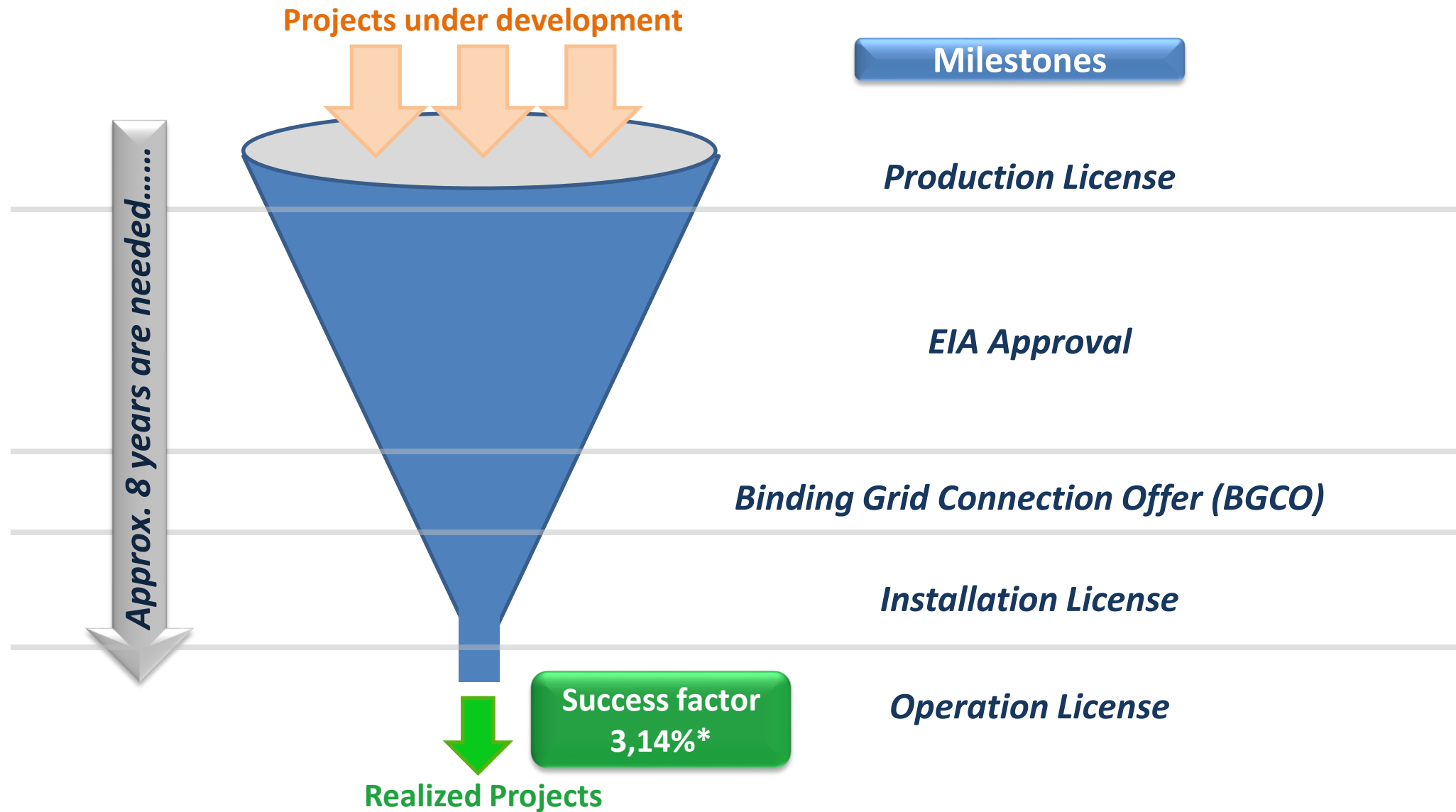
Capacity (installed MW)	2022	2025	2030	2035	2040	2045	2050
Photovoltaic	5.430	8.500	13.500	18.500	26.000	30.619	35.051
Onshore Wind	4.702	7.000	8.900	9.500	11.000	13.000	13.000
Offshore Wind	0	0	1.900	3.900	5.787	8.143	11.780
Large Hydro	3.171	3.171	3.458	3.893	4.023	4.488	4.678
Small Hydro	250	338	365	394	421	453	482
Biomass & Biogas	161	123	81	75	73	45	42
Lignite	1.625	1.280	-	-	-	-	-
Natural Gas.*, **	6.296	7.045	7.885	6.430	6.430	6.430	6.430
CHP NG	127	127	205	205	205	205	156
Oil**	846	863	196	171	147	123	91
Total	22.608	28.445	36.490	43.069	54.086	63.505	71.709

* See table E3 in pg.39 of NECP (OG 6983 B 2024)



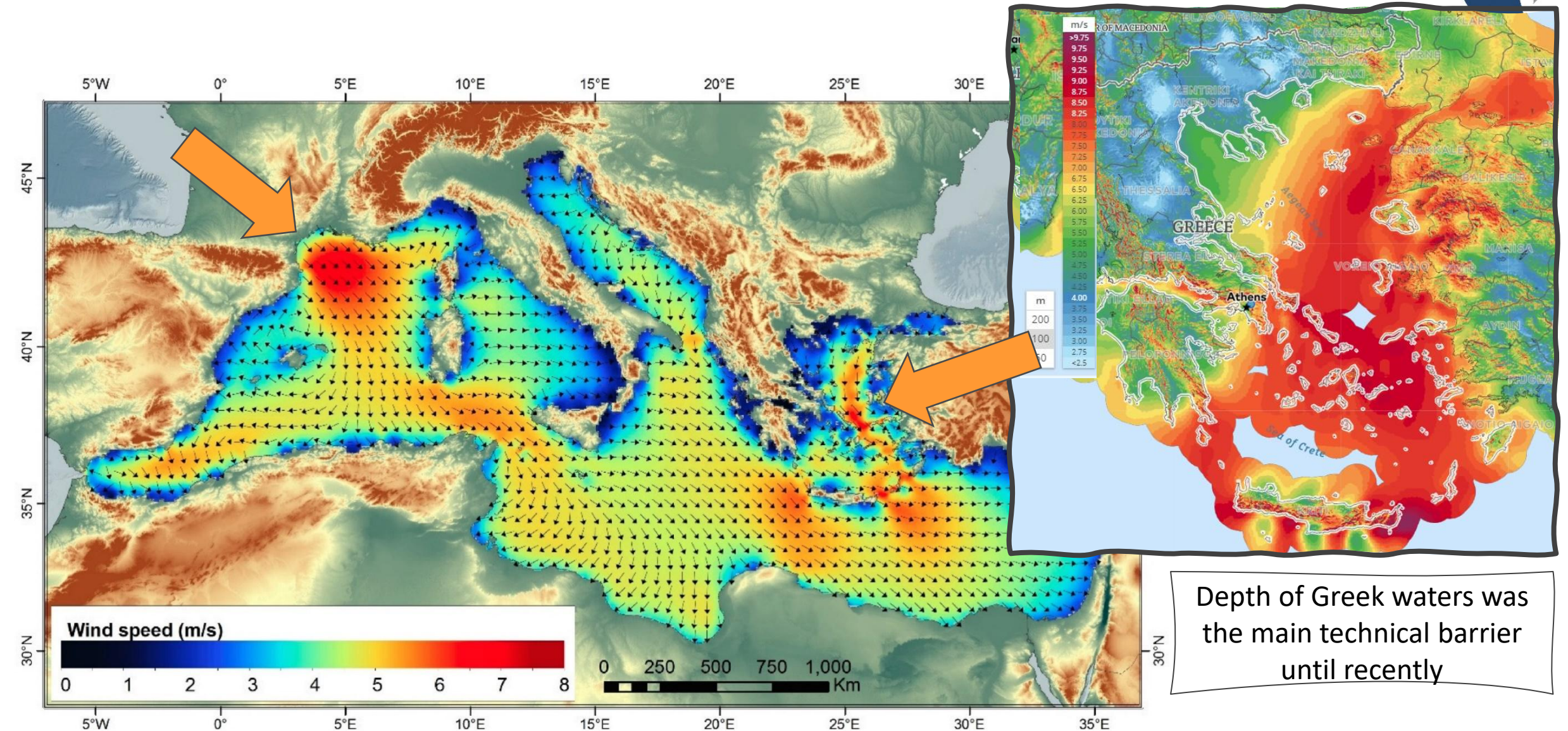
Applicable Legislation

Law 3468/2006, Law 4685/2020 (Phase A), Law 4951/2022 (Phase B), Spatial Planning for RES, Environmental Law 4014/2011 as valid etc.



* New installation and operation licenses for a 5y period as per the under development projects

Offshore wind: The opportunity of the Greek seas

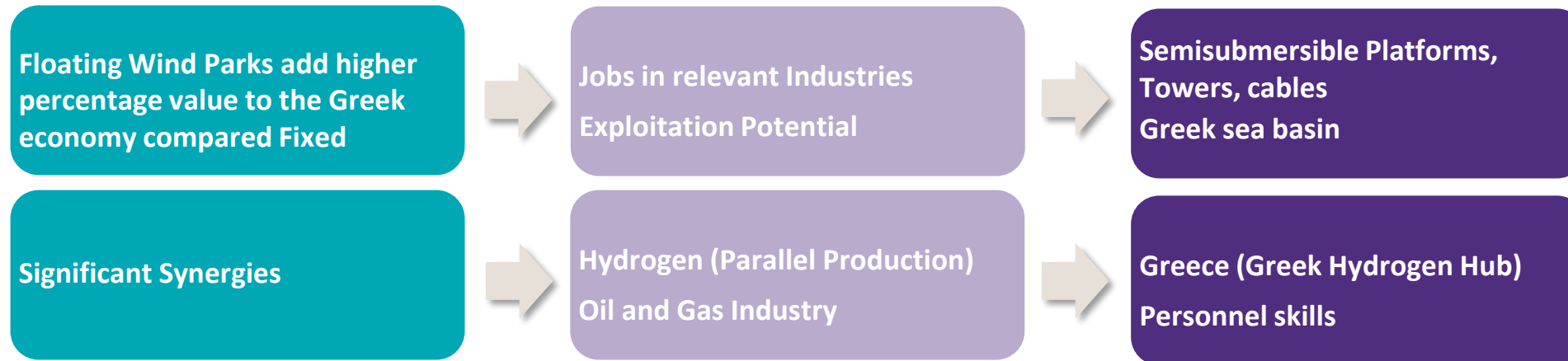


Depth of Greek waters was the main technical barrier until recently

Competitive advantages and added value to the Greek economy

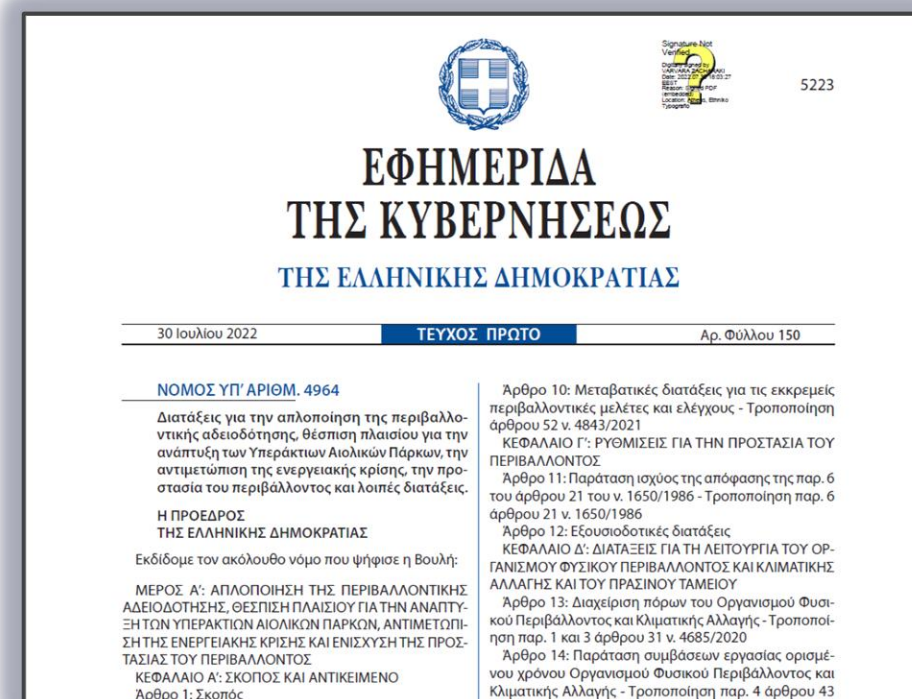


- Significant Expected Investments > **6 billion € by 2030** and > 28 billion € by 2050 - Attracting foreign investments with high Greek added value (67% expected to be part of the Greek economy and from the rest significant part in the EU)
- More than **8.000 permanent and highly specialized new jobs** 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



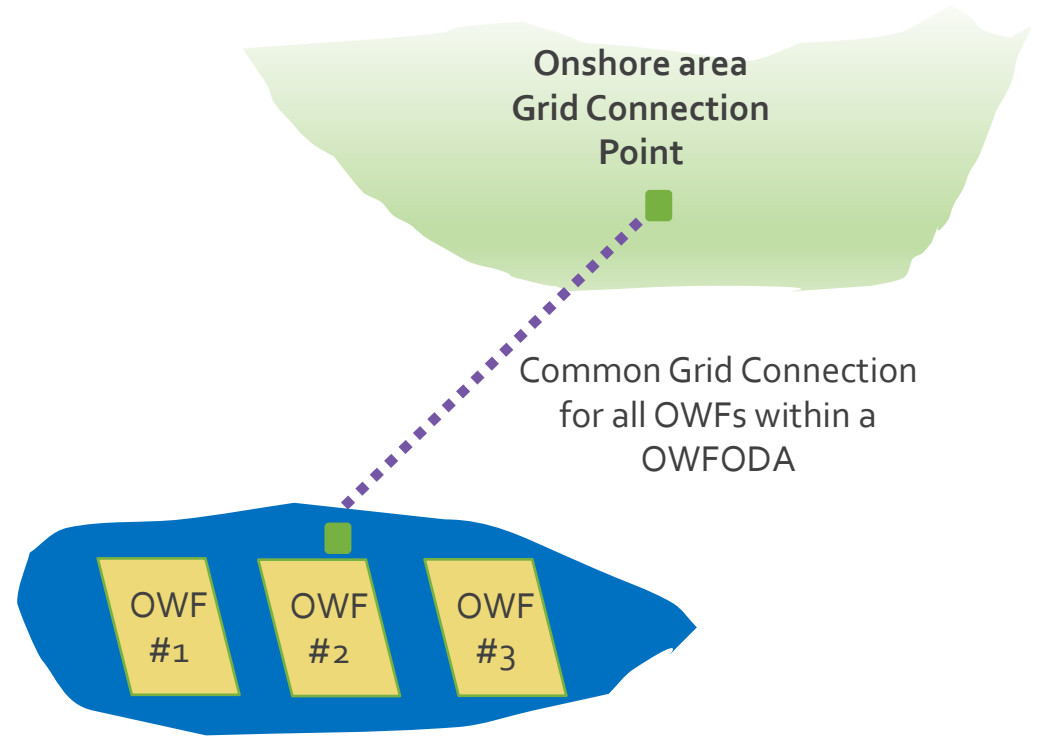


1. **National Program for Offshore Wind Development** after a Strategic Environmental Impact Assessment (SEIA) identifies planned Offshore Wind Farm Organized Development Areas (OWFODA).
2. **Presidential Decree (PD) will define the terms of OWF** development in each approved OWFODA after a Strategic Environmental Impact Assessment (SEIA).
3. **Granting of non-exclusive Exploration Licenses** in each OWFODA to interested parties (on/off technical and financial criteria, submission of letter of guarantee 10k€/MW).
4. **Research Period to the permitted parties** (for max 3years right to elaborate measurements and studies within each OWFODA).
5. **Definition of specific Installation Areas in each OWFODA** (Ministerial Decision that will include *inter alia* an assessment of the maximum installed capacity in each Installation Area)
6. **Auction for Operational Aid (CfD type PPAs)** 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 license and develop each Installation Area to the lowest bidder



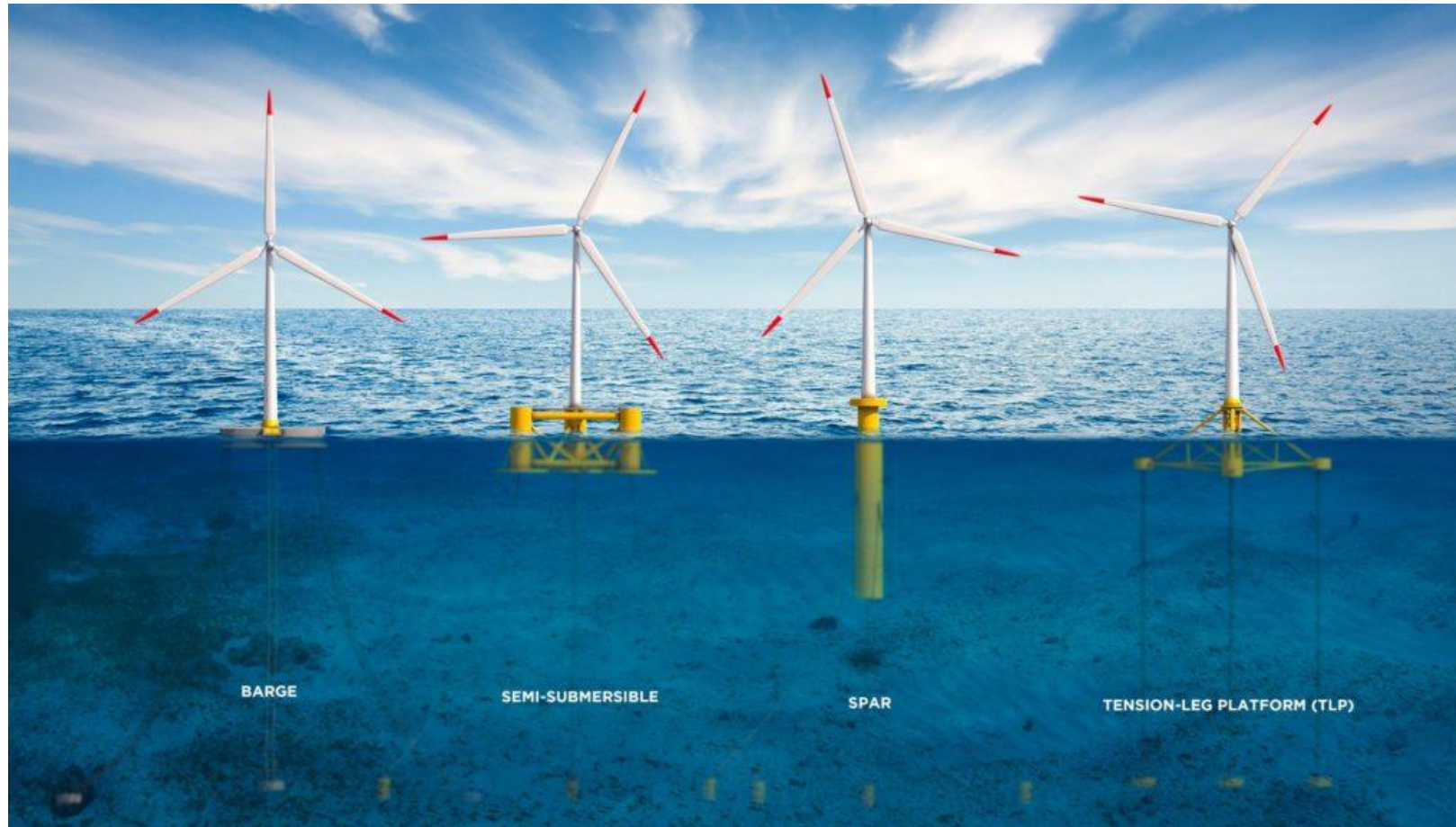


Note: All areas depicted are indicative for illustration purposes

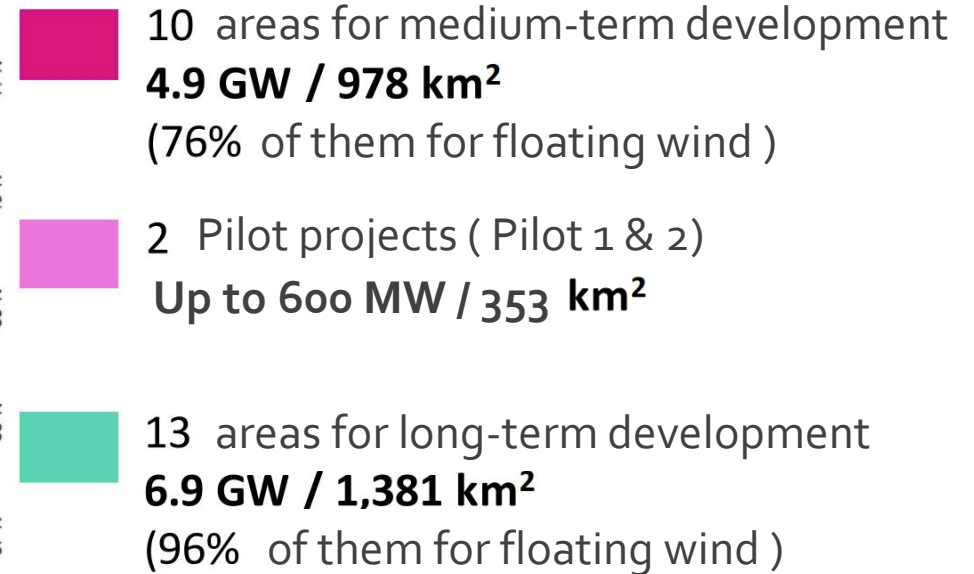




Basic types of floating platforms



- Different type of floating platforms are developed and tested
- Steel or concrete?
- Size matters!
- Industrialization is a must
- Infrastructure (ports, shipyards etc.)
- Where are the OEMs?
- Is there space for a “Greek platform”?
- Test Stations lack in Mediterranean



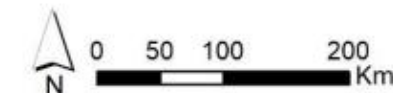
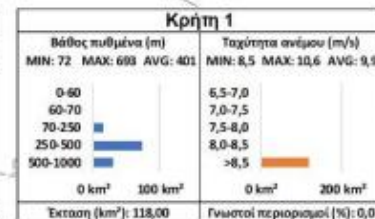
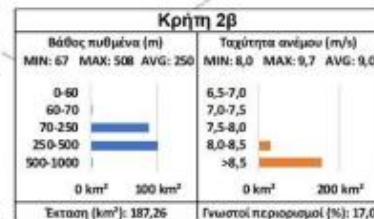
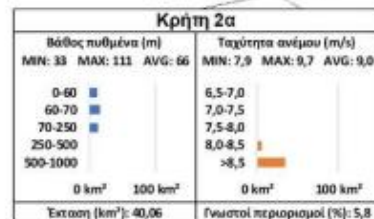
- ✓ The National Offshore Wind Farm Development Plan, determines the total marine area that has a potential for exploitation. It has been prepared by HEREMA, it was published in **October 2023** and its approval is still expected



The OW National Program – The medium term OWFODAreas

Medium term, bottom fixed

Medium term, floating

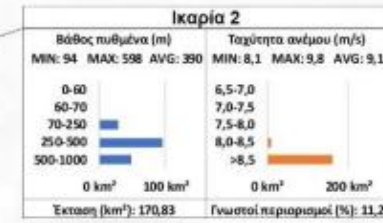
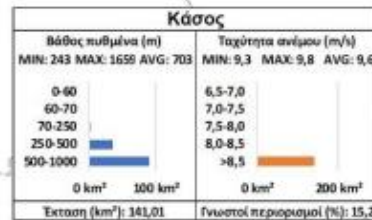
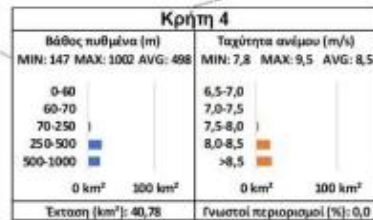
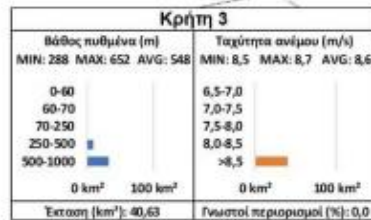
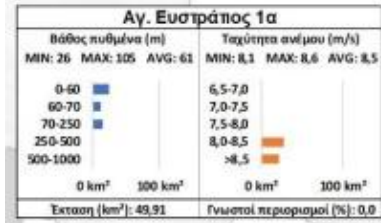




The OW National Program – The long term OWFODAreas

Long term, bottom fixed

Long term, floating





- Path after 50% RES penetration gets really tough!
- Asymmetries in RES mix (PV dominance creates issues)
- Scarcity of Electrical Space
- Curtailments are a big threat
- Need for local supply chain vs European de-industrialization
- The West OEM slow down the East accelerate
- Geopolitics
- Cybersecurity
- Sea zoning & tensions
- Fake news!





Provide concrete answers to the most spread fake news against wind energy

Topics touched:

- Technology and cost of energy
- Society and Development
- Climate change
- Humans and environment

<https://ask4wind.gr/>



Questions?

