



Foundation for Sustainable Energy

Baltic InteGrid Renewable Energy and Offshore Wind Development in Poland: The Potential of Regional Cooperation

Berlin, 22nd March 2016



Offshore potential in Poland

The Polish transmission system operator PSE SA signed an agreement with two investors for connecting offshore wind farm projects with a total capacity of 2.25 GW. Investments are to be connected by 2025.

According to the signed agreements, connecting the first offshore wind farm in Poland may be plugged in 2021.

Avoiding the emission of about 40 million tonnes of CO2 and related costs.



A real potential for the development of offshore energy sector in Poland is 6 GW by 2030 according to the EY. 1 GW by 2020, 2 GW by 2025, and finally 6 GW in 2030.

About 70 applications have been submitted for locations for offshore wind farms with a total value of more than 70 billion euro.



State-of-the-art

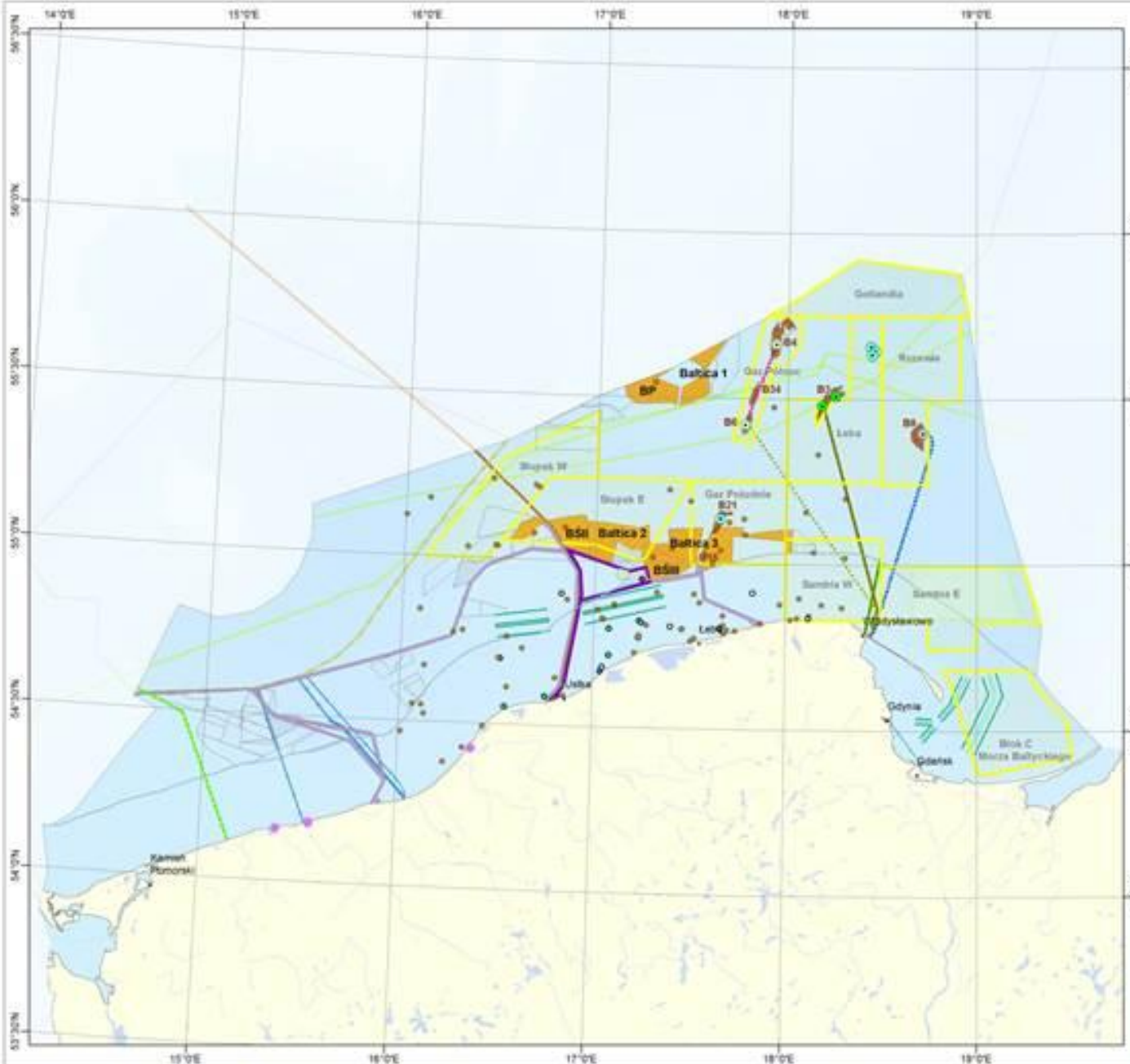
According to information provided by the Ministry of Infrastructure and Development (December 2015) **13 permits for the construction of offshore wind farms were in force**, of which 9 were paid.

Due to the conditions of the system, environment, location, and economic, some of these projects have a real chance of implementation.

Significant interest of investors, among which are the biggest national and international energy companies, the Polish market of the offshore wind farms **may in the long years 2025-2050 constitute an important element of national power system.**

Such development would mean bringing to the Polish economy approx. **20 billion euro by 2030** In addition the offshore sector may provide **nearly 25 thousand new jobs**, of which approx. 85% related to the maritime industry. Other statistics: between 30 and 60 thousand new jobs related to the industry offshore.

Morskie farmy wiatrowe mapa oddziaływań skumulowanych



Legenda

- MFW (pełna emisja PSZM)
- MFW (wydane PSZM odcinane)
- MFW (wydane PSZM nieodcinane)
- MFW (wzrosty przygotowane vs. DSU, zakres raportu)
- obszary łowostw na produkcję ropy naftowej lub rozpraszanie gazu ziemnego / ropy naftowej
- planowana morza stacja monitorująca (SMP)
- planowana morza infrastruktura przesyłowa energii elektrycznej MFW BSM
- planowana morza infrastruktura przesyłowa energii elektrycznej MFW
- obszary ptak
- obszar robót geologicznych na koncesji Samca E
- granice obszaru sprawnego z Daną
- strefa ograniczenia ruchu
- granice morza terytorialnego
- planowana latka na morzech wódach szelfowych
- planowany obszar poszukiwań i rozpraszania
- planowana platforma wydobycia ropy naftowej (obecnie poszukiwań i rozpraszania)
- strefa platformy wydobycia
- planowana platforma poszukiwań i rozpraszania
- podmorzska linia kablowa
 - energetyczna Sea-Pol Link
 - telekomunikacyjna masywna
 - telekomunikacyjna
- porozrogi
 - planowany porozrog Energetyka
 - planowany porozrog platformy wiatrowej "Baltic Sea"
 - liniowy Swarcen (zrost skaliste)
 - planowany porozrog BZ-Wydziałowa Lotna Petrolbalt
 - planowany porozrog Betycki (Baltic Pipe)
 - planowany porozrog ON 130
 - planowany porozrog ON 250
- obiekty podwodne
 - wreki
 - gazy
 - bariery
 - łodzi
 - zanikające
 - obiekty nadszły (np. wreki, łódki starzy)

porozrogi

obiekty podwodne

Data: 2015-08-28

Podziałka

0 15 30 km

0 5 10 mile morskie





Polish offshore industry in the BSR

Poland has a chance to become a strong center of the development of offshore wind energy for the Baltic Sea Region.

Transmission infrastructure that would arise in connection with the implementation of such a scenario, in a sustainable manner would increase the energy security of Polish.

At present, in Poland there are companies that manufacture components for wind turbines, as well as firms engaged in the production of automation systems for wind turbines, manufacturers of steel towers, and other equipment.

The flagship investment in this sector is a factory of foundations for offshore wind turbines in Szczecin. It is a huge industry that produces for the needs of the wind energy sector. Nowadays, it produces only for export.



Maritime industry as a stakeholder

Shipyards in Poland have been already working for the needs of offshore wind farms. Their production is exported to countries that operate offshore installations.

For example, the shipyard Crist (former Gdynia Shipyard) has already completed more than 300 contracts for ships serving offshore wind farms and hydro-technical constructions.

Such companies as Elektromontaż-North Gdynia, the shipyard Nauta and MSR Gryfia are involved in the offshore market.

Each of these companies employ several hundred people. At the time of the development of wind farms within the Polish sea, the employment in these types of companies would be even greater.



Chances and problems

Professional investors, energy companies from the country and from abroad, but also investment funds, are interested in investments in the wind sector in Poland.

Most wind farms have PGE Renewable Energy. More than 20% of the market is owned by the individual domestic investors.

However, proposals for changes in the law raises concerns among investors. The new government postponed the entry into force of the new support system from January 1 to July 1, 2016 year.

Therefore, an investment boosts is expected in 2017, after the completion of the first auction.

The government also announced further legal changes, so investors have to wait for the final decision. Only then they will be able to decide whether they will find a place for themselves in the new legal environment, so whether they will invest or not.



dr Maciej M. Sokołowski
mms@fnez.pl