Quarterly Report POLAND / Q4 2023

BALTIC WIND.EU

PGE offshore wind projects – year 2023 in review

Baltic Breakthroughs: Unveiling the Latest Milestones in Offshore Wind Power Projects

Strategic partners:

PGE

Baltica sp. z o.o.

Baltic Power

ORLEN

NORTHLAND POWER

Baltic Power in 2023 - leader in the Polish Baltic Sea

The year 2023 has confirmed Baltic Power's position as the most advanced offshore wind farm project in the Polish Baltic Sea. It is the only project in Poland and in the Baltic Sea to have reached this milestone in 2023. The investment developed jointly by Orlen and Northland Power, has reached Financial Close and most importantly, a final investment decision (FID). Key contracts and infrastructure solutions, as well as strategic decisions made in the past year, show how the transformation of Poland's energy mix is being implemented. Below are the highlights of the year 2023 for the Baltic Power project.

Final Investment Decision - financing guaranteed

The Final Investment Decision means that the project has a set of construction permits and has secured all farm components and financing. It is the only project in Poland and Europe to have reached this milestone in 2023.

The project's total budget is estimated at around EUR 4.73 billion and includes capital expenditures with insurance of around EUR 4.05 billion, as well as financing costs and a supplementary reserve. In the initial five years of operation, the Baltic Power project could generate additional average annual free cash flow of about €140 million. Repayment of the loan will be based on future financial surpluses generated by the project. The financing of the investment is carried out under the Project Finance formula, which is particularly favorable for investments that require significant expenditures and time to reach full capacity – like offshore wind. The consortium of 25 financial institutions that have decided to support the project includes Polish and international commercial banks, export credit agencies (ECAs) and multilateral institutions including: European Investment Bank (EIB), European Bank for Reconstruction and Development (EBRD), Euler Hermes, Export and Investment Fund of Denmark and Export Development Canada. This is the largest financing raised for a single investment in Poland's history and at the same time one of the largest transactions of its kind in the offshore area in Europe. The terms and conditions under which the loan agreements were concluded testify to the very strong business foundations of the Baltic Power project.

During the five-and-a-half-year project preparation period, the Baltic Power team obtained seven construction permits, requiring a total of more than 150 administrative approvals, obtained from 40 different institutions. The construction documentation for the farm alone is more than 10,000 pages, and the number of all files that the Baltic Power team prepared during this time is nearly 320,000. At the end of last year, the Baltic Power project received the prestigious Deal of the Year 2023 (European Deal of the Year 2023) award from the Project Finance International (PFI) agency. In its justification for the award, PFI pointed out that Orlen and Northland Power were the only investors in offshore wind farms in Poland to close the financing of the investment on schedule.

Construction of an onshore substation in Choczewo

ORLEN Group and Northland Power have started construction of an onshore substation in Choczewo. This is the first station of its kind, which will enable the reception of energy produced at sea by the Baltic Power farm.

The entire infrastructure accompanying the farm was designed to minimize the investment's impact on the environment. Almost the entire route of the approximately 7 km long land section of the cable will be run underground. This includes the beach. Thanks to the use of so-called steerable drilling, the power output to the land will be at a depth of about 10 meters underground, it will be invisible and will not affect the ability to use the beach.

Vestas offshore turbines: Danish technology for Baltic Power

Danish turbine manufacturer Vestas has received orders to supply 76 V236-15.0 MW wind turbines to Baltic Power. They will be delivered, installed and serviced for a minimum of 15 years, providing modern and efficient technology.

The companies signed a final agreement on the matter on August 10 last year. Information about the planned installation of Vestas turbines at the Baltic Power farm had been available since September 2022, when the reservation agreement was concluded. The selected model is the impressive V236 turbine, currently the largest in the manufacturer's portfolio, dedicated to the offshore wind industry. An intensive testing process of this huge wind turbine, whose rotor blades have an impressive diameter of 236 meters, has been underway since last year. The machine's remarkable efficiency has been confirmed by setting a record for electricity production - it delivered an impressive 363 MWh in just 24 hours. The Baltic Power farm will be one of the first investments in the world to use 15 MW turbines.

Supply chain: key contracts secured

Tele-Fonika Kable and JDR Cable Systems, in partnership with NKT and DEME Offshore, have been selected by ORLEN Group and Northland Power for one of the key roles in the Baltic Power project. Their task will be to design, manufacture and install 340 kilometers of onshore and offshore cables, crucial for the offshore wind farm's transmission infrastructure.

TFK will manufacture and carry out the installation of the 230 kV onshore export cables, as well as carry out the production of inter-array cable centers at its manufacturing facility in Bydgoszcz. As a consortium partner, NKT will supply submarine export cables, which are responsible for the transmission of energy from the offshore area to land. TFK will also manage the transportation and installation of the onshore cable section within the Baltic Power wind farm.

JDR will design and manufacture 66 kV inter-array cables at its Hartlepool facility in the UK, which will be used to connect all offshore wind turbines to an offshore substation. DEME Offshore is responsible for the transportation and installation of all the submarine cables. Production and their delivery will be completed by the end of 2025.

Smulders, an international company specializing in the engineering, construction, supply and assembly of steel structures, will supply 76 transition elements for the Baltic Power offshore wind farm under the signed contract.

Meanwhile, a contract for transporting and installing the foundations for the turbines and, in addition, two foundations for the Baltic Power farm's offshore substations has been signed with Van Oord. Implementation is expected to begin in 2024 and be completed in the summer of 2025.

Service base in Łeba under construction

Construction of the service base for the Baltic Power Offshore Wind Farm in Łeba began in early 2024. ERBUD has become the general contractor. Construction will be completed next year, and from 2026 the base will service the 76 turbines that will comprise the first Baltic wind farm. The location is of primary importance in this case - the base is located close to the area where the farm is located to ensure the shortest possible response time for service teams. In this case, it will be about 40 minutes to get from Łeba to the farm area.

The service base in Łeba will be ready in 2025, a year before the Baltic Power farm is launched. The area of about 1.1 hectares will house, among other things, a farm spare parts warehouse and a workshop. The waterfront will be able to accommodate vessels with a maximum length of 35 meters. The base will be permanently serviced by 3-4 specialized vessels designed to transport equipment and service personnel. Each of them will take on board up to 24 technicians with full equipment. The estimated cost of the investment is about PLN 62 million.

The year 2023 for the Baltic Power project is not only the achievement of further milestones, but also a marker of a sustainable energy future in Poland. Key decisions, the start of construction, innovative solutions and strategic partnerships are part of the long-term goals of Poland's energy transition. According to the schedule, the first offshore installation work will begin this year. The 1,200 MW Baltic Power farm will be able to power more than 1.5 million households with clean energy as early as 2026.

Photo source:
Baltic Power Sp. z o.o.

PGE offshore wind projects – year 2023 in review

PGE Baltica, the PGE Group company responsible for the Offshore Program, has completed another year of intensive efforts to build offshore projects, including the Baltica Offshore Wind Farm. Key agreements have been signed, contracts finalized and decisions taken to enable the next steps in the implementation of the largest renewable energy project in Poland to date.

The construction of the Baltica Offshore Wind Farm is a strategic investment project of the PGE Group in partnership with Ørsted. It consists of Baltica 2 and Baltica 3 stages with a total installed capacity of about 2.5 GW. In the past year, a suppliers of turbines, offshore transformer stations, foundations and internal and export cables, as well as cable installation and connection services, were selected for the Baltica 2 stage.

A series of important agreements for the Baltica 2 project

In April 2023 PGE and Ørsted selected Siemens Gamesa Renewable Energy as the turbine supplier for Baltica 2. Each of the 107 turbines ordered will have a capacity of 14 MW. Siemens Gamesa will also be responsible for servicing them and supplying spare parts for five years after commissioning. The contracted turbines will be supplied to 1,5 GW project which is currently the largest offshore wind investment in the Polish part of the Baltic Sea and one of the largest in the world.

A few weeks after the turbine supplier was chosen, a contract was signed with a consortium of SEMCO Maritime and PTSC Mechanical & Construction to design, manufacture and commission offshore substations for the Baltica 2 project. There will be four stations, each equipped with two transformers to collect the electricity generated by the wind turbines before exporting it onshore.

Key components already contracted

A consortium of Navantia and Windar, as well as Steelwind, have been invited to work together on another strategic undertaking, which consists of the supply of foundations. The Navantia-Windar consortium will deliver 77 monopiles, the largest of which exceed 100 meters in length and weighs more than 2,000 tons. They will be used for the installation of turbines and offshore transformer stations. Their production will begin in 2024. The remaining 34 monopiles will be supplied by Steelwind. The schedule calls for production of these foundations to begin in the second half of 2025.

Subsea inter-array cables will be manufactured by Orient Cable (NBO), and export cables will be delivered by ZTT and Hellenic Cables. A fleet of Boskalis was contracted to install and connect them.

Thus, PGE and Ørsted have finalized the contracting of all major components for the offshore part of Baltica 2 in 2023, additionally securing cable installation and connection for this investment project.

PGE and Ørsted plan to complete the Baltica 2 stage, with a capacity of about 1.5 GW, by the end of 2027, and the Baltica 3 stage, with a capacity of about 1 GW, by 2030.

A sort of summary of the contracts signed so far was the Suppliers Day, which PGE and Ørsted jointly organized. They invited representatives of already contracted suppliers and representatives of Polish companies interested in joining the supply chain for offshore wind projects. The event at the PGE Narodowy stadium was attended by nearly half a thousand participants, who had the opportunity to take part in nearly 70 business networking sessions.

PGE and Ørsted closed 2023 with contracting all components for the offshore part of Baltica 2. They also signed contracts for cable laying and wind turbine installation vessels.

Source: Boskalis

Support for financing the investment

In August last year PGE received approval from the European Investment Bank's Board of Directors to support the financing of the Baltica Offshore Wind Farm. For each of the stages, Baltica 2 and Baltica 3, there is one tranche to be mobilized under the Project Finance formula in the amount of EUR 350 million, as well as one tranche per each stage to be mobilized based on guarantees from financial institutions, banks or export credit agencies, bringing the total package to EUR 1.4 billion.

Five new locations

In 2023 the Ministry of Infrastructure has issued further decisions on granting permits for the future development of offshore wind farm projects.

For PGE was granted five new seabed areas. The total potential capacity of wind farms planned for construction in the new seabed areas is about 3.9 GW.

The PGE Group was awarded the following areas: 43.E.1 and 44.E.1, located close to the PGE's existing offshore wind farm projects and the Ustka service port that is currently under construction; another 60.E.3 and 60.E.4 areas located near the Baltica 1 projects; and the 45.E.1 area in the vicinity of the Baltica 2 and Baltica 3 projects under developmentn, which PGE has applied for jointly with Ørsted.

Independently of the Baltica Offshore Wind Farm, the PGE Group is working on development the Baltica 1 project with a capacity of about 0.9 GW. It will be built about 80 km from the Polish coast of the Baltic Sea. The project already has a location permit and a connection agreement. The project has closed a full year of metocean data survey. In addition, a geophysical survey was carried out in March 2023 to map the bottom and the objects lying on it, identify bottom sediments, and identify places where life may be found. Sonar images were also taken to identify specific objects and geological formations on the bottom. Baltica 1 will be launched after 2030.

Baltic Breakthroughs: Unveiling the Latest Milestones in Offshore Wind Power Projects

Explore the recent strides in offshore wind energy development across the Polish Baltic Sea, featuring positive environmental decisions, key contracts, and groundbreaking innovations.

1. Baltic II Wind Farm by RWE: Positive Environmental Decision for Connection Infrastructure

RWE has received a positive environmental decision for the construction of connection infrastructure for its F.E.W. Baltic II wind farm off the Polish coast. The validated environmental decision was issued by the Regional Director for Environmental Protection in Gdansk.

> *Grzegorz Chodkowski, Vice President Offshore Development Poland, RWE Offshore Wind, states: "This decision is an important milestone on the way to realizing RWE's first offshore wind farm off the Polish coast."*

The planned grid connection is expected to be implemented in the Polish Exclusive Economic Zone and in Polish territorial waters. The submarine cable section crossing the coastal zone is planned to be drilled using trenchless technology. In the next step, a sea-land coupler is expected to be installed on land to connect the submarine cable to the land cable. The planned infrastructure will then run through the municipalities of Ustka and Słupsk to RWE's onshore substation. From here, the energy produced by the wind farm will be transmitted via an overhead line to the planned SE Krzemienica substation of the national transmission system operator PSE. The length of the transmission corridor will be up to 71 kilometres in the offshore part and up to 19 kilometres in the onshore part.

The wind farm, with a 350 MW capacity, is located in the central part of the Polish Baltic Sea. Baltic II wind farm off is expected to supply green electricity to around 350,000 Polish households after its commissioning at the end of the decade.

2. Offshore Wind Farms by Equinor and Polenergia: Export Cable Contracts Signed and Seaway7 Awarded Substantial Contract

A consortium of Jan De Nul Group and Hellenic Cables will design, manufacture, transport, and install four 220 kV HVAC export cables for the Baltyk II and Baltyk III offshore wind farms.

Jan De Nul and Hellenic Cables continue their partnership for offshore cable works, after recently announcing their collaboration on the RWE Thor project in Denmark and TenneT DolWin Kappa in Germany. The companies will execute the connection of the two Baltyk wind farms to shore in 2026.

The design and manufacture of the HVAC cables are performed at Hellenic Cables' plant in Corinth, Greece, after which Jan De Nul transports, installs and buries the cables.

> *Wouter Vermeersch, Manager Offshore Cables at Jan De Nul Group: "We are proud that Equinor and Polenergia have awarded us to install the export cables for these 2 important Polish projects and their recognition of the combined capabilities of Jan De Nul and Hellenic Cables. A further significant milestone in the construction of the energy transition for Poland and Europe."*

> *Alexis Alexiou, CEO of Cenergy Holdings: "Hellenic Cables is proud to renew our collaboration with Jan De Nul and together to support Equinor and Polenergia in meeting their export cable needs for Baltyk II & III offshore wind projects. We look forward to executing the project safely and supporting the energy transition in Europe and Poland."*

The wind farms, developed by Equinor and Polenergia, each with a 720 MW capacity, are poised to provide green electricity to over two million Polish households. The cable installation is part of the continued partnership between Jan De Nul and Hellenic Cables, extending to other offshore cable projects.

Subsea7 Group, has been awarded a substantial contract by Equinor and Polenergia for the MFW Bałtyk II and III offshore wind projects. Seaway7's scope of work covers the engineering, procurement, construction and installation (EPCI) of 100 66kV inter-array cables, measuring approximately 200 kilometres in length. The two projects will be delivered in continuous campaigns with offshore works expected to commence in 2026.

> *Stuart Fitzgerald, CEO Seaway7, said: "We are very pleased to have been selected to supply the full inter-array cables scope for these significant wind farms in the Baltic region. This is Seaway7's first contract in Poland, a new and emerging market for offshore wind. We look forward to continuing our long-standing relationship with Equinor and supporting them on their energy transition journey with this project, our sixth offshore wind project together".*

Subsea7 defines a substantial contract as being between USD 150 million and USD 300 million.The wind farms, with a joint capacity of 1.44 GW, will be located in the Polish exclusive economic zone of the Baltic Sea, contributing to Poland's renewable energy transition. Offshore works are expected to commence in 2026.

3. BC-Wind Offshore Wind Farm by Ocean Winds: Wood Thilsted Chosen for Jacket Design Project

Wood Thilsted (WT) has been appointed to complete the preliminary foundation designs for the BC-Wind offshore wind farm developed by Ocean Winds.

> *Ed Crammond, WT's Head of Growth & Sales, said: "Wood Thilsted's continued involvement in this landmark project signifies our dedication to advancing offshore wind energy in Poland and across the globe. Our expertise in jacket design and extensive experience of overcoming complex engineering challenges means this pioneering project will set the standard for optimised, efficient offshore wind design in Poland."*

BC-Wind offshore wind farm is being developed by Ocean Winds, the international company dedicated to offshore wind energy and created by ENGIE and EDPR. The project has the capacity to generate up to 500 MW of energy from up to 34 turbines, 23 km from Poland's shoreline. BC-Wind's development of the Polish coastline follows a renewed policy focus from the Polish government to grow offshore wind capacity in the Baltic Sea

Construction of offshore wind farms will gain momentum

03/10/2023

The road to strengthening Poland's energy security through the use of the sea has been opened. October 2, 2023, the Polish Ministry of Infrastructure organized a conference "Offshore – concessions in Polish maritime areas", summarizing the process of issuing permits for the construction of offshore wind farms.

> *– Building an offshore wind energy sector is crucial to creating a balanced energy mix and ensuring Poland's energy security. We have completed the permitting process for offshore wind farms, which is the first step in the important process of shaping a new sector of the economy – said Deputy Infrastructure Minister Marek Gróbarczyk.*

At the beginning of the conference, in addition to Deputy Minister Marek Gróbarczyk, we also heard the Secretary of State, Government Plenipotentiary for Strategic Energy Infrastructure Anna Lukaszewska-Trzeciakowska, Vice President of the Management Board of PGE Polska Grupa Energetyczna SA Paweł Śliwa and Member of the Management Board of ORLEN SA Armen Artwich.

Thanks to the adopted plan for the spatial development of Polish maritime areas and the creation of appropriate legal regulations that fit the requirements and development needs, it has become feasible to grant permits and close this stage, necessary for the further construction of offshore wind energy.

The Ministry of Infrastructure has evaluated 132 applications, which translates into a dossier of approx. 360,000 pages. The sum of the power that will be generated by the wind farms for which permits have been issued in the just-completed Phase 2 offshore, is nearly 9 GW. In turn, the sum of power in Phase 1 and 2 of offshore it's reached up to approx. 15 GW.

The conference brought together key representatives of the most important players that make up the offshore wind energy industry in Poland: representatives of state and private entities. Representatives of the offshore industry's research and training facilities also came in large numbers. The conference was centered around three thematic debates.

The debate among the rectors focused on offshore development, which has the potential to become an engine of Poland's technological development. It was attended by representatives of the Maritime University in Szczecin, the West Pomeranian University of Technology in Szczecin, the Maritime University of Gdynia and the Gdansk University of Technology.

The debate among concession owners focused on the reasons for involvement in offshore and the present and future of the offshore industry in Poland against the background of the industry's long-term challenges. It was attended by representatives of Orlen, PGE Bałtów, Polenergia, Ocean Winds and RWE.

During the debate of service providers and cooperators, the opportunities, challenges, shape and prospects of the offshore market were discussed. Representatives of the Szczecin and Swinoujscie Seaports Authority, PŻB Offshore, GE Power, Siemens Gamesa and Vestas took part in this debate.

Completion of location permits for offshore wind farms is a response to the needs for developing the offshore industry and building Poland's energy independence. Wind energy has been given due priority while respecting the environment and the interests of other sea users. Thanks to the planning of the entire process, from the preparation of the zoning plan to the adaptation of the law to the current situation, it has been possible to issue permits that make optimal use of the Baltic's potential. The permits pave the way for the development of projects involving the entire maritime industry.

Source: Ministry of Infrastructure

ORLEN Group with concessions to build five wind farms in the Baltic Sea

03/10/2023

ORLEN Group has obtained the final decision of the Minister of Infrastructure to grant five new locations for the construction of offshore wind farms. This opens the way for the preparatory phase of the investment to begin. According to the plans, ORLEN Group's next five offshore farms will have a capacity of about 5.2 GW, which will allow the production of clean energy sufficient to power about 8 million households.

– ORLEN Group is consolidating its position as a leader in the development of offshore wind farm projects in Poland. Thanks to our experience from the Baltic Power project, we are prepared to quickly and efficiently carry out work on preparations for the construction of five more offshore investments. We are operating on schedule, ahead of other investors who have started offshore work even before us. As planned, we will commission the first wind farm in the Polish part of the Baltic Sea. The following investments are key to ensuring the competitiveness and development of the Polish economy based on modern energy sources. Their implementation will be another step towards increasing Poland's energy security and achieving the ORLEN Group's strategic goals of 9 GW of installed capacity in renewable energy sources by the end of the decade – says Daniel Obajtek, ORLEN CEO.

Four of the five concessions granted to ORLEN Group are located on the Odrzanska Bank, at the level of Kolobrzeg. The fifth site is located on Slupsk Bank. This area borders the site of the Baltic Power wind farm, which ORLEN is building together with Canadian partner Northland Power. It is currently the most advanced offshore wind farm project in Poland. The farm, with a capacity of 1.2 GW, will start producing electricity as early as in 2026.

The final decision to grant the license means that the ORLEN Group will be able to start work on preparing projects for five new wind farms. The first order of business will include wind measurements, preliminary geotechnical and environmental surveys, necessary for administrative and design processes. There, the corporation will make use of the experience gained from analogous work on the Baltic Power project.

Offshore wind energy is one of the main directions of modern energy development in ORLEN Group. In addition to the Baltic Power project, ORLEN Group is also implementing the construction of Poland's first offshore wind farm installation terminal. The investment, which is being carried out by ORLEN Neptun, is being built in the port of Swinoujscie and will be one of the most modern terminals in Europe when completed in 2025. Its wharves and storage yards will allow for the transportation and installation of state-of-the-art wind turbines of 15 MW and larger. The terminal will first serve the Baltic Power project, then support the implementation of other developers' projects and ORLEN Group's subsequent investments in the Baltic Sea.

Source: Orlen Group

Vulcan opens pioneering fire range with helipad

06/10/2023

Vulcan Training & Consultancy (VTC), the largest training center in Central and Eastern Europe providing training for Oil & Gas and Wind Energy employees, is proud to announce the opening of Poland's first commercial fire training ground with a helicopter landing pad. The inauguration ceremony took place at Vulcan Training & Consultancy's 5th Anniversary Gala, on September 7, 2023.

For the past 5 years, Vulcan Training & Consultancy has been preparing trainees from Poland and across Europe, offering accredited training courses, among others, by OPITO – in accordance with the highest safety standards in the offshore industry. Fire Field is another milestone in the development of the center, which boasts modern infrastructure. The training ground will provide hands-on safety training for advanced firefighting teams securing helicopter landing sites in the offshore sector around the world.Main features of the Fire Field training ground:

- Full-size Helideck: The main area of the training ground is a helicopter landing pad and a burning helicopter simulator, which allows you to imitate fires in several spaces: the cockpit, the passenger seat, the ceiling, and the engine and its surroundings. The facility also includes an overturned helicopter simulator, so students will have the opportunity to participate in simulations of various evacuation scenarios, improving their skills and preparedness for critical situations.
- Innovative infrastructure adaptation: The advanced infrastructure mimics the structure of a three-story building, complete with an interior and exterior staircase, windows, balconies, terraces and fire stations. In addition to the fire (warm-up) chamber, the trainer is equipped with five gas-fueled fire stations, where engine room fires, ceiling fires, kitchen backroom fires and equipment fires in the form of a burning bed or sofa will be simulated.
- The post-shipyard pumping station: The former post-shipyard pumping station has been adapted for practical exercises. Students will have to deal with evacuation difficulties such as thick smoke, a maze of pipes and valves, and the use of gas technology in fire simulation. They will gain practical skills in building firefighting lines or extinguishing internal fires (such as an engine fire).

Source: Vulcan Training & Consultancy

MORE

New offshore investment in Swinoujscie

09/10/2023

Euro Terminal, like many Polish companies, is preparing to participate in the development of the Polish offshore market. The completion of the latest investment, the RO-RO ramp, is another step in the company's development and cooperation with key players in the wind turbine market. Together with the companies, i.e. Vestas or Orlen, they are creating a strong hub for offshore wind farms in West Pomerania.

On September 29, a ceremony was held at the Euro Terminal – Swinoujscie's port hub, marking the completion of the latest investment. Among the invited guests were amongst others Vestas, LM Wind, SGRE, MAG and other leading players in the wind turbine market.

With regard to the completion of the latest investment – the largest RO-RO ramp in Poland – an event was held, where, together with representatives of the above-mentioned companies, we were able to learn comprehensively about the company's infrastructure, plans and development strategy.

> *– The extensive port infrastructure, together with Swinoujscie's prime location and many years of experience, provides great opportunities for West Pomerania's offshore sector. This region has the predisposition to gain the most from the dynamic development of the offshore industry in Poland. New jobs, growth of service providers and international cooperation. West Pomerania has all the conditions for rapid economic growth, including increasing its role in the country's economy – points out Janusz Gajowiecki, President of the Polish Wind Energy Association.*

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Offshore wind tower factory in Gdansk, Baltic Towers, with support from the Polish Investment Zone

10/10/2023

The board of the Pomeranian Special Economic Zone has issued a decision on support for the Baltic Towers company. The Polish Investment Zone will support the construction of a production and storage hall for the manufacturing of offshore wind towers. The value of the new investment is estimated at around EUR 200 million.

Baltic Towers, owned by the Industrial Development Agency S.A., in cooperation with the Spanish company GRI Renewable Industries, S.L., will build a state-of-the-art plant for the production of offshore wind towers for wind turbines of more than 15 MW. The factory will be capable of producing up to 150 towers per year. This is a key investment for building the potential of the Polish offshore industry. The newly built factory will create more than 500 new, highly qualified jobs. This is an investment that will be part of the economic landscape of the Tri-City for years, restoring industrial functions in the area of the southern tip of Ostrow Island.

With the Pomeranian Special Economic Zone's decision to support the investment, the Baltic Towers project is gaining momentum.

> *– Construction of offshore wind farms is a complex process for which we need plants built in accordance with the principles of the fourth industrial revolution, and Baltic Towers is making exactly such an ambitious investment. The new factory also means new high-quality jobs. We are happy to be part of this project, which is extremely important not only for the development of the region, but also for the energy security of the whole country", says Przemysław Sztandera, President of the Management Board, Pomeranian Special Economic Zone.*

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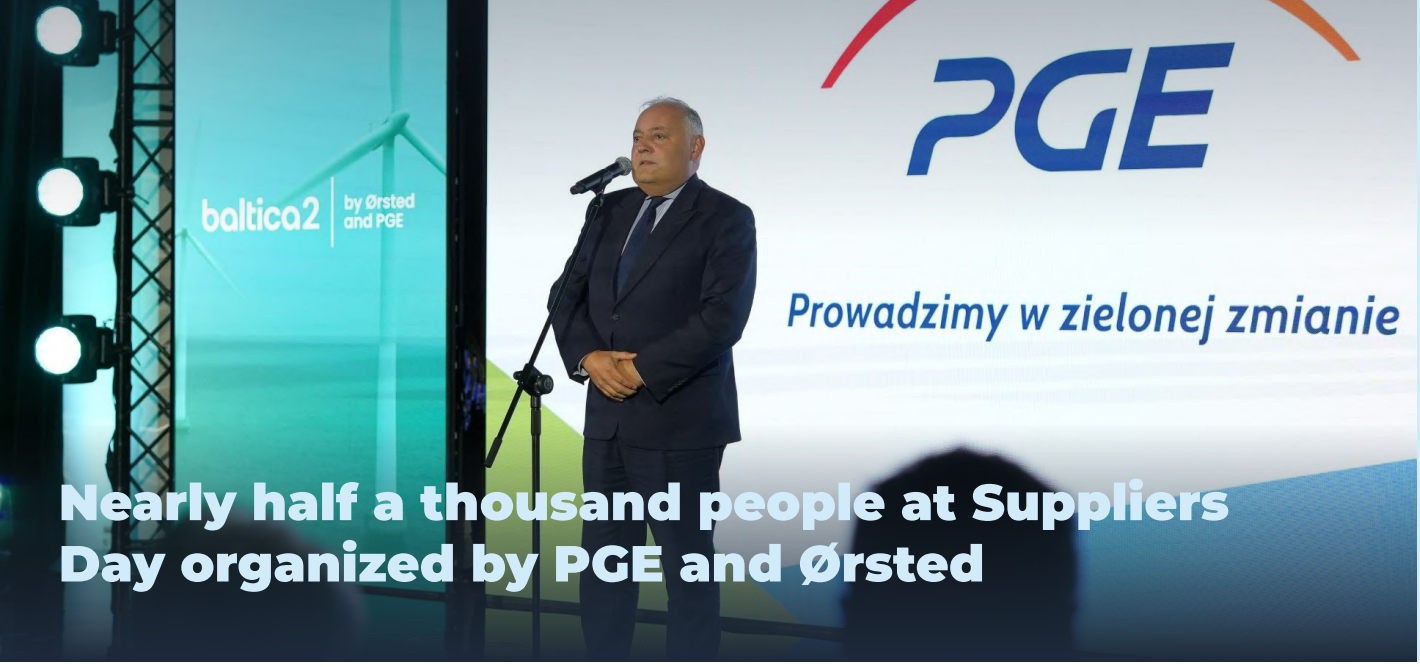


Nearly half a thousand people at Suppliers Day organized by PGE and Ørsted

11/10/2023

Representatives of companies from all over Poland and abroad interested in joining the Baltica 2 project took part in a meeting organized for them at PGE Narodowy. Suppliers Day was an opportunity to meet individually with suppliers of components and services already contracted by PGE and Ørsted.

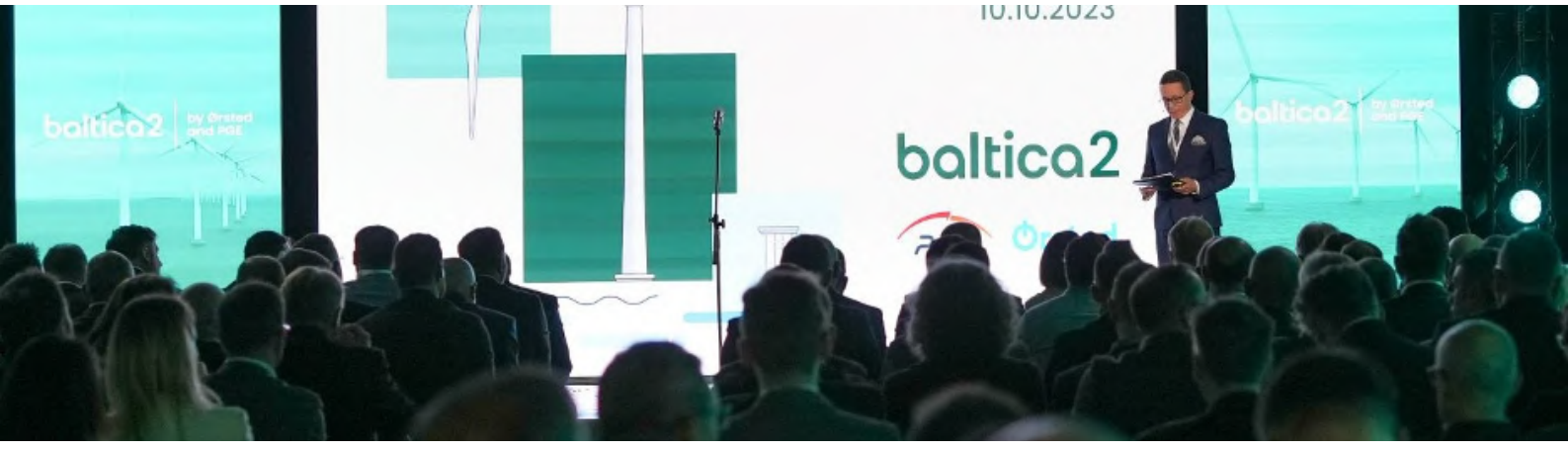
– Interest showed in the event exceeded our expectations. This shows how much potential there is in Polish companies and their ability to join in the realization of this strategic offshore wind energy project for the Polish energy sector – said Wojciech Dąbrowski, President of the Management Board of PGE Polska Grupa Energetyczna. – We want as many Polish companies as possible to take advantage of the opportunity to cooperate in the construction and operation of the Baltica Offshore Wind Farm. In connection with PGE's plans to develop more areas in the Baltic, long-term prospects for joint operations are opening up for Polish contractors. Development of the offshore wind farm sector in Poland is an opportunity to build new branches of economy – adds PGE's President of the Management Board.

– Through the organization of the Suppliers Day, we created a unique platform for the exchange of information and contacts, thanks to which Polish entities were given a real opportunity to join the supply chain for the Baltica 2 project. We are happy to be a part of Poland's energy transition, but also to provide a boost to the national economy, creating thousands of well-paying jobs in the coming decades – said Agata Staniewska, Managing Director of Ørsted Offshore Poland.

About 450 people attended the event, including pre-registered company representatives, employees of invited suppliers, as well as PGE Group and Ørsted, who also took part in discussions with interested entrepreneurs. Participants had the opportunity to learn about the current stage of implementation of the Baltica 2 project, the status of contracting of key components and services, as well as hear about tenders planned for award in the near future.

At the meeting, representatives of suppliers already contracted for the Baltica 2 project presented themselves, who not only introduced the audience to the scopes of their activities, but talked about the role they will play during the construction of the offshore wind farm. Each of the speeches was addressed to potential partners and cooperators from Poland, who can join as sub-suppliers and subcontractors in the implementation of the project. Siemens Gamesa will supply 107 turbinesfor the Baltica 2 project. The Navantia – Windar consortium will build monopile foundations for turbines and marine transformer stations. The marine stations will be designed, built and delivered by the SEMCO/PTSC consortium, and Boskalis will lay and connect the submarine cables.

Representatives of the suppliers stressed that they are looking for cooperators from the Polish market for various areas of their business in carrying out tasks for Baltica 2. In turn, representatives of PGE and Ørsted talked together about possible areas of cooperation during the multi-year operation phase of the offshore wind farm.
In the one-on-one portion of the meetings, organizers allowed participants to attend about 70 networking sessions. During these business discussions, both parties – contracted suppliers and entrepreneurs wishing to cooperate with them – were able to discuss areas of potential cooperation, mutual opportunities and expectations, but also requirements, e.g. in terms of security standards.



Supplier Day at PGE Narodowy was the fifth such event organized by PGE and Ørsted. Organized in various formulas, they have already attracted a total of more than a thousand people – representatives of companies wishing to build offshore wind farms in Poland together with developers.

Baltica 2 is one of two phases of the Baltica Offshore Wind Farm, which PGE Group and Ørsted are jointly preparing to build. The Baltica 2 stage, with an installed capacity of 1.5 GW, is scheduled for delivery in 2027. Electricity production from the second phase – the 1 GW Baltica 3 – will begin by 2029. The total capacity of 2.5 GW will produce energy capable of powering approx. 4 million homes.

Source: PGE

Seatech Engineering discusses possibility of supporting Polish offshore

13/10/2023

The latest project of Seatech Engineering – CTV (Crew Transport Vessel) SE-223 catamaran will be tasked with safe transfer of technical personnel, along with necessary equipment, between service ports and offshore wind farms. In addition, vessel will enable support of SOVs (Service Operation Vessel) working in the area of farms on the Baltic Sea, thus increasing the service capacity of turbines.

Seatech Engineering, in order to propose a functional and energy-sustainable vessel, made a huge effort to prepare comprehensive concept of the unit. The goal was to develop objectives of a modern catamaran that meets the requirements for European vessels, such as speed, ergonomics, environmental requirements, crew comfort and, what's important, financial efficiency both during construction and subsequent operation. Considerations made with shipyards and suppliers of necessary equipment, as well as extensive work of our initial design team, led to the development of a complete basic design of SE-223. Intensive work is currently underway to prepare classification design of the vessel.

Source: Seatech Engineering

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Poland and Norway establish strategic offshore wind alliance

13/10/2023

Norwegian Offshore Wind has strengthened their collaborative efforts in the Polish market by signing two key MoUs in Gdansk this week. On the main stage at Baltexpo, the Polish Offshore Wind Energy Society (PTMEW) signed the collaboration agreement with Norwegian Offshore Wind. This MoU will play a pivotal role in building closer relationships between the two countries and in shaping offshore wind projects both in Poland and Norway.

A second MoU was also signed with the Polish Cluster of Composite Technologies at a ceremony at Gdańsk University of Technology, underscoring Norwegian Offshore Wind's dedication to advancing composite technologies within offshore wind projects. This partnership seeks to harness collective expertise and resources to drive innovation and enhance the competitiveness of the Polish offshore wind sector.

Christian Vinstrup, leader of the Norwegian Offshore Wind working group for Poland, expressed his enthusiasm for these developments: These MoUs represent a significant milestone in our collaboration with Polish partners. Norwegian Offshore Wind is dedicated to identifying and capitalizing on opportunities in the Polish offshore wind market, and these agreements reinforce that commitment, says Vinstrup.

> *Jakub Budzynski, Vice-President of PTMEW, is eager to collaborate further with Norwegian supply chain companies and developers within offshore wind: We are delighted to strengthen our bonds with Norwegian Offshore Wind. This collaboration will play a pivotal role in shaping our relationship and building a sustainable offshore wind sector in Poland and Norway as well, delivering lasting benefits to our environment and economy, says Budzynski,*

Source: Norwegian Offshore Wind

MORE

The 2nd edition of the largest educational trade fair EDU OFFSHORE WIND coming on 5-6 March 2024

16/10/2023

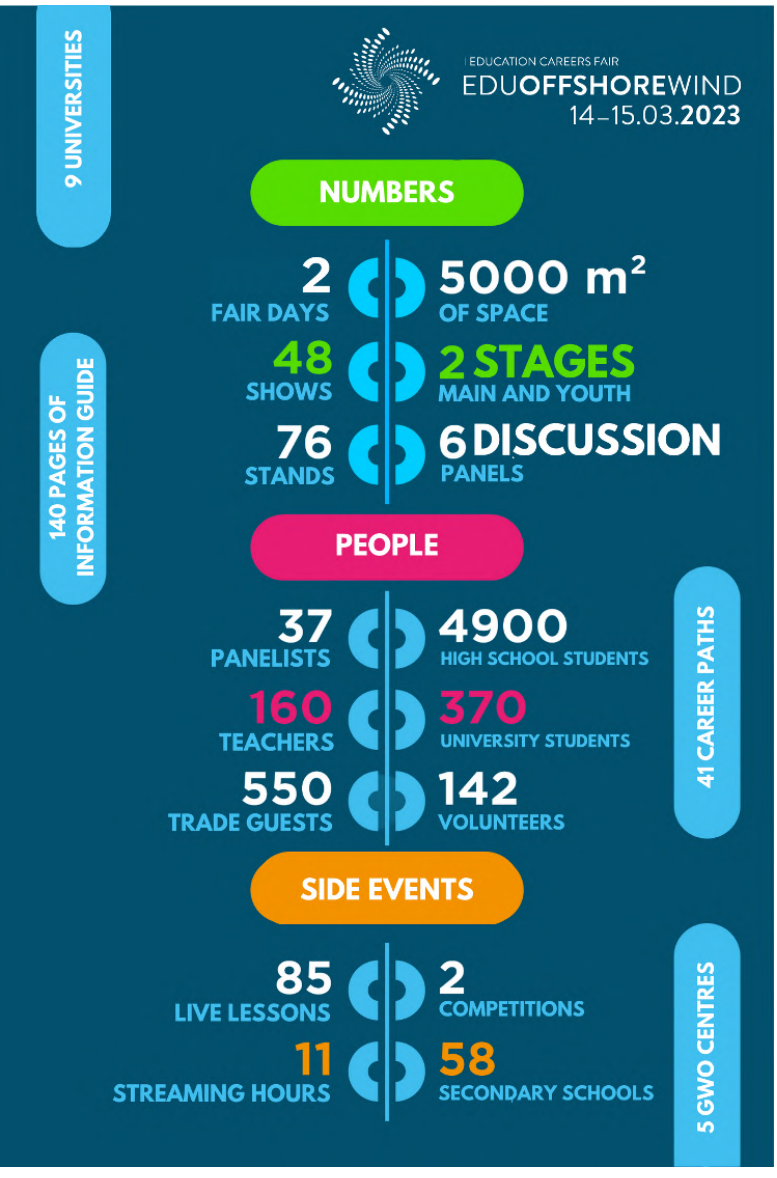
Preparations for the 2nd edition of Poland's largest educational career fair in the offshore renewable energy, and related sectors taking part in the climate transformation, have begun. The date of the event is already known – the 2nd edition of EDU OFFSHORE WIND will take place on March 5-6, 2024 in Gdansk. The event is accompanied by the slogan "We shareour passion for green energy with the youth!". BalticWind.EU is a strategic media partner of the event.

Representatives of the organizers, which include Rumia Invest Park, Co-Made, the Foundation for Innovative Offshore Energy Industry and MTG SA, emphasize that the success of the 1st edition shows how necessary it is to continue this type of an event. The main partners of the event remain: Self-Government of Pomorskie Voivodeship and the City of Gdansk.

The EDU OFFSHORE WIND Fair is an initiative of the Pomeranian Platform for Offshore Wind Energy Development in the Baltic Sea and the Pomeranian Center of Competence for Offshore Renewable Energy in Rumia.

It is important to recognize that the educational career fair EDU OFFSHORE WIND fits perfectly with the needs of the offshore wind sector – especially since Phase I projects are running according to schedules not only for the Polish offshore, but also in the rest of the Baltic Sea region. The Danes, Germans, Lithuanians, Latvians and Estonians, among others, are also betting on offshore wind energy as a foundation for transformation. And the new labor market requires qualified personnel.

“Organizing the first edition of the fair for 2 days and on an area of 5000 m2, we gathered 76 stands of companies and entities related to the offshore wind energy industry. During the fair there were 6 panel discussions and 48 special shows aimed at young people, teachers and students” – indicates Agnieszka Rodak, President of Rumia Invest Park.



“The fair was visited by 4900 thousand schoolchildren, 370 students and 160 teachers. They participated in 85 special live lessons. We created a unique event where, in an extremely interesting way, theory about job opportunities in the offshore wind energy sector met with practice” – added Łukasz Kneba of Co-Made.

Who is kept in mind during the fair’s implementation are high school and college students looking for their career path. Next year, the fair is expected to attract between 8,000 and 10,000 participants. Meanwhile, more than 250,000 participants, including from 500 high schools and 24 colleges, will take part in lectures and training sessions organized as part of the education and information program before the fair.

“Uninterruptedly since 2022, we have been conducting workshops in schools on offshore wind energy, our lessons are also available on an e-learning platform and youtube channel – thus providing knowledge and building awareness of the new industry among young people, parents, teachers and career counselors” – says Krzysztof Tomaszewski of the Foundation for Innovative Offshore Power Industry, the main presenter of the program at schools.

The formula for the second edition of the event will be expanded to include a new theme – an energy transition island, where young people will learn the secrets of hydrogen technology, nuclear power plants, PV farms or onshore wind power.

International youth will participate in the Innovaton Baltic Challenge 2024 during which they will solve real business challenges in the industry.

Amongst other novelties at EDU OFFSHORE WIND 2024 will be JOB TRUCK – a special zone for young people and students with internship and apprenticeship offers, with active networking of HR departments.

More information: www.eduoffshorewind.pl and on LinkedIn , Facebook , YouTube , Instagram profiles

If you are interested in cooperation, please contact Karolina Lipińska k.lipinska@pomorskie.eu and Łukasz Kneba lukasz.kneba@eduoffshorewind.pl

Smulders to supply Transition Pieces for Poland's First Offshore Wind Farm

23/10/2023

Smulders Projects Belgium, subsidiary of Smulders, is proud to announce its contract with Baltic Power (joint venture of Orlen and Northland Power) for the supply of 76 transition pieces for the groundbreaking Baltic Power Offshore Wind Farm, marking a significant milestone in the Polish offshore wind industry.

Over the past year, Baltic Power and Smulders have collaborated under a capacity reservation and early works agreement, to develop the Baltic Power project towards the construction phase. With the project securing the necessary building permits and reaching financial close, it is set to become Poland's first offshore wind farm to generate clean energy. Once operational, it will provide electricity to over 1.5 million households in Poland.

For Smulders, this project holds special significance. As a leading supplier of transition pieces, we are thrilled that our production facilities in Poland, which have supported offshore wind projects across Europe for the past two decades, can now contribute to a project in their home country.

Jaap Jansen, Tender Director of Smulders says: "It was a pleasure to work on this project with both the client, the other contractors, and the supply chain and to bring this project from concept stage towards the construction phase. It is a true achievement of the Baltic Power team to reach financial close in these challenging times."

Stefan van Hoydonck, Project Manager of Smulders, emphasized the company's close collaboration with the construction teams of Baltic Power. "We have recently commenced production at our main subcontractor and industrial partner, Haizea Bilbao, where primary steel cans for the project are being manufactured. Our facilities in Poland and the UK are ready to start their scope in the coming months."

Smulders remains committed to advancing the renewable energy landscape in Poland and beyond, and this partnership with Baltic Power underscores its dedication to creating a greener, more sustainable future.

Source: Smulders

A modern factory for the production of wind towers will be built in the port of Szczecin

23/10/2023

Szczecin and Świnoujście Seaports Authority SA and Windar Polska sp. z o.o. signed a preliminary lease agreement in Szczecin for land located on Ostrów Grabowski in the Szczecin port.

A factory will be built on 17 ha, which will produce elements of wind towers for offshore or onshore wind farms, foundation structures for offshore towers or onshore wind turbines and onshore wind farms, and mast or metal tower structures. The manufactured elements will be transported using, among others: sea transport.

According to the adopted schedule, the factory will start operating in the first half of 2026. It will employ at least 400 people. The investor's value of the project is estimated at EUR 70 million.

After the installation terminal for servicing offshore wind farms in Świnoujście, this is another project in the Szczecin-Świnoujście port complex related to renewable energy sources.

Source: Port Szczecin-Świnoujście

Inauguration of the III edition of the Executive Offshore Wind MBA Postgraduate Program at Gdynia Maritime University

31/10/2023

The Offshore Wind Energy Centre at Gdynia Maritime University (UMG) launched the third edition of its Executive Offshore Wind MBA postgraduate program on October 27. BalticWind.EU is a media partner of the studies.

The ceremony was attended by the Deputy Rector for Education at Gdynia Maritime University, PhD Sambor Guze, Professor at UMG, UMG Council Member, and Chairman of Inter Marine Group, Slawomir Kalicki, and Jakub Budzynski, Vice President of the Polish Offshore Wind Energy Society.

Among the guests were also representatives of the embassies with honorary patronage of the EOW MBA program. A short speech was delivered by His Excellency Ole Toft , Ambassador of the Kingdom of Denmark to Poland, and Huub von Freytag Drabbe, Head of the Economic Department of the Netherlands Embassy.

The projected potential of the industry creates a unique career opportunity for those with managerial education confirmed by a prestigious MBA degree. Completing the first in Poland and second in Europe MBA program for the offshore wind sector, culminating in an international Executive Offshore Wind MBA diploma will certainly allow you to take advantage of these opportunities. The organizers anticipate that graduates will be among the most sought-after managers and professionals in the Polish and international offshore wind energy industry, and that companies directing their employees to the program will gain motivated staff, unique competencies and a huge number of inspiring solutions.

MORE

Source:
Offshore Wind Energy Centre of the Gdynia Maritime University

“100 Questions for Ocean Winds” – experts answer questions from potential suppliers

07/11/2023

Following the ‘Suppliers Day’ for the BC-Wind project, held on 13 September in Gdansk, we are publishing Ocean Winds’ experts’ responses to questions raised by potential suppliers to the offshore industry.

The following information provides a better understanding of the rules governing the market for suppliers of goods and services – not only for the BC-Wind project, but also for Ocean Winds’ other worldwide investments. The potential for collaboration is underlined by the fact that OW’s portfolio currently includes 15 projects in the operational, development and construction phases with a total capacity of 16.6 GW in seven geographical regions.

What are the quality requirements for aggregates?

We have made the decision to change the foundations to jacket and are currently in the process of analyzing how we will protect them. We are considering aggregates with a 60mm-180mm fraction, but we need to finish the analysis and check the conditions at our OWF sites. We are also considering using aggregates as a protection method for both inter-segment and export cables.

What are the criteria for corrosion protection, steel structure protection and fire protection?

We expect CX protection with high durability and systems life of 35 years, because that’s the operational life we assume for the project. These are the protections as far as the above-water part is concerned. As for the underwater part, we are betting on IM4 with anodic protection. We are in the phase of analyzing what kind of anodes we plan to use in the project. We are considering both passive and active.

Our company deals with anodes for steel corrosion protection. Do you prequalify such suppliers, or will you leave it to steel structure manufacturers to purchase?

We are open to dialogue with suppliers. There is a question of economic calculation here. We are currently in the process of prequalifying suppliers for various components, including anodes. We would like to have these systems in larger project "packages," while we know the conditions in which the market operates. If a company is able to provide a system that is qualitatively acceptable to us, we are open to discussion and possible exclusion from a larger design package. We encourage direct contact and potential cooperation.

Procurement procedures
Construction Permit Design (CPD) – 2022/2023

Onshore SUB Construction Permit Design Onshore Substation	**Contract signed 2022**
Export Cable Construction Permit Design Offshore Export Cable	**Contract signed Q1 2023**
Offshore SUB Construction Permit Design Offshore Substation	**Contract signed Q3 2023**
„Umbrella" Construction Permit Design Wind Farm	**Contract signed Q3 2023**
O&M Port - Operation and Maintenance Port Concept & Construction	**Contract for concept design signed Q3 2023** **Construction contracting planned Q1 2024**

READ MORE

and link to the Suppliers Day webcast:

https://balticwind.eu/pl/ow-suppliers-day-2023/

Baltic Industrial Group completes a project of constructing two offshore transformer stations for a Danish partner

10/11/2023

The Baltic Industrial Group has completed a project involving the construction of two offshore transformer stations (OSS) for a Danish partner. In the afternoon of November 8, from Baltic Operator's production site in Gdynia, sailed a finished, second, "twin" trafostation for the offshore wind farm meant for the US market. As part of constructions completed for Offshore Wind Energy by the Group's companies, this is the eighteenth of its kind. Indeed, to date, the group has completed traffic structures for projects including such as: Borkum Riffgrund OWF, Rødsand OWF, Walney OWF, Kaskasi OWF, Vineyad OWF.

The Baltic Industrial Group is currently the largest Polish manufacturer of trafostations and onshore wind towers. Customers are offered comprehensive implementation of entrusted contracts: from prefabrication to full assembly of the steel structure including installation of plants, equipment elements and loading.

Video of previous loading under this project (first trafostation) :

https://www.youtube.com/watch?v=cSaRwQwBqLI&t=56s

Source:

Baltic Industrial Group

Litgrid and PSE are considering an alternative for the new Polish-Lithuanian interconnection

15/11/2023

Lithuanian and Polish electricity transmission system operators Litgrid and PSE are considering various alternatives for the planned new electricity interconnection between Lithuania and Poland.

Due to a significant increase in costs and overbooked cable and converter station production slots, the procurements for the planned Harmony Link HVDC interconnection were terminated in April 2023. Immediately after this decision, Polish and Lithuanian TSOs began the preparation process for the new procurement tenders, but at the same time considered various alternatives that could bring costs down and be commissioned within the shortest possible timeframe.

One of the alternatives studied by TSOs is an onshore cable. According to preliminary assessment, the alternative could allow for a reduction in the project budget and a faster implementation.

The onshore cable could partially use the infrastructure corridor of the planned Rail Baltica railway route between Poland and Lithuania. As preliminary assessments are still being taken, both offshore and onshore interconnections are considered at this stage.

It is expected that the decision on the implementation approach will be made in the first half of 2024.

Source:
Litgrid

LIGUM Offshore present in the supply chain for Baltic Power in the Baltic Sea

17/11/2023

LIGUM Offshore will participate in the realisation of the first Polish offshore wind farm Baltic Power in the Baltic Sea. A success of the Polish supply chain.

Baltic Power is currently the most advanced offshore wind farm project in the Polish part of the Baltic Sea. In the Baltic Power farm's area of approximately 130 square kilometres, there will be 76 wind turbines, each with a generating capacity of 15 MW, giving a total capacity of 1140 MW. The farm is being built by ORLEN and Northland Power.

> *"The success of LIGUM Offshore is not only an achievement of the company itself, but also a triumph of the Polish supply chain. The project will require advanced technology, high quality components and efficient logistics. We are proud to be part of Poland's energy transition" – said Piotr Walkowiak, CEO of LIGUM Offshore.*
>
> *"LIGUM Offshore, being one of the leaders in advanced solutions for the offshore wind sector, will provide its expertise and experience to ensure the success of the Baltic Power project. Our involvement confirms Poland's ability to compete in the international renewable energy market" – adds Seweryn Talkowski, Sales Manager at LIGUM Offshore.*

LIGUM Offshore supplies rubber-coated coatings and components for wind farm components such as boat landing and external ladder. It offers innovative solutions for coating steel components with polyurethane, as well as a PU sleeve – as a finished product assembled directly at the customer's site.

This will be LIGUM Offshore's 20th wind farm and the total capacity of the projects in which the company has participated is close to 11 GW. LIGUM Offshore is currently developing projects for the He Dreiht farm in Germany, Yeu-Noirmoutier in France and Dogger Bank C in the UK.

Since 2020, LIGUM Offshore has been a member of the Polish Offshore Wind Energy Society [PTMEW] supporting the national supply chain.

Source: LIGUM Offshore

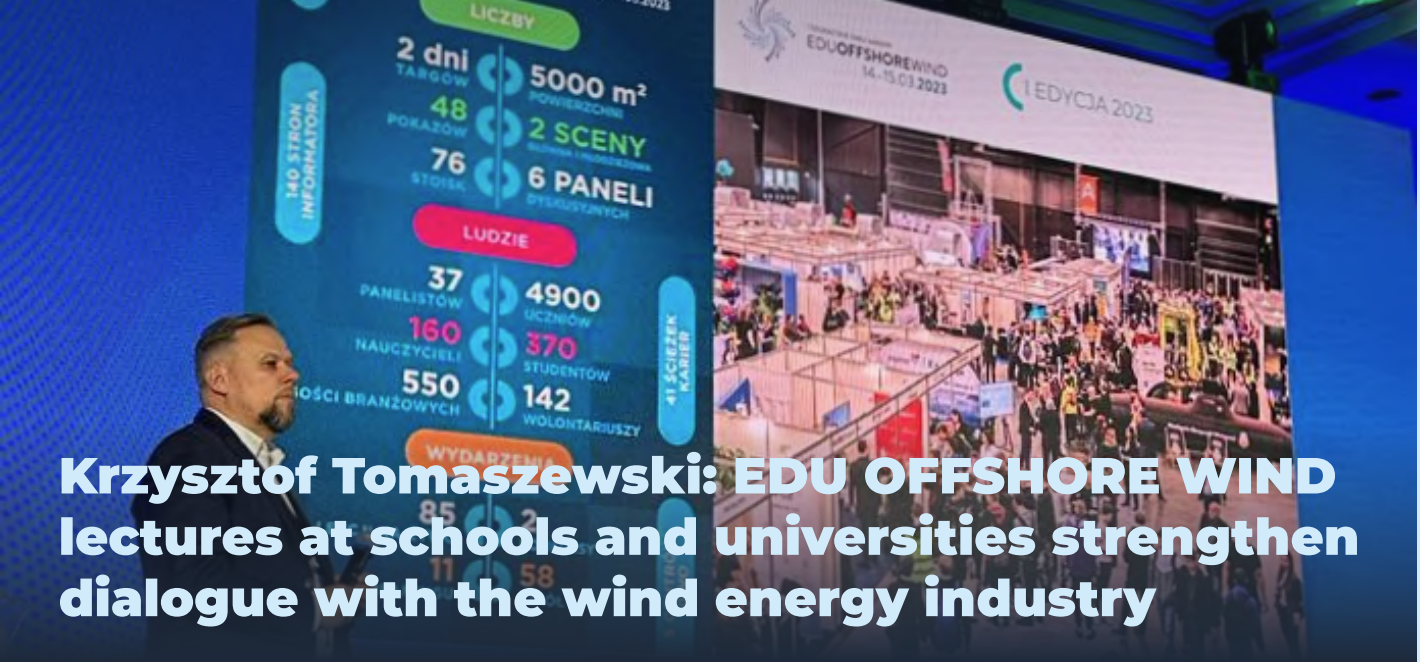
Fifth gear for offshore – PWEA creates a signpost to harness offshore wind potential

21/11/2023

178 billion zlotys of added value for the Polish economy, a decrease in CO2 emissions by approx. 102 million tons per year, more than 100,000 new jobs. The Polish economy will reap a number of macroeconomic benefits as long as the Polish government takes measures to facilitate the emergence of offshore wind farms. Simplifying permitting or revising the Maritime spatial plan for Polish sea areas (PZPPOM) are just some of the necessary actions for offshore. At the Offshore Wind Poland 2023 Conference, the Polish Wind Energy Association identified specific changes necessary for the authority to implement as a matter of urgency.

The global offshore market is accelerating, and Poland is not lagging behind. Economic benefits, new jobs and the development of local content are within reach – but without strong regulatory support, the best-case development scenario will not materialize. After the elections, the new government's priority should be to support offshore wind energy. Within a decade, thanks to OWF, Poland can gain 178 billion zlotys of added value for the economy, decrease CO2 emissions by approx. 102 million tons per year, and collect revenue for companies in the construction phase of approx. 81 billion zlotys. The activity of companies in the sector, especially in the Pomeranian region, is the creation of more than 100,000 new jobs.

MORE



Krzysztof Tomaszewski: EDU OFFSHORE WIND lectures at schools and universities strengthen dialogue with the wind energy industry

28/11/2023

Registration has started for the 2nd edition of EDU OFFSHORE WIND – Poland's largest educational career fair for offshore renewable energy and related sectors associated with climate change, which will take place on 5-6 March 2024 in Gdansk. We spoke to Krzysztof Tomaszewski, the leader of offshore wind lectures at schools and universities programme and co-organiser of the fair from the Foundation for Innovative Offshore Power Industry, about the role of workshops on offshore wind energy held in Pomeranian schools from 2022 onwards, as well as the challenges facing the industry and the educational measures to be taken. BalticWind.EU is a strategic media partner of the event.

BalticWind.EU: What role do the educational meetings you conduct in Pomeranian schools play in the EDU OFFSHORE WIND project?

Krzysztof Tomaszewski: Jobs related to offshore wind energy are still a new topic in Poland, so the meetings at schools and universities aim to introduce pupils, students and teachers to these issues in the most effective way possible before they even attend the fair. This way, when they meet future employers during EDU OFFSHORE WIND, they will have an idea of what wind farm investments look like at different stages, as well as what qualifications will be in demand. The dialogue we have with young people during these workshops stimulates them to think about potential careers in energy transition professions and to plan their next career steps. Our meetings and lectures therefore play a key preparatory role.

How do such meetings take place? Can schools and universities express their interest in such a meeting to you?

– During the meetings, we show the preparation and implementation of investments in offshore wind farms step by step. We provide information on what the paths to specific professions look like, e.g. how to become a sheet metal bending machine operator or a wind turbine service technician. We show what

skills are most desired by employers and how to develop them. The way we do this and the tools we use are tailored to the needs of our audience. Our lessons are available on our youtube channel and e-learning platform. In addition, we are always ready for questions from participants to which we try to provide concrete and clear answers. It is worth emphasising that in addition to imparting knowledge – in line with the motto of the 2nd edition of the fair – we spread our passion for green energy. Schools and universities interested in participating in the project are welcome to contact us.

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District School Complex No. 2 in Wejherowo

What is of most interest to young people?

The issues that young people raise during the meetings are, firstly, what the prospects are for the new sector, and secondly, they ask what the day-to-day work is like in the various professions, whether and to what extent it involves long journeys, which languages they should know or what the recruitment process is like. Young people want to know not only what the labour market looks like today, but also how it will change in a few years' time.

Are you also seeing interest in offshore wind energy from teachers ?

– Yes, we are indeed seeing increasing interest from both teachers and career advisors. This is important, because in the case of secondary school students, they play a very important role in planning their future career paths, as well as carrying out specific activities to acquire skills and expand the necessary knowledge. EDU OFFSHORE WIND is not only a series of meetings in schools and a trade fair, but also a series of information and education activities aimed specifically at teachers and career advisers.

What lessons do these meeting bring on the offshore wind sector – what educational measures are needed first?

– The main conclusion is that in preparing our education and workforce development system for the green transition, we need long-term measures. Both those aimed at young people, but also at companies involved in wind farm projects in the Polish Baltic Sea. Close dialogue and cooperation between them is essential, if only in the form of running patronage classes, implementing comprehensive internship policies, and building knowledge transfer from company experts to teachers and students about how the industry and individual technologies are changing. The aim of EDU OFFSHORE WIND is to create and support such dialogue and knowledge transfer.

The EDU OFFSHORE WIND trade fair is an initiative of the Pomeranian Platform for Offshore Wind Energy Development in the Baltic Sea and the Pomeranian Centre of Competence for Offshore Renewable Energy in Rumia. The event is accompanied by the slogan "We spread our passion for green energy!"

Representatives of the organisers, which include Rumia Invest Park, Co-Made, the Foundation for Innovative Offshore Energy Industry and MTG SA, emphasise that the success of the 1st edition shows how necessary it is to continue this form of event. And this time the main partners of the event are: Local Government of the Pomeranian Voivodeship and the City of Gdansk.

Zespół Szkół "Elektryk" im. Noblistów Polskich in Slupsk

More information:
www.eduoffshorewind.pl as well as on the event's LinkedIn, Facebook, YouTube i Instagram

Companies interested in cooperating with the event are invited to contact:
Karolina Lipińska k.lipinska@pomorskie.eu
Łukasz Kneba lukasz.kneba@eduoffshorewind.pl,

while schools and careers advisors are welcome to contact:
ktomaszewski@przemyslowa-akademia.pl.

Energa Wytwarzanie and Northland Power will cooperate on servicing offshore wind farms

30/11/2023

Thanks to an approval issued by the Office of Competition and Consumer Protection, Energa Wytwarzanie of the ORLEN Group and Canadian company Northland Power can establish a joint venture to provide maintenance services for offshore wind farms in Poland. The new company will carry out activities in such areas as technical management of offshore wind farm infrastructure, commercial asset management, health and safety and environmental issues.

Energa Wytwarzanie and Northland Power will combine the experience and expertise of their teams to provide specialized services to the offshore wind sector. In the coming years, Energa Wytwarzanie aims to use its existing knowledge and experience in operating onshore wind farms in Poland to provide new services related to the maintenance and operation of offshore wind farms in the Baltic Sea Northland Power, as one of the world's most experienced companies in the offshore wind sector, brings to the new company its extensive experience in managing and maintaining this type of an offshore investment.

MORE

Source:
Energa Wytwarzanie

Industry Skills Center as a response to growing demand for skilled workers

04/12/2023

Lębork's district council is the initiator of a PLN 12,000,000 project to establish the first Industry Center dedicated to Wind Energy in Poland. Working with industry leaders such as the ORLEN Group, the Polish Offshore Wind Energy Society (PTMEW) and Windhunter Academy, they have launched an initiative to create a pioneering wind energy competence center in the heart of Lębork. November 27, 2023 marked the official launch of the project, with the participation of its contractors and invited representatives of local government and the wind energy industry.

> *We are very pleased to be able to implement this project with our Partners. It's important for young people to be educated in specialties that are the future. – The head of Lębork District, Alicja Zajączkowska, praises the venture. This is an opportunity for students who plan to tie their professional future to the growing renewable energy sector, gaining professional stability and high-level income.*

The Industry Skills Centers, the brainchild of the Ministry of Education and Science, aim to foster collaboration between industry stakeholders – employers and higher and vocational education institutions for building a new generation of teachers and professionals to meet the changing needs of the industry. Over the next few years, 120 such centers will be established in Poland – each specializing in a different profession. Lębork will focus on wind energy, a sector that has seen significant growth in onshore potential and is poised to launch Poland's first offshore wind farms in the Baltic Sea.

Source: Windhunter Academy

MORE

Piotrowicz, Iberdrola: innovation, maintaining project profitability, standardisation and scalability are key for developing offshore potential

05/12/2023

We spoke to Łukasz Piotrowicz, Offshore Development Manager at Iberdrola, about the main challenges in the market, how to meet growing demand within supply chains, the potential of the Baltic market, as well as key technologies that will drive innovation in the offshore sector.

BalticWind.EU: What are the main challenges Iberdrola sees for the offshore wind sector in the context of the very ambitious plans to reach 111 GW in EU countries by 2030 (according to the EU Wind Power Package)*?

Łukasz Piotrowicz, Offshore Development Manager, Iberdrola: We are very positive about the European Commission's approach to the development of wind energy as a key element of decarbonisation. It is a very ambitious plan, as the Commission itself points out, this means about 12 GW of new installed offshore wind capacity in Europe per year. This is 10 times more per year than wat was installed in 2022. Reaching this level means significantly accelerating the implementation of projects at all stages. This also means a significant increase in the volume of deliveries of components and, consequently, in the volume of supplies of raw materials necessary for production, including critical raw materials. One of the main immediate challenges will be the readiness of the necessary infrastructure, for example power grids and port infrastructure.

Another problem might be the access to right number of raw materials, global factors have a direct impact here. Of course, the readiness of the supply chain, including the availability of the installation fleet, will be equally crucial. Competition between markets in the world, i.e., between the European and American markets, may play a role here.

The degree of complexity and duration of the procedures for issuing permits, opinions and administrative arrangements is a regional factor on which we have a direct influence. We find the fact The European Commission recognises these risks and is already taking action to mitigate these challenges, for example through the proposal for the Critical Raw Materials Act. It will be important to maintain the pace of work on the implementation of appropriate tools to mitigate these risks and to keep productive dialogue with all stakeholders.

Are European supply chain companies for the offshore wind sector able to meet the growing demand?

Unexpected and very dynamic changes in the world directly and indirectly affect the readiness of European supply chain companies to meet the growing demand. We can also observe this in other technologies of electricity production and in other industries, e.g., in the automotive industry. Taking the above into account, this is one of the significant challenges for the implementation of offshore wind farms in our region.

Here it is worth referring again to the actions of the European institutions. As you can see, the risk is recognized by all stakeholders, including the European Commission. The answer is to support European industry, for example the Net Zero Industry Act. Such mitigation measures are very important, and we are glad that they are being implemented with the right momentum. There is also concern about the increasing share of supplies from other regions of the world, primarily from China.

Experts see the need to change the approach and treat the entire European industry as a form of the local content. They talk about the necessity for cooperation amongst the EU markets and mutual support, of course, while maintaining the principles of competitiveness. The role of the European institutions and the national authorities is very important here – through direct action and, above all, by establishing clear, sensible strategies for the development of wind energy linked to strategies for other sectors.

Which technologies will be key to effectively develop offshore potential in Europe?

The effective development of offshore potential in Europe will require the use many innovative and state of the art technical solutions while maintaining project cost-effectiveness, standardisation, and scalability. Here, it is simply required to maintain the tradition of this industry, which has been the spiritus movens of innovation in the industry since its beginnings.

Indicating these key technologies, it is necessary to start with the supply of electricity, i.e., the development of offshore wind connections with the direct current technology, the development of offshore energy islands or connection hubs.

A new approach to foundations will be necessary due to the growing challenges related to the increasing depth of farm areas, the complex structure of the bed sea, but also the mechanical loads of increasingly large wind turbines. As well as the development of floating wind farm technology in the next stage.

Further, the direct link between offshore wind farms and energy storage and hydrogen production. The growing share of unmanned surface water, underwater and air vessels in the maintenance and installation of these projects will also be important. It is also worth mentioning the technical solutions that ensure increased safety of farms against growing external threats.

How does Iberdrola see the potential of the offshore market in Poland and other Baltic Sea countries?

We are present in the Baltic Sea, and we know it's conditions very well. Iberdrola is the operator of the Wikinger wind farm with a capacity of 350 MW. We have also successfully installed all fifty monopiles for the Baltic Eagle offshore wind farm, which is the second of the large projects being implemented in the German waters of the Baltic Sea. A third Windanker project, with a capacity of 315 MW, is under development and is scheduled for completion in 2026. Together, these three offshore wind farms form Iberdrola's so-called Baltic Hub.

The potential of the Baltic Sea, including the Polish part, is greater than what has been allocated so far in concessions. In the PWEA's analysis, Poland's offshore wind capacity is amounted to 33 GW. We will therefore consider participating in a potential third phase in the future.

What role do you want to play in these markets?

We are constantly working on expanding our portfolio of offshore projects. At the end of September 2023, Iberdola's offshore wind grew by 28.6%, to 1,618 MW. We also plan to invest more than €8 billion in this sector by 2025. Our offshore wind capacity will reach 3,100 MW by 2025 and 4,800 MW in 2026/27.

Recently, Iberdrola connected to the grid offshore wind farm Saint-Brieuc constructed in the waters of Brittany, France. It is the first large-scale offshore wind project in Brittany and the second in France to produce clean energy.

We are probably the largest offshore wind developer in the Baltic Sea. We have not obtained a location permit for the construction of an offshore wind farm in the Polish part of the Baltic Sea, as have other foreign investors, but we maintain our interest in this area.

It cannot be ruled out that the companies that obtained the permits in the second phase will look for partners. We will monitor the situation, especially since there will be a change of the government and we will see what decisions the new government will make.

What are the main challenges facing the Polish market?

One of the main bottlenecks in RES investments, regardless of technology, is the grid connection. The data shows that up to 90 per cent of applications for connections are rejected. This is also a significant risk for the development of offshore wind farms. Now, the capacity planned by PSE in the National Power System is 10.9 GW for the connection of the offshore wind farm, compared to 17.9 GW of capacity at the locations from the first and second phases combined. There are announcements of large investments in networks, so we hope that the situation will improve.

To this should also be added the subject of maritime spatial planning, both in terms of locating new areas for offshore energy and planning corridors for submarine cables connecting wind farms with onshore connection points. Maybe it is worth going back to the concept of a maritime network and using the ideas that have already been developed.

Given the planned scale of offshore wind development in Poland, it is necessary to strengthen the state and local government administration, which will bear a significant burden of conducting numerous administrative procedures. And in terms of the legal regulations themselves, it is worth introducing several optimisation measures to make these procedures more flexible and realistic. For example, the rules for connecting to the Grid and settling production from offshore wind farms. As well as the introduction of the possibility of implementing energy storage or hydrogen technologies as part of the implementation of offshore wind projects.

It will also be a challenge to recruit the right staff and prepare specialists in the country. Bottom-up activities of individual organisations, which are in a way very important and ambitious, are not enough. To achieve this, we need to change and update the education system along with the core curriculum. After all, we are talking about a comprehensive, broad industrial and economic transformation on a national scale.

We know that the supply chain is a global challenge. At the same time, we know that local industry has the potential to participate in this market in our country. Appropriate planning and support activities at the national level can significantly help in the preparation of the Polish industry and thus reduce the risk of delays in the supply of materials, components, or services.

The key to these challenges will be the cooperation of all the market players and, above all, a constructive and open dialogue between the participants of the offshore wind industry and the government.

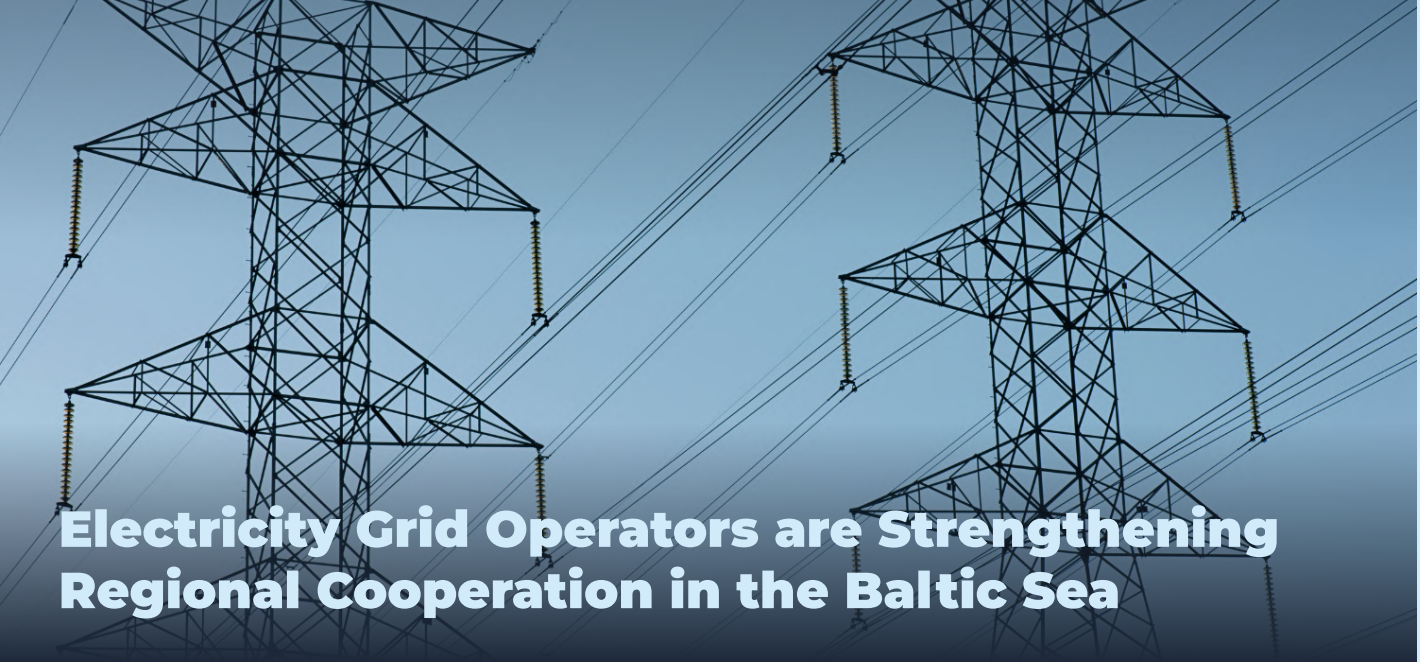
Pomeranian Platform for the Development of Offshore Wind Energy drives offshore industry growth in the region

05/12/2023

Joined meeting of the Pomeranian Platform for the Development of Offshore Wind Energy and the Cluster of Hydrogen Technologies just took place. Among the major topics at the December 1 meeting at the Office of the Marshal of the Pomorskie Region (UMWP) were EU initiatives to strengthen the wind industry as a strategic industrial sector, the role of small and medium-sized seaports in the implementation of service functions for offshore wind farms, plans and assumptions for the Baltic Towers wind tower factory investment in Gdansk, the 2nd edition of Edu Offshore Wind 2024 and synergies between the offshore and hydrogen technology sectors.

Meeting of the Pomeranian Platform organized with the Cluster of Hydrogen Technologies operating within the framework of i.a. the Regional Pomeranian Chamber of Commerce (RIGP) was an opportunity for networking and dialogue between representatives of offshore companies, local government and institutions that are involved in the process of preparing for the construction of wind farms and providing personnel.

MORE



Electricity Grid Operators are Strengthening Regional Cooperation in the Baltic Sea

12/12/2023

The electricity transmission system operators (TSOs) of the nine Baltic Sea Region countries will continue to cooperate actively to ensure the reliability of the region's electricity supply, the implementation of the project to synchronise the Baltic electricity grids with continental Europe and to develop the future energy system for large-scale offshore wind power. This decision was taken by the CEOs of Latvia's Augstsprieguma tīkls, Lithuania's Litgrid, Estonia's Elering, Denmark's Energinet, Finland's Fingrid, Sweden's Svenska kraftnät, Norway's Statnett, Poland's PSE and Germany's 50Hertz at the Baltic Sea Region TSO CEOs meeting in Stockholm on 8 December.

"The security of energy supply and the development of the energy system in the Baltic Sea region is a shared responsibility of all electricity transmission system operators in the region. I am pleased that the annual meeting of TSO CEOs has strengthened the successful cooperation so far. There is an active exchange of information on the energy supply situation and the implementation of the final phase of the project to synchronise the Baltic electricity grids with Europe, as well as continued joint work on the development of the region's power system for large-scale offshore wind power. At the same time, the operators are committed to continue to address the region's challenges in a united manner," says Rolands Irklis, Chairman of the Board of Augstsprieguma tīkls AS.

Source: Augstsprieguma tīkls

MORE

Ocean Winds wraps up “Careers with Wind” educational program

21/12/2023

Ocean Winds, a company operating in the field of offshore wind farms and developing the BC-Wind project in the Baltic Sea, together with the Industrial Development Academy (Przemysłowa Akademia Rozwoju), is implementing the “Careers with Wind” („Kariera z wiatrem”) educational program to impart knowledge and increase the competence of high school students in the field of offshore wind energy. Among the beneficiaries of the program in Szczecin are young people from the Wladyslaw Orkan School Complex No. 2 – the educational cycle for the RES technician class has just ended.

The program is aimed at students in the renewable energy technician profile. These young people spent more than two years learning about the many practical aspects of the creation of offshore wind farms, and were introduced to the component supply chain, as well as strategic stages of offshore wind development through examples of Ocean Winds’ investments around the world. Eighteen students from the IVE class have participated in classes at the technical school in Szczecin since the beginning of the 2021/2022 school year.

> *“At Ocean Winds, we believe in the power of knowledge transfer and long-term prospects of offshore wind energy in Poland. That’s why we engage in dialogue with young people and try to show them the behind-the-scenes of our work and professional development in the offshore sector. Practical knowledge will be an asset because of the supply chain being developed among Polish companies, among others in the West Pomeranian region” – said Aleksandra Jampolska, Stakeholder Manager at Ocean Winds.*

MORE

More on the program:
Video https://youtu.be/J1Yf1bq11XY?si=nudtpz890cCgU4eG
Source: Ocean Winds

Baltic States set to synchronise grids with continental Europe by 2025

21/12/2023

On December 19th, the European Commission and representatives of the governments of Estonia, Latvia, Lithuania and Poland signed a Political Declaration confirming their commitment to proceed at full speed to connect the electricity networks of the three Baltic States with continental Europe, via Poland, by February 2025. This is almost a year earlier than the previous deadline of end of 2025.

The three Baltic States are the last remaining EU Member States with electricity networks that are still synchronised with Russia and Belarus. Their synchronisation is a strategic project of common interest. Over the past 12 years, it has received significant political, technical, and financial EU support exceeding EUR 1.2 bn worth of grants.

Under the political declaration, the Member States concerned also committed to speeding up the development of the 'Harmony Link Interconnector', one of the most significant energy infrastructure projects between Lithuania and Poland.

> *Commissioner for Energy, Kadri Simson, said: 'We are approaching the historic moment of full integration of Estonia, Latvia and Lithuania into our internal electricity market, to be achieved with the synchronisation of Baltic and Continental European power grids by February 2025. The war in Ukraine, Russia's shameless manipulation of EU energy markets and the subsequent energy crisis have underlined the importance of energy independence. This synchronisation project will enable the three Baltic States to gain full control of their electricity networks, and reinforce energy security in the region. Today's joint political declaration with the Baltic States and Poland will guarantee the delivery of the final stages of the project. Most notably, we have endorsed an alternative onshore design of the Harmony Link interconnector, adding security and resilience to the grid, while avoiding cost over-runs and delays in buildout. Today's declaration confirms our solidarity at a time when war continues to rage on Europe's borders.'*

Source: European Commission

Polish Offshore Wind Industry Chamber – Poland's first economic self-government organization for the offshore wind sector

22/12/2023

In response to the dynamic development of the offshore wind energy sector in Poland and the Baltic region, a new chamber of commerce will be established in Poland. The Polish Offshore Wind Energy Society (PTMEW), which has been working exclusively for the Polish offshore wind industry since 2010, is establishing the Polish Offshore Wind Industry Chamber (PIMEW).

About Polish Offshore Wind Industry Chamber

The Polish Offshore Wind Industry Chamber (PIMEW) will be an organisation of economic self-government, bringing together and representing primarily entities operating in Poland in the production of components, provision of services, trade or construction for the offshore wind energy sector, as well as other entities interested in the development of the offshore wind sector.

PIMEW will become a continuation of the mission undertaken by the Polish Offshore Wind Energy Society (PTMEW), will develop its achievements and expand the functions and tasks hitherto carried out by the Society, and will conduct its activities with expanded representation and statutory bodies.

> *– The concept of the so-called PTMEW 2.0 was born in our minds several years ago, but only now the size of the primarily domestic offshore wind sector fully justifies the transition to a new organizational formula – says Jakub Budzynski, Vice President of the PTMEW Board of Directors and member of the PIMEW Founding Committee.*

PIMEW's role for the offshore wind industry

Among the important factors influencing the decision to establish the Polish Offshore Wind Industry Chamber (PIMEW), one should point out first and foremost the need for structured, intensive and continuous work related to legislation, industry standards, organizational and structural support and consolidation of the sector to strengthen the position and comprehensive support for the development of Polish companies in the face of intensive development of the offshore wind energy market in Poland, the Baltic region and the rest of Europe and the world.

PIMEW tasks

PIMEW's tasks will be carried out in a complementary manner, in a number of areas related to the development of the domestic offshore wind energy sector, the promotion of local content in foreign markets and the advocacy of the collective interests of Chamber members in relations with the authorities of the Republic of Poland and the EU.

– So far, in the Society's formula, we have been able to push through and secure in a basic way at the level of national regulations, within the limits of the rather narrow possibilities, amongst others, mandatory for investors active on the Polish market and using the so-called "support system", review of domestic supply chain offerings for offshore wind farm projects, combined with dialogue with potential suppliers or sub-suppliers. The next logical step is i.a. focusing on supporting the process of building close relations in the general contractor-subcontractor direction, intensive promotion of domestic industry in foreign markets or, finally, proactive activity to create systemic tools to support the organic development of domestic suppliers or, for example, help in obtaining collateral for contracts concluded by them – completes Jakub Budzynski.

Therefore, the Polish Chamber of Offshore Wind Energy (PIMEW) will undertake comprehensive cooperation with authorities at all levels to initiate and provide opinions on legal regulations concerning the offshore wind energy sector, conditions and strategic directions for its development in Poland and countries of the European community.

In addition, PIMEW's activities will promote and support the development of companies with sectoral activities in manufacturing, services, trade and construction in Poland and executing their contracts in both Polish and foreign offshore elevator markets. Special attention will be paid to issues related to the development, consultation and implementation of industry standards and norms for the entire sector with constant monitoring of their impact on environmental welfare.

In order to prevent the phenomenon of competence gap, among the activities undertaken by PIMEW will be those for formal and informal education and training of personnel at all levels, understood here as, among others: conferences, courses, seminars, as well as the establishment and awarding of industry certificates, certificates, awards, and conducting publishing activities, as well as the continuation of activities currently implemented by PIMEW to support directional education at an academic level.

Further information on creation of the Chamber is provided by the PTMEW Office at ptmew@ptmew.pl

LIVE WEBINAR

SAVE THE DATE

31.01.2024

TIME: 11^{00} CET

Baltic Sea Offshore Wind

2024 Outlook

Key challenges

BALTIC WIND.EU