



**REGIONAL DIRECTOR
FOR ENVIRONMENTAL
PROTECTION IN GDAŃSK**

Gdańsk, December 3, 2024

RDOŚ-Gd-WOO.420.35.2022.AJ.24

DECISION

Pursuant to:

- Article 104 of the Act of June 14, 1960 – Code of Administrative Procedure (*consolidated text, Journal of Laws of 2024, item 572*),
- Article 75 section 1 point 1 letter c), Article 82 and Article 85 of the Act of October 3, 2008 on providing access to information on the environment and its protection, public participation in environmental protection and on environmental impact assessment (*consolidated text, Journal of Laws of 2024, item 1112*), hereinafter referred to as the EIA Act,
- Article 76 section 1 of the Act of December 17, 2020 on promoting electricity generation in offshore wind farms (*consolidated text, Journal of Laws of 2024, item 182*),
- § 2 section 1 point 5 and § 3 section 1 point 61 of the Regulation of the Council of Ministers of September 10, 2019 on projects that may significantly impact the environment (*Journal of Laws of 2019, item 1839, as amended*),

having considered the application filed by the Investor: MFW Bałtyk I S.A., represented by Ms. Ewa Mozer, ref. No. MFWBI-008/2022/AM, of May 12, 2022 (received on May 18, 2022), for the issuance of the decision on environmental conditions for the project titled: **“Bałtyk I OWF Offshore Wind Farm”** (hereinafter referred to as the “Bałtyk I OWF” or the “Project”),

I hereby decide to

A. Specify the project type and implementation location.

The planned Project involves the construction, operation and decommissioning of the Bałtyk I OWF with maximum installed capacity of 1,560 MW.

The purpose of the Project is to generate electricity using a renewable energy source – wind. The kinetic energy of wind is converted into mechanical energy of the rotating rotor. Mechanical energy is then converted in the generator into low voltage alternating current, which is then transformed to medium or high voltage and transmitted to the offshore substation via internal power infrastructure. The scope of the application for the issuance of the decision on environmental conditions for the Bałtyk I OWF does not include the set of power output equipment (within the meaning of the Act of December 17, 2020 on promoting electricity generation in offshore wind farms) from the planned farm to the National Power System (hereinafter the “NPS”).

The Project will be implemented in the Polish Exclusive Economic Zone at a distance of approx. 81 km from the shore at the level of the Łeba municipality (Pomorskie voivodship).

The surface area of the water region inside of which, in accordance with the permit for erection and use of artificial islands, structures and devices in Polish maritime areas (“PSZW” or “location

decision”), the construction of the OWF is possible, is 128.53 km². The actual surface area of the aforementioned area determined at the stage of preparation of the environmental impact assessment report is slightly larger than that stated in the PSZW, and amounts to approx. 129.2 km².

In the Investor's option, the planned Project consists of:

- no more than 104 offshore wind turbines, the basic elements of which are: the foundation, tower and a set of nacelles and rotor;
- up to 2 offshore substations (OS);
- no more than 250 km of inner array power and telecommunication cables connecting:
 - individual wind turbines with each other (into cable circuits),
 - OS wind turbine group,
 - OSs among themselves.

Table No. 1. The geographical coordinates of the points delimiting the Bałtyk I OWF area according to the location decision.

WGS 84 coordinate system DD°MM'SS.ss"		
Point No.	Longitude (E)	Latitude (N)
1	17°22'48.0842"	55°35'12.9062"
2	17°18'13.6818"	55°33'28.6638"
3	17°18'45.1652"	55°33'13.8068"
4	17°25'18.6708"	55°31'52.4230"
5	17°24'30.7190"	55°28'28.3090"
6	17°23'21.1507"	55°28'58.3008"
7	17°11'27.7087"	55°28'43.9310"
8	17°08'45.0747"	55°29'53.4755"
9	17°08'05.9219"	55°31'45.3848"

B. Determine the environmental conditions for the planned project consisting in the construction of the Bałtyk I OWF and, at the same time, I set out the following conditions for the project implementation.

I. Conditions of using the area at the stage of implementation and operation or use of the project, with particular focus on the necessity of protecting outstanding natural values, natural resources and monuments, as well as on reducing nuisance to neighboring areas.

1. For all stages of the project:

- 1.1. The technologies adopted for performing all works should include procedures in case of transfer of potential pollution to the sea waters, this applies in particular to protection measures against pollution by solid and liquid waste. The project site should be equipped with measures for removing of oil-derivative substances. In the event of a leakage of oil-derivative substances, they should be immediately and continuously removed from the water surface. If it is necessary to deliver construction materials and elements of the farm facilities to the onshore site back-up facilities, they should be delivered in lots of sizes just necessary for performance of construction works, avoiding their long-term storage.
- 1.2. All works related to the project should be conducted in compliance with the provisions of the spatial development plan(s) for the Polish maritime areas applicable in the project implementation area.
- 1.3. If any new, unidentified archaeological objects are discovered, they should be protected against damage as a result of the performed works and the relevant administrative authorities should be informed about the discovery.
- 1.4. At nighttime, the use of strong light sources on vessels and structures of the farm should be limited and the lighting should not be directed upwards.

- 1.5. A coordination center should be provided for supervising the construction, operation and decommissioning of the Bałtyk I OWF.
- 1.6. A plan of safe construction, operation and decommissioning of the Bałtyk I OWF should be prepared.
- 1.7. The implementation, operation and decommissioning of the project should be carried out in a manner that does not pose a threat to people and the environment.
- 1.8. Safety zones should be designated and properly marked and areas temporarily or permanently out of service should be secured.
- 1.9. Appropriate, regular training of vessel crews and employees and subcontractors involved in the construction, operation and decommissioning of the project should be performed.
- 1.10. The equipment and machines operated by persons with specialist training in the field of general and detailed OH&S rules should be ensured.
- 1.11. The exposure to noise, vibrations and impacts of flue gas and dust as well as electromagnetic field for contractors and service technicians should be limited by applying adequate mitigation measures.
- 1.12. Works should be performed using operational equipment, proper maintenance and service of construction machines and equipment should be ensured and proper technical condition of the equipment during operation should be maintained.
- 1.13. Collection of sanitary sewage in a manner adequate to the place of its generation should be ensured.
- 1.14. Procedures should be developed for transferring and storing of substances that may be a source of pollution.
- 1.15. Selective collection of waste (including bilge oils and other hazardous oils) should be ensured during construction and service works, operation and decommissioning of the project.
- 1.16. Sea operations plans and search and rescue plans, as well as evacuation and safety plans and strategies to prevent hazards, including construction disasters, should be developed.
- 1.17. Vessels and power substation should be equipped with means for clean-up of spills of oil-derivative substances or released waste.
- 1.18. Appropriate level of treatment and disposal method of oily waters should be ensured.
- 1.19. Materials and equipment should be used that meet relevant standards and have certificates permitting their use in an appropriate type of environment.

2. For to the project construction stage:

- 2.1. Appropriate mitigation measures should be implemented to ensure that underwater noise levels resulting from construction do not exceed the weighted level of 140 dB re 1 μ Pa_{2s} (SEL_{cum}) for porpoises within the boundaries of the Hoburgs bank och Midsjöbankarna Natura 2000 site (SE0330308).
- 2.2. Regardless of the use of underwater noise suppression technology, a soft-start procedure should precede each piling operation each time.
- 2.3. Subsequent elements of the offshore wind farm should be built in such a manner as to fill the area designated for the project with structures in stages, causing an increasing scarring effect and thus gradually displacing fish, birds and marine mammals from the area designated for the project.
- 2.4. All works must be supervised by an environmental supervision expert who will be responsible for the control and supervision of the construction works, so that the task is carried out in accordance with provisions of environmental protection and nature conservation law and relevant administrative decisions. Experts with expertise on supervision in the fields of ichthyology, ornithology and marine mammals should supervise the works.
- 2.5. To minimize the risk of collision during bird migration, the lighting of construction vessels should be designed in a minimalist way, taking into account the provisions of law and safety rules.

- 2.6. Once the presence of the wrecked vessel WK-0042 is confirmed, construction works should be planned so as to ensure its protection.
- 2.7. After the completion of the construction works, all construction process debris and possible pollution should be removed from the seabed.
- 2.8. Before commencing the construction stage it is essential to prepare and implement appropriate procedures to prevent accidents related to unexploded ordnance, in particular chemical warfare agents. In the event of finding unexploded ordnance or toxic warfare agents, information about their finding should be forwarded to the Director of the Maritime Office in Gdynia and the Hydrographic Office of the Polish Navy.
- 2.9. Proper organization and construction schedule should be ensured.
- 2.10. Appropriate back-up facilities and social conditions with appropriate sanitary facilities for the employees should be organized.
- 2.11. The construction works should be performed with the use of contractors with appropriate experience and licenses and trained personnel.
- 2.12. Construction works should be performed in weather conditions allowing for safe and precise completion of works in accordance with the adopted technology.
- 2.13. Warning systems should be used for vessels not related to the construction of the Bałtyk I OWF, navigation supervision should be ensured and a system of navigation warnings and announcements should be provided, and vessel traffic should be continuously monitored.
- 2.14. The seabed should be checked to precisely determine the location of facilities that could pose a hazard during the works to other users of the maritime areas, and inform the competent services about the existing hazards and act according to applicable guidelines.
- 2.15. Appropriate storage and transport conditions should be ensured for the project components.
- 2.16. Information campaigns concerning the nature and scope of the project as well as the related nuisances and methods of their elimination should be carried out.
- 2.17. Information on the planned scope of works, traffic intensity and the need to exercise caution in the area of the construction site should be made public.
- 2.18. Process commissioning and handover for operation after obtaining all required acceptances and permits should be conducted.

3. For to the project operation stage:

- 3.1. The components of the Bałtyk I OWF should be equipped with elements that minimize the risk of oil getting into the marine environment, including, among others, sealed turbine casings and oil trays.
- 3.2. The offshore substations are to be equipped with oil pans with a capacity of approx. 110% of the amount of oil in the transformers, capable of receiving the total oil volume in case of a leakage.
- 3.3. Turbine lighting that will not attract migrating birds should be used in nighttime. Its emission should be adjusted to the minimum level required by current regulations and safety standards.
- 3.4. Service works and works related to direct operation in weather conditions should be conducted, allowing for their safe and precise performance.
- 3.5. Periodic inspections of individual components should be carried out and the infrastructure should be maintained in good technical condition.
- 3.6. Emergency response plans during project operation time should be developed.

4. For the project decommissioning stage:

- 4.1. Upon completing the operation of the project in question, all above-water elements of the Bałtyk I OWF and other components of the offshore wind farm should be removed in a manner that allows for possible future aggregate extraction in the area of the POM.60.E water region. Before starting the decommissioning process, it is necessary to conduct a wildlife survey of the objects founded in or on the seabed. It is allowed to leave some of the objects founded on the seabed if they constitute a habitat of valuable communities of marine

- organisms after prior agreement with the Director of the Maritime Office in Gdynia.
- 4.2. Removal of offshore wind farm components should be started from one location so that the water region occupied by the structures is released gradually.
 - 4.3. All works must be supervised by an environmental supervision expert who will be responsible for the control and supervision of the decommissioning works, so that the task is carried out in accordance with provisions of environmental protection and nature conservation law and relevant administrative decisions.
 - 4.4. To minimize the risk of collision during bird migration, the lighting of decommissioning vessels should be designed in a minimalist way, taking into account the provisions of law and safety rules.
 - 4.5. After the completion of the decommissioning works, all construction process debris and possible pollution should be removed from the seabed.

II. Requirements regarding environmental protection necessary to be taken into account in the building permit design:

1. Up to 104 offshore wind turbines should be designed with a minimum clearance between the lower rotor blade position and the sea surface of no less than 20 m, maximum rotor diameter of no more than 315 m, and total wind turbine height of no more than 350 m above the sea level.
2. Up to 2 offshore substations (OS) and up to 250 km of inner array power and telecommunication cables should be designed.
3. The maximum seabed area occupied by one turbine foundation should not exceed 2,828 m², and the total maximum seabed area occupied by all foundations should be not larger than 299,708 m².
4. The location of individual turbines should be designed in such a way that a minimum 4 km migration corridor is maintained between the Bałtyk I OWF and the planned Swedish Södra Victoria farm, which will be an area undeveloped by offshore wind turbines.
5. To minimize the risk of collision during bird migration, the lighting of the Bałtyk I OWF should be designed in a minimalist way, taking into account the provisions of law and safety rules.
6. Inner array power cables in the area of the Bałtyk I OWF should be laid in a space-saving manner, under the surface of the seabed, and if this is not possible, other permanent protection measures should be used to allow the safe use of set anchored gillnets.
7. Power cables should be laid at a depth of up to 3 m below the surface of the seabed. The minimum burial depth should be determined on the basis of the characteristics of the seabed, type of sediments (their thermal conductivity) and the type of power grid (size and type of loads, thermal performance). If it is not technically possible to bury the cable, it shall be laid on the seabed surface. Cables laid on the seabed surface should be protected by laying rock material, concrete mattresses, or other process solutions that provide permanent protection from damage.
8. The infrastructure should be designed according to the rules of minimizing the environmental impact, in particular in terms of safety principles, emission of noise, electromagnetic radiation, emission of substances into the air and ensuring proper hygienic and health conditions and fire safety.
9. The OWF should be equipped with a designed monitoring system for common crane flights, consisting of a radar and camera system, as well as a system for shutting down individual wind turbines or groups of wind turbines, triggered in the event of detected common crane flights by the monitoring system.

III. Environmental protection requirements in the scope of limiting the cross-border impact on the natural environment:

1. Appropriate mitigation measures should be implemented to ensure that underwater noise levels resulting from construction do not exceed the weighted level of 140 dB re 1 µPa2s (SELcum) for porpoises within the boundaries of the Hoburgs bank och Midsjöbankarna Natura 2000 site

(SE0330308) in the period between May and October.

2. Piling should be commenced with a soft-start, to be followed by a period of acceleration. The duration of the soft-start procedure and subsequent acceleration should be sufficient to ensure that porpoises are not exposed to underwater noise levels exceeding the TTS and PTS threshold values. The minimum time for soft-start and subsequent acceleration is 20 minutes.
3. Underwater noise measurements should be carried out at the boundary of the aforementioned Natura 2000 site during foundation piling to control compliance with the imposed noise limitation.
4. Cumulative effects from other offshore wind farm projects should be avoided through cooperation and project planning. Simultaneous piling or seismic surveys should be avoided.

C. Impose on the applicant the following obligations:

1. Obligations of the applicant in the scope of actions minimizing and mitigating negative environmental impacts:

A. In connection with the need to reduce piling noise and the need to reduce the impact on birds, fish and marine mammals:

- a) Gradually carry out construction works for individual stages of foundations for wind turbine structures in order to limit the work area, i.e. construct wind turbines successively adjacent to each other, starting from one place, to gradually fill the water region with structures.
- b) Acoustic devices for deterrence, such as pingers, should be used. Acoustic deterrent devices are to be active while marine mammals are being observed prior to pile driving and to be turned off when pile driving activities begin.
- c) In order to reduce the impact of noise on ichthyofauna, ornithofauna and marine mammals, piling should be started using the soft-start procedure to enable fish, birds and marine mammals to leave and move away from the area of works being performed.
- d) Measures should be taken to coordinate the execution schedules of the Bałtyk I OWF and other possible offshore wind farm projects carried out in the vicinity, so as to prevent the accumulation of adverse environmental impacts. In order to reduce the noise caused by the piling process, works should be performed simultaneously in up to two locations. This applies to the implementation of the Bałtyk I OWF and neighboring offshore wind farms. Piling works at the Bałtyk I OWF should be carried out in such a manner so that prior to the commencement of works carried out in its area, consisting in driving foundation piles into the seabed, the piling works on other planned wind farms in the direct vicinity are also taken into account so that the number of simultaneous piling works is not greater than two.
- e) Visual observations should be carried out by qualified marine mammal observers (MMOs) from onboard a vessel in accordance with the methodology specified by the JNCC and Passive Acoustic Monitoring (PAM) based on the use of a set of hydrophones (PAM detectors) placed in the water column. The duration of the search for mammals before piling should be at least 30 minutes.
- f) During piling, noise mitigation systems should be used, e.g. air/bubble curtains or other technologies to ensure that the noise level that can induce a temporary threshold shift (TTS) in porpoises, i.e. a level of 140 dB re 1 μ Pa_{2s} (SEL_{cum}) weighted by the VHF function (for cetaceans with hearing abilities in the very high frequency range of sounds), is not exceeded at the boundary of the Hoburgs bank och Midsjöbankarna Natura 2000 site. In the event that the noise measurements result in exceeding the above mentioned threshold, the pile driving should be interrupted and additional minimizing measures should be taken to achieve the above mentioned limit noise mode. The Regional Director for Environmental Protection in Gdańsk shall be immediately informed about such situation and further measures applied, not later than 7 days after the occurrence of the event.

2. Obligations of the applicant related to monitoring of the project environmental impact:

2.1. Scope of pre-investment monitoring (prior to the commencement of the construction).

- 1) Monitoring of seabirds should include counting of birds staying in the area of the planned OWF and

in the reference area during the day.

- a. The route of the survey cruise should be marked out in such a way as to include the 2-NM buffer zone counted from the boundaries of the development area and so as to assess the changes in the density of birds staying at different distances from the future wind turbines.
 - b. These surveys must cover, first of all, the period of the most abundant occurrence of birds in the southern Baltic Sea, i.e. they should last from October to May with a frequency of not less than one survey session per month. In the remaining months the population size of a bird group in the area of the Bałtyk I OWF is low and in summer it is enough to carry out two survey sessions, one in August and one in September.
 - c. The dates of survey sessions should be synchronized so that counts in both water regions are performed, if possible, in a single survey session, to ensure comparability of results. These surveys should be carried out one year prior to the commencement of the OWF construction.
- 2) Monitoring of porpoise occurrence is carried out using C-POD devices, or equivalent monitoring technology available at the time of the survey.
- a. The devices (three to six devices) should be deployed in the Bałtyk I OWF area, preferably in the same (selected) locations as during the pre-investment monitoring. Additional devices should be arranged at two points within a 20-kilometer radius from the boundaries of the offshore wind farm, including in the Hoburgs bank och Midsjöbankarna Natura 2000 site (SE0330308) (following the agreement with Swedish authorities). If the Swedish party does not agree to place the device in the Hoburgs bank och Midsjöbankarna Natura 2000 site, the device should be placed in another location designated by a marine mammal specialist.
 - b. Start monitoring of porpoises not later than 6 months prior to the planned commencement of construction works.

2.2. Scope of monitoring at the construction stage:

- 1) Underwater noise monitoring:
- a. At the boundary of the Hoburgs Bank och Midsjöbankarna Natura 2000 site (SE0330308), where, in view of the porpoise that is the subject of the area protection, the level of permissible underwater noise must not exceed 140 dB re 1 μ Pa_{2s} (SEL_{cum}) weighted by the VHF function (for cetaceans with hearing abilities in the very high frequency range of sound).
 - b. The location of the noise measurement station should be determined in a manner enabling assessment of the underwater noise level at the boundary of the Hoburgs Bank och Midsjöbankarna Natura 2000 site (SE0330308) for the works performed in the Bałtyk I OWF area.
 - c. Noise measurements shall be performed using calibrated hydrophones in the frequency range from 10 Hz to 20 kHz.
 - d. The results of underwater noise monitoring should be provided to the Regional Director for Environmental Protection in Gdańsk in the form of periodic reports referred to in section G of the decision. If exceeding the indicated noise levels is demonstrated, impact preventive or mitigation measures should be proposed together with indication of the methods of their implementation and results control.
- 2) Porpoise occurrence monitoring using C-POD devices or equivalent monitoring technology available at the time of the survey throughout the construction phase, in accordance with the pre-investment (pre-construction) monitoring methodology, with placement of devices, where possible, at the same stations.

2.3. Scope of post-development monitoring:

1. Monitoring of ichthyofauna shall be carried out both during the operation of the OWF and after its decommissioning. The surveys should be performed in spring and summer – after one year and 5 years from the completion of the construction and one year after the decommissioning phase.
- a. As part of the monitoring, a set of survey tools should be used in the form of multi-panel bottom meshes, and in the case of early development stages – an ichthyoplankton mesh of Bongo type.
 - b. The survey stations should be located in both the OWF Area and at a certain distance from it, on the water region not intended for offshore energy generation and characterized by similar parameters of the marine environment (depth, distance from the shore, etc.).

2. The monitoring of migratory birds should include both the observation of the flight with a radar and the counting of birds staying in the OWF area during the day.
 - a. Radar surveys should target the trajectory of birds flying towards the OWF and their response to the barrier in the form of an OWF they encounter, as well as to determine the intensity of migration in the OWF Area and in its immediate vicinity in order to enable comparative analysis with other surveys that are available in this respect, as well as providing new data for analyzing the barrier effect and the frequency of avoidance (birds bypassing).
 - b. Radar surveys should be carried out during the migration period, in the months from March to May and from August to mid-November.
 - c. The monitoring should consist of simultaneous visual and radar and acoustic observations (at night, in order to identify species), allowing identification not only of the flight direction and response, but also of the species. As an alternative to acoustic observations, the farm could be equipped with a system that provides identification not only of the direction of flight, but also of the species of migratory birds.
 - d. The survey stations should be located on a permanent platform (e.g. OWF substation) or an anchored vessel so that to allow for observation of the OWF from the direction from which birds arrive at a given migration stage (on the south-western side of the OWF in spring and on the north-eastern side of the OWF in autumn).
 - e. In each migration season, observations should be carried out for not less than 20 days in 2–5-day sessions, distributed evenly throughout the migration season.
 - f. Monitoring should to be performed in two cycles per year, resulting from two birds migration periods, i.e. from March to May and from August to November, in 4 monitoring sessions:
 - 2 survey cycles each (spring and autumn) during migration periods for 2 years after the commencement of the farm operation.
3. The monitoring of seabirds should include counting of birds staying in the area of the OWF and in the reference area during the day. The route of the survey cruise should be the same or very similar as in the pre-investment monitoring (prior to the commencement of the construction).
 - a. These surveys must cover, first of all, the period of the most abundant occurrence of birds in the southern Baltic Sea, i.e. they should last from October to May with a frequency of not less than one survey session per month (optimally two survey sessions per month). In the remaining months the population size of a bird group in the area of the Bałtyk I OWF is low and in summer it is enough to carry out two survey sessions, one in August and one in September.
 - b. The dates of survey sessions should be synchronized so that counts in both water regions are performed, if possible, in a single survey session, to ensure comparability of results.
 - c. These surveys should be carried out for 2 consecutive years (2 first years of the OWF operation stage), if the construction is not staged. Otherwise, these surveys should be carried out after the completion of the first construction phase and after the completion of the construction of the entire OWF.
4. Monitoring of the presence of porpoises should be carried out for at least 2 years after the completion of the construction of the planned project using the same methods as during the pre-investment monitoring.
5. Monitoring of benthic organisms aimed at the survey of colonization of artificial hard substrates by animal and plant periphyton (epiphyte) communities.
 - a. Benthos monitoring surveys:
 - The program of monitoring surveys of benthos in the Bałtyk I OWF Area in the scope of surveys of flora and periphyton will be carried out on 5 underwater structural elements of wind turbines and the accompanying infrastructure.
 - At each surveyed facility, measurements of the thickness of the cover by marine organisms should be performed, as well as film and photographic documentation of the entire riser overgrown by macroalgae and periphyton should be provided.
 - The surveys will be carried out once a year in June. For the first time, the surveys should be carried out after the first year after the commissioning of the Project. Subsequent surveys

should be performed after 5 and 10 years. The last surveys should be performed one year before the planned disassembly of the wind farm.

b. Macrozoobenthos monitoring surveys:

- The surveys should be performed within 5 foundations or support structures of wind turbines selected so that they represent possible staging of the construction (structures constructed at different stages) and that they are located in different parts of the Bałtyk I OWF area.
- In the vicinity of a single foundation or support structure, 6 stations are to be designated, including 3 stations on the transect of the main profile (in the near-bed current axis) at a distance of 15, 25, 100 and 200 m from the foundation or support structure, and 3 stations on the transect perpendicular to the main profile (reference profile) at the same distances.
- The surveys should be performed after completion of the construction of the structures selected for monitoring, once in a period similar to the survey (from May to June). The first surveys should be performed within the indicated period after completion of the construction, and the following surveys after 2 and 4 years since the first survey. The last surveys should be performed one year before the planned disassembly of the wind farm.

6. Monitoring of bats aimed at determination of the species composition and population size.

- a. The equipment used should allow automatic recording and meet the minimum requirements for equipment used for surveys at the stage of wildlife survey.
- b. Post-development monitoring should cover a period of 3 years – the first year after the wind turbine is handed over for operation as well as the 2nd and 3rd year of the OWF operation. Monitoring must cover the period of spring migration (April–May) and autumn migration (August–October).

D. Ensure environmental supervision over the project implementation:

1. the project should be implemented under environmental supervision, led by a person(s) with knowledge and experience in ornithology and marine mammal biology and ecology. The supervision should include:
 - a) training for employees to supervise the construction site;
 - b) protective indications during the performance of the works;
 - c) supervision over following the provisions of the decision on environmental conditions as regards the compliance with the Act on nature protection;
 - d) supervision over the implementation of the provisions of the environmental decision as regards underwater noise emission.
2. An environmental protection specialist responsible for development and application of a rapid response procedure in emergency situations (e.g. contamination of sea waters with oil substances from transformers and vessels) at the farm site, for and training of persons participating in rescue of animals in contact with oil-contaminated waters.

E. Do not state the necessity of establishing the limited use area.

Wind turbines are not included in the catalog of projects for which a limited use area may be established. As part of the project, subsea power lines and substations will be constructed, for which the regulations provide for the possibility of creating such an area. It is not expected that any environmental quality standards may be violated by these facilities, and therefore there is no need to establish a limited use area for the project.

F. Find it necessary to carry out a reassessment of the environmental impact as part of the procedure for the issuance of the building permit decision, with particular emphasis on the following:

1. Determination of the methods of foundation and accurate determination of the area permanently occupied for foundations and, based on this, assessment of the impact of this project stage on various components of the natural environment, along with an analysis of the method of maintaining the structural components of the farm.

2. Determination of the location and parameters of individual turbines and platforms and the impact of the above-mentioned elements on the availability of this area for animals, including in particular sea birds and marine mammals, and determine the impact on long-distance migration routes of birds and local flights.
3. Determination of the key parameters of wind turbines.
4. Indication of exact locations and parameters of offshore substations, as well as the type and size of foundations on which they will be founded.
5. Model calculations as regards the range of propagation and concentration of suspended matter in water as a result of works disturbing bottom sediments.
6. Model calculations as regards underwater noise propagation, which will be based on the size and type of wind turbine foundations.
7. Model calculations as regards the bird collision rate, which will be based on the parameters of wind turbines in the Bałtyk I OWF area.
8. Proposed solutions to minimize the impact of noise and to reduce its impact range, adequate to the adopted foundation methods.
9. Analysis of the appropriateness of using a system of temporary shutdown of individual wind turbines or groups of wind turbines during periods of intense migration for a larger number of bird species flying at collision height.
10. Indication of detailed methodology of the ornithological monitoring at the project implementation stage.
11. Indication of detailed methodology of pre-execution monitoring (prior to the commencement of construction works) as regards seabirds.
12. Indication of detailed methodology of post-development monitoring in the scope of: ichthyofauna and seabirds.

G. Post-execution analysis.

Present the post-execution analysis containing conclusions from the performed execution and post-execution monitoring within 6 months from the end of the last season as part of the post-execution survey. And, after each year of partial monitoring, reports on individual monitoring stages should be submitted to the Regional Director for Environmental Protection in Gdańsk within 3 months.

H. Request that the characteristics of the project be Appendix No. 1 to this decision.

STATEMENT OF GROUNDS

On May 18, 2022, the Regional Director for Environmental Protection in Gdańsk received an application from the Investor: MFW Bałtyk I S.A., represented by Ms. Ewa Mozer, ref. No. MFWBI-008/2022/AM, of May 12, 2022, for the issuance of the decision on environmental conditions for the project titled: **"Bałtyk I OWF Offshore Wind Farm"**.

The above application was accompanied by:

- 1) Project information sheet (3 copies + CD version);
- 2) A map on a scale ensuring legibility of the presented data, with a marked planned area where the project will be implemented and marked planned area where the project will have an impact, together with a record of the map in an electronic form;
- 3) Powers of attorney for: Ms. Ewa Mozer, Ms. Anna Marczak, Ms. Marta Porzuczek and Ms. Joanna Makowska to represent the company MFW Bałtyk I S.A.;
- 4) Proof of payment of stamp duty for issuance of the decision (PLN 205) and powers of attorney (PLN 68).

Pursuant to Article 74 section 3a of the EIA Act, the party to the procedure for issuing the decision on environmental conditions is the applicant and the entity having the right in rem in the real

property located in the area affected by the project in the option proposed by the applicant, subject to Article 81 section 1 of the EIA Act. This area shall mean: the planned area where the project will be implemented and the area located at a distance of 100 m from the boundaries of this area; plots on which environmental quality standards would be exceeded as a result of the project implementation, operation or use, or plots located within the range of significant impact of the project, which may introduce restrictions in the development of the real property in accordance with its current purpose. As it results from the environmental impact assessment report submitted in the case, the project in question will be implemented in the maritime area of the Republic of Poland (Exclusive Economic Zone) at a distance of 81 km from the sea shore. In accordance with Article 2 section 2 of the Act of March 21, 1991 on maritime areas of the Republic of Poland and maritime administration (*consolidated text, Journal of Laws of 2024, item 1125*), the Exclusive Economic Zone is not part of the territory of the Republic of Poland. From the well-established jurisprudence it results that no entity may have ownership rights to the waters, the airspace above those waters and the seabed of the waters of the Exclusive Economic Zone or to the inside of the Earth. Moreover, the project in question will be implemented within the boundaries of the Development Area and the impacts of the project in question will not result in exceeding the environmental quality standards, both within or outside the boundaries of the area of its implementation. Therefore, the Investor, i.e. MFW Bałtyk I S.A. with its registered office in Warsaw, is the only entity to which the rights of a party may be assigned in the procedure in question.

In consequence of the above-mentioned notice of May 27, 2022, ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.1, the Investor was informed by the local authority about the initiation of the procedure and the possibility to read the documents and submit comments and requests, if any. The information on the application was included on the publicly accessible data list Ekoportal (www.ekoportal.pl) under number 186/2022 maintained on the basis of Article 21 of the EIA Act.

Pursuant to § 2 section 1 point 5 of the Regulation of the Council of Ministers of September 10, 2019 on projects which may have significant environmental impact (*Journal of Laws of 2019, item 1839, as amended*), the project planned is classified as “*plants using wind energy for the generation of electricity with a total nominal capacity of the wind turbines of not less than 100 MW and located in the maritime areas of the Republic of Poland*”.

In addition, helipads qualify as projects with a potentially significant impact on the environment (§ 3 section 1 point 61 “*airports other than those listed in § 2 section 1 point 30 or helipads, excluding helipads referred to in the Regulation of the Minister of Health of June 27, 2019 on the hospital emergency department (Journal of Laws of 2021, item 2048)*”), which could potentially be installed on offshore substations.

In consequence of the foregoing, pursuant to Article 71 section 2 point 1) of the EIA Act, the implementation of the project requires a decision on environmental conditions.

The project shall be located in the southwestern part of the Baltic Sea in the Polish EEZ, in the area indicated in the obtained permit for the erection and use of artificial islands, structures and devices in Polish maritime areas. The Bałtyk I OWF area is located in the Polish Exclusive Economic Zone, at the height of municipalities of Smołdzino and Łeba, at a minimum distance of approx. 81 km from the coastline.

Bearing in mind that the project may exert a permanent impact on the environment and due to its location in a maritime area, pursuant to Article 75 section 1 point 1), letter c) of the EIA Act, the authority competent to analyze the case is the Regional Director for Environmental Protection in Gdańsk.

Pursuant to Article 6 of the EIA Act, the requirement for approval or providing opinion does not apply if the authority in charge of the procedure is also the approving authority or authority providing the opinion. In this case, the authorities competent to give opinions/approvals are: the State Border Sanitary Inspector in Gdynia and the Director of the Maritime Office in Gdynia.

Therefore, acting on the basis of Article 69 section and Article 70 in conjunction with Article 71

section 1 and section 2 point 2, with letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.3. of May 31, 2022, the local authority asked the State Border Sanitary Inspector in Gdynia and the Director of Maritime Office in Gdynia for determination of the scope of the environmental impact assessment report.

The State Border Sanitary Inspector in Gdynia in letter ref. No. SE.ZNS 80.4910.14.22 of June 24, 2022 (received on June 30, 2022), expressed its opinion stating that, as quoted: *“the environmental impact assessment should be carried out and the report should be prepared within the statutory scope”*.

The Director of the Maritime Office in Gdynia, in letter ref. No. INZ.8103.35.3.2022.IKO of March 24, 2022 (received on March 31, 2022), decided to: *“give an opinion that the scope of the environmental impact assessment report for the project in question should meet the conditions specified in Article 66 of the EIA Act”*. The opinion of the Director of the Maritime Office in Gdynia was fully taken into account when determining the scope of the environmental impact assessment report.

In accordance with Article 69 section 1 of the aforementioned EIA Act, the applicant may, when applying for a decision on environmental conditions for projects that may always have a significant impact on the environment, submit a project information sheet along with an application for determining the scope of the report. According to section 2 of this provision, the determination of the scope of the report is mandatory if the project may have a cross-border impact on the environment.

The planned Bałtyk I OWF required a cross-border environmental impact procedure due to the possibility of impacts crossing the borders of Poland – the area of the Bałtyk I OWF offshore wind farm borders directly the Swedish EEZ and is located at a distance of about 47 km from the Danish EEZ. Poland's obligations to conduct cross-border environmental impact assessments are also defined by the Convention on Environmental Impact Assessment in a Transboundary Context, drawn up in Espoo on February 25, 1991 (the Espoo Convention).

Acting on the basis of Article 108 section 1 point 2) of the EIA Act, the local authority, by virtue of letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.2 of May 27, 2022, informed the General Director for Environmental Protection about the possibility of cross-border environmental impact of the planned project and provided the General Director for Environmental Protection with the project information sheet.

Acting on the basis of Article 108 section 1 point 1) of the EIA Act, the Regional Director for Environmental Protection in Gdańsk by decision ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.3 of May 31, 2022, claimed the necessity to conduct proceedings on the cross-border impact of the above-mentioned project on the environment, and imposed on the Investor the obligation to prepare and submit the appropriate documentation specified by the provisions of the EIA Act. On July 29, 2022, the Investor, in letter ref. No. MFWBI-021/2022/AM of July 28, 2022, submitted to this office an application for a decision on environmental conditions and a project information sheet prepared in Swedish and Danish in hard copy and electronic form. In addition, the Investor attached the above-mentioned documentation in English with a request to inform Lithuania, Latvia, Finland and Estonia about the planned project.

By virtue of letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.5 of August 4, 2022, the Regional Director for Environmental Protection in Gdańsk forwarded the documents submitted by the Investor to the General Director for Environmental Protection, as the authority responsible for coordinating the procedure of environmental impact assessment in a transboundary context.

By virtue of letter ref. No. DOOŚ-TSOOŚ.440.2.2022.MT.1 of August 18, 2022, the General Director for Environmental Protection notified, pursuant to Article 3 of the Espoo Convention and Article 7 of Directive 2011/92/EU, the Environmental Protection Agency of the Ministry of Environment of Denmark and the Swedish Environmental Protection Agency of the planned project.

In letter ref. No. DOOŚ-TSOOŚ.440.2.2022.MT.3 of October 17, 2022, the General Directorate for Environmental Protection informed the local authority that the Swedish Environmental Protection Agency, by virtue of letter ref. No. NV-07646-22 of September 26, 2022, and the Environmental Protection Agency of the Ministry of Environment of Denmark, by virtue of the letter of October 3, 2022, expressed interest in participating as the Affected Party in the procedure on the cross-border environmental impact of the project in question, and thus the need to conduct a complete environmental impact assessment in a transboundary context. The Swedish party and the Danish party provided the

relevant comments submitted to the Project Information Sheet, which the local authority took into account when determining the scope of the environmental impact assessment report. The key topics raised by the Affected Parties during the Espoo report consultations included:

- the risk of spreading of invasive alien species (IAS) at the construction stage;
- cumulative impacts on Natura 2000 sites with loss of habitat areas and loss of habitat features/functions (Hoburgs bank och Midsjöbankarna (SE0330308), long-tailed duck *Clangula hyemalis*, black guillemot *Cepphus grylle*, common harbor porpoise *Phocoena phocoena*, reefs (blue mussel *Mytilus edulis*), sandbar);
- noise emissions and their impact on marine mammals (*Phocoena phocoena*) and fish (e.g. Baltic herring *Clupea harengus*; sprat *Sprattus sprattus*);
- cumulative impact on oxygen deficit in the deep waters of the Baltic Sea and impact on water mixing in the surface layer;
- risk of impact on surface water bodies (coastal waters) according to the Water Framework Directive (e.g. on S Ölands kustvatten (WA41402327));
- impacts on migratory, nesting and overwintering birds;
- shipping routes between Sweden and Poland in the Baltic Sea;
- risks associated with suspended sediments in Natura 2000 protected areas.

On December 29, 2022, the Regional Director for Environmental Protection in Gdańsk, by virtue of decision ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.7. (*Ekoportal*, under number 643/2022) determined the scope of the environmental impact assessment report for the project titled “Bałtyk I OWF Offshore Wind Farm”, applied for by MFW Bałtyk I S.A. in Warsaw.

By virtue of letter ref. No. DOOŚ-TSOOŚ.440.2.2022.MT.4 of January 12, 2023, the Regional Director for Environmental Protection in Gdańsk forwarded to the Swedish Environmental Protection Agency and the Environmental Protection Agency of the Ministry of Environment of Denmark the aforementioned decision of the Regional Director for Environmental Protection in Gdańsk.

On March 31, 2023, the Regional Director for Environmental Protection in Gdańsk, by virtue of decision ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.8. (*Ekoportal*, under number 246/2023), at the request of Ms. Anna Marczak, representing the Investor: MFW Bałtyk I S.A., ref. No. MFWBI-006/2023/AM of March 17, 2023 (supplemented on March 22, 2023), amended the decision of December 29, 2023 with regard to the surveys to form the basis for the environmental impact assessment.

Acting pursuant to Article 63 sections 5 and 6 of the EIA Act, the local authority, by virtue of decision ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.9. of April 6, 2023, suspended the procedure until the applicant submitted the environmental impact assessment report.

On November 21, 2023, by virtue of letter ref. No. MFWBI-020/2023/EM of November 20, 2023, the Investor submitted to the case file the environmental impact assessment report for the project titled: “Bałtyk I OWF Offshore Wind Farm” with Appendices in hard copy and electronic versions, as well as the Espoo report in Polish, Swedish and Danish in hard copy and electronic versions. The EIA report was entered in the publicly available Ekoportal list (<http://www.ekoportal.pl>), under number 965/2023. In view of the above, by virtue of decision ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.10 of December 1, 2023, the local authority resumed the suspended procedure. In turn, by virtue of letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.12 of December 13, 2023, in accordance with Article 15 section 1 of the Act of July 13, 2023 on the amendment to the Act on access to information on the environment and its protection, public participation in environmental protection and on environmental impact assessments and certain other acts (*Journal of Laws, item 1890*), requested the Investor to submit two additional copies of the EIA report in hard copy version (one copy for each approving authority). The Investor submitted the relevant documents with letter ref No. MFWBI-021/2023/AM of December 20, 2023.

By virtue of letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.11 of December 1, 2023, the local authority forwarded the Espoo report on the environmental impact of the project drawn up in Polish, Swedish and Danish (in electronic form), with Appendices, to the General Director for Environmental Protection. Subsequently, by virtue of letter ref. No. DOOŚ.TSOOŚ.440.2.2022.MT.5 of December 8, 2023, the General Director for Environmental Protection submitted the documentation in accordance with Articles 4 and 5 of the Espoo Convention for cross-border consultation.

Pursuant to Article 62 of the EIA Act, in the process of the project environmental impact assessment, the following shall be determined, analyzed and assessed:

- 1) the direct and indirect impact of the given project on:
 - a) environment and people, including human health and living conditions,
 - b) tangible property,
 - c) monuments,
 - ca) landscape, including cultural landscape,
 - d) interaction between the elements referred to in letters a-ca,
 - e) availability of mineral deposits;
 - 1a) risk of serious failures as well as natural and construction disasters;
- 2) possibilities and methods of preventing and reducing the negative impact of the project on the environment;
- 3) required scope of monitoring.

As part of the assessment of the project's impact on the Natura 2000 site, the project's impact on Natura 2000 sites is determined, analyzed and assessed while taking into account also the project's cumulative impact with other implemented, executed or planned projects.

In accordance with the definition contained in Article 3 section 1 point 8 of the EIA Act, such an assessment includes in particular: 1) verification of the project environmental impact report, 2) obtaining opinions and agreements required by law, 3) ensuring the possibility of public participation in the procedure. The above activities are the main determinants for the submission of evidence in this case.

Pursuant to Article 77 section 1 points 2 and 4 of the EIA Act, the approval is not required unless the authorities have previously expressed their opinion that there is no need to carry out an environmental impact assessment. In view of the above, in letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.13 of December 28, 2023, the local authority requested the Director of Maritime Office in Gdynia and the State Border Sanitary Inspector in Gdynia to agree on the conditions for the implementation of the project in question.

The State Border Sanitary Inspector in Gdynia, by virtue of letter ref. No. SE.ZNS.80.4912.20.23 of January 25, 2024, assessed the conditions of project implementation.

The Director of the Maritime Office in Gdynia, in letter ref. No. INZ.9202.188.1.2024.AD of January 29, 2024, did not agree on the conditions of implementation for the aforementioned project, while indicating the need to supplement the submitted documents.

On March 6, 2024, the General Director for Environmental Protection provided information about the positions received from Sweden and Denmark in letter ref. No. DOOŚ-TSOOŚ.440.2.2022.JP.6 of March 6, 2024, in order for the applicant to prepare replies to questions of the Affected Parties.

In connection with the above, in letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.14 of March 21, 2024, the Regional Director for Environmental Protection in Gdańsk provided the Applicant with the above information, in order to translate it into Polish and prepare a reply to the comments of the Affected Parties. At the same time, the local authority requested the clarification of the information contained in the EIA report, including a reference to the letter ref. No. INZ.9202.188.1.2024.AD of January 29, 2024

from the Director of the Maritime Office in Gdynia.

On April 5, 2024, the Applicant, in letter ref. No. MFWBI-010/2024/AM of April 5, 2024 provided translations into Polish of the positions of Sweden and Denmark communicated in the procedure on the cross-border environmental impact of the project titled: "Bałtyk I OWF Offshore Wind Farm". With regard to the Swedish Party's comments, by virtue of the letter of February 23, 2024, the Swedish Environmental Protection Agency provided the official position of Sweden on the EIA report with comments from the following parties:

- Kalmar Regional Administrative Council – issues were raised concerning the impact of the offshore wind farm on migratory birds and bats including the impact on bird populations resulting from estimated death rate as a result of collisions, the cumulative impact of the barrier effect on migratory birds in the Baltic Sea, the impact on the Södra Midsjöbanken Natura 2000 site, cross-border impact in the event of oil spills and toxic pollution on species, in particular: *Clangula hyemalis* and *Cephus grylle*, the impact of noise on behavioral responses in the Baltic harbor porpoise, the cumulative impact of underwater noise caused by other OWF projects and shipping routes.
- Gotland Regional Administrative Council – issues were raised regarding the lack of sufficient description of impacts in relation to fish species specific to the different habitat types of the Hoburgs bank och Midsjöbankarna protected area, to the common porpoise (*Phocoena phocoena*) and to seabirds. In addition, insufficient information was pointed out regarding the impact on habitats and the marine substrate or cumulative impacts.
- The Swedish Agency for Marine and Water Management – issues were raised regarding, i.a., the project impact on the porpoise and fish while driving the foundations into the seabed, also in the context of cumulative impacts and the necessity to apply effective solutions in this respect.
- The Swedish Meteorological and Hydrological Institute (SMHI) – issues were raised such as the lack of modeling results of the potential impact of the Bałtyk I OWF on hydrography, especially with regard to the proximity of the "Hoburgs bank och Midsjöbankarna" Natura 2000 site (SE0330308), including in a cumulative context.
- The Swedish University of Agricultural Sciences – issues were raised regarding, i.a., the potential effects of an artificial reef and the exclusion from field surveys and construction works, critical periods of the year for the critically endangered Baltic porpoise and long-tailed duck.
- The Geological Survey of Sweden (SGU) – the comments focused on geological issues, mainly the potential occurrence of environmental pollutants in the sediments and the effects of turbidity and sediment dispersion that may arise.
- The Swedish Transport Agency – the issues raised concerned the impact on the existing shipping in the area and the possibility of continuing shipping in the area after the project.
- BirdLife Sweden – raised questions concerning the impact of the project on bird species, migration routes, feeding sites, the formation of a barrier effect including in the context of cumulative impact.

The Danish Environmental Protection Agency provided the official position of Denmark on the EIA report with annotations from the following entities:

- The Danish Ministry of Defense Estate Agency: has no comments, but nevertheless wishes to be kept informed about further developments in the case in accordance with the Espoo Convention procedure, including, i.a., decisions on the final design of the offshore wind farm (wind turbine positions, number and height) so that the Ministry has the opportunity to object if the parameters of the project are changed to the detriment of the Ministry of Defense.
- The Environmental Protection Agency; units: Marine and Water Environment; has no comments, but wishes to participate in the further environmental impact assessment process.

Subsequently, a supplement to the content of the EIA report was submitted on April 16, 2024 by virtue of letter ref. No. MFWBI-014/2024/AM of April 16, 2024. In letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.15 of May 6, 2024, the local authority forwarded the supplement to the Director of the Maritime Office in Gdynia.

The reference to the comments of the Swedish Party was provided by the Investor on May 13, 2024 in Polish, Swedish and English language versions, together with Appendices which were forwarded by the local authority to the General Director for Environmental Protection in letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.16 of May 21, 2024.

In letter ref. No. DOOŚ-TSOOŚ.440.2.2022.JP.9 of July 15, 2024, the General Director for Environmental Protection notified the local authority that the Polish Party, by virtue of letter ref. No. DOOŚ-TSOOŚ.440.2.2022.JP.7 of May 29, 2024 and by virtue of letter ref. No. DOOŚ-TSOOŚ.440.2.2022.JP.8 of May 29, 2024, forwarded replies to comments submitted to the environmental impact assessment documentation for the project to Sweden and Denmark, respectively. At the same time, the aforementioned letter indicated information on the results of the procedure.

In the case of Denmark, the Polish Party informed in its position paper that the comment submitted additionally (in the absence of other comments) by the Danish Ministry of Defense Estate Agency will be considered when issuing the decision on environmental conditions. It was also reported that the Polish Party considers the stage of cross-border consultations with the Danish Party for the planned project to be completed.

In the case of Sweden which submitted a number of substantive comments, explanations prepared by the Investor were provided to the Swedish Party.

On July 4, 2024, the Swedish Party submitted by e-mail its position on the provided clarifications. In its position, the Swedish Party states that after reviewing the clarifications, it considers the consultation stage for the planned project to be complete. Comments from 3 Swedish entities that participated in the review of the clarification were attached to the position. Of these entities, further comments were submitted by BirdLife Sweden, but, as stated in the cover letter about the end of the consultation stage, they do not form the position of the Swedish Party within the framework of the cross-border environmental impact procedure. In letter ref. No. DOOŚ-TSOOŚ.440.2.2022.JP.10 of July 15, 2024, the Polish Party provided the Swedish Party with information on the completion of cross-border consultations, indicating that the position of BirdLife Sweden, attached to the letter of July 4, 2024, will be forwarded for consideration by the authority conducting the procedure on the decision on environmental conditions for the project in question, and provided information on the course of the next stages of the procedure.

In connection with the submission of additional clarifications on April 5, 2024, April 16, 2024 and May 13, 2024, the Regional Director for Environmental Protection in Gdańsk, in letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.17 of May 21, 2024, while conducting the procedure on the issuance of the decision on environmental conditions, again requested an opinion on the conditions for implementation of the above-mentioned project from the State Border Sanitary Inspector in Gdynia.

The State Border Sanitary Inspector in Gdynia, in letter ref. No. SE.ZNS.80.4912.2.24 of June 21, 2024 upheld the position contained in opinion ref. No. SE.ZNS.80.4912.20.23 of January 25, 2024.

In connection with the submission of additional clarifications on April 5, 2024 and May 13, 2024, the Regional Director for Environmental Protection in Gdańsk, in letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.17 of May 21, 2024, while conducting the procedure on the issuance of the decision on environmental conditions, forwarded them to the Director of the Maritime Office in Gdynia for use in taking a position on the matter. The Director of the Maritime Office in Gdynia, by virtue of letter ref. No. INZ.9202.188.2.2023.AD of August 2, 2024, approved the conditions of implementation of the project in question. In decision ref. No. INZ.9202.188.3.2023.AD of August 14, 2024, the Director of the Maritime Office in Gdynia corrected ex officio an obvious clerical error in decision ref. No. INZ.9202.188.2.2023.AD of August 2, 2024.

Pursuant to Article 79 of the EIA Act, prior to issuing the decision on environmental conditions, the authority competent to issue this decision ensures the possibility for the public to participate in the procedure under which the environmental impact assessment is to be conducted. Consequently, on

August 16, 2024, in announcement ref. No RDOŚ-Gd-WOO.420.35.2022.AJ.22.8, the Regional Director for Environmental Protection in Gdańsk published the information on submission of the EIA report together with the information on the possibility of reviewing the EIA report and on the right to submit comments and requests in the registered office of the authority within 30 days. The announcement was posted on the authority's website(www.rdos.gdansk.gov.pl) and on the notice board in the authority's headquarters. Moreover, the aforesaid announcement has been submitted to the following officials for publication: the Director of the Maritime Office in Gdynia, the Director of the Maritime Office in Słupsk, the Mayor of Gdańsk, the Mayor of Gdynia, the Mayor of Sopot, the Head of Ustka Municipality, the Mayor of Ustka, the Head of Smołdzino Municipality, the Mayor of Łeba, the Head of Wicko Municipality, the Head of Choczewo Municipality, the Head of Krokowa Municipality, the Mayor of Władysławowo, the Mayor of Jastarnia, the Mayor of Hel, the Head of Puck Municipality, the Mayor of Puck, the Head of Kosakowo Municipality, the Head of Stegna Municipality, the Head of Sztutowo Municipality, and the Mayor of Krynica Morska.

No comments or applications were submitted within the stipulated period.

When assessing all the evidence gathered in this case, the Regional Director for Environmental Protection in Gdańsk determined as follows:

The planned project comprises the Bałtyk I Offshore Wind Farm with a total maximum installed capacity of 1,560 megawatts (MW), together with the infrastructure necessary for its construction and operation (hereinafter referred to as the "Bałtyk I OWF") (excluding the set of equipment for power output to the NPS, which will be the subject of a separate administrative procedure for the issuance of the decision on environmental conditions, and excluding a possible operation and maintenance base).

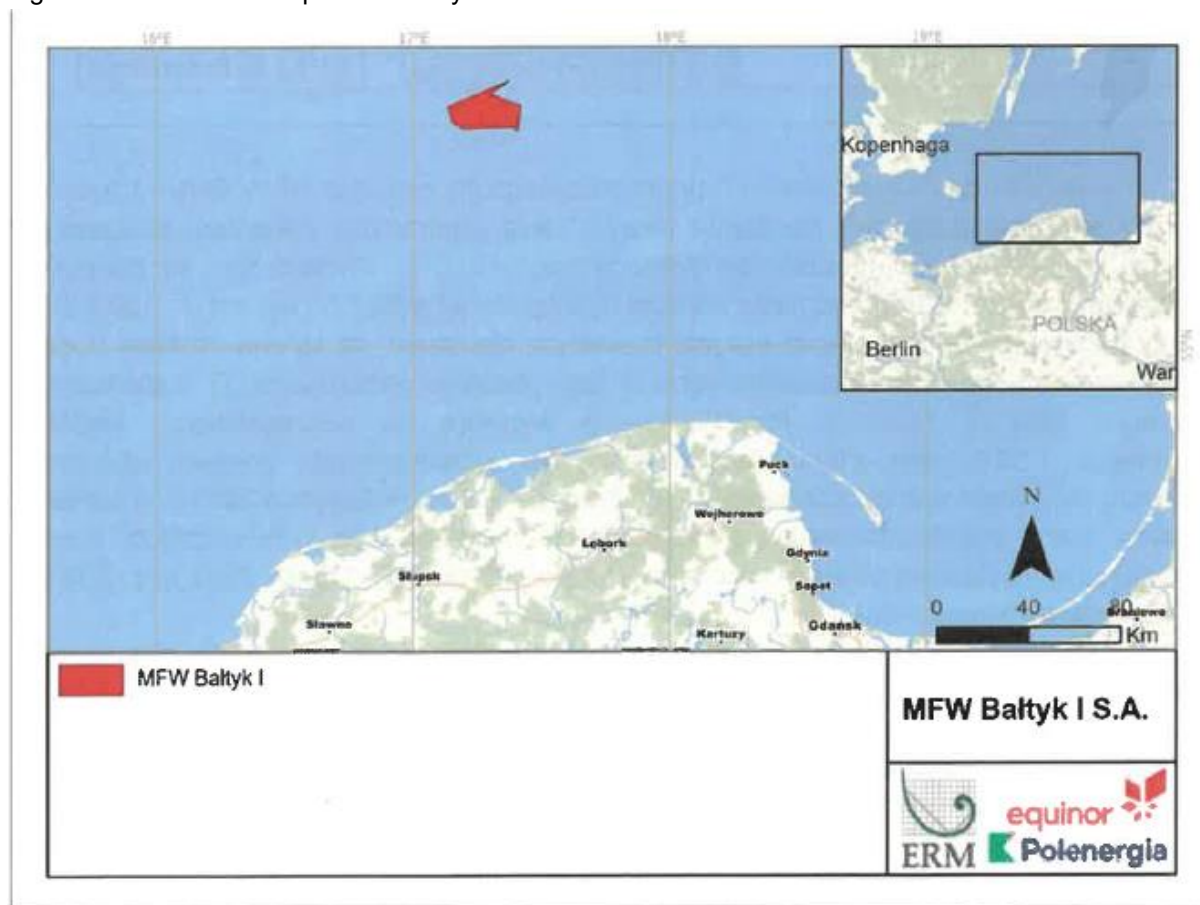
In the Investor's (implementation) option, the planned Project consists of:

- no more than 104 offshore wind turbines, the basic elements of which are: the foundation, tower and a set of nacelles and rotor;
- up to 2 offshore substations (OS);
- no more than 250 km of inner array power and telecommunication cables connecting:
 - individual wind turbines with each other (into cable circuits),
 - OS wind turbine group,
 - OSs among themselves.

The purpose of the Project is to generate electricity using a renewable energy source – wind. The kinetic energy of wind is converted into mechanical energy of the rotating rotor. Mechanical energy is then converted in the generator into low voltage alternating current, which is then transformed to medium or high voltage and transmitted to the offshore substation via internal power infrastructure. Operation of the Bałtyk I OWF is expected to last 25–30 years.

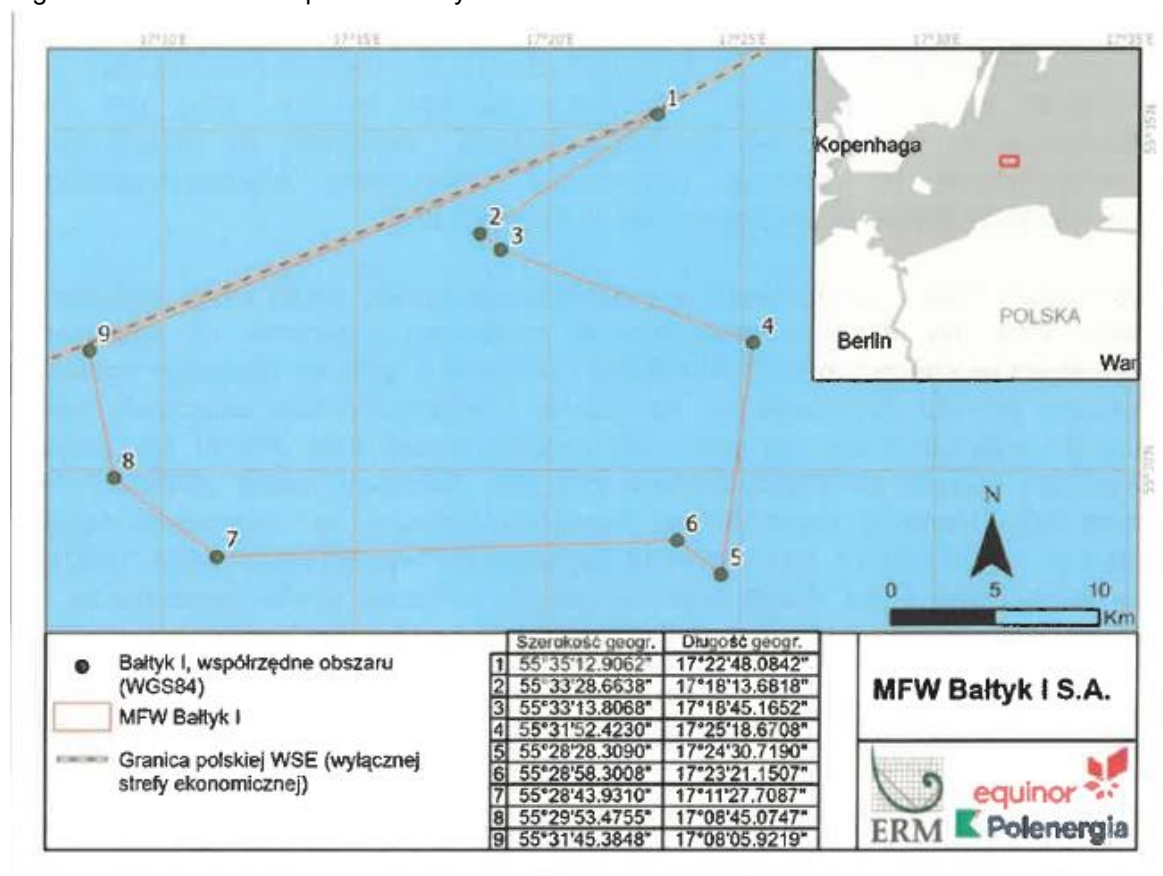
The project shall be located in the southwestern part of the Baltic Sea in the Polish EEZ, in the area indicated in the obtained permit for the erection and use of artificial islands, structures and devices in Polish maritime areas. The Applicant has the permit for erection and use of artificial islands, structures and devices in the Polish maritime areas (hereinafter referred to as "PSZW" or "location decision") issued for the Project under its previous name "Bałtyk Północny Offshore Wind Farm" by the Minister of Transport, Construction and Maritime Economy in the decision of July 16, 2012 (No. MFW/1a/12, ref. No. GT7wp/62/1182060/MFW/1a/2012). The Bałtyk I OWF area is located in the Polish Exclusive Economic Zone, at the height of Smołdzino and Łeba municipalities at a distance of approx. 81 km from the coastline.

Figure 1. Location of the planned Bałtyk I OWF Offshore Wind Farm in the Baltic Sea.



PL	EN
Kopenhaga	Copenhagen
Berlin	Berlin
POLSKA	POLAND
MFW Bałtyk I	Bałtyk I OWF

Figure 2. Location of the planned Bałtyk I OWF Offshore Wind Farm with coordinates.



PL	EN
Szerokość geogr.	Latitude
Długość geogr.	Longitude
Bałtyk I, współrzędne obszaru (WGS84)	Bałtyk I, area coordinates (WGS84)
MFW Bałtyk I	Bałtyk I OWF
Granica polskiej WSE (wyłącznej strefy ekonomicznej)	Boundary of the Polish EEZ (Exclusive Economic Zone)
Kopenhaga	Copenhagen
Berlin	Berlin
POLSKA	POLAND

The area (water region) designated for construction of the Bałtyk I OWF according to the permit for erection and use of artificial islands, structures and devices is 128.53 km². At the stage of preparing the EIA report, the surface area of the above-mentioned area was accurately measured using GIS tools. It was found that the actual surface area of the farm is slightly larger than that stated in the permit for erection and use of artificial islands, structures and devices and is approx. 129.2 km². It should be noted that the above-mentioned area is not the same as the area where it will be possible to locate components of the project, i.e. its development area. Limitations on the area of implementation of the Project result from the detailed provisions of the obtained permit for erection and use of artificial islands, structures and devices and the spatial development plan for the Polish maritime areas, adopted by the Regulation of the Council of Ministers of April 14, 2021 on the adoption of the spatial development plan for internal sea waters, territorial sea and the exclusive economic zone at a scale of 1:200,000 (Journal of Laws of 2021, item 935, as amended), referred to as the POM Plan.

[...]

Additional limitations in this regard arise from the provisions of the POM Plan, according to which, in the

60.E water region designated for offshore wind energy development, within which the Bałtyk I OWF will be located, it is prohibited to erect artificial islands and structures within less than 2 km of the boundary of the Hoburgs bank och Midsjöbankarna Natura 2000 site (area code SE0330308).

The impact assessment in the EIA report was based on the envelope concept with the assessment of the worst case scenario in terms of impact on the various analyzed environmental components, i.e. adopting from among the considered technological solutions and parameters of the Project in the analyzed options for assessment those that may cause the greatest impact on a given environmental component. The envelope concept means that, when assessing the selected parameter and the possibility of applying different technical solutions, the environmental impact assessment was carried out for the potentially most onerous solution for the environment. It has been assumed that, if the most onerous solution does not have a significant negative impact on the environment, the remaining solutions, as less onerous ones, will be acceptable as well.

One of the mandatory elements of the EIA report comprises the what-If analysis. The project considered two options that differ in the number and parameters of the wind turbines planned for use.

[...]

The closest Natura 2000 site is Hoburgs bank och Midsjöbankarna (SE0330308) located in the Swedish EEZ, 150–200 m from the boundary of the Project area and 2 km from the boundary of the Project development area (as the POM Plan prohibits the erection of artificial islands and structures within 2 km of the boundary of the said Natura 2000 site).

The subjects of conservation (for which the area was designated) of the Hoburgs bank och Midsjöbankarna Natura 2000 site are the following habitat types and plant and animal species: Habitats:

- sandbanks which are slightly covered by sea water all the time (1110);
- reefs (1170);

Animal species:

- black guillemot (*Cephus grille*) (A202);
- long-tailed duck (*Clangula hyemalis*) (A064);
- common eider (*Somateria mollissima*) (A063);
- porpoise (*Phocoena phocoena*) (1351).

The population of porpoise in the Baltic Sea is estimated at about 500 individuals, with the species most often observed in summer. The porpoise is protected in the Słupsk Bank Natura 2000 site (PLC990001), Ostoja Słowińska (Słowińska Refuge) (PLH220023) and Kashubian Cliffs (PLH220072), as well as in Swedish waters in the Hoburgs bank och Midsjöbankarna Natura 2000 site (SE0330308), which is used by porpoises as a breeding ground during the summer months. According to the EIA report, the potential most significant impact on marine mammals will be piling during the construction stage, and without mitigation measures, underwater noise will be loud enough to affect marine mammals, particularly porpoises, within the boundaries of the Hoburgs bank och Midsjöbankarna Natura 2000 site. The Natura 2000 site is important for the survival of a subpopulation of porpoises, as it is their breeding ground. According to the EIA report, the impact of piling without additional mitigation measures was assessed as high and significant for the porpoise and moderate and significant for the grey seals.

The authors of the EIA report, to ensure that the impact of the Project on the porpoise in the Hoburgs bank och Midsjöbankarna Natura 2000 site (SE0330308) remains insignificant, propose a mitigation measure consisting in designing and implementing appropriate mitigation measures during the construction stage, so that underwater noise levels do not exceed the weighted level of 140 dB re 1μPa²s (SEL_{cum}) for animals within the boundaries of the said Natura 2000 site. Prior to the commencement of the construction stage, the Investor plans to analyze available technical solutions to reduce underwater noise from piling and will implement the selected mitigation technology to achieve the above noise level. A potential mitigation option could be the use of a large double bubble curtain. The local Authority found the proposed condition reasonable and obliged the Investor to comply with it. In addition, during the construction stage of the project, the Investor plans underwater noise monitoring which will be carried out throughout the period from the commencement of piling until completion for each pile. The location of the noise measurement station will be determined at the boundary of the Hoburgs bank och

Midsjöbankarna Natura 2000 site (SE0330308), at the location closest to the piling site, to ensure that noise levels will not exceed 140 dB. As a result of implementing a soft start piling procedure, marine mammals and fish will be scarred away from the construction area, preventing significant hearing damage to these animals that could occur, if they were present in the immediate vicinity of the erected foundation. According to the EIA report, the application of such mitigation measures will reduce the significance of the impact for the Project individually and in combination with other offshore wind projects to small and insignificant. It was also concluded that the Project individually, as well as in combination with other offshore wind farms, will not have a negative impact on the integrity of the Hoburgs bank och Midsjöbankarna Natura 2000 site (SE0330308), taking into account the objectives of conservation of black guillemot, long-tailed duck and common eider in the area from any pressure associated with the Project during the construction, operation and decommissioning stages.

[...]

Cross-border and cumulative impacts of Bałtyk I OWF with other projects.

In the assessment of the cumulative impact of the implementation of the Bałtyk I OWF in connection with other projects, the projects were included that were implemented, are being implemented or planned. Of the offshore wind farm projects in the Polish Baltic Sea, only the Baltica 1 project is located within 40 km of the Bałtyk I OWF (in area 60.E, as specified in the Regulation of the Council of Ministers of April 14, 2021 on the adoption of the spatial development plan for internal sea waters, the territorial sea and the exclusive economic zone at a scale of 1:200,000 (*Journal of Laws of 2021 item 935*), hereafter referred to as the POM Plan). Baltica 1 is located in the vicinity, about 1 km from the Bałtyk I OWF; however, all other projects are located to the south at a distance of more than 40 km from the proposed Project.

The proposed Södra Victoria offshore wind farm project is located in the Swedish Exclusive Economic Zone (EEZ), 80 km from the Swedish mainland and 1.85 km north of the Bałtyk I OWF, in the South Middle Bank area.

In the South Middle Bank area, in the immediate vicinity of the Project area (beyond its northeastern boundary), there are areas designated for the extraction of natural aggregate from the "South Middle Bank – South Baltic" deposit. Mining can be carried out there on the basis of License No. 3/2006 of November 15, 2006, issued by the Minister of the Environment in accordance with the Act of June 9, 2011 – Geological and Mining Law (*Journal of Laws of 2023, item 633*). The license is valid until 2031. At the moment, there are no pipelines or cables in the area of the Project that could interact with the planned Bałtyk I OWF.

The closest such installations in the Swedish EEZ include: (1) the NordBalt power cable, located north of the Hoburgs bank och Midsjöbankarna Natura 2000 site and transmitting electricity between Sweden and the Baltic States; (2) the Nord Stream gas pipeline transporting gas from Russia to Germany; (3) SwePol Link, a high voltage direct current (HVDC) submarine cable between Poland and Sweden, the Störnö peninsula near Karlshamn in Sweden, and Bruskowo Wielkie near Słupsk. It runs through the Swedish, Danish and Polish EEZs at a distance of about 60 km from the Bałtyk I OWF; (4) C-Lion 1, a submarine communication cable between Finland and Germany (C-Lion). They run through the Swedish EEZ near Södra Victoria.

To the east and southeast, at least 25 km from the proposed Project, there are areas of oil and gas production or exploration, including the Lotos Petrobaltic S.A. production platform (at a distance of approx. 50 km).

There is also intensive commercial shipping in the Swedish EEZ using maritime routes through the Natura 2000 site north of Södra Victoria and outside the Natura 2000 site south of Södra Victoria (SVT, 2020). The Project is also close to shipping routes in Polish waters. However, they are associated with less vessel traffic.

All impact pathways identified for the effects of the implementation of the Project itself were considered for potential adverse cumulative impacts. Many of them do not pose a risk of cumulative impacts with other plans or projects.

Cross-border and cumulative impacts may occur in particular with respect to:

- bats – risk of collision;
- benthic habitats – introduction/spread of alien invasive species;
- seabirds – risk of collision;
- seabirds – displacement / barrier effects;
- seabirds – disturbances associated with vessels;
- fish – increased total suspended solids;
- fish – noise and vibration emissions;
- fish – habitat change;
- fish – loss of habitats;
- marine mammals – noise and vibration emissions;
- marine mammals – collisions with vessels.

Bats. The assessment identified the risk of collision from migratory species, such as the recorded individuals of *Nathusius' pipistrelli* *Pipistrellus nathusii* and other species of the *Eptesicus* family (e.g., noctules, *Nyctalus*). The results for the Baltic Power offshore wind farm were reviewed, where the impact on bats as a result of the implementation of this project during the operation stage was assessed as insignificant. Given the lack of published data on bat migration routes over the Baltic Sea, the lack of data on mortality associated with offshore wind turbines, and the available results of assessments of other offshore wind farms in the area, it was concluded that there was no evidence that the cumulative collision effects of neighboring projects could exceed those of a single project. Nevertheless, this decision indicates the need for post-execution monitoring of migratory bat activity.

Benthic habitats. Spread of invasive alien species. During the construction stage, there will be an increase in vessel activity, which will come to the Project area and carry out works within it. They can act as important vectors of incidental IAS transfer. It is also possible that IASs already present in the Project area or newly introduced into the waters may be additionally introduced into the area. Since the infrastructure is being installed for the Project, this may also provide a suitable support for the successful establishment of these species. It is recommended that the risks can be managed through detailed biosecurity plans, and the significance of the Project's impact itself was determined to be slightly adverse and insignificant. All other projects included in the assessment of cumulative impacts are related to the introduction pathway / spread of IASs. Due to the lack of detailed data on vessel traffic and the amount of hard substrate that will be introduced into each of these Projects, it is not possible to quantify the risk of introduction / spreading the IASs or occupying the area of the entire hard substrate by the IASs. However, it is clear that the scope of the impact will be regional, but will be spatially limited to each specific project site. The project's infrastructure is by definition confined to the project area, and vessel traffic is expected to be restricted to established shipping routes, other than for direct access to the site. The effects will be long-lasting, continuous and irreversible during the operation period of the Projects; nevertheless, the magnitude of the impact is considered low. The sensitivity of the receptors will remain unchanged compared to the assessment of the Project's impacts alone (medium), so the overall significance of the cumulative impact was determined to be low – insignificant.

Seabirds.

Potential cumulative impacts on seabird populations include:

- vessel-related disturbances;
- presence of marine structures, mainly turbines (barrier effects, displacement, etc.);
- operating turbines pose a risk of direct collision with flying birds.

For the Project itself, it was determined that the magnitude of impacts during the construction stage would be low, with the exception of gulls, where “no impact” was determined. The magnitude is expected to rise above these levels if construction activities are carried out concurrently as part of other projects under assessment. This would potentially result in a higher level of impact significance. It should be noted, however, that construction works are unlikely to take place at two offshore wind farms located close to each other due to the relatively low availability of special-purpose equipment for this type of construction works. Given the low probability of high vessel activity at multiple locations at the same time, it is believed that the cumulative levels of disturbance will be insufficient to increase the magnitude

of impact above the low level. Therefore, it is considered that the cumulative disturbances associated with the vessels will have a low – insignificant impact. The assessment noted that most of the seabirds recorded in the surveyed area were not considered collision-sensitive or were reported at low number. Of all the species considered, only the European herring gull (*Larus argentatus*) and the lesser black-backed gull (*Larus fuscus*) were included in the collision risk assessment. The Project's impact assessment alone showed moderate – significant impacts for both species.

No data is available on predicted collision mortality for the European herring gull and the lesser black-backed gull for any of the other offshore wind farms included in the cumulative assessment. Therefore, it is not possible to make a quantitative assessment of the cumulative risk of collision for these species. However, the EIA report for the Baltic Power offshore wind farm noted that the risk of collision posed an insignificant threat to these species.

Given the lack of published data on the results of the risk of collision model and the insignificant predicted impacts when assessment results are available for other offshore wind farms, it was concluded that there was no evidence that the cumulative effects of the risk of collision would exceed those predicted for the Project itself. Accordingly, the Project's overall cumulative impact on the risk of collision, along with the other projects under assessment, was found to be moderate – significant for the European herring gull and the lesser black-backed gull.

Some seabird species are sensitive to the displacement effects associated with OWF construction. Quantitative data on predicted mortality associated with displacement or barrier impacts are not available for the following species: common scoter, long-tailed duck, common guillemot, common razorbill, black guillemot and black-throated diver, with respect to the other offshore wind farms included in the cumulative assessment. Therefore, it is not possible to make a quantitative assessment of the cumulative impact on displacements/barriers for these species. However, based on the ecological information presented above, it is clear that the greatest risk of cumulative impact on the long-tailed duck is in the form of a barrier/access to overwintering areas in the Baltic Sea. Although the assessment of the effects of the Project itself was determined as low – insignificant, this is due to the high sensitivity of the species and the lack of impact. The inclusion of multiple projects will inevitably increase their scale (if they overlap spatially with bird migration routes), leading to a greater risk of significant negative cumulative impacts.

The Bałtyk I, Baltica 1 and Södra Victoria offshore wind farms are in close proximity to each other, which generally increases the potential for a single large barrier to the migration of the long-tailed duck. It is suggested that displacement and barrier effects manifest as impacts on daily time and energy budgets, which can ultimately reduce demographic condition, such as survivability and breeding productivity.

The potential for the presence of offshore wind turbines (OWTs) to act as a barrier to the long-tailed duck's access to overwintering areas can be mitigated by introducing migration corridors. Migration corridors involve providing or maintaining the routes that birds follow during inter-seasonal migrations.

The POM Plan, which covers the proposed Project, imposes the following restrictions:

- The erection of OWTs at sea is allowed only in areas whose primary function is the generation of renewable energy. If it is necessary to establish a flight corridor for migratory birds, its exact direction and size will be determined as part of the environmental impact assessment for individual projects. It is recommended that the width of such a corridor should not be less than 4 km, and its axis should be a straight line.
- In the POM.60.E area, it is prohibited to erect artificial islands and structures within 2 km of the boundary of the Hoburgs bank och Midsjöbankarna (SE0330308) Natura 2000 site.

There is evidence to suggest that long-tailed ducks clearly avoid areas occupied by offshore wind turbines within a radius of up to 4 km. As demonstrated in the pre-investment marine environment research program for the Bałtyk I OWF, migratory birds, particularly sea ducks (including the long-tailed duck), show a clear flight direction (>60%) to the northeast in spring and to the southwest in autumn. This is also confirmed by other surveys conducted by Bellebaum (2012) as well as MEWO S.A. and Gdynia Maritime University (2022) in the Baltic Sea. Taking into account the direction of flight and migratory movements of species, the barrier created by both Bałtyk I and Baltica 1 OWFs is not significantly higher than by the Bałtyk I OWF alone. Therefore, there is no need to implement a migration

corridor for these two projects. However, the barrier effect of Södra Victoria and the Bałtyk I OWF must be taken into account. The gap between Södra Victoria and Bałtyk I OWF will be 4.29 km between the nearest planned turbine location for the Bałtyk I OWF and the Södra Victoria boundary. Taking into account the existing migration corridor between the Södra Victoria and the Bałtyk I OWF, it was determined that the cumulative impact on the long-tailed duck would be low, giving the overall significance of the OWF's impact insignificant.

Marine mammals.

Potential cumulative adverse impacts on marine mammal populations include:

- emission of noise and vibration;
- collisions with ships.

Cumulative impacts on marine mammals during the construction stage may occur if construction activities of a similar nature are carried out elsewhere at the same time or with a small time interval between disturbance events. No information is available on the proposed construction timeframe for the other projects included in the cumulative impact assessment. Given the early stage of the Project and the lack of detailed information on the schedule of other projects in the vicinity, it is impossible to clearly determine where temporary overlapping of acoustic disturbances will occur. Although there is a possibility that the construction of two offshore wind farms located close to each other will lead to cumulative impacts, such a situation is unlikely due to the relatively low availability of special-purpose equipment for offshore construction works. Due to the lack of noise modeling results for the individual projects and insufficient information on them to reasonably understand the impacts and conduct an assessment of cumulative impacts, these projects were omitted from this assessment.

In addition, there may be an accumulation of underwater noise from the piling of the Bałtyk I OWF foundations and mining activity, if it occurs, in the nearby South Middle Bank area, especially during calm water periods or during seismic surveys for new fossil deposits. There is currently no information available on potential future mining activities in the vicinity of the Project, but the likelihood that mining activities will overlap with the construction of the Bałtyk I OWF is very low.

Given the lack of published data on underwater noise modeling results for other offshore wind farms and the limited information available on potential future mining operations, it was determined that there was no evidence that the cumulative impact risk associated with underwater noise would exceed that associated with the Project itself. Therefore, the overall cumulative impact of the Project, together with the other assessed projects, was found to be low – insignificant for the porpoise and low – insignificant for the gray seal. During the construction of the offshore wind farm, increased vessel activity is a potential source of mammal-vessel collisions leading to physical injuries of the animals. These injuries include blunt force trauma or propeller impact injuries. The risk of collisions of marine mammals with vessels depends directly on the type of vessel and the speed at which it is traveling. It is also indirectly affected by underwater noise levels and the behavior of marine mammals.

Currently, there is a lack of information on the frequency of vessel collisions as a source of marine mammal mortality. While there is evidence that mortality due to vessel collisions may and does occur, it is not considered a key source of mortality, according to mammal post-mortem examinations. There are reports across Europe of porpoises washed ashore with injuries caused by collisions with propellers. This risk is higher for species living in coastal waters, near ports, or near vessel traffic routes.

Porpoises and gray seals are relatively small and very mobile, and given their observed responses to noise, they are expected to detect vessels in close proximity and largely avoid collisions. Predictability of vessel traffic by marine mammals is a key aspect in minimizing potential risks associated with vessel traffic.

Cumulative collisions between marine mammals and marine vessels are expected to increase above the level estimated for the Project itself. After analyzing the available data on offshore wind farms, pipelines and cables, and mineral extraction operations, it is clear that the greatest potential for cumulative growth in vessel traffic is associated with other offshore wind farm investment projects.

Indicative vessel traffic levels are not available for other offshore wind farms included in the cumulative assessment. However, it is assumed that they will be generally in line with the levels expected for the Bałtyk I OWF Project. Vessel traffic to and from any port will be integrated into existing vessel routes to

the extent possible, so the increased risk of interaction with vessels will be limited to the OWF site. While in the offshore wind farm area, these vessels are expected to mainly stand still or move slowly, minimizing the risk of collision. In addition, it is expected that, as in the case of the planned Project, other investment projects will commit to developing and adhering to a vessel management plan to reduce the risk of collision. Given the background level of vessel traffic in the area, it can be assumed that marine mammals in the area will be accustomed to the presence of vessels, and are therefore expected to be able to detect and avoid vessels carrying out construction works.

The sensitivity of receptors to cumulative impacts will remain unchanged compared to the Project's impacts alone (medium), and given the expected low transit speeds outside established shipping routes and adherence to best practices to mitigate the risk of collision, it is concluded that the magnitude of cumulative impacts will be low. Due to the medium sensitivity of receptors and the small scale of impact, impacts on marine mammal (porpoise and gray seal) receptors are expected to be low – insignificant.

Fish. Potential cumulative adverse impacts on fish populations include:

- increased amount of suspended solids;
- emission of noise and vibration;
- modification of habitats;
- loss of habitats.

During preparatory works, but also during the construction of an offshore wind farm, the sediment layer is penetrated, causing sediment particles to float in the water column. Most of the seabed surface in the surveyed BI DA is sandy, causing sediment particles to fall to the seabed after a relatively short period of time.

Cumulative impacts on fish associated with an increase in suspended sediment during the construction stage may occur if construction works related to seabed disturbance are carried out as part of other projects simultaneously with the activities necessary for the proposed Project. Given the early stage of the Project, the lack of detailed information on the work schedule of other projects in the vicinity, which will be implemented at the same or similar time, and the construction time of offshore wind farms covering several years, it is not possible to clearly determine what cumulative impacts will occur at the construction stage of the Bałtyk I OWF. Although there is a possibility of construction of two offshore wind farms located close to each other, which would lead to cumulative impacts, such a situation is unlikely due to the relatively low availability of special-purpose equipment for offshore construction works.

Although it is considered unlikely that the other projects considered in this cumulative assessment will be constructed concurrently with the Bałtyk I OWF, it is possible that construction works will coincide with operation and maintenance activities of the other projects under consideration. There is also the possibility that construction works will coincide with regional mineral extraction works.

Potential cumulative impacts will be limited only to those closest to the Bałtyk I OWF, i.e., the Baltica 1 and the Södra Victoria offshore wind farms. Given the limited number of projects in this reach, the low probability of temporary overlapping of occurring events, there is a low risk of cumulative increases in suspended sediment concentrations at the location under consideration. Although simultaneous increases in sediment concentrations at more remote locations could theoretically affect populations of fish species with larger reach, these mobile animals are considered less sensitive to increases in suspended sediment concentrations. Therefore, the overall cumulative impact of the Project on fish due to an increase in suspended sediment concentrations, in combination with other projects included in the assessment, was determined to be low – insignificant.

Noise levels higher than background noise can interfere with fish's ability to detect natural sounds, making it difficult to find food and disturbing spatial orientation. On a micro scale, this can lead to fish leaving their hiding and feeding grounds and even reducing the value of spawning grounds. In extreme cases, such as the accumulation of underwater noise during pile driving, injury to fish cannot be ruled out.

No information is available on the proposed construction timeframe for the other projects included in the cumulative assessment. As mentioned above, there is a possibility of the construction of two offshore

wind farms located close to each other, leading to cumulative impacts, but such a situation is unlikely due to the relatively low availability of special-purpose equipment for offshore construction works.

Given the lack of published data on underwater noise modeling results for other offshore wind farms and the expectation that there will be no temporary overlapping with regional mining operations, it is concluded that there is no evidence that the cumulative risk from underwater noise exceeds the risk associated with the Project itself. Accordingly, it is determined that the overall cumulative impact of the Project related to noise and vibration emissions on fish, in combination with the other projects under assessment, is low – insignificant (which means that it is not significant in the context of the EIA for fish species).

Temporary modification of seabed habitats will occur as a result of seabed disturbance during the construction stage of the Project through a number of impacts, including cable installation works. These activities lead to disturbance of the seabed and may affect species with bottom life stages (e.g., the Baltic herring) or species that live close to the seabed (e.g., the eel or lumpfish), and/or use the seabed as a spawning habitat, e.g., the Baltic herring. Although it is considered unlikely that the other projects considered in this cumulative impact assessment will be constructed concurrently with the Bałtyk I OWF, it is possible that construction works related to the Bałtyk I OWF will coincide with operation and maintenance activities of the other projects under consideration. There is also the possibility that construction works will coincide with regional mineral extraction works. However, given the negligible spatial extent of disturbances in relation to the availability of alternative similar habitats and the expected rapid regeneration of habitats after the disturbances, it is believed that the magnitude of the potential cumulative level of disturbances to habitats will remain low, which is in line with what was found in terms of the impacts of the Project itself. Therefore, it was concluded that the overall cumulative impacts of the Project on fish as a result of effects on their habitats, in combination with other projects included in the assessment, are low – insignificant.

In contrast to the habitat modification assessed during the construction stage, permanent habitat loss is expected to occur during the operation stage within the infrastructure placed on the seabed (as the seabed area, which is where the internal cables are buried, is expected to be repopulated over time). The volume of infrastructure will not significantly reduce the volume of water in the BI DA, which provides habitat for pelagic and bentopelagic fish, so the impact is focused on the extent of infrastructure on the seabed. The expected extent of permanent habitat loss is equal to the total extent of infrastructure on the seabed. For the Investor's option, this is 299,708 m² (i.e., about 0.30 km²). This area accounts for <1% of the BI DA (97.3 km²). For the reasonable alternative option, this is 345,576 m² (i.e., 0.35 km²). This area accounts for <1% of the BI DA. The BI DA itself represents a small area relative to the more extensive habitats of the Baltic Sea. Therefore, even when combined with the presumed (in the absence of published values) similar levels of habitat loss at other proposed offshore wind farm locations, this represents a local, small loss of regional habitats for seabed-dependent species. Therefore, the magnitude of the cumulative impact associated with long-term habitat loss is considered low. Receptor sensitivity remains unchanged with respect to that assessed for the Project itself (low – medium). Therefore, the overall cumulative impact of the Project on the risk of fish habitat loss, in combination with the other projects included in the assessment, is low – insignificant.

The Bałtyk I OWF was analyzed in terms of the possibility of cross-border impact. Cross-border impacts refer to potential impacts that may result from activities carried out in one of the countries of the European Economic Area (EEA) that affect or may affect the environment of another EEA country. The proposed project is located in the Polish EEZ in close proximity to the Swedish EEZ. The closest protected area within the Natura 2000 network is the Swedish Hoburgs bank och Midsjöbankarna (SE0330308), located 150–200 m from the boundary of the Project area and 2 km from the boundary of the BI DA. The subject of protection of the said area includes the porpoise, a critically endangered species of marine mammal. In order to ensure, in accordance with the precautionary principle, that the impact of the Project on the porpoise (*Phocoena phocoena*) in the Hoburgs bank och Midsjöbankarna (SE0330308) Natura 2000 site is insignificant, the Project will develop and implement appropriate measures to mitigate the impact during the construction stage, so that underwater noise resulting from

construction works does not exceed a specified level within the Natura 2000 site, causing damage to the hearing organs of these mammals. Cross-border impacts (alone or cumulative) for all subjects of impact were determined to be insignificant.

In addition, the proposed Project is approximately 47 km from the Danish EEZ, so Denmark is an Affected Party in the Espoo process. The distance of the Project from the nearest land, the Danish island of Bornholm, is more than 150 km. Impacts of the Project that have the potential to be long-range are sediment dispersion and underwater noise. However, these are not impacts of such scale, duration, or intensity as to affect the waters of the Danish EEZ. Given the Project's considerable distance from the Danish EEZ, the low density of shipping activity in the Project area, potential impacts on Danish fisheries will not be significant, and no cross-border impacts on Denmark, as an Affected Party, are anticipated.

Having analyzed the EIA report, given the specificity of the place where the project will be executed, the scope of planned works, the presence of the protected areas, and following the precautionary principle, the authority has determined with this decision the conditions to be applied at the project implementation and operation stage.

Conditions and obligations specified in point B.I. of this decision were imposed based on the conclusions and recommendations of the submitted EIA report and opinions of the cooperating authorities. The conditions specified for the project implementation stage were formulated taking into account the following obligations:

- ensuring economic use of the land during preparation and implementation of the project – Article 74 section 1 of the *Act of April 18, 2001 – Environmental Protection Law (consolidated text, Journal of Laws of 2024, item 54, as amended, hereinafter referred to as the EPL)*;
- considering the environmental protection on the area of works, in particular, protection of soil, vegetation, natural topography, and water conditions – Article 75 section 1 of the EPL;
- using and converting natural elements during the construction works only to the extent to which it is necessary in connection with the implementation of a specific project – Article 75 section 2 of the EPL;
- conducting waste management in a manner ensuring protection of human life and health and the environment, in particular in such a way that waste management does not cause a threat to water, air, soil, plants or animals (Article 16 of the Waste Act).

The above requirements were specified taking into account the most important of all the identified emissions, the lack of management of which could be the source of negative impact on the environment, including human health or, in extreme cases, could lead to hazard to the environment. The provided conditions include the supervisory and preventive actions, and technical means of emissions management. The conditions specified for the building permit design constitute a direct guideline for the design engineer and are aimed at ensuring an economic use of environmental resources, minimization of emissions, proper management of emissions. The basis of the above guidelines covers, i.a.:

- principles of prevention, caution, and incurring costs of environmental impacts, resulting from Articles 6 and 7 of the EPL;
- prohibition of causing deterioration of the condition of the environment to a large extent or hazard to human life or health (Article 141 section 2 of the EPL);
- obligation to comply with environmental quality standards and emission standards (Article 141 section 1 and Article 144 section 1 of the EPL);
- prohibition of operation of the plant resulting in introduction of gases or dusts to the air, noise emission, and generation of electromagnetic fields to the extent causing exceeding of the environment quality standards outside the area, to which the plant operator has the legal title (Article 144 section 2 of the EPL);
- prohibition to undertake activities which may, separately or as combined with other activities, significantly negatively affect the objectives of protection of the Natura 2000 site (Article 33 section 1 of the Nature Conservation Act);

Due to the long-term process of preparation of the project for the stage of its physical implementation and taking into consideration the possibility of changes in the environment at that time, it was found necessary to obtain additional survey data documenting the most up-to-date state of the environment before the commencement of the project. The results of these studies will be taken into account in the assessment of the effects of the project implementation carried out at the stage of the post-execution analysis. Due to the necessity to assess the effectiveness of the applied prevention and mitigation measures, the obligation of monitoring was imposed on the Applicant concerning changes in the environment caused by implementation of the project and operation of the plant in the scope specified in point C.2 of this decision. Pursuant to Article 82 section 1 point 5 of the EIA Act, the Applicant was obligated to submit the post-execution analysis. The post-execution analysis will enable to confront, on the basis of the results of the on-going monitoring, the effects in the environment, including those in the protected habitats and for the protected species within the Natura 2000 site, against the arrangements and recommendations contained in the EIA Report prepared as part of this procedure. The time and scope of the post-execution analysis were linked with the obligations imposed on the Applicant in terms of the environmental monitoring, at the same time assuming a period necessary to collect reliable data to enable the potential planning of any further measures limiting the negative environmental impact and protective actions in the protection plans for the Natura 2000 sites.

By virtue of this decision, the obligation was imposed on the Applicant to prepare documentation for the re-assessment of the environmental impact of the project. In accordance with Article 82, section 2 of the EIA Act, the necessity to carry out a re-assessment will be determined taking into account that:

- data obtained at the stage of issuing the decision on environmental conditions, concerning the project or natural elements of the environment covered by the scope of expected project environmental impact, are insufficient for the assessment of its environmental impact;
- due to the type and characteristics of the project and its relations with other projects, it is possible that impacts of the projects located in the area, on which the project will have impact, will cumulate;
- the project may also have impact on the areas that require special protection due to occurrence of species of plants and animals or their habitats or natural habitats that are subject to protection, including the Natura 2000 sites and other forms of protection of nature.

The factual circumstances that support the need for the re-assessment in this case are, in the opinion of the Regional Director for Environmental Protection in Gdańsk: optioneering of the technical solutions adopted in the functional and spatial concept plan being the basis for the assessment in the EIA report, and therefore the need to confirm the conclusions regarding the magnitude and intensity of the environmental impact, as well as the lack of significant negative impacts of the project on the Natura 2000 sites on the basis of the final solutions adopted in the building permit design.

[...]

Having analyzed the scope of the planned project and identified its impact on the environment along with their scale, it was found that the planned project may cause a potential transboundary environmental impact.

The comments and requests submitted during the transboundary procedure by the affected countries have been analyzed in the present procedure, and the environmental protection requirements for limiting transboundary environmental impact have been taken into account in the operative part of this decision.

Prior to the issue of the decision, by virtue of letter ref. No. RDOŚ-Gd-WOO.420.35.2022.AJ.23 of November 4, 2024, the Regional Director for Environmental Protection, pursuant to Article 10 of the Code of Administrative Procedure, notified the parties to the procedure that the evidence gathering was completed, the case files were available for review, and the parties could provide their comments on the gathered evidence and materials. No comments or requests were received within the specified deadline.

The implementation of the project pursuant to this decision and the subsequent operation of the facilities resulting from the project does not absolve the Investor from the following obligation, regardless of the provisions of this decision:

- to apply the provisions on technical conditions established pursuant to Article 7 of the Act of July 7, 1994 – Construction Law (*consolidated text, Journal of Laws of 2024, item 725, as amended*),
- to obtain the required permits, opinions and approvals;
- in terms of proper operation of equipment, as defined by the provisions of the Act of April 27, 2001 – Environmental Protection Law (*consolidated text, Journal of Laws of 2024, item 54, as amended*); waste management as specified by the provisions of the Act of December 14, 2012 (*consolidated text, Journal of Laws of 2023, item 1587, as amended*).

These obligations as existing and binding by law, are not subject to the re-imposition and disclosure in the decision.

Therefore, the decision should be as aforementioned herein.

The decision is subject to announcement on publicly accessible data list.

Regional Director for
Environmental Protection in
Gdańsk

Anna Tchórzewska

INSTRUCTION

This decision may be appealed against to the General Director for Environmental Protection through the Regional Director for Environmental Protection in Gdańsk, ul. Chmielna 54/57, 80-748 Gdańsk, within 14 days from the date of its receipt, in accordance with Article 76 section 1 of the Act of December 17, 2020 on promoting electricity generation in offshore wind farms (*Journal of Laws of 2024, item 182*).

For the issuance of this decision, a stamp duty in the amount of PLN 205 was paid (Appendix No. 1, part I, item 45 of the Act of November 16, 2006 on stamp duty (*consolidated text, Journal of Laws of 2023, item 2111, as amended*)).

The decision on environmental conditions does not replace the permit issued pursuant to Article 56 of the Nature Conservation Act. Any possible destruction of habitats of species, disturbance or transfer of species under protection should be granted a permit pursuant to Article 56 section 1 of the Nature Conservation Act of April 16, 2004 (*consolidated text of 2024, item 1478*).



**REGIONAL DIRECTOR
FOR ENVIRONMENTAL
PROTECTION IN GDAŃSK**

APPENDIX NO. 1

To the decision No. RDOŚ-Gd-WOO.420.35.2022.AJ.24

pursuant to Article 84 section 2 of the Act of October 3, 2008 on access to information on the environment and its protection, public participation in environmental protection and on environmental impact assessments (consolidated text, Journal of Laws of 2024, item 1112).

The proposed project comprises the Bałtyk I Offshore Wind Farm with a total maximum installed capacity of 1560 megawatts (MW), together with the infrastructure necessary for its construction and operation (hereinafter referred to as the "Bałtyk I OWF") (excluding the set of equipment for power output to the NPS, which will be the subject of a separate administrative procedure for the issuance of the decision on environmental conditions, and excluding a possible maintenance base).

In the Investor's (implementation) option, the proposed Project consists of:

- no more than 104 offshore wind turbines, the basic elements of which are: the foundation, tower and a nacelle and rotor assembly;
- up to 2 offshore substations (OSS);
- no more than 250 km of inner array power and telecommunication cables connecting:
 - individual wind turbines with each other (into cable circuits),
 - OSS wind turbine group,
 - OSSs among themselves.

The purpose of the Project is to generate electricity using a renewable energy source – wind. The kinetic energy of wind is converted into mechanical energy of the rotating rotor. Mechanical energy is then converted in the generator into low voltage alternating current, which is then transformed to medium or high voltage and transmitted to the offshore substation via internal power infrastructure. It is expected that the offshore wind farm (OWF) will be operated for 25–30 years.

List of the most important project parameters for the option proposed by the Applicant is provided in the table below:

Parameter	Investor's option
Maximum number of wind turbines [pcs]	104
Maximum total height of the wind turbine a.s.l. [m]	350
Minimum clearance between the lower blade position and the sea surface [m]	20
Maximum rotor diameter [m]	315
Maximum zone occupied by a single rotor [m ²]	77,932
Maximum total zone occupied by rotors [m ²]	8,104,838
Maximum number of accompanying infrastructure foundations [pcs]	2

Considered types of foundation of the turbine and accompanying infrastructure	Monopile, tripod, jacket and gravity-base foundations
Maximum foundation diameter [m]	60
Maximum seabed area occupied by 1 turbine foundation [m²]	2,828
Maximum seabed area occupied by all foundations [m²]	299,708
Maximum cable length of the farm internal connection infrastructure [km]	250
Maximum capacity of the wind farm according to the permit for erection and use of artificial islands, structures and devices [MW]	1,560

Project elements include:

- offshore wind turbines, the basic elements of which are: the foundation, tower and a nacelle and rotor assembly;
- inner array power and telecommunication cables;
- offshore substations.

An offshore wind turbine has a rotor consisting of three blades and a hub at the front of the nacelle. The rotor is attached to a main shaft supported by bearings, which generates rotational energy that is transferred through a system of gearboxes to a generator converting it into electricity. Some turbine suppliers also use the so-called direct drive technology, in which there is no gearbox. The nacelle is placed on top of the tower, which is installed directly on the foundations. Inside the tower there are cables transferring electricity from the generator and other elements necessary for the operation and functioning of the wind turbine.

The types of foundation of the turbine and accompanying infrastructure considered for the project in question include:

- monopile;
- tripod;
- jacket;
- gravity-base.

The selection of wind turbine foundations will depend on the technology available during the construction stage, the foundation depth, and the geotechnical conditions of the seabed. Monopiles are usually constructed from welded steel tubular sections and driven vertically into the seabed using pile drivers. Monopiles are the most commonly used foundations for currently operating wind farms.

A tripod truss foundation includes a steel structure usually supported by three supports set by gravity on the bottom using piles that are driven into the seabed. This type of foundation is used in deeper waters.

A jacket-type truss foundation usually consists of three or four main legs supported on a truss, which is a system made up of bars that are articulated together at nodes. Jacket-type foundations are anchored to the seabed with individual piles or suction caissons on each leg. Currently, they are the preferred foundation solution for larger turbines in deeper waters.

Gravity-base foundations founded on the seabed are usually heavy ballast structures made of steel and/or concrete. They can vary in shape, and the diameter of their base can be up to 60 m. The structure is placed on a pre-prepared area of the seabed, which may include the removal of moving sediment and leveling the area by laying a layer of stone/gravel. The diameter of the leveled area of the seabed can amount to 120 m. The gravity-base foundation is suitable for large turbines and deep waters. Gravity-base foundations can be made without the so-called "aprons" (most common for offshore wind

energy) or with aprons (most common for oil and gas platforms).

Individual turbines will be connected with inter array cables in series and then groups of turbines will be connected to the offshore substation. The design of the cable system will be based on radial cable runs coming out of the offshore substation and connecting the turbines. It is planned to install 66 kV or 132 kV AC inter array cables. The maximum total length of inter array cables will be 250 km. They will occupy a strip of the seabed about 6 m wide and will be buried at a maximum depth of 3 m below the level of the seabed or, in specific cases, left on the seabed and then properly protected by laying rock material, concrete mattresses, or other technological solutions that provide permanent protection against damage. The cables will be protected by a suitable protection system near the inlet opening to the turbine or substation foundation.

Cables will be laid by a special-purpose cable laying vessel (CLV). A cable can be buried immediately after it is laid or at a later stage. The preferred method for burying a cable is the water jetting method; however, other methods for burying cables may be applicable. It is usually performed using a vessel and a remotely operated vehicle (ROV). The stream of water produced by the ROV loosens and suspends the seabed sediments, and the cable falls by gravity to the bottom of the duct. The seabed material will re-sediment and cover the cable. The technology used will depend on the characteristics of the seabed and may vary within the Project.

Cables connecting the wind turbines will be routed to offshore substations, which will be properly located to optimize the lengths of inter array cables and export cables. The OSSs receive alternating current supplied through 66 kV or 132 kV inter array cables and, depending on the technology for power transmission to the shore, increase the voltage to that required for export cables, or increase and convert it to high voltage direct current to reduce losses during power transmission to the shore. The OSSs will be located within the OWF area, and their location and the required technical data will be confirmed at the detailed design stage. It is planned to build one or two offshore substations for the Bałtyk I OWF. Jack-up Heavy Lift Vessels, transport vessels, and service vessels will be used to install the offshore substation.

The construction stage will require the use of vessels and helicopters to transport materials to and from the Bałtyk I OWF, as well as to conduct works on site. The exact number of vessels that will operate simultaneously during the construction and decommissioning stages is unknown, as is the frequency of their occurrence and the duration of the operations performed. Although operations may potentially require the use of more than 6 vessels at any time, fewer vessels may be required for particular construction works. For example, the installation of foundations will require only 1 or 2 jack-up vessels and 1 or 2 support vessels. Other vessels required during construction include:

- support vessels (supply, crew transport and service, underwater works, noise reduction, etc.);
- survey vessels.

The construction period, including installation of wind turbines and OSS systems, is expected to take approximately 2.5 to 3 years. The current estimated operation period of the OWF is 25–30 years, the planned decommissioning period is estimated to be similar to the construction period at approximately 2.5 to 3 years.

The operation stage will be characterized primarily by taking scheduled maintenance activities and replacing/repairing components. Offshore installations are usually monitored/operated in an unmanned manner and remotely from an onshore control center. They are visited annually by trained personnel for maintenance and, if necessary, repairs. For routine maintenance activities, personnel and equipment are transported to offshore wind turbine and OSS locations using CTVs. A jack-up vessel is required for ad hoc repairs / replacement of larger components.

Typical maintenance activities will include: general servicing of the wind turbine, oil sampling/replacement, replacement of batteries in emergency power supply units, servicing and inspection of the wind turbine's safety equipment, nacelle crane, service elevator, high-voltage system, blades, major overhauls and repairs, and restarts of the wind turbine.

During the Project's operation period, cable repairs and periodic inspections may be required.

Scheduled inspections will also be required to ensure that the cables remain buried, and if exposed, works will be undertaken to re-bury them. Cables can also be exposed due to the movement of sand or erosion of other soft/mobile sediments.

It is expected that the wind farm will be operated for approximately 25–30 years.

The wind farm decommissioning works will be similar in scope to that of the offshore wind farm's construction, but they will be carried out in reverse order. This stage will involve disassembly of wind farm elements (wind turbines and OSSs) using the same or similar equipment and methods as during construction, transporting the components, and then managing the materials accordingly. The decommissioning of the wind farm after the end of its operation will take from 1 to 2 years.

Regional Director for
Environmental Protection in
Gdańsk

Anna Tchórzewska