Extended Potęgowo Wind Farm Project

Non-Technical Summary

Prepared by Ramboll Environ Poland Sp . z o. o.

Potegowo Mashav Sp. z o.o.

Introduction

Mashav Energy Sp. z o.o., one of the leading national wind farm operators is developing via a special purpose vehicle (SPV) Potegowo Mashav Sp. z o.o. a Potęgowo Wind Farm project (further Potęgowo WF or the Project) which comprises of a smaller subprojects located in Pomorskie and Zachodniopomorskie voivodeships. After successful development and construction of the core part of the project, Mashav decided to extend the project to its originally planned size. The Project extension includes construction of additional 8 wind turbine generators (WTGs) at one of the existing subprojects (namely Bięcino WF) and development of a wind farm near Wieliszewo village (Wieliszewo WF)

The Project has been under development since early 2000's. During this period all necessary nature inventories and monitoring were completed and the individual subprojects passed environmental impact assessment procedures. All necessary environmental and construction permits were granted. By the end of 2019, all subprojects of WF, except for the current extension, were constructed and fully operational.

The Project is co-financed by various financial institutions with European Bank for Reconstruction and Development (EBRD) as a leading lender. Prior commitment for financing, EBRD classified the Project as a "Category A" one, following EBRD's Environmental and Social Policy (further "ESP"). Moreover, the Project was subject to review by the independent company (Ramboll Environ Poland Sp. z o.o., a member of Environment and Health global practice of Ramboll, further referred to as "Ramboll") who assessed the Project against the national and EU environmental law and EBRD Performance Requirements, as per ESP. Results of the assessment were summarized in a report and actions needed to achieve full compliance with the good industry practice and EBRD's PRs have been summarized in the Environmental and Social Action Plan (ESAP) and Stakeholder Engagement Plan (SEP). As part of the assessment REH assessed the Project for compliance with the Health and Safety Guidelines for Wind Energy and the Project was found to be developed in respect to this reference document. Further, a cumulative impact assessment report was prepared by Ramboll to address potential environmental and social impacts of the Project as a whole.

EBRD requires, that the projects, in particular these classified as "Category A" shall be developed in a way ensuring that the meaningful public and stakeholders engagement process is properly secured. In order to meet this requirement a set of documents which comprise:

- Environmental Impact Assessment Reports prepared for individual subprojects in line with the national requirements;
- Cumulative Environmental and Social Impact Assessment Report for the entire Project;
- Supplementary Report which summarizes findings of the Project assessment and Cumulative Environmental and Social Impact Assessment;
- Environmental and Social Action Plan;
- Stakeholders Engagement Plan, and this
- Non-technical Summary,

were prepared in English and Polish as the Project Disclosure Package. For the current extension of the Project additional documents were prepared, namely:

- Updated Stakeholders Engagement Plan;
- Supplementary report which addresses the issues related to expansion of Bięcino and Wieliszewo WFs,
- Non-technical Summaries for Wieliszewo WF and extended Bięcino WF.

General presentation of the Project

Until 2017 the Potęgowo WF project was carried out, as a two separated projects: Potęgowo West (comprising of Przystawy, Bartolino and Sulechówko subprojects) and Potęgowo East (comprising Karżcino, Wrzeście-Kępno, Bięcino and Głuszynko- Grapice subprojects).

The Potęgowo West part of the Project comprised of:

- development of a group of 7 WTGs type GE 2.75 – 120, hub height 98,3m, rotor diameter 120 m, capacity 2.75 MW, in the vicinity of the Przystawy village (Przystawy subproject), Malechowo commune (gmina), Sławno county (powiat), Zachodniopomorskie voivodeship;
- development of a group of 7 WTGs type GE 2.75 – 120, hub height 98,3m, rotor diameter 120 m, capacity 2.75 MW, in the vicinity of the Bartolino village (Bartolino subproject), Malechowo commune (gmina), Sławno county (powiat), Zachodniopomorskie voivodeship;
- development of a group of 29 WTGs type GE 2.75 – 120, hub height 98,3m, rotor diameter 120 m, capacity 2.75 MWin the vicinity of the Sulechówko village (Sulechówko subproject), Malechowo commune (gmina), Sławno county (powiat), Zachodniopomorskie voivodeship.

Figure 1. Locations of WTG's (marked with blue icon) in the Przystawy subproject, approximated WF border is marked with red line

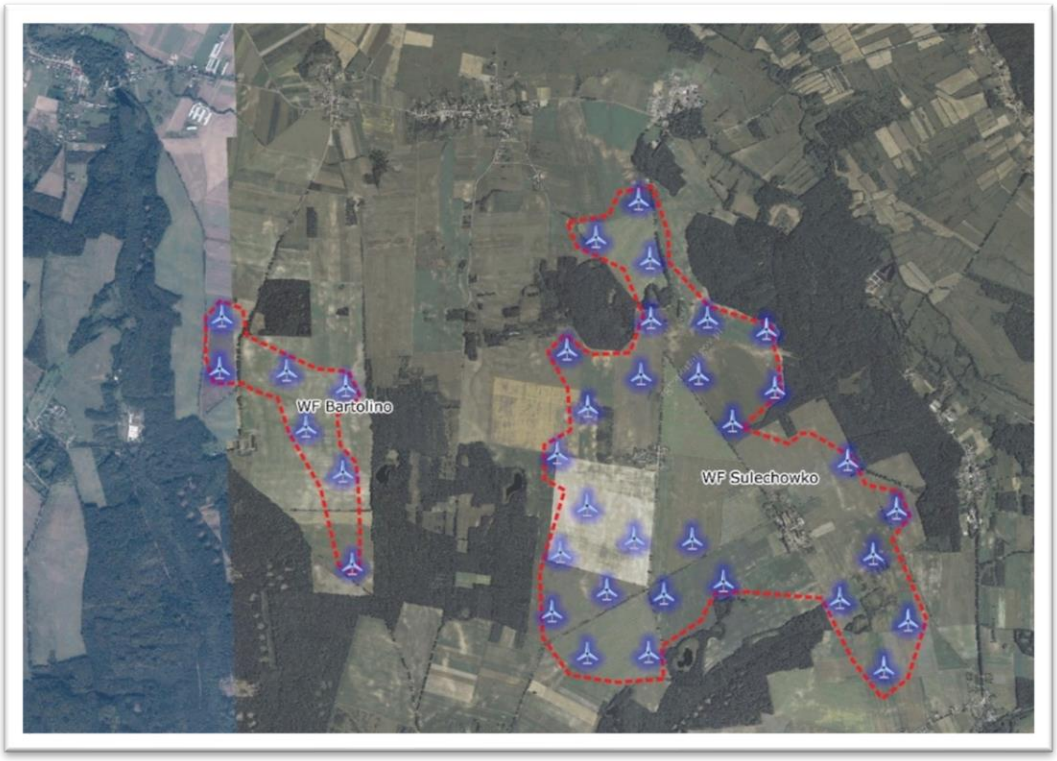

Figure 2. Locations of WTG's (marked with blue icon) in the Bartolino and Sulechówko subproject, approximated WF border is marked with red line

The eastern part of the Project, Potęgowo East, comprised of the following:

- development of a group of 7 WTGs type GE 2,5 xl-103, hub height 98.3 m, rotor diameter 103 m in the vicinity of the Karżcino village (Karżcino subproject), Słupsk commune (gmina) and county (powiat), Pomorskie voivodeship;
- development of a group of 5 WTGs type GE 2.75 – 120, hub height 110m, rotor diameter 120 m, capacity 2.75 MW each in the vicinity of the Bięcino village (Bięcino subproject), Damnica commune, Słupsk county, Pomorskie voivodeship;
- development of a group of 6 WTGs type GE 2.5-103, hub height 98.3 m, rotor diameter 103 m, capacity 2.5 MW each, in the vicinity of the Wrzeście and Kępno villages (Wrzeście-Kępno subproject), Słupsk commune and county, Pomorskie voivodeship;
- development of a group of 20 WTGs type GE 2.75 – 120, hub height 110m, rotor diameter 120 m, capacity 2.75 MW each, in the vicinity of the Głuszynko and Grapice villages (Głuszynko-Grapice subproject), Potęgowo commune, Słupsk county, Pomorskie voivodeship.

Figure 3. Locations of WTG's (marked with blue icon) in the Karżcino subproject, approximated WF border is marked with red line

Figure 4. Layout of the Bięcino WF

Figure 5. Locations of WTG's (marked with blue icon) in the Września-Kępno subproject, approximated WF border is marked with red line

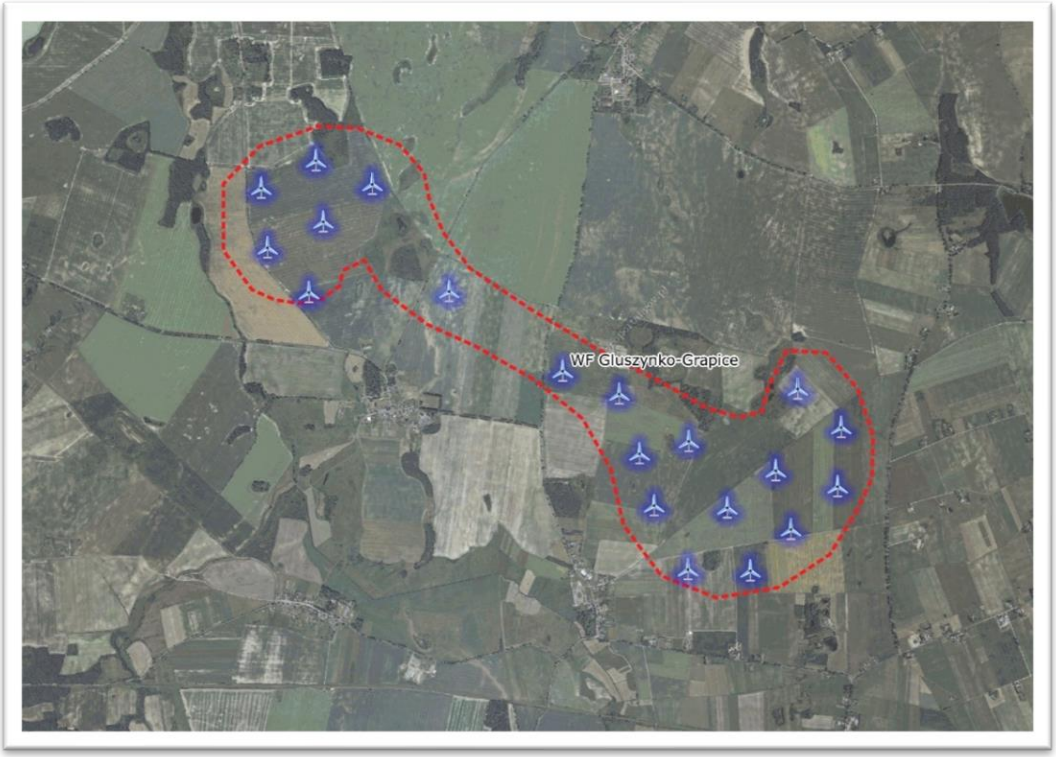

Figure 6. Locations of WTG's (marked with blue icon) in the Głuszynko-Grapice subproject, approximated WF border is marked with red line

All of the above wind farms are already operational. The current extension of the Potęgowo WF include installation of another eight wind turbine generators at the Bięcino WF (see figure 4) and construction of a Wieliszewo WF, where 17 Vestas V70 WTGs, hub height 100 m, rotor diameter 90 m will be installed.

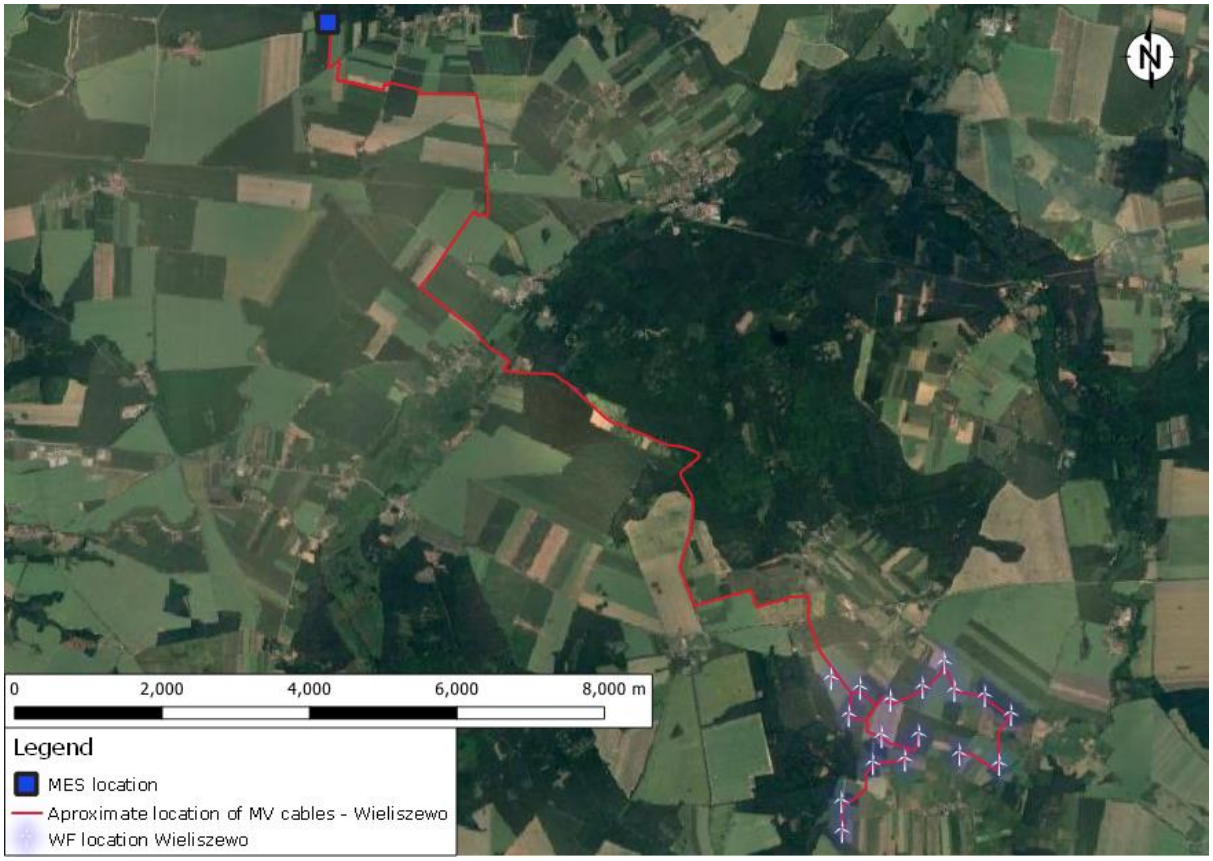

Figure 7. Layout of the Wieliszewo WF

What is a wind turbine generator?

A typical wind turbine generator consists of a tower and a nacelle comprising a rotor and measurement apparatus. The rotor is composed of the blades and an axle, attached to each other by a bearing. The blades are moved by the wind and transmit this force to the bearing, which is connected to a multiplier that increases the axle speed. Mechanical energy is transferred from the multiplier to an electricity generator, which transforms it into electricity for subsequent injection into the grid.

Figure 8. GE Wind Turbine Generator (Source: www.ge-energy.com)

For the Potęgowo Wind Farm, the investor has already decided, which model of the wind turbine generator will be installed. The wind turbines for each of the subproject, can be found in previous chapter.

The WTG is a combination with the proven single – blade pitch control that includes the latest enhancements in load management control, low acoustic emissions, efficient electrical power conversion and robust performance.

Where the Project will be developed?

Location of the subprojects constituting the Project is shown on the Figure 9 and Figure 10.

The Potęgowo Wind Farm project will be developed in the communes of Potęgowo, Damnica and Słupsk, Słupsk County, pomorskie voivodeship and in the commune of Malechowo, Sławno County, zachodniopomorskie voivodeship.

The Potęgowo commune occupies an area of approximately 228 km^2 of which approx. 80% is occupied by agricultural land and only 28% by forests (as for 2016). A characteristic feature of the commune is the domination of the agricultural landscape. As for 2016, the population of the commune counted approximately 7,031.

The Damnica commune occupies an area of approximately 168 km^2, of which 64,6% is occupied by agricultural land and only 29,4% by forests (as for 2016). As for 2016, the population of the commune counted approximately 6222.

According to the available sources, the Słupsk commune occupies an area of approximately 262 km^2, of which 62% is occupied by agricultural land and only 28% by forests (as for 2016). As for 2016, the population of the commune counted approximately 17383.

According to the available sources, the Malechowo commune occupies an area of approximately 227 km^2, of which approx. 60% is occupied by agricultural land and only 30,8% by forests(as for 2016). As for 2016, the population of the commune counted approximately 6,421.

In all locations of the planned subprojects there are a valid local zoning plans allowing for construction of wind farms. These plans were adopted in line with the national legislation, with participation of local societies and other stakeholders secured.

Figure 9. Map of Potęgowo West Wind Farm

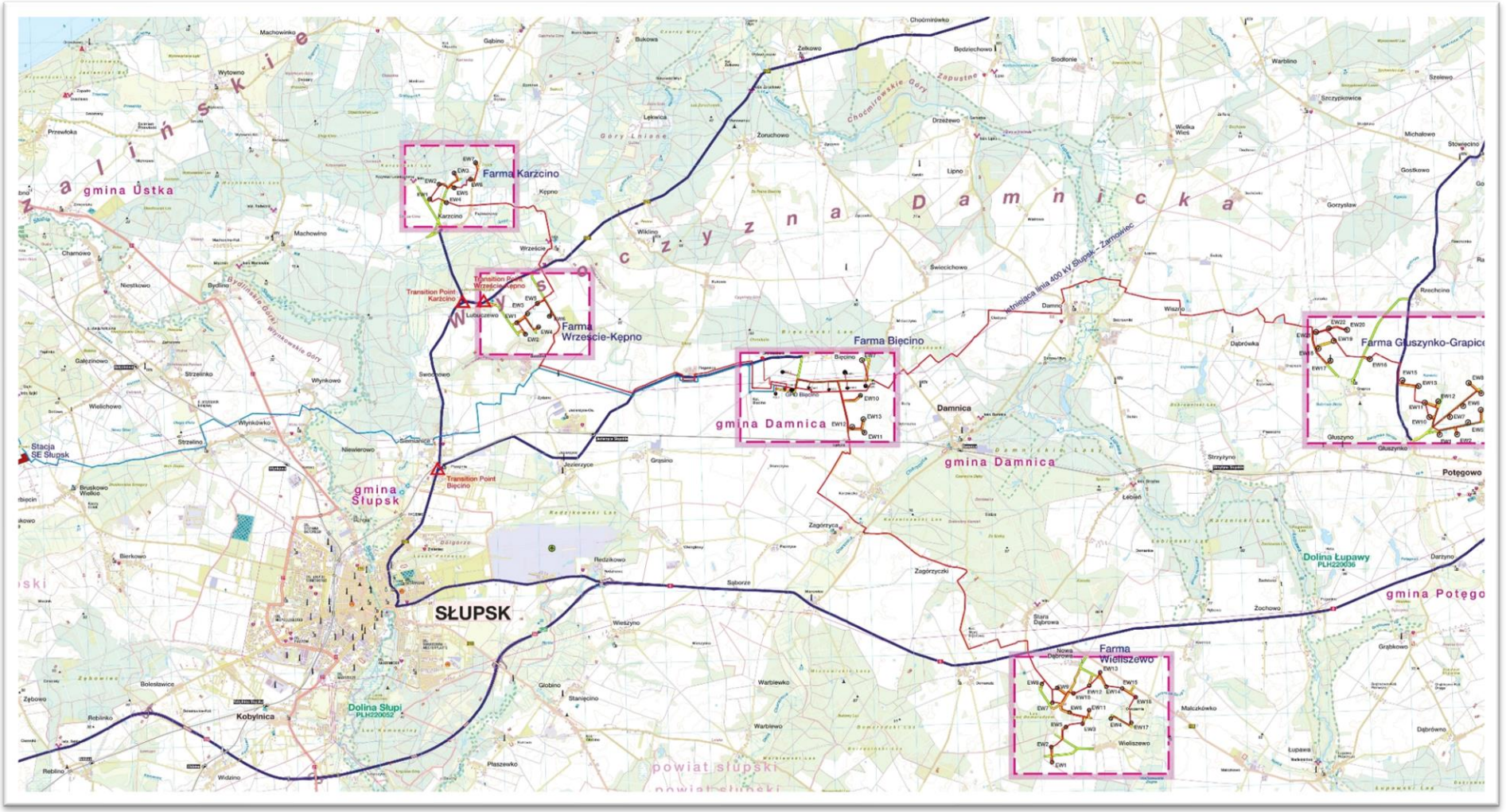

Figure 10. Map of Potęgowo East Wind Farm

What is the rationale of the Project?

In line with the European Climate Change Program, many European countries, including Poland, have adopted national programs aimed at reduction of greenhouse gases emissions. These cover various policies, adopted at the European level as well as national levels, includes among others:

- Planned increase in use of renewable energy (wind, solar, biomass)
- Improvements in energy efficiency in e.g. buildings, industry, household appliances;

The main regulations of EU countries to reduce emissions is the cost-effectively Emission Trading Scheme of carbon dioxide and legislation tackling with emissions of fluorinated greenhouse gases.

Poland has recently adopted its energetic policy until 2040 'Polityka energetyczna Polski do 2040 roku'. Based on this document Poland plans to increase the fraction of renewable sources in total energy consumption by at least 32% by 2030 with its further growth in the following years.

The development of wind energy is one of the measures to be implemented, which leads to the limitations of air emissions and increase of energy production from renewable sources. The main benefit is that wind turbines convert the wind's kinetic energy to electricity, while producing none of the emissions to the air. Conventional energy sources, mainly based on various types of coal incineration, when producing energy generate emissions of greenhouse gases, SO_2, dust and others.

The expected annual energy production from the Potęgowo WF, including the current project extension is estimated at 801,800 MWh per year. This corresponds to emission savings as compared to conventional energy sources in the following amounts:

- Up to 652.7 thousand tons of CO2
- Up to 611 tons of SO2
- Up to 621 tons of NO2
- Up to 222 tons of CO
- Up to 37 tons of PM.

The issues which are in favor for location of the wind farm in this region include among others, approving attitude of the local Authorities, lack of protected areas in the neighborhood and favorable wind conditions; additionally successful realization of such investment is connected with benefits for the local communities, including reconstruction of power supply installations, new occupation and improvement of the local road infrastructure.

What is the legislative context of the Project and were there any public consultations?

According to environmental regulations on disclosure on environmental information, public participation in environment protection and on environmental impact assessments, an Environmental Impact Assessment (EIA) procedure must be performed for projects which can always significantly impact the environment (group I projects) or may be conducted upon discretion of the competent authorities for particular ones which can potentially impact the environment (group II projects), or may impact area of 'Natura 2000' protected areas.

Information on the planned subprojects together with the EIA Reports were made available for comments of the public, including local communities and potential interested parties, such as nature protection bodies and ecological organizations. Announcements on the subprojects were presented to the public in the manner adopted by the competent local authorities, i.e. on their websites, at the information boards in the authorities' sits and affected villages and often in local newspapers, such as "Głos Pomorza" for example. During the public consultations, stakeholders were informed on potential impacts associated with the investment, in particular impacts on landscape, acoustic environment, shadow flicker phenomena and noise. There were no complaints or protests against the planned investments.

The Company, as part of its agreement with the Lenders elaborated a Stakeholders Engagement Plan (SEP) to allow meaningful consultations with Project stakeholders during construction and then operation of the Project.

In summer 2018, before commencement of the construction of Potegowo East and West, as part of SEP implementation, meetings in communes (Malechowo, Słupsk, Damnica, Potęgowo) took place. The main purpose of the meetings was to inform the inhabitants of municipalities about the upcoming start of construction works on wind farms, presentation of the investor, the planned course of construction works, presentation of the main transport routes used during construction and assembly works, providing information on the creation of a "Contact Point" for stakeholders at the Municipal Office. In Damnica and Potęgowo communes stakeholders were informed about future investments of the Company such as second stage of Bięcino Project and additional Wieliszewo cluster in Potęgowo commune.

Since the commencement of the construction works at the Potęgowo project, the Company representatives meet on regular basis the inhabitants and representatives of the villages around the Wieliszewo and Bięcino WF sites as well as the Commune Heads of the Communes.

How large will be the Project and how it is located versus protected areas?

Głuszynko-Grapice subproject
The Głuszynko-Grapice subproject is not situated within borders of any nature and landscape protected areas, except of the medium voltage underground power transmission cable line, which will cross Natura 2000 site "Dolina Łupawy" PLH220036 over an approximate distance of 1070 m. Moreover, it will be located along the border of Natura 2000 site "Dolina Łupawy" PLH220036 over approximate distances of 110 m and 360 m respectively.

The environmentally sensitive areas located up to 20 km away, are the following:

1. National Park "Słowiński Park Narodowy i jego otulina", approx. 15.7 km to the north of the nearest WTG location and approx. 14.4 km from the planned 110 kV high voltage (HV) power transmission cable line;
2. Nature Reserves:
   - "Grodzisko Runowo", approx. 7.3 to the south-east of the nearest WTG location and approx. 11.8 km from the planned medium voltage power transmission cable line;
   - "Czarne Bagno", approx. 7.8 km to the north-east of the nearest WTG location and approx. 10.3 km from the planned medium voltage power transmission cable line;
   - "Łebskie Bagno", approx. 10.6 km to the north-east of the nearest WTG location and approx. 12.7 km from the planned medium voltage power transmission cable line;
   - "Torfowisko Pobłockie", approx. 11 km to the north of the nearest WTG location and approx. 11.1 km from the planned medium voltage power transmission cable line;
   - "Bagna Izbickie", approx. 13.3 km to the north of the nearest WTG location and approx. 12.3 km from the planned medium voltage power transmission cable line;
   - "Jałowce", approx. 14.3 km to the north of the nearest WTG location and approx. 10.3 km from the planned medium voltage power transmission cable line;
   - "Karwickie Źródliska", approx. 15.5 km to the south-east of the nearest WTG location and approx. 20.3 km from the planned medium voltage power transmission cable line;
   - "Las Górkowski", approx. 17.3 km to the north-east of the nearest WTG location and approx. 17.6 km from the planned medium voltage power transmission cable line;
   - "Nowe Wicko", approx. 19 km to the north-east of the nearest WTG location and approx. 19.6 km from the planned medium voltage power transmission cable line;
3. Landscape Park "Park krajobrazowy Dolina Słupi i jego otulina", approx. 20 km to the south-west of the nearest WTG location and approx. 14.4 km from the planned medium voltage power transmission cable line;
4. Landscape Protection Areas:

- "Fragment pradoliny Łeby i wzgórza morenowe na południe od Lęborka", approx. 5 km to the south-east of the nearest WTG location and approx. 9.8 km from the planned medium voltage power transmission cable line;
- "Pas pobrzeża na wschód od Ustki", approx. 25 km to the north-west of the nearest WTG location and approx. 14.4 km from the planned medium voltage power transmission cable line;

5. Natura 2000 sites:
   - "Ostoja Słowińska" PLB220003, approx. 15.7 km to the north of the nearest WTG location and approx. 14.4 km from the planned medium voltage power transmission cable line;
   - "Dolina Słupi" PLB220002, approx. 20 km to the south of the nearest WTG location and approx. 14.4 km from the planned medium voltage power transmission cable line;
   - "Przybrzeżne wody Bałtyku" PLB99002, approx. 15.7 km to the north of the nearest WTG location and approx. 14.4 km from the planned medium voltage power transmission cable line;
   - "Dolina Łupawy" PLH220036, approx. 3.5 km to the south and west of the nearest WTG location and from the planned medium voltage power transmission cable line;
   - "Łebskie Bagna" PLH220040, approx. 7.8 km to the north-east of the nearest WTG location and approx. 10.3 km from the planned medium voltage power transmission cable line;
   - "Torfowisko Pobłockie" PLH220042, approx. 11 km to the north of the nearest WTG location and approx. 11.1 km from the planned medium voltage power transmission cable line;
   - "Bagna Izbickie" PLH220001, approx. 13.8 km to the north-east of the nearest WTG location and approx. 12.5 km from the planned medium voltage power transmission cable line;
   - "Karwickie Źródliska" PLH220071, approx. 14.6 km to the south-west of the nearest WTG location and approx. 19.4 km from the planned medium voltage power transmission cable line;
   - "Górkowski Las" PLH220045, approx. 17.3 km to the south-east of the nearest WTG location and approx. 17.6 km from the planned medium voltage power transmission cable line;
   - "Klify Poddębskie" PLH220100, approx. 29 km to the north-west of the nearest WTG location and approx. 18.1 km from the planned medium voltage power transmission cable line;
   - Nature monuments – all of them located more than 5 km away from the site and approx. 2.6 km from the planned medium voltage power transmission cable line;
   - Ecological lands – the closest ones located approx. 1.8 km to the north of the nearest WTG location and medium voltage power transmission cable line;
   - Documentation stand of an inanimate nature "Oz Grapice", approx. 1.3 km to the south-west of the nearest WTG location and approx. 2.3 km from the planned medium voltage power transmission cable line.

Bięcino subproject

The Bięcino subproject is not situated within borders of any nature and landscape protected areas. The nearest protected areas, located up to 20 km distant from the planned WTGs locations, are listed below:

1. National Park "Słowiński Park Narodowy i jego otulina", approx. 12.5 km to the north-east of the nearest WTG location;
2. Nature Reserves:
   - "Bagna Izbickie", approx. 17 km to the north-east of the nearest WTG location;
   - "Jałowce", approx. 12.5 km to the north-east of the nearest WTG location;
   - "Torfowisko Pobłockie", approx. 18 km to the north-east of the nearest WTG location;
3. Landscape Park "Park krajobrazowy Dolina Słupi i jego otulina", approx. 14.8 km to the south of the nearest WTG location;
4. Landscape Protection Areas:
   - "Pas pobrzeża na wschód od Ustki", approx. 14.2 km to the north-east of the nearest WTG location;
5. Natura 2000 sites:
   - "Pobrzeże Słowińskie" PLB220003, approx. 12.5 km to the north of the nearest WTG location;
   - "Dolina Słupi" PLB220002, approx. 15 km to the south of the nearest WTG location;
   - "Ostoja Słowińska" PLB220003, approx. 12.5 km to the north of the nearest WTG location;
   - "Przybrzeżne wody Bałtyku" PLB99002, approx. 18.5 km to the north of the nearest WTG location;
   - "Dolina Łupawy" PLH220036, approx. 3 km to the west of the nearest WTG location;
   - "Torfowisko Pobłockie" PLH220042, approx. 18.7 km to the west of the nearest WTG location;
   - "Bagna Izbickie" PLH220001, approx. 18 km to the north-west of the nearest WTG location;

- "Klify Poddębskie" PLH220100, approx. 18 km to the north-west of the nearest WTG location;

6. Nature monuments – located in the region of Karżniczka, approx. 1.6 km to the south from the site;
7. Ecological lands – the closest located in the region of Dąbrówka lake, approx. 9 km to the south of the nearest WTG location.

Karżcino and Wrzeście-Kępno subprojects

None of the WTGs of these subprojects are situated within borders of any nature and landscape protected areas. The nearest protected areas, located up to 20 km distant from the planned WTGs locations, are listed below:

1. National Park "Słowiński Park Narodowy i jego otulina", approx. 4.3 km to the north-east of the Karżcino subproject and approx. 5.15 km to the north of the Wrzeście-Kępno subproject;
2. Nature Reserves:
   - "Buczyna nad Słupią", approx. 11.2 km to the west of the Karżcino WF and approx. 14.2 km to the north-west of the Wrzeście-Kępno WF;
   - "Jałowce", approx. 15.2 km to the north-east of the Karżcino WF and approx. 14.5 km to the north-east of the Wrzeście-Kępno WF;
   - "Jezioro Modła", approx. 17 km to the west of the Karżcino WF and approx. 19.9 km to the north-east of the Wrzeście-Kępno WF;
   - "Zaleskie Bagna", approx. 19 km to the west of the Karżcino WF;
   - "Bagna Izbickie", approx. 20 km to the north-east of the Karżcino WF and approx. 19 km to the north-east of the Wrzeście-Kępno WF;
3. Landscape Park "Park krajobrazowy Dolina Słupi i jego otulina", approx. 16 km to the south of the Karżcino WF and approx. 14.1 km to the south-west of the Wrzeście-Kępno WF;
4. Landscape Protection Areas:
   - "Pas Pobrzeża na Wschód od Ustki", approx. 5.0 km to the north-west of the Karżcino WF and approx. 9.11 km to the north-west of the Wrzeście-Kępno WF;
   - "Pas Pobrzeża na Wschód od Ustki", approx. 14.85 km to the north-west of the Karżcino WF and approx. 18 km to the north-west of the Wrzeście-Kępno WF;
5. Nature-Landscape complex "Kraina w kratę w Dolinie Rzeki Moszczeniczki", approx. 10.5 km to the south-west of the Karżcino WF and approx. 9.11 km to the south-west of the Wrzeście-Kępno WF;
6. Natura 2000 sites:
   - "Pobrzeże Słowińskie" PLB220003, approx. 6.8 km to the north of the Karżcino WF and approx. 9.15 km to the north of the Wrzeście-Kępno WF;
   - "Przybrzeżne wody Bałtyku" PLB990002, approx. 8.6 km to the north of the Karżcino WF and approx. 12.5 km to the north-west of the Wrzeście-Kępno WF;
   - "Dolina Słupi" PLB220002, approx. 8.6 km to the south of the Karżcino WF and approx. 12.5 km to the south of the Wrzeście-Kępno WF;
   - "Dolina Słupi" PLH220052, approx. 3.6 km to the west of the Karżcino WF and approx. 4.9 km to the west of the Wrzeście-Kępno WF;
   - "Dolina Łupawy" PLH220036, approx. 5.6 km to the north-east of the Karżcino WF and approx. 5.55 km to the north-east of the Wrzeście-Kępno WF;
   - "Ostoja Słowińska" PLH220023, approx. 6.8 km to the north of the Karżcino WF and approx. 9.14 km to the north of the Wrzeście-Kępno WF;
   - "Klify Poddębskie" PLH220100, approx. 7.7 km to the north-west of the Karżcino WF and approx. 19.5 km to the north-west of the Wrzeście-Kępno WF;
   - "Jezioro Wicko i Modelskie Wydmy" PLH320068, approx. 19.1 km to the west of the Karżcino WF;
   - "Bagna Izbickie" PLH220001, approx. 19.8 km to the north-east of the Wrzeście-Kępno WF.

Przystawy, Bartolino and Sulechówko subprojects

The WTGs, all located in Malechowo commune, are divided in the following subgroups:

- The Przystawy subproject is located to the south-west of the Przystawy village, nearby the border between Darłowo and Malechowo communes (7 WTGs) ;
- The Bartolino subproject is located to in the area delineated by the villages of Kusice and Krzekoszewo (6 WTGs) and to the south of Krzekoszewo village, nearby the border between Polanów and Malechowo communes (1 WTG);

- The Sulechówko subproject is located to the north of the border between Polanów and Malechowo communes, in the area delineated by the villages of Sulechówko, Kukułczyn, Lejków, Lejkowo, Darstkowo, Borkowo, Sierakowo Sławieńskie and Krzekoszewo.

The three subprojects are not situated within borders of any nature and landscape protected areas, except of the high voltage underground power transmission lines, which cross Natura 2000 site 'Dolina Wieprzy i Studnicy' PLH220038 over an approximate distance of 540 m, moreover are located along its border over an approximate distances of 50 m and 730 m.

Secondly, the medium voltage underground power transmission cable lines, crosses Natura 2000 site 'Dolina Bielawy' PLH320053 over an approximate distance of 90 m and 35 m.

The nearest nature protected areas, located up to 20 km distant from the wind farm's or underground cable lines' areas, are as follows:

1. National Park 'Słowiński Park Narodowy', approx. 40 km to the north-east of the nearest WTG location and approx. 18.4 km to the north-east from the planned 110 kV high voltage (HV) power transmission cable line;
2. Nature Reserves:
   - 'Słowińskie Błota', approx. 4.2 km to the north of the nearest WTG location and approx. 9.4 km to the west from the planned 110 kV HV power transmission cable line;
   - 'Sieciemińskie Rosiczki', approx. 6 km to the south-west of the nearest WTG location and approx. 9 km to the south-west from the planned 110 kV HV power transmission cable line;
   - 'Jodły Karnieszewickie', approx. 6.5 km to the north of the nearest WTG location and approx. 9.4 km to the west from the planned 110 kV HV power transmission cable line;
   - 'Janiewickie Bagno', approx. 9 km to the east of the nearest WTG location and approx. 8 km to the south-west from the planned 110 kV HV power transmission cable line;
   - 'Łazy', approx. 11.3 km to the west of the nearest WTG location and approx. 20 km to the west from the planned 110 kV HV power transmission cable line;
   - 'Wieleń', approx. 12 km to the south-east of the nearest WTG location and approx. 15 km to the south-east from the planned 110 kV HV power transmission cable line;
   - 'Sławieńskie Dęby', approx. 13 km to the north and north-east of the nearest WTG location and approx. 2 km to the west from the planned 110 kV HV power transmission cable line;
   - 'Bielica', approx. 15.7 km to the north of the nearest WTG location and approx. 20.4 km to the south-west from the planned 110 kV HV power transmission cable line;
   - 'Rezerwat na rzece Grabowej', approx. 16 km to the south-east of the nearest WTG location and approx. 19 km from the planned 110 kV HV power transmission cable line;
   - 'Jezioro Lubiatowskie im. Prof Wojciecha Górskiego', approx. 17 km to the south-west of the nearest WTG location and approx. 20 km to the south-west from the planned 110 kV HV power transmission cable line;
   - 'Zaleskie Bagna', approx. 30 km to the north-east of the nearest WTG location and approx. 6.6 km to the north-west from the planned 110 kV HV power transmission cable line;
   - 'Jezioro Modła', approx. 30 km to the north-east of the nearest WTG location and approx. 6.2 km to the north-west from the planned 110 kV HV power transmission cable line;
   - 'Buczyna nad Słupia', approx. 30 km to the north-east of the nearest WTG location and approx. 5.6 km to the north from the planned 110 kV HV power transmission cable line;
3. Landscape Park 'Park krajobrazowy Dolina Słupi', approx. 30 km to the east of the nearest WTG location and approx. 12.5 km to the south-east from the planned 110 kV HV power transmission cable line;
4. Landscape Protection Areas:
   - 'Koszaliński Park Nadmorski', approx. 7.4 km to the west and to the north-west of the nearest WTG location and approx. 12 km to the north-west from the planned 110 kV HV power transmission cable line;
   - 'Okolice Polanowa', approx. 11.7 km to the south-east of the nearest WTG location and approx. 14.5 km to the south-east from the planned 110 kV HV power transmission cable line;
   - 'Jezioro Łetowskie i okolice Kępic', approx. 14 km to the east of the nearest WTG location and approx. 12.5 km to the south-east from the planned 110 kV HV power transmission cable line;
   - 'Dolina Radwi (Mostowo-Zegrze)', approx. 17.7 km to the north-east of the nearest WTG location and approx. 5.6 km to the north from the planned 110 kV HV power transmission cable line;

- ‘Pas Pobrzeża na zachód od Ustki’, approx. 20.5 km to the north of the nearest WTG location and approx. 6 km to the north from the planned 110 kV HV power transmission cable line;
- ‘Pas Pobrzeża na wschód od Ustki’, approx. 40 km to the north-east of the nearest WTG location and approx. 8.2 km to the north-east from the planned 110 kV HV power transmission cable line;

5. Natura 2000 areas:
   - ‘Przybrzeżne wody Bałtyku’ PLB990002, approx. 10.5 km to the north of the nearest WTG location and approx. 9.3 km to the north from the planned 110 kV HV power transmission cable line;
   - ‘Zatoka Pomorska’ PLB990003, approx. 14.2 km to the west of the nearest WTG location and approx. 22.5 km to the north-west from the planned 110 kV HV power transmission cable line;
   - ‘Dolina Słupi’ PLB220002, approx. 30 km to the north-east of the nearest WTG location and approx. 12.8 km to the south-east from the planned 110 kV HV power transmission cable line;
   - ‘Ostoja Słowińska’ PLB220003, approx. 40 km to the north-east of the nearest WTG location and approx. 18.5 km to the north-east from the planned 110 kV HV power transmission cable line;
   - ‘Dolina Grabowej’ PLH320003, approx. 75 m to the east and north-east of the nearest WTG location and approx. 350 m to the east from the planned 110 kV HV power transmission cable line;
   - ‘Dolina Bielawy’ PLH320053, approx. 350 m to the west of the nearest WTG location and the planned MV power transmission cable line is crossing that area;
   - ‘Słowińskie Błoto’ PLH320016, approx. 4.9 km to the north-west of the nearest WTG location and approx. 9.2 km to the west from the planned 110 kV HV power transmission cable line;
   - ‘Jezioro Bukowno’ PLH320041, approx. 7.2 km to the north-west of the nearest WTG location and approx. 16 km to the north-west from the planned 110 kV HV power transmission cable line;
   - ‘Janiewickie Bagno’ PLH320041, approx. 8.6 km to the east of the nearest WTG location and approx. 7.9 km to the south-east from the planned 110 kV HV power transmission cable line;
   - ‘Dolina Wieprzy i Studnicy’ PLH220038, approx. 10.3 km to the north of the nearest WTG location and approx. 13 km to the east and north-east from the planned 110 kV HV power transmission cable line;
   - ‘Jezioro Kopań’ PLH320059, approx. 16.2 km to the north of the nearest WTG location and approx. 15 km to the north-west from the planned 110 kV HV power transmission cable line;
   - ‘Mechowisko Manowo’ PLH320057, approx. 19 km to the south-west of the nearest WTG location and approx. 21 km to the south-west from the planned 110 kV HV power transmission cable line;
   - ‘Bukowy Las Górki’ PLH320062, approx. 20 km to the west of the nearest WTG location and approx. 25 km to the west from the planned 110 kV HV power transmission cable line;
   - ‘Przymorskie Błota’ PLH220024, approx. 30 km to the north-east of the nearest WTG location and approx. 5 km to the north from the planned 110 kV HV power transmission cable line;
   - ‘Klify Poddębskie’ PLH220100, approx. 40 km to the north-east of the nearest WTG location and approx. 9.8 km to the north-east from the planned 110 kV HV power transmission cable line;
   - ‘Ostoja Słowińska’ PLH220023, approx. 40 km to the north-east of the nearest WTG location and approx. 18.5 km to the north-east from the planned 110 kV HV power transmission cable line;
   - ‘Dolina Łupawy’ PLH220036, approx. 40 km to the north-east of the nearest WTG location and approx. 19.3 km to the north-east from the planned 110 kV HV power transmission cable line;
6. Ecological lands are located approx. 100 m from the nearest WTG location;
7. Nature monuments are located approx. 450 m from the nearest WTG location, in the village of Sulechówko, within the cemetery’s area.

Wieliszewo subproject

The Wieliszewo subproject is not situated within borders of any nature and landscape protected areas. The nearest protected areas, located up to 15 km distant from the planned WTGs locations, are listed below:

1. National Park ‘Słowiński Park Narodowy’, approx. 17.4 km to the north-east of the nearest WTG location;
2. Nature Reserves:
   - ‘Gogolewko’, approx. 9 km to the south-east of the nearest WTG location;
   - ‘Źródliskowe Torfowisko’, approx. 12.3 km to the south-west of the nearest WTG location;
   - ‘Grodzisko Runowo’, approx. 13.9 km to the east of the nearest WTG location;
3. Landscape Park ‘Park Krajobrazowy Dolina Słupi’ (buffer zone), approx. 0.05 km to the southeast of the nearest WTG location;
4. Landscape Protection Areas:

- ‘Fragment Pradoliny Łeby i Wzgórza Morenowe na Południe od Lęborka’, approx. 14.3 km to the east of the nearest WTG location;

5. Natura 2000 sites:
   - ‘Dolina Łupawy’ PLH220036, approx. 2 km to the northeast of the nearest WTG location;
   - ‘Dolina Słupi’ PLH220052, approx. 6.7 km to the southwest of the nearest WTG location;
   - ‘Dolina Słupi’ PLB220002, approx. 7.6 km to the southwest of the nearest WTG location;
6. Nature monuments – located in the village of Domaradz, approx. 1.9 km to the west from the site;
7. Ecological lands – the closest located approx. 1.2 km north of the site.

The map presented below shows location of abovementioned wind farms and nature protection areas.

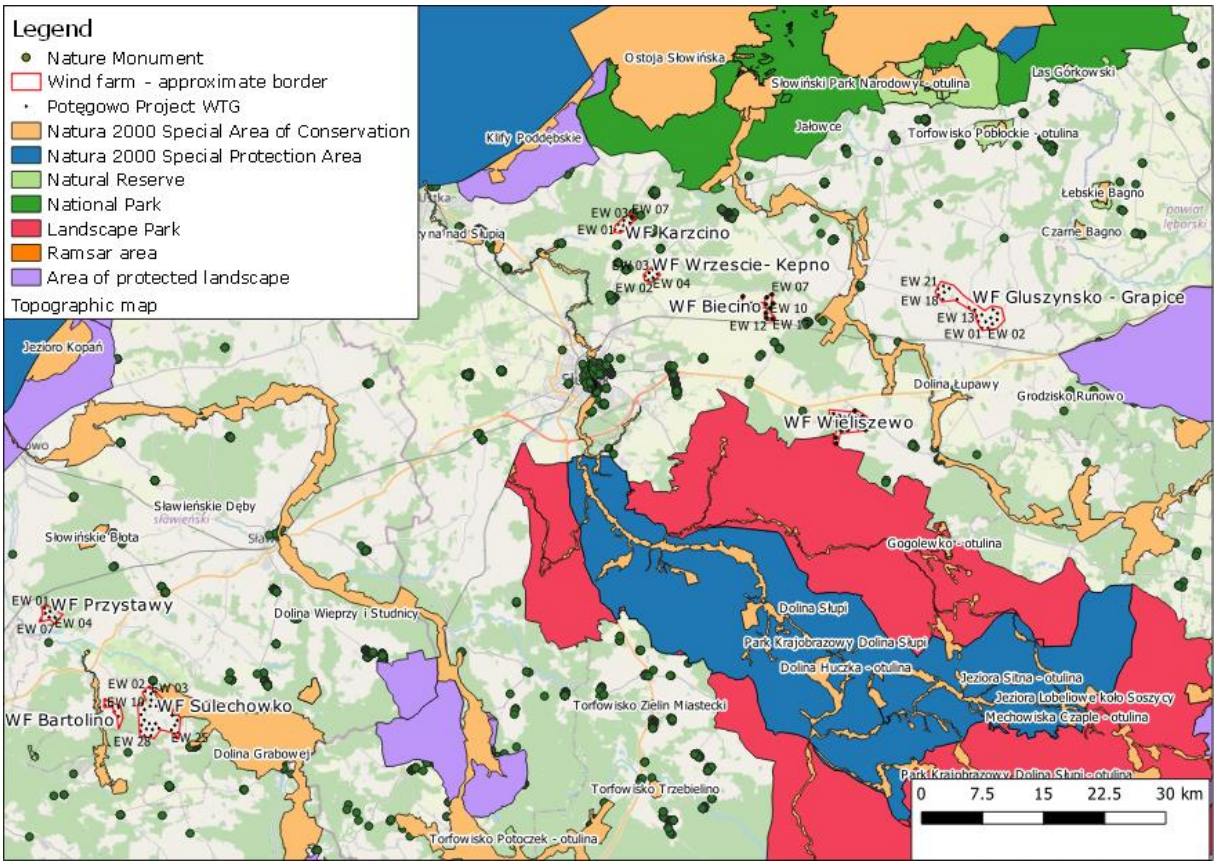

Figure 11. Map of nature protection areas and locations of the wind farms

Will the Project affect societies?

Development of the core part of the Potęgowo WF until its fully operational phase has not required any displacement of the people or business - no physical or economical resettlement had taken place. The current expansion of the Project will not require such resettlements as well.

The land for the development of the entire Potęgowo project, including its current extension, was entirely acquired by the Company based on a lease contracts or easement agreements. Fair market prices were offered to the landowners for land lease.

During construction works of the already built part of the Project the company established a procedure to address grievances submitted in case of any damages resulted from construction works or delivery of building materials. The same procedure will apply to expansion of the Bięcino WF and construction of the Wieliszewo WF.

The project has direct socio-economic impacts on development of all relevant communes and local inhabitants. The following direct impacts have been identified:

- increased income of the commune by taxes paid by the operator for commercial activities in the area (estimated at approx. 20-25 thousand euro per WTG annually);
- increase of the annual income of land leasers for each;
- improvement of the local communication routes;
- creation of working places on local labor market during construction phase of the Project.

The negative impact is related to decrease of the land area used for agricultural purposes; however, this is compensated by the land lease fees. The footprint of the wind farms and infrastructure is limited, and farming can be maintained around the turbines.
Moreover, some negative social impacts can be expected during construction phase of the Potęgowo WF due to increased traffic. These include:

- noise and vibrations generated by heavy trucks to which the citizens will be exposed;
- increased traffic on the local roads;
- increased likelihood of road accidents;
- damages to road's surface and possibly also building structures;
- temporary limitations in the access to the roads due to the needs of oversize cargo transport.

The Company will implement measures to compensation to farmers and land users for any damages that could result from the construction works undertaken. This is in line with Polish legislation. In general, any works-related damages reported by the land owners will be immediately verified on-site by the Company representative assisted by the land owner. Then the range of damages and a compensation level will be evaluated by the expert (appraiser). Agreed compensation will be paid to the victim.

What impacts during construction will occur?

The main impacts of the projects associated with the wind farm development relate to earth works (primarily during setting of foundations for the towers), construction works and increased transport traffic and include intrusion and disturbance within soils strata, temporary change of groundwater level (when groundwater draining is required during the construction), increased noise and vibration.

The Company implemented the best practice to limit the nuisance of works for construction of the already developed part of the Projects. The same will be implemented in the current extension of the Project. The measures to limit the impacts the Company will apply such measures as:

- use construction equipment complying with noise and exhaust fumes abatement levels while excavating for foundations and building provisional access roads;
- planning transport routes for cars and heavy machinery in such way that local citizens are least disrupted; in addition, to reduce noise emissions during the investment delivery stage, construction works which could cause excessive noise emissions should be reserved for daytime and organized in such a manner to reduce the noise-related nuisance to a minimum;
- provision of trees containments;
- preventing contamination of construction site with polluting substances, e.g. by well-sealed fuel distribution to equipment and vehicles operated during construction and maintenance;
- conducting waste management in line with the provisions of Waste Act and local commune regulations.

What will be the impacts during operation?

Completed investigations and public consultations conducted primarily as part of the environmental impact assessments procedure identified that main environmental impacts associated with the operation of the wind farm refer to increased noise levels, change in the landscape and influence on avifauna and bats. Apart from the individual EIAs for the subprojects also a cumulative impact assessment has been completed for the Project as a

whole. This assessment takes into account also other wind farms in the vicinity of the Project subprojects in order to get a clear picture of the cumulative effect. Below we present the general conclusions of the assessment.

Noise

Operation of a WTG causes noise generation as a result of wind interfering with the tower and particular with the blades as well as by equipment installed in the WTG, such as gear, transformer etc. The noise impact is considered as one of the most obvious impacts generated by the wind farms.

In order to predict an impact on the acoustic climate the noise dispersion analyses have been completed. The purpose of such analyses was to assess, whether any acoustically protected areas, such as homestead housing, are in risk of noise impact exceeding the binding environmental quality standards. It should be noted here, that the acoustic model commonly used in the EU and used for the analysis predicts the worst case scenario and the noise levels observed at various existing wind farms are below the predicted levels.

In order to assess the noise impact generated be all windfarm subprojects, but taking also into account impact already generated by existing wind farms a comprehensive noise modeling was undertaken as part of the Cumulative Impact Assessment. For the purpose of the assessment data on 3rd party wind farms located within 10 km distance from the subprojects was collected and analyzed. Given the noise propagation properties, noise generated by wind turbines distant more than 2 km shall not overlap. Among the identified 3rd party wind farms only one was found to be located within this distance, approximately 800 m away from the Głuszynko-Grapice subproject. The noise modeling results indicate that if the noise level emitted by the wind turbines does not exceed the levels imposed by the environmental decisions and supplementary environmental impact assessment for the Karżcino and Wrzeście-Kępno subproject, then the environmental standards (40 or 45 dB at night) will not be exceeded at any point in the villages located in the proximity of the Project. The modern turbines installed at the sites have capability to work with reduced acoustic power, hence, the noise reduction to a necessary level is technically possible.

Visualization of the cumulative noise impact is presented on the below maps:

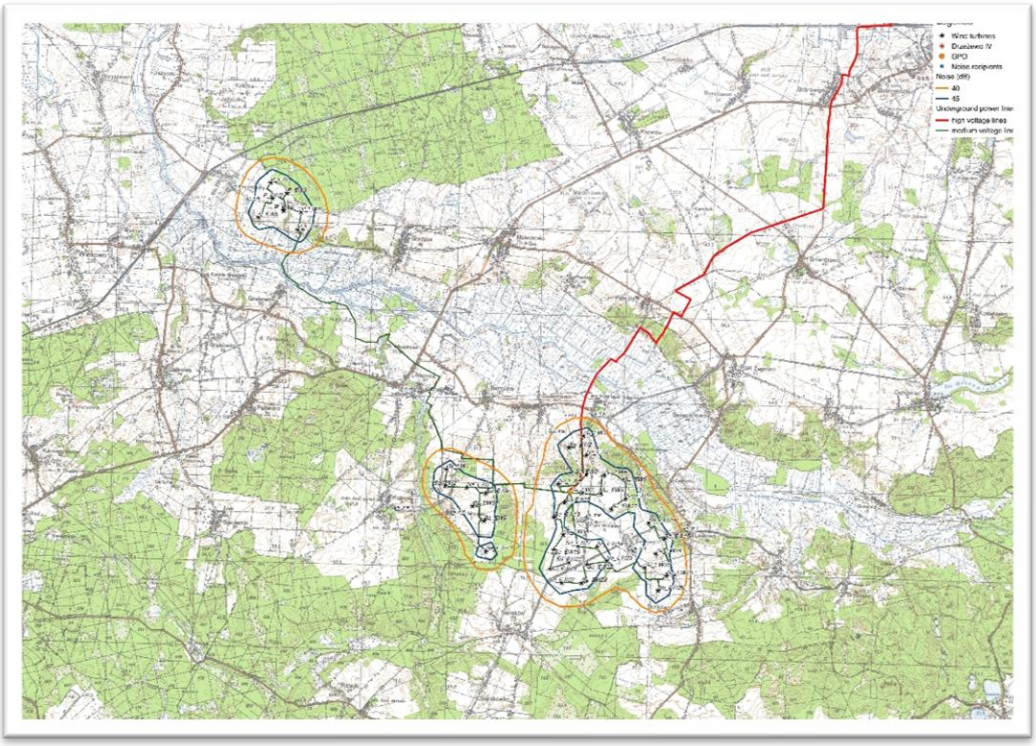

Figure 12. Prediction of the cumulative noise impact map for the Bartolino, Sulechówko and Przystawy subprojects - nighttime

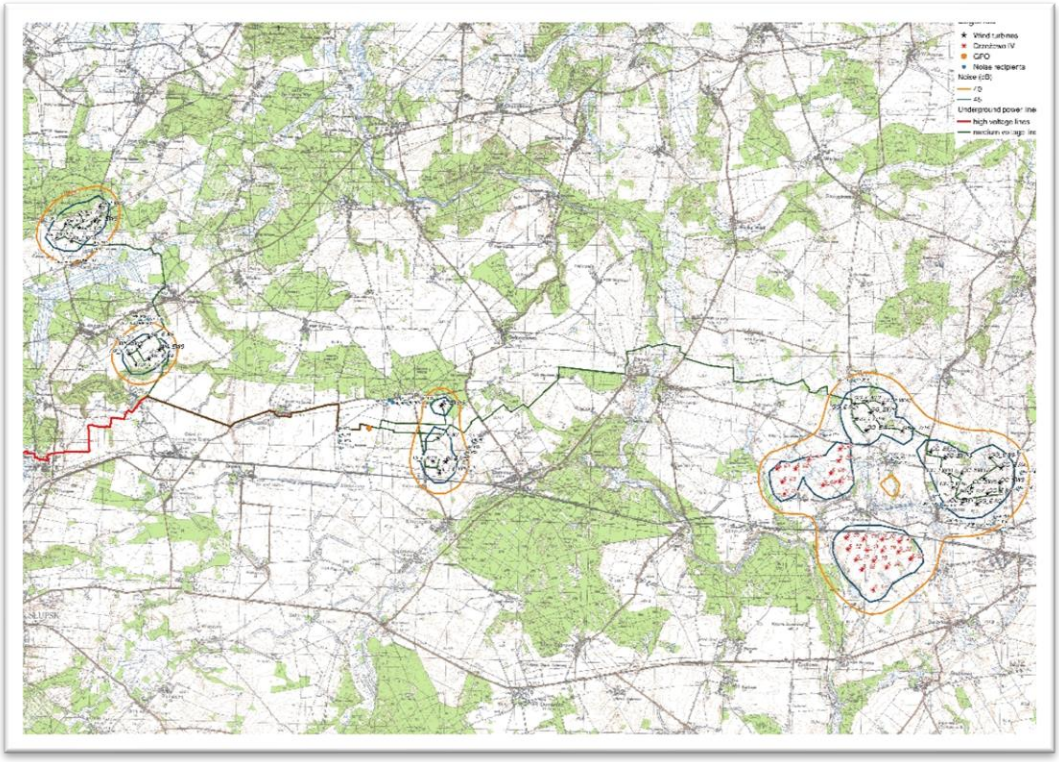

Figure 13. Prediction of the cumulative noise impact map for the Karżcino, Wrzeście-Kępno, Bięcino and Głuszynko-Grapice subprojects – nightime

The noise impact of the planned Wieliszewo WF was assessed separately. As this wind farm is more than 2 km distant from other subprojects of Potęgowo WF, a cumulative noise impact will not occur.

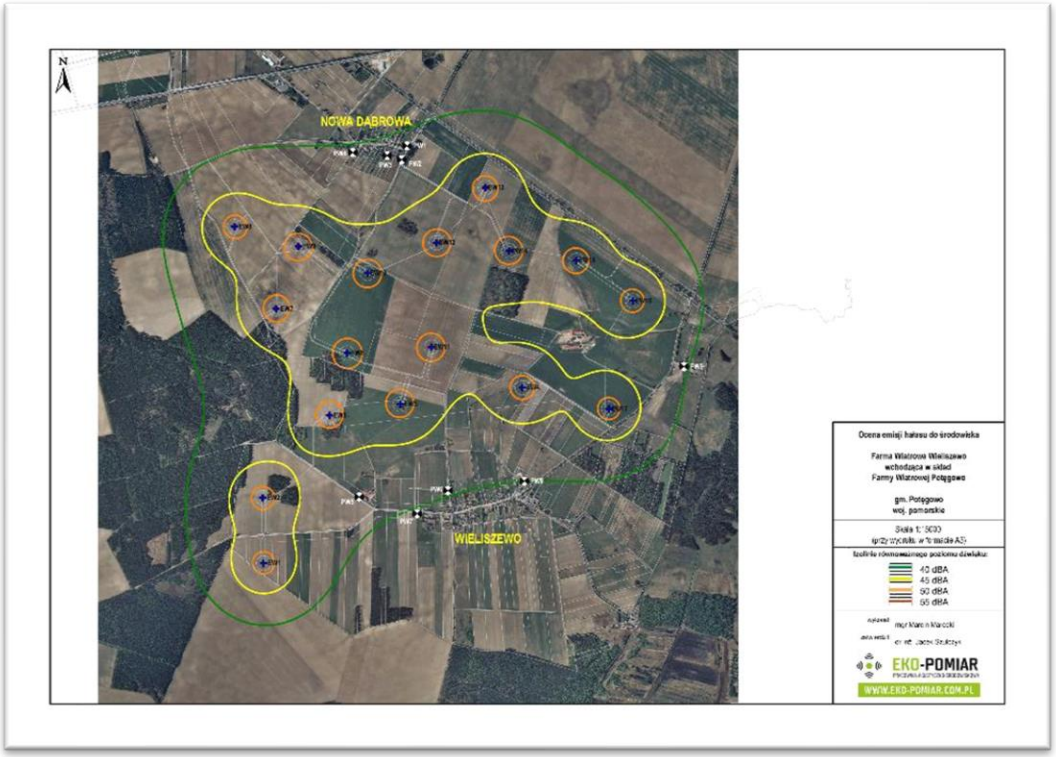

Figure 14. Prediction of the noise impact generated by Wieliszewo WF

Birds and bats

The location of the Potęgowo Wind Farm may create a possible threat to birds and bats. Nevertheless, it should be pointed that number of observations and reports on active wind farms and its impact on birds' populations indicates that birds avoid collisions with wind farms. The number of deaths within birds resulting from collisions with wind turbines is significantly smaller than those caused by collisions with e.g. cars, power lines and houses.

To recognize the local birds' populations and undertake applicable measures during the planning stage the investor has conducted a number of ornithological observations on the area of the planned wind farms. These were conducted by qualified ornithologists in line with the guidelines recommended, among others, by the Polish Wind Energy Association and OTOP[1]. The scope of the assessment was later assessed as adequate for the subject areas by the Competent Authority and RDOS (Regional Environmental Agency). Accuracy, quality and compliance with the national and international guidelines were also positively assessed by an independent ornithologist of Ramboll Environ.

At each of the sites a pre-investment ornithological monitoring was conducted. The ornithological monitoring was conducted between September 2009 and September 2010 at the Karżcino WF and Wrzeście-Kępno WF areas, for Głuszynko- Grapice WF was conducted between September 2009 and August 2010, in Bięcino WF from the beginning of May 2009 to the end of April 2010, for Bartolino, Przystawy and Sulechówko WFs from the beginning of March 2009 to the end of February 2010 and finally for Wieliszewo WF between September 2009 and August 2010. From the pre investment monitoring results point of view the identified avifauna was represented mainly by small birds with insignificant records of rare and infrequent species. The areas included in the Project have not been identified as valuable or of special interest concerning wildlife and nature protection needs.

Collisions of birds with the new objects may occur, especially at night, with weather conditions resulting in limited visibility. However observations from existing wind farms show that those would be very isolated incidents and would not have a significant effect on local bird populations. Since the wind farms are not on a migration routes and are not an important breeding ground for protected species, it is therefore expected that collisions may only occur incidentally and will not have a significant effect on the populations. The overall Potęgowo Project's impact on birds was assessed as low to medium.

A cumulative impact assessment completed by Ramboll Environ included also assessment of the impact on birds. Apart from the planned Potęgowo Project wind farms, also existing and far advanced in development 3rd parties wind farms distant no more than 10 km from the Potęgowo subprojects were taken into account. The cumulative impact on birds of a few windfarms, located close to each other, may occur mainly due to inappropriate location of wind turbines, e.g. at the sites used by birds as valuable breeding areas, nesting areas or, on the major migration routes. In case of the Project and nearby 3rd party windfarms such circumstances do not occur: neither the sites nor their surroundings are important or potentially important breeding or nesting areas nor the wind farms are located on the birds migration routes (these were confirmed by the pre-construction monitoring programs). Hence, the cumulative adverse impact on birds is not expected to occur.

Since the monitoring of avians in the area of the Project was conducted in 2009-2010 (and based on this the EIA procedure was completed with still valid environmental decision granted to the Project), as a precaution measure, additional validation of natural conditions at the site was completed, in September and October 2019. The findings of the validation were presented in the validation report[2].

In order to assess the timeliness of the data obtained in 2009 and 2010, in 2019 monitoring studies were conducted aimed at censorship of selected breeding rare and medium rare species with simultaneous assessment of the existing habitat conditions in the area of the Project. In 2019, 4 field inspections were carried out on each of the originally two planned wind farms in September and October, which made it possible to assess the data collected in 2009/2010. The major findings of the valuation are summarized below.

1 Wytyczne w zakresie oddziaływania farm wiatrowych na ptaki. Chylarecki, Pasławska. Szczecin 2008. (in Polish)

2 'Assessment of nature valuation of land designated for the construction of the Bięcino Wind Farm (Damnica commmune) and Wieliszewo Wind Farm (Potęgowo and Damnica communes)'. Biuro Usług Przyrodniczych Bio-Ekspert Beata Studzińska, Włocławek, 2019

Bięcino WF:

- In 2019 the area of the planned WTGs does not constitute attractive places for avifauna and therefore no negative impact is expected (domination of agricultural use). The lack of wetlands and water reservoirs also results in a small habitat diversity. All these aspects mean that the impact of planned wind turbines on avifauna will be consistent with the assessment contained in the pre-investment nature inventory;
- In the 10 km buffer zone around the planned wind farm, two nest protection zones of white-tailed eagles are located (species from Annex 1 of the Birds Directive, highly exposed to collisions with wind farms): in the distance of 5 and 9 km from the nearest WTG;
- At a distance of about 8.5 km there is a protection zone for black stork nesting (species from Annex I of the Birds Directive);
- The potential impact of planned WTGs may occur in the case of white-tailed eagles (nesting 5 km from the wind turbines), as the birds would penetrate the WTGs area, which in turn cause the risk of collision. However, the lack of observed individuals during the annual pre-investment monitoring, as well as during the inventory in 2019, and the lack of attractive feeding grounds in the WTGs vicinity contribute to minimizing the negative impact of the investment on this species;
- Two observations of the red kite was made (species considered to be highly exposed to collisions with wind farms and identified over the investment area during pre-investment monitoring). However, considered the fact there is no nesting protection zone of this species within 10 km of the wind farm, there are not expected significant negative impacts of planned investment.

Wieliszewo WF

- In 2019 no habitat changes were found, compared to those existing in 2009 and 2010, which would contribute to increasing the attractiveness of the WTGs area for breeding avifauna (domination of agricultural use). Moreover, the reverse trend is taking place - the deterioration of the attractiveness of the area for breeding birds, due to observed gradual drying out of wetlands, i.e. meadows, as well as shrinking of the surface or drying of water reservoirs;
- In the area of Wieliszewo Project there is a water reservoir adjacent to wet meadows, which, as the time of the nature inventory was identified as the most valuable place for birds in the entire area of the planned subproject: a place of regular concentrations of birds, including those considered exposed to collisions with wind farms (during pre-investment monitoring there were observed i.a.: mute swans, mallards, herons, common teals, wigeons, goosanders; in 2019 field inspection confirmed these species' presence);
- In the vicinity of WTG No. 4, there is a wet meadow, currently partly dried and degraded. Depending on the humidity level, it can be an attractive biotope for selected species of birds, among others seedlings, although during the research in 2009-2010 no key breeding bird species were found there;
- The closest breeding place of white-tailed eagles was confirmed to be the same, as inventoried in 2009-2010 (7 km from the wind farm);
- In 2019 the presence of white-tailed eagles was observed in different areas (feeding place by the water reservoir), than during avifauna monitoring in 2009-2010 (the area east of the WTGs, excluded from the Project - only three observations throughout the year). Since 2010 the feeding/hunting grounds of white-tailed eagles have changed – due to dissapearance of the water reservoir on the area east of the road no 211 and thus a different use of the site by birds;
- The reservoir together with the surrounding wet meadows, is the only attractive area of the planned wind farm and in its immediate vicinity for wading, *Anseriformes* birds. For this reason, this area is a potential feeding place for white-tailed eagles, also during the breeding season;
- Two observations of the red kite was recorded (species considered to be exposed to collisions with wind farms and observed over the investment area during pre-investment monitoring). However, considered the fact there is no nesting protection zone of this species within 10 km of the wind farm, there is no expected singnificant negative impacts of planned investment;
- In the case of WTGs planned in areas attractive for avifauna (WTG No. 4) or located in close proximity to forest areas (WTGs No.: 2, 5, 7, 14), the need to apply any mitigation measures should result from the post-investment monitoring outcomes;

- The WTG No. 16, planned at a distance of about 200 m from the water reservoir, seems to be of the highest concern given its attractiveness for birds (and likely also bats) observed in 2019 nature valuation. One should consider, however, that this increased attractiveness of the site results from the general drying of terrain in the entire area. Therefore there are two extreme possibilities: either the terrain drying will continue or, in opposite, the terrain irrigation will occur. In both cases the attractiveness for birds (and likely also bats) of the site will decrease, making this exact area comparable to the surroundings. Therefore the indicated attractiveness of this site should be considered temporary. As the precaution measure, however, this site should be of primary concern during the post-construction monitoring, and the results of the observations, upon agreement with the environmental authorities, should be duly included in the Active Turbine Mitigation Plan.

Based on the assessment of the occurrence of selected species of key birds in the Project area in 2019 and its comparison with the results obtained during the research in 2009/2010, it can be concluded that the assessment of the impact of the planned wind turbines on avifauna carried out in 2009 and 2010 has not become obsolete. However, the changes in habitat conditions (in terms of favourability for avifauna) in the area of the planned Wieliszewo WF observed in 2019, resulted in different use of the area by birds and further - in the necessity to apply additional mitigation measures. These should be defined by the birds and bats experts based on the current knowledge of the risks to avifauna and future post-construction monitoring outcome, and, after consultations/agreement with the environmental authorities included into the Active Turbine Management Plan.

There were also bats observations within the area of each WF, which, according to each of the subproject's EIA's, were performed between September 2009 and August 2010 at the Karżcino WF and Września-Kępno WF areas, for Głuszynko- Grapice WF was conducted between beginning of September 2009 to the beginning of September 2010, in Bięcino WF from the beginning of June 2009 to the end of May 2010, for Bartolino, Przystawy and Sulechówko WFs in the begging of March 2009 and for Wieliszewo WF between September 1, 2009 and September 1, 2010. This monitoring was undertaken in accordance with the national guidelines[3], compliant with these issued by EUROBATS, and was positively approved by the competent authorities and then by an independent bat expert of Ramboll Environ.

During bats monitoring, only limited number of bats were detected at the sites. None of identified bat species is classified as rare nor listed in the Annex II to the Habitats Directive or Polish Red Data Book. Taking into account the status of protection, all these are included in a group with low risk of quantity change and therefore with no needs of undertaking significant conservations measures. As indicated by the bats monitoring reports, the planned investment will not significantly influence the population of bats occurring in the region of Potęgowo Wind Farm project.

In line with EUROBATS guidelines the identified species of bats belong to a group of high risk of collision with wind turbines. However taking into account the spatial distribution of wind turbines and areas where bats were observed it can be concluded that the risk may be significantly reduced by moving the turbines from forested areas and borders of residential areas – as it has been adopted by the Project.

Taking into account the characteristics of the investment, results of birds and bats monitoring as well as location of the sites versus valuable nature areas, it can be concluded that the Project will have no negative impact on the species and habitats protected under 'Natura 2000'.

Similar as for birds assessment on cumulative impact on bats was conducted by Ramboll Environ. Based on the assessment results, existence of the groups of wind turbines should not result with a barrier effect or destruction of the breeding sites. Such types of impacts are related to individual wind turbines rather than the wind farms, hence, the cumulative effect is a set of impacts generated by each, individual wind turbine but do not generate any additional impact of the entire group of wind turbines (at least such effect is not known or described in the literature, as it is of birds). Based on the monitoring results, the Project sites are not located at the important bats migration routes a cumulative impact on migrating birds is not expected to occur. The impact on breeding bats has been already assessed as low and potential adverse impact is reduced by proper location of the

3 Tymczasowe wytyczne dotyczące oceny oddziaływania elektrowni wiatrowych na nietoperze. 2009. (in Polish)

individual wind turbines, sufficiently distant from water bodies, forests and linear element of the landscape preferred by both breeding and migrating bats.

Further, in order to assess the validity of data on bats obtained in 2009/2010 on selected transects, field inspections were carried out in 2019 with the use of a detector (Pettersson D-230). The aim of the study was to assess their activity in selected, considered attractive places. The bats were registered during 4 night inspections, on each of the planned wind farms subprojects. Conducting research by sampling (4 controls) the activity and species composition of bats was treated as a method enabling to indicate places of increased activity in the reproductive period with the simultaneous possibility of comparing the data collected with those obtained in 2009/2010. At the Project site the presence of 4 bat species was stated (common noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, Nathusius's pipistrelle *Pipistrellus nathusii*, Mouse-eared bat *Myotis spp.*). The obtained activity, defined as the average of all field controls on particular transects, was assigned to the low and moderate category.

The observations from 2019, on the activity of bats in the Project's area, differs from the data obtained during 2009-2010 monitoring, where no bats were found in the planned location of the wind turbines at Wieliszewo WF, while in the case of Bięcino WF only in the area of the rows of trees.

Based on the assessment of the methodology of bat monitoring in 2009, carried out in 2019, which is consistent with the currently applied guidelines, it can be concluded that the monitoring was performed correctly, which served to conclude on the impact of planned wind farms on chiropterophauna. Additionally, four inspections carried out in 2019 on each surface in order to assess the activity and species composition of bats allow us to conclude that the data obtained during the monitoring in 2009 are up-to-date.

Visual impacts

The visual aspects of the planned wind farm were described in the individual EIA reports and cumulative impact assessment report and no negative impacts were identified. The turbines, which are currently regarded as visually intrusive to current rural landscape, will form architectonic dominant objects in the environment. Nevertheless, it should be stressed that the evaluation of the influence of the wind farm on the landscape is difficult and always subjective and depends on the individual approach. It may be assumed that the subproject will gain supporters and critics taking into account the influence on the landscape.

The picture below presents exemplary visualization of the wind farm.

Figure 15. Predicted view on the Wieliszewo WF - view from the west

The landscape impact is not permanent, given the expected "lifetime of the product" i.e. 25-30 years, when decommissioning should be undertaken.

The WFs development apart from the stable visually intrusive change will create, so called shadow flicker, caused by rotating turbine blades. This may affect residents living in a close proximity to the rotating shadow sources. It should be noted, that this effect has not been proved as directly harmful to human health, however, may be disruptive to the recipient and cause unpleasant effects such as irritability or headaches. The shadow flicker effect is not formally regulated in the European countries, however, some guidelines exist in Germany, the Netherlands or the UK. These guidelines recommend that shadow flicker should not occur longer than 30 minutes

per day or 30 hours per year. Within the Cumulative Impact Assessment a shadow flicker study was undertaken for the same wind farms as for the noise modeling. The assessment results indicate that seven dwellings may be in risk of the shadow flicker impact generated by the wind turbines belonging to the Project. Mashav will monitor occurrence of shadow flicker in these locations and if the actual data confirm duration of the shadow flicker exceeding the recommended time will propose appropriate mitigation or compensation measures.

The results of the shadow flicker modeling are presented on the below maps.

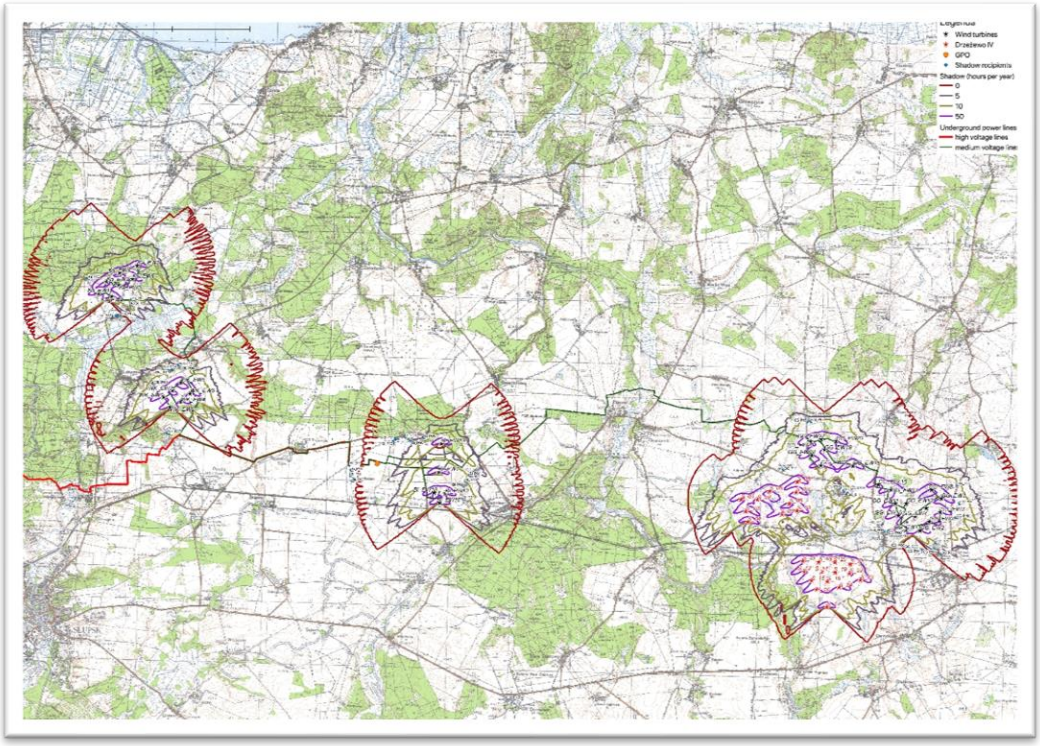

Figure 16. Predicted cumulative shadow flicker effect impact map for the Karżcino, Września-Kępno, Bięcino and Głuszynko-Grapice subprojects

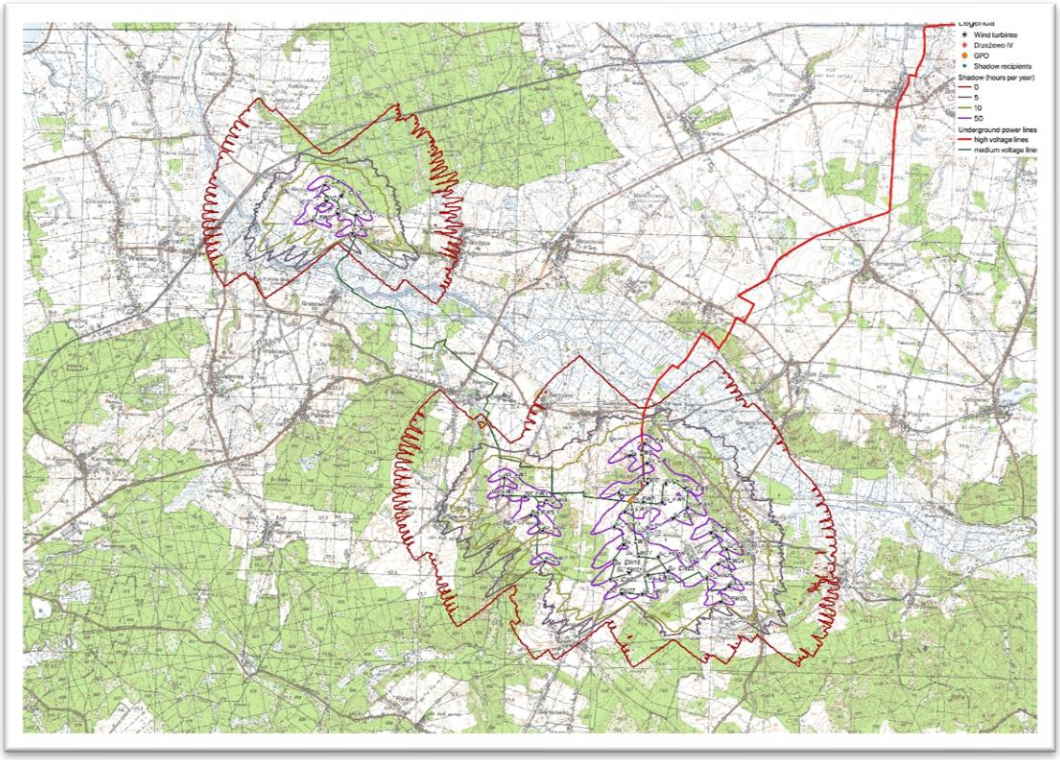

Figure 17. Predicted cumulative shadow flicker effect impact map for the subprojects Bartolino, Sulechówko and Przystawy

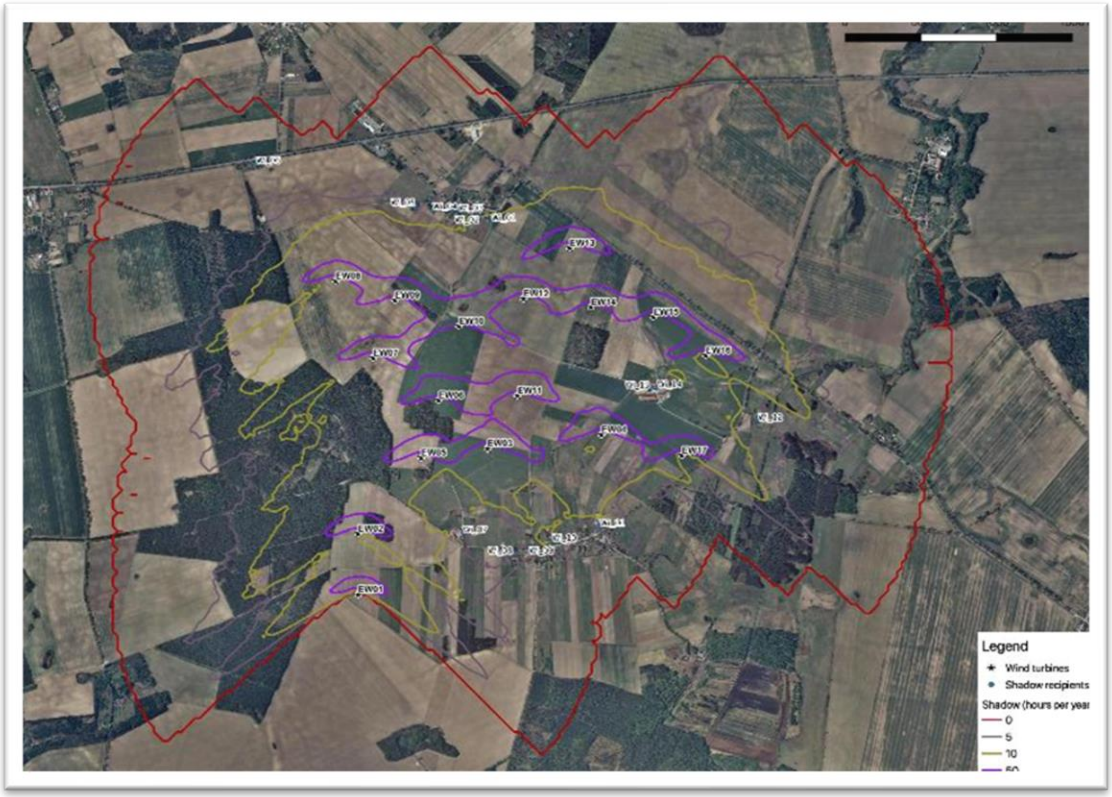

Figure 18. Predicted shadow flicker effect impact map for Wieliszewo subproject

Electric and magnetic fields

The electric and magnetic fields are generated by the following elements of the wind farms' infrastructure:

- Electrical equipment placed in the WTGs
  The electrical equipment in modern WTGs is placed in the nacelle on top of the tower. The wind energy after transformation first to mechanical energy is then transformed to low voltage (about 400 V) electrical energy. Prior transmission off the WTG the low voltage energy is transformed to medium voltage (30 kV) in a transformer. Due to the location of the internal WTG transformer high above the ground, the level of the generated electromagnetic field at the ground level (at a height of approximately 1.8 m) can be generally omitted. The situation is similar in the case of the designed devices equipped with generators with relatively low power. Besides the fact that they will be located at high altitudes, they will also be encapsulated within the metallic conductor surrounded by a nacelle, which in turn causes the WTG will not affect the electromagnetic climate.
- Medium voltage underground power transmission lines
  In accordance with the applicable standards, all cables will be placed in trenches with a depth of at least 1 m and a width of about 1 m. Medium voltage cable networks generate an electromagnetic field which level is low enough that it does not threaten the environment.
- Main transforming stations (MTS)
  In case of modern MTS, the radiation of the electric and magnetic fields does not occur in practice. The MTS is considered to be a part of the project. Based on the information included in the EIA report and according to the already existing similar experiences, it is assumed that the maximum intensity of the electromagnetic fields should not exceed 10kV/m (in the areas available for personnel). Moreover, the electromagnetic force will not exceed the permissible value of 60 A / m (at maximum load). The area of GPO will not be available for public.

Measure aiming at limitation of the impacts

The main measure which may be used to prevent significant environmental impact of a wind farm is a good choice of the location. Thus, during the project preparation a number of possibilities of different locations of wind turbines have been analyzed. Preparation of the variants of the investment, apart from technological and economic issues such as winds characteristics and costs of land lease and use, have taken into account the following issues, important from the perspective of environmental protection:

- existing state and way of land development and use of areas, which includes distribution of residential housing, forests, farming land,
- mutual impact on individual objects on each other, including also possible adding up of sound waves,
- necessity of protecting the objects of residential housing against noise,
- location from the perspective of birds and bats protection.

The second aspect of choice, very important from the point of view of environmental protection, was the choice of a producer and a supplier of equipment. The company decided to install WTGs manufactured by the leading international companies such as General Electric and Vestas.

Works consisting of placement of WTGs and successive preparation of variants of individual WTGs' location took several months. After many analyses of the preliminary lay-out of wind turbines, considering noise restrictions, avifauna protection, soil's characteristic, adjustment to lay-out have been implemented. In summary it may be stated, the layout of wind turbines has been planned in that way to achieve the following goals:

- not to exceed the binding environmental noise quality standards, set in Executive Order of the Ministry of Environment;
- to be located out of birds migration routes, birds concentrations, feeding or nesting areas;
- to be located out of valuable plants habitats, wetlands or forest areas;
- to be located out of nature and landscape protected areas;
- not to disturb the continuity of ecological corridors.

Will the impacts of the Project be controlled?

In order to ensure that the Project meets the highest international standards, national legal obligations and lenders' requirements, a defined monitoring program will be implemented during construction and the operation of the wind farms. The findings of the monitoring programs will be implemented into an Active Turbine Management Plan, which will address all identified excessive impacts and determine necessary technical or organizational measures necessary to eliminate them. The monitoring program will include elements as described below.

Noise

Following the requirements of the environmental decisions granted to the individual subprojects as well as the agreement with the lenders, as per the Environmental and Social Action Plan (ESAP), the noise measurements were completed after the individual subprojects commissioning and being fully operational. The measurements were conducted by the certified laboratory 'Ekopomiar' for wind farms Bięcino WF, Potęgowo East WF (Września-Kępno, Karżcino clusters) and Potęgowo West WF (Przystawy, Sulechówko and Bartolino clusters). Ath the Bięcino WF the measurements were carried out on September 4 and 5, 2019 and no breaches of the the permissiblie sound levels at the protected areas were noted.

At Września-Kępno and Karżcino WFs measurements were carried out in October 2020. According to the noise inspection reports the noise limits were not exceeded at these location.

At Potęgowo West WF the noise measurements were carried out in November 2020. At all clusters of this part of the Project no breaches of the noise standards were noted.

All measurement results and full measurements' reports were submitted to the relevant local authorities as well as the Regional Directorates for Environmental Protection.

The noise measurements were not completed at the Głuszynko-Grapice WF due to weather conditions inappropriate for this kind of measurements occurring after the WF become operational. Noise measurements at this site will be conducted early in 2021.

The noise measurements at the Bięcino WF and Wieliszewo WF will be conducted in line with the environmental decisions and ESAP agreed with the lenders after these subprojects are fully developed and operational.

Shadow flicker

Although not legally regulated the shadow flicker effect is voluntarily monitored by Mashav. If excessive nuisance of this effect is observed, in particular at the extended Bięcino WF and Wieliszewo WF, the company will develop and implement, as part of the Active Turbine Management Plan a mitigation or compensation measures to limit duration of the flickering below 30 hours per year, as recommended by some of the European guidelines. None of the grievances submitted to date was related to shadow flicker effect.

Birds and bats

Birds and bats monitoring has been required by the local in environmental decisions granted to the subprojects. For already operational part, the monitoring of birds and bats has already been commenced. The environmental monitoring is carried out in accordance with the environmental decisions and in line with the methodologies which are based on the national guidelines for birds and bats monitoring and best practice in this type of research. Methodology used has been accepted by the Regional Directorate for Environment Protection (Pl. *Regionalna Dyrekcja Ochrony Środowiska,* RDOŚ) in Gdańsk and Szczecin for eastern and western part of the Potęgow WF respectively. This monitoring is carried by specialist researchers with many years of field experience. Moreover, a system for automatic bat detection has been installed on the chosen wind turbines of WF Potęgowo West registering activity of these animals in proximity to the turbines and wind farm as a whole.

Monitoring activities for Potęgowo East are carried out continuously for three years and for Potęgowo West – continuously for four years. The current monitoring completion state for each of the projects is: WF Potęgowo East – 17%, Bięcino WF – 42%, WF Potęgowo West – 6%.

Field monitoring conducted to date has shown bird mortality rate as 0,15 fatalities per turbine per year and bat mortality rate as 0,15 fatalities per turbine per year. At Bięcino WF, where the full 1-year long cycle of monitoring has been finished, mortality rates were higher, however still low considering the European average values. Mortality rate for Bięcino WF was 1,28 bird fatality per turbine per year and 0,64 bat fatality per turbine per year, while the European averages are 10.1 bird fatalities pert turbine per year and 3.56 bat fatalities per turbine per year. At Potęgowo West WFs the number of fatalities amounted 0.02 and 0.12 per turbine per year for birds and bats respectively.

The birds monitoring is focused also on the subprojects impact on birds which are particularly vulnerable with respect to collisions with the wind turbines, such as white tiled eagle, golden plover and others. Only two birds of prey were found in the Potęgowo WF area. A buzzard was found dead at the Bięcino WF area. It is the most common and not endangered species of bird of prey in Poland. The red kite was the victim in the Potęgowo West WF area. This species listed in Annex I of the Birds Directive is characterized by high collision risk with wind farms. It should be noted, however, that the collision took place at the peak of migration of this species. Moreover, the population of the red kite in Poland has shown a strong upward trend in recent years, despite the growing number of wind farms. Both collisions were most likely incidental events and occurred shortly after the wind farm was put into operation, when bird mortality is usually increased. No prey was found among other key species, including gold plover and storks, or among other wetland birds.

Bird and bat mortality rates observed so far are low as compared to European averages. Extrapolation of acquired results for the whole monitoring period shows low mortality rates for this animal groups. If this tendency is maintained, the negative impact of the wind farm on avifauna and chiropterofauna will be negligible.

Collision risk assessment is a part of the monitoring activities for given projects as well. Final assessment will be possible after at least two years of bird and bat mortality rate monitoring.

Overall Project performance

As the project is financed by EBRD and other international lenders the overall Project performance is continuously monitored. As part of the agreement with the lenders, the Company:

- Has developed and maintains environmental and social management system tailored to the character of the Project and size of the company. The management system is based on the Environmental and Social Policy developed by the Company and by the respective procedures and instructions addresses all operational aspects of the wind farms. By the Company management commitment relevant resources are allocated for environmental and social management of the Project. Non-discrimination and equal opportunity principles are secured system and full compliance with the national standards with respect to employment of child and pregnant women or forced labor are followed for both own and outsourced human resources.
- As part of the environmental and social management system the Company has developed procedures to monitor the key performance indicators which, apart from purely operational factors include also monitoring of accidents and other than normal operations, submitted grievances and others.
- The Company maintains a H&S management system, which by procedures and instructions secures that all internationally recognized H&S standards and national legal requirements are followed. In particular the system will secure that all own and outsourced staff will be properly trained, will pass medical examination and will be provided with the personal protective equipment adequate for the performed tasks. Certain procedures will constitute the H&S plans for various operations at the wind farms, such as working in the confined spaces, working at heights, working with electrical equipment etc.
- The Company maintains a stakeholders engagement plan (SEP) which defines rules of communication with all Project stakeholders as well as the grievance mechanism for both own and outsourced workers and external stakeholders.
- Report on Project performance on annual basis.
- Maintain a Project website on which all major documents related to the Project, including possessed permits, results of the environmental monitoring, annual reports and other Project related information will be posted and regularly updated. The Project website will also allow to submit grievances.

- Be subject to a 3rd party environmental and social audit every three years during the Project lifetime.

The whole list of the Company commitments can be found in the environmental and social action plan available at the Project website.

Is additional information available?

The whole Project disclosure package is available for review at the Project website www.mashavenergia.com and at the Company HQ in Warsaw (ul. Twarda 18, 24 floor, 00-105 Warsaw).

The table below lists available locations where the disclosure package will be available for the review:

No.	Contact Points	Address	Contact Person
1	Malechowo commune	Urząd Gminy Malechowo Malechowo 22A 76-142 Malechowo	Mayor Radosław Nowakowski
2	Słupsk commune	Urząd Gminy w Słupsku ul. Sportowa 34 76-200 Słupsk	Mayor Barbara Dykier
3	Damnica commune	Urząd Gminy Damnica ul. Górna 1 76-231 Damnica	Mayor Andrzej Kordylas
4	Potęgowo commune	Urząd Gminy Potęgowo ul. Kościuszki 5 76-230 Potęgowo	Mayor Dawid Litwin
5	Mashav local	ul. Twarda 18, 24 floor, 00-105 Warsaw	Grzegorz Borowiecki
6	Mashav site	www.mashavenergia.com	Grzegorz Borowiecki

All requests for additional information related to the Potęgowo Wind Farm can be also addressed to the Project Manager :

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Tel: +48 695 666 516
Email: grzegorz.borowiecki@mashavenergia.com