

Offshore wind in Poland: the market and supply chain

Offshore wind in Poland: the market and supply chain

Jakub Budzyński

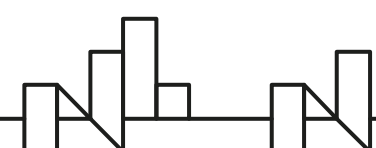
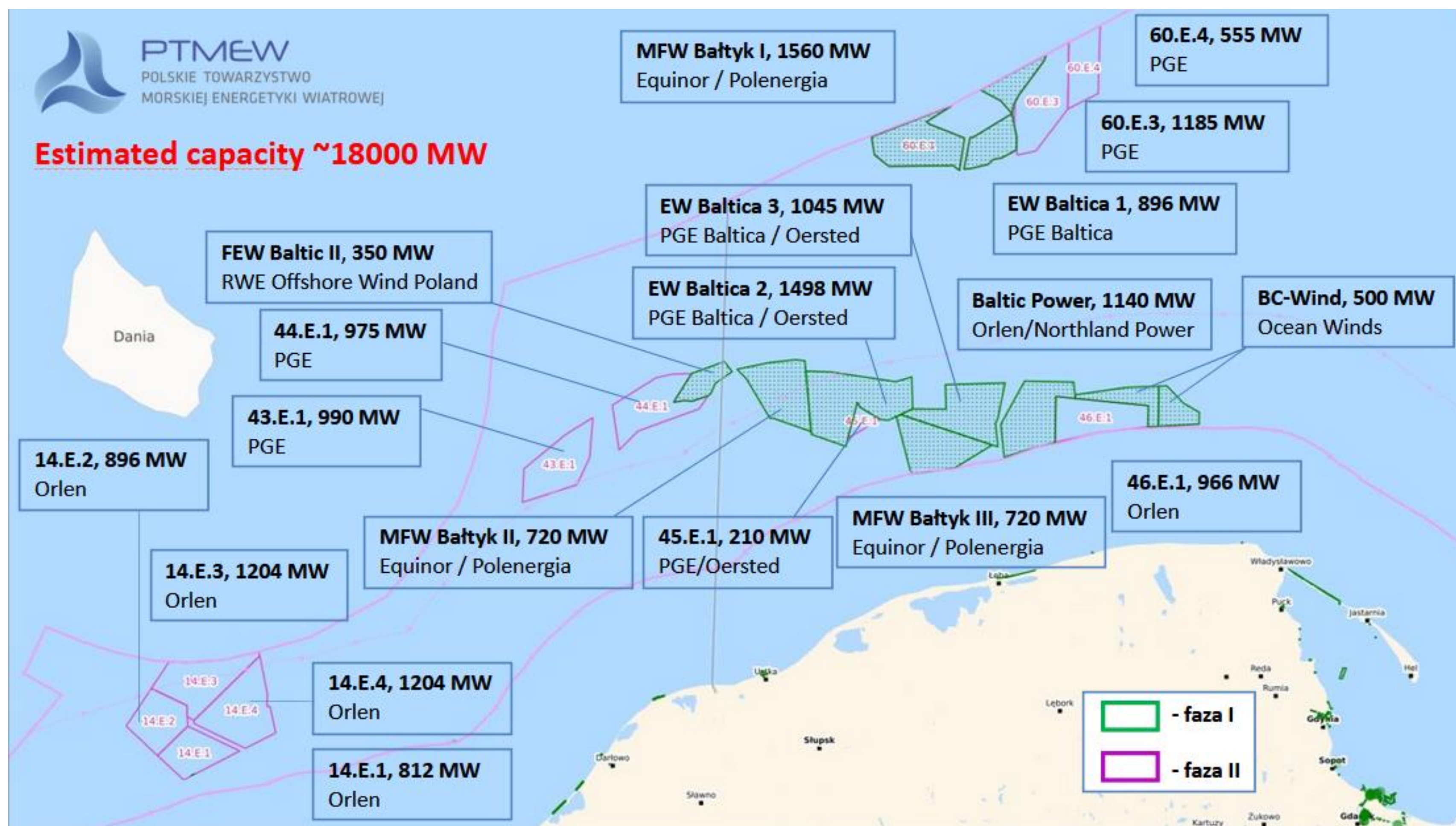
President of the Board

Polish Offshore Wind Industry Chamber

13.11.2024

Polish Maritime Areas

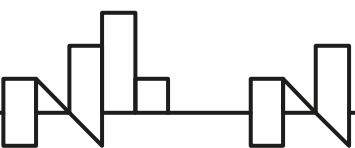
Dedicated to OWF development (so-called phase I and II)



Polish most advanced OWF projects in brief

(so-called phase I)

Project name	Developer / investor	<u>Building permits / FID</u>	GCA	EIA	ED	Capacity	Distance to shore	Depth
MFW Baltyk III	Equinor/Polenergia	- / -	+	+	+	720 MW	22 km	25-39 m
MFW Baltyk II	Equinor/Polenergia	- / -	+	+	+	720 MW	37 km	23-41 m
EW Baltica 3	PGE Baltica/Oersted	- / -	+	+	+	1045 MW	25 km	30-50 m
EW Baltica 2	PGE Baltica/Oersted	+ / -	+	+	+	1498 MW	31 km	20-50 m
Baltic Power	Orlen/Northland Power	+ / +	+	+	+	1140 MW	23 km	30-50 m
BC-Wind	Ocean Winds	- / -	+	+	+	500 MW	23 km	30-50 m
FEW Baltic II	RWE Offshore Wind Poland	- / -	+	+	+	350 MW	50 km	40 m
MFW Baltyk I	Equinor/Polenergia	- / -	+	ongoing	-	1560 MW	81 km	25-35 m
EW Baltica 1	PGE Baltica	- / -	+	ongoing	-	890 MW	77 km	20-40 m



CfD contracting scheme

,Phase I' (non-competitive)

- 2021 – max. 5,9 GW

Capacity volume

- 5,9 GW

,Phase II' (reversed auctions)

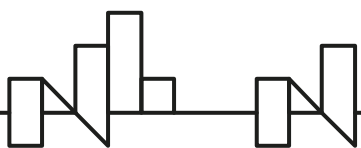
- 2025 – max. 4 GW
- 2027 – max. 4 GW
- 2029 – max. 2 GW
- 2031 – max. 2 GW
- 2032 (option) - min. 0,5 GW

9,9 GW

13,9 GW

15,9 GW

17,9 GW



Polish offshore wind industry (1)



Shipbuilding capacity



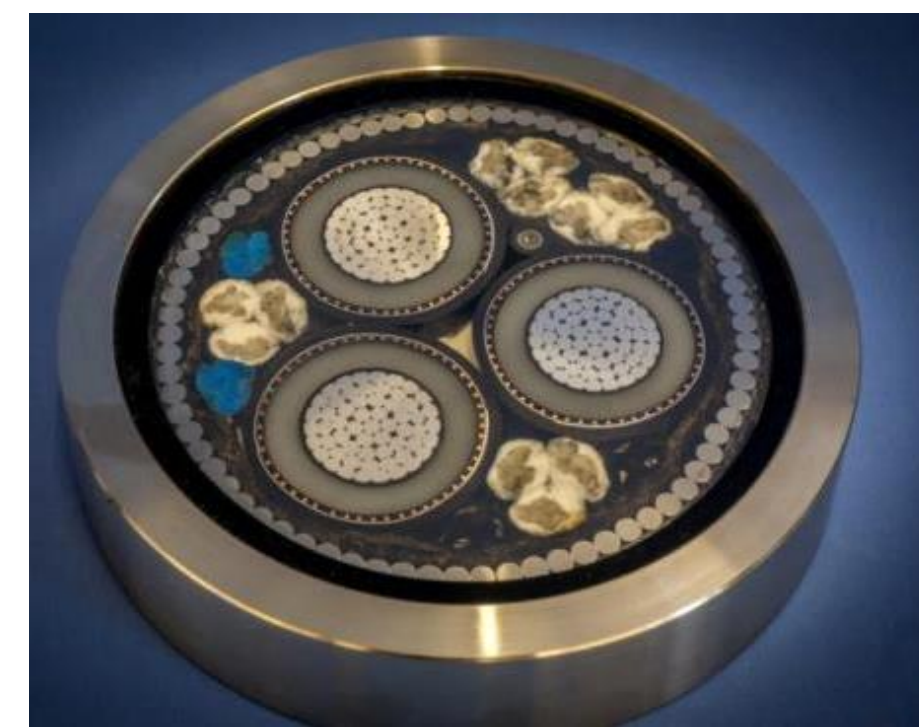
Steel structures fabrication



Offshore transformers



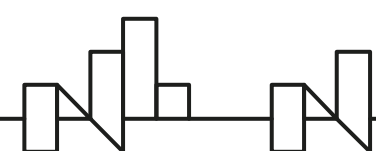
EIA surveys / geotechnics



Subsea HV array cables



Secondary steel



Polish offshore wind industry (2)

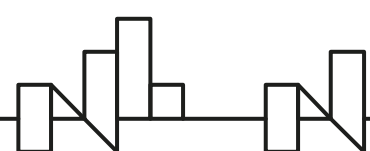
New investments

New offshore towers production facility

- **Owner / investor:** ARP – GRI joint venture
- **Location:** Gdansk Shipyard area, Gdansk, Poland
- **Operational:** H1 2025
- **Annual capacity:** 150 units
- **FTE:** 550-650
- **Total investment value:** approx. EUR 200M
- **Production and painting area:** 6,2 ha
- **Storage area:** 9,3 ha
- **Max. length of section:** 50 m
- **Max. diameter of section:** 10 m
- **Max. weight of section:** 500 t
- **Max. thickness of sheet:** 120 mm



Courtesy: Baltic Towers



Polish offshore wind industry (3)

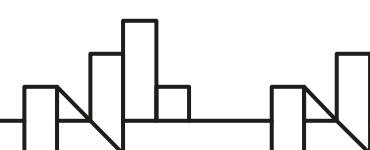
New investments

Vestas offshore nacelles assembly plant / blades factory

- **Owner / investor:** Vestas
- **Location:** Szczecin (Ostrów Brdowski/Skolwin)
- **Operational:** 2025 / 2026
- **FTE:** 700 / 1000



Courtesy: Vestas



Polish offshore wind industry (4)

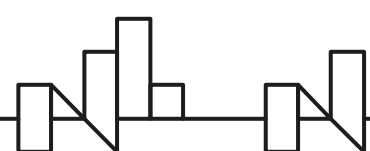
New investments

ORLEN Neptun installation port in Świnoujście

- **Owner / investor:** ORLEN Neptun
- **Location:** Świnoujście, Poland
- **Operational:** 2025
- **Annual capacity:** ~80 WTG units
- **Fairway depth:** 12.5 m
- **Bottom width on approach track:** 130 m
- **Total quays length:** 495 m (250+245)
- **Storage area:** 16 ha
- **Capacity on loading quay:** 50 t / sqm



Courtesy: Orlen Neptun



Polish offshore wind industry (5)

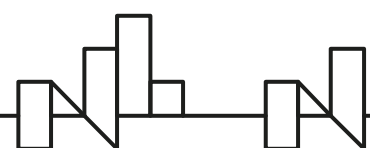
New investments

Offshore Centre in Gdańsk operated by Maritime University in Gdynia

- **Owner / investor:** Pomerania Dev. Agency
- **Location:** Gdańsk, Poland
- **Operational:** 2024
- **General description:** Innovative Center of Integrated Marine Environment Research Laboratories for the Offshore Industry will include comprehensive research and measurements at sea tools in order to obtain information about the state of the marine environment and its resources necessary for operations on the fuel market, shipbuilding, offshore wind energy and maritime transport.



Courtesy: portalmorski.pl



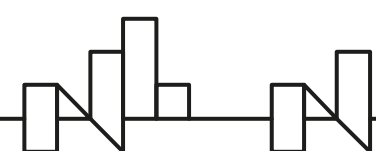
Polish offshore wind industry

O&M bases in smaller Polish sea ports

- **Investors:** PGE Baltica, Equinor, Baltic Power, Ocean Winds
- **Operational:** 2025-2028
- **FTE:** ~300



Ustka
Łeba
Władysławowo



Thank you!

