Non-Technical Summary

RADZYŃ CHEŁMIŃSKI WIND FARM PROJECT AND GRUTA WIND TURBINE, POLAND

greenbear Managing energy for a better future

Introduction

The Green Bear consortium, one of the leading wind power operators is developing two separate wind farm investments (further referred to as Project No.1 and Project No.2) in northern part of Poland, kujawsko-pomorskie voivodeship. The Project No. 1 will be developed in the Radzyń Chełmiński commune with one wind turbine generator (WTG) located in the adjacent commune of Wąbrzeźno. The Project No. 2 is being developed in the commune of Gruta, also neighboring the Radzyń Chełmiński commune. All of these communes administratively belong to Grudziądz county, Kujawsko-Pomorskie voivodeship. The aim of this non-technical summary is to ensure that a cumulative assessment of the planned wind farm developments in the region is presented to enable meaningful public and stakeholders engagement process.

Attached to this document are non-technical resumes which are integral part of the Environmental Impact Assessment Reports which are presented separately. In line with the Polish environmental regulations the Environmental Impact Assessments were completed for the projects by the competent authorities..

General presentation

Green Bear Corporation Poland Sp. z o.o. was founded in 2007 and since then it has been active on the Polish market, designing, constructing and managing wind farms.

As one of the leading wind farm developers, the company is committed to guide the business activity in accordance with the sustainable development principles, including among others:

- Efficient use of resources, including the development of cleaner and more efficient energy technology and development of energy generation means based on renewable sources;
- Environmental protection with minimization of the environmental impact of all business activities and participation in initiatives that contribute to the conservation of the environment;
- Support social development.

Project No.1

Green Bear company (the developer) intends to construct Project No.1 wind farm, which is to be located in:

- Radzyn Chełmiński and Wabrzezno communes (further referred to as Radzyn wind farm)

The investment is divided into two stages:

- Stage I – 12 WTGs located in the Radzyn Chełmiński commune;
- Stage II – 1 WTG in the Wąbrzeźno commune.

Construction of a typical wind farm includes the following:

- WTGs and relevant technical infrastructure;
- Internal roads and maneuvering areas;
- Assembly and storage yards.

Details regarding structure of the Project No.1 are given below:

Radzyn wind farm - under development, total capacity of maximum 39 MW, and it will consists of 13 WTGs, medium-voltage underground power transmission lines, a transformer station, telecommunication lines connecting the WTGs with the transformer station, and internal roads and maneuvering yards. Initially 13 wind turbines were planned to be located within Radzyń Chełmiński commune, however due to potential impact of WTG No. 12 on birds, its construction was cancelled and the development of WTG No.12W in Wąbrzeźno commune is planned to be implemented.

The wind farm part located within the Radzyń Chełmiński commune was developed by GB Radzyń 401 Sp. z.o.o while the WTG in the Wąbrzeźno commune was developed by GB Książki 405 Sp. z o.o.

The maximum hub height of the turbines reaches 119-140 m depending on the chosen variant, and the maximum total height 187.5 m for Wąbrzeźno and 200 m for turbines located in Radzyń Chełmiński commune.

Project No.2

Green Bear company (the developer) intends to construct Project No.2 wind farm, which is to be located in:

- Boguszewo (Gruta commune), further referred to as Gruta wind turbine.

Construction of a typical wind turbine includes the following:

- Tower, rotor, nacelle, wind farm foundation and relevant technical infrastructure;
- Internal roads and maneuvering area;
- Assembly and storage yards.

Details regarding structure of the Project No.2 are given below:

Gruta wind turbine – constitutes extension by one WTG of the previously constructed 24 WTGs of the Linowo wind farm. Total capacity of the wind farm will amount 50 MW generated by 25 WTGs. Unlike the other WTGs of the Linowo wind farm, the additional WTG of the Gruta wind turbine will transmit the generated power directly to the existing medium voltage network.

The maximum height of the turbine reaches 150 m.

Wind turbine description

A typical wind turbine 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.

Source: www.vestas.com

Project No.1

The wind turbines installed in Radzyń Chełmiński commune are not chosen yet. Most probably they will be produced by one of the following companies: Vestas, Enercon, Gamesa, GE Wind Energy or Siemens. The turbines are installed on maximum 140 m towers with blades of a maximum diameter 113 m. The maximum height of the turbines reaches 200 m (tower plus blades). Each of the turbines can generate 3 MW of power.

The wind turbine installed in Wąbrzeźno county is not chosen yet neither. The same WTGs providers as for the Radzyń Chełmiński part are considered. The turbine maximum height reaches 187.5 m (tower plus blades). The turbines can generate 3 MW of power.

Project No.2

Individual turbines in Linowo wind farm are located in a distance of approximately 300 m from each other. The wind turbines installed are manufactured by Vestas (type: Vestas V90, hub height 105 m, rotor diameter 90 m. The maximum height of the turbines reaches 150 m. Each of the turbines can generate 2 MW of power. One of the turbines was not built and it is currently under development (Gruta wind turbine).

The planned wind farms are located in northern Poland, kujawsko-pomorskie voivodeship, Grudziądz county.

Project No.1 Location

From the geomorphologic point of view, the Radzyń wind farm is located in Pojezierze Chełmińskie mezoregion. Twelve WTGs (12 WTGs from the stage I and 1 WTG from the stage II) will be located in the area of Radzyń Chełmiński commune, Grudziądz county, kujawsko-pomorskie voivodeship at land plots situated at Zielnowo, Kneblowo, Rywałd, Mazanki, Nowy Dwór, Radzyń Wybudowanie, Gołębiewo and Stara Ruda villages.
One WTG (stage II) will be located in the Wabrzeźno commune, Grudziądz county, kujawsko-pomorskie voivodeship at land plots of Jarantowice village.
The surroundings comprise predominantly rural areas with arable fields with sparsely populated areas.

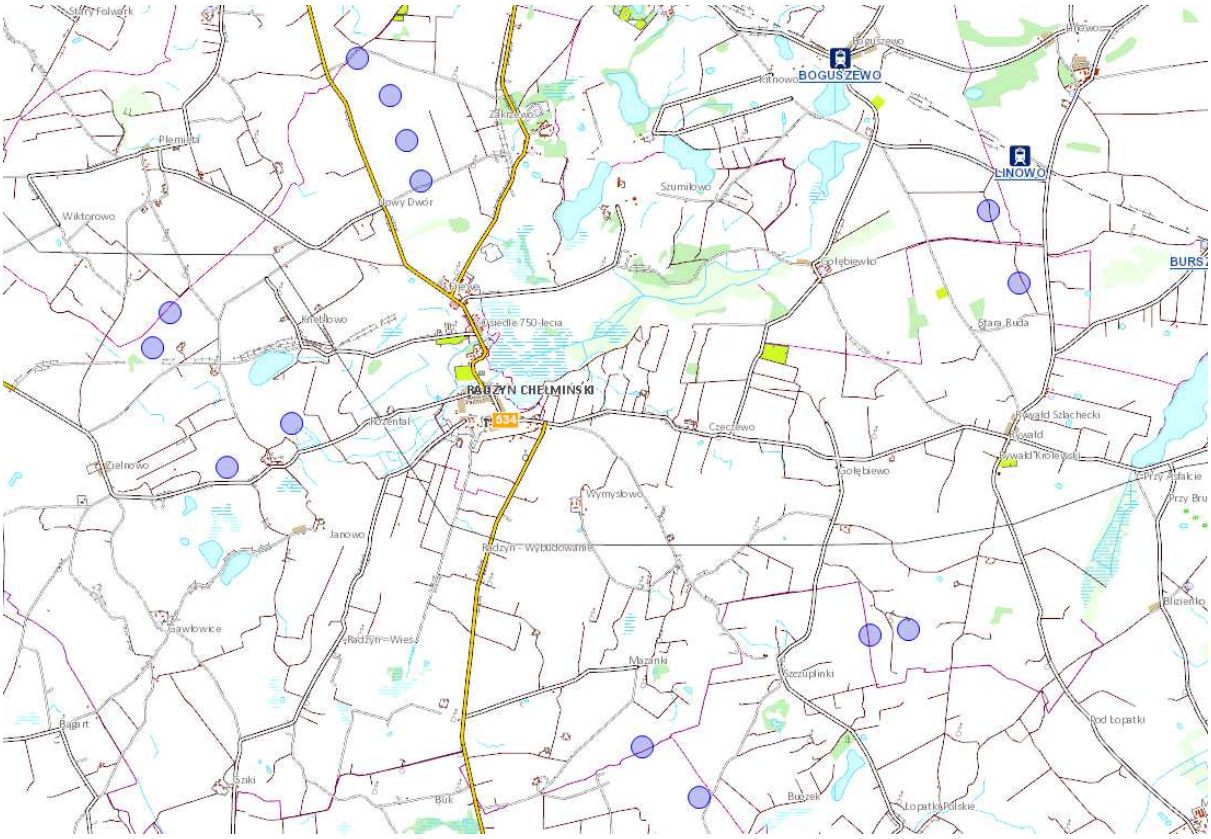
The areas of the investment are located outside major and dense forest complexes, marshy areas, areas identified as valuable for scientific interest. During the inventorying and

observation works completed to date, the areas have not been found to be important for birds (attractive feeding grounds, routes of regular migration passages, routes of regular passages to feeding grounds or roosting places).

Project No.2 Location

From the geomorphologic point of view, the Gruta wind turbine is located Pojezierze Chełmińskie mezoregion. From administrative point of view the project is situated in Gruta commune, Grudziądz county, kujawsko-pomorskie voivodeship.
The surroundings comprise predominantly rural areas with arable fields with sparsely populated areas, built up with detached houses of rural character (located over 420 m from the investment).
Geographically Gruta wind turbine is a part of already existing Linowo wind farm.

Below you will find a map with the layout comprising locations of WTGs belonging to both Project No.1 and Project No.2.



Rationale for this Project

In line with European Climate Change Program, many European countries, including Poland, have adopted national programmers aimed at reducing 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.

In March 2007, the EU approved an ambitious climate change and energy plan to limit greenhouse gas emissions by at least 20 % by 2020 (comparing to 1990 levels) and achieve, by 2020 a target of 20 % of total EU primary energy use through renewable energy. In January 2008, the European Commission proposed an energy and climate package to achieve objectives of reducing greenhouse gas emissions and boosting renewable energies by 2020. Currently, the UN are attempting to finales a legally binding global climate treaty to succeed the Kyoto Protocol in 2013.

Poland, currently is finalizing formal approval of its energetic policy until 2030 ”Polityka energetyczna Polski do 2030 roku”. Based on this draft document Poland plans to increase the fraction of renewable sources in total energy consumption by at least 15 % by 2020 with its further growth. Currently the percentage of energy produced through renewable energy is significantly smaller, although it is in line with the “road map” for achieving the goal.

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, SO2, dust and others.

According to the EIA report, the expected annual energy production from Project No.1 will amount approximately 130,000 MWh. Therefore the environmental benefit of the project will be to reduce greenhouse gases emission in an amount of 82,940 tons per year (calculated based on an emission factor, representative for projects supplying additional electricity to the grid, as of 0.638 tCO2/MWh, produced for Poland in 2012).

Based on the EIA report, an estimated energy production from the Project No.2 (1 WTG) – Gruta wind turbine will equal approximately to 4,480 MWh. Therefore the environmental benefit of the project will be to reduce greenhouse gases emission in an amount of 2,858.2 tons per year (calculated based on an emission factor, representative for projects supplying additional electricity to the grid, as of 0.638 tCO2/MWh, produced for Poland in 2012).

Apart from saving the greenhouse gases emission, both Project No.1 and Project No.2 will also result with significant ‘avoidance’ of post – combustion emissions. As an example, the equivalent production of electricity by the largest Polish hard-coal power plant in Kozienice would result with the following emissions (estimations based on Elektrownia Kozienice emission factors for 2011).

Project No.1:

- PM: approx. 29 tons/year;
- SO_2: approx. 862 tons/year;
- NOx: approx. 562 tons/year

Project No. 2:

- PM: approx. 1 tons/year;
- SO_2: approx. 30 tons/year;

- NOx: approx. 19 tons/year

The emissions are calculated based on typical emission factors for a regular coal fired power plant.

Exploitation of the subject wind farms is therefore a measure to avoid the emissions to the atmosphere of the comparable amounts of pollutants. Future activation of the both wind farm projects will increase those advantages.

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.

Legislative Context and 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 particular ones which can potentially impact the environment (group II projects), or may impact an area of 'Natura 2000' protected land. An EIA is carried out to obtain a decision on Environmental Conditions (environmental decision) which is obligatory for a realization of an individual project.

In the administrative procedure for the Project No.1 and Project No.2, the Authorities, including County Authorities, obligated the Investor to prepare EIA reports for the both planned projects. For the WTG located out of the Radzyń Chełmiński commune the individual EIA procedure was conducted, as this WTG was considered for development after completion of the EIA procedure for the Radzyń project.

Information on the planned investment together with 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 Radzyń and Wąbrzeźno projects were presented to the public in all villages where the project would be conducted, as it is routine and accepted practice in the region. As required environmental and sanitary authorities were informed about the investment to come up with any potential issues. In addition, the society of the communes has been notified on the planned investment through articles printed in the local press, including:

- "Nasza Gmina, Radzyń Chełmiński", a weekly magazine popular in the area.

Following preparation of the EIA reports the investor has been granted with the relevant environmental decisions for the Project No.1:

- The environmental decision for WTGs located in Radzyń Chełmiński commune, the decision no. BPK.6220.1.2010.2011.2012.2013.AF, issued on July 29, 2013
- The environmental decision for WTG located in Wąbrzeźno commune, the decision no. WRŚ.6220.6.14.2011 was issued March 17, 2014.

Following preparation of the EIA reports the investor has been granted with relevant environmental decisions for the Project No.2:

- The environmental decision for Linowo wind farm (includes Gruta wind turbine) no. INB.7331-25-2/08/09, issued on November 6, 2009 (the decision issued for the whole Linowo wind farm). The provisions with regard to 1 WTG, Gruta wind turbine, were transferred to GB Gruta 403 Sp. z o.o. with the decision no. IBN.7331-25-2/08/09/11, issued on May 30, 2011.

The decisions are attached.

The key environmental conditions for the project have been set forth:

- to use materials with no adverse impact on the environment;
- to use construction equipment complying with noise and exhaust fumes abatement levels while excavating for foundations and building provisional access roads;
- to survey noise levels after project completion/start-up;
- to conduct post-development bats and birds monitoring for 3 years within 5 years after project set-up;
- to comply with the ban on noisy works at night and to conduct noise monitoring, where applicable.

Radzyń wind farm and Gruta wind turbine are at the initial stages of the projects development and all the turbines are in possession of relevant environmental decisions.

As part of the pre-development procedure, apart from the required public consultations including EIA disclosure, the developer organized additional meetings for any party interested in the project development. During the public consultation, stakeholders were informed on potential impacts associated with the investment, in particular impacts on landscape, acoustic environment, shadow flicker phenomena and infrasound. Three local inhabitants/families protested against the investment in Radzyń and submitted a formal protest to the investors. The protest was associated mainly with potential negative impacts humans health and on the birds population. The protests were decide to be unfounded, which was explained in the environmental decision justification.

What is the current condition of the existing environment?

The planned Project No.1 and Project No.2 WTGs are not situated within borders of any nature and landscape protected areas. The investments are located over 9.5 km north from the borders of ‘Natura 2000’ special habitats protection zones (Specjalny Obszar Ochrony Siedlisk PLH 040033 ‘Dolina Osy’).

Project No.1

As a part of the pre-investment process, including preparation of the EIA report, several-day long series of ornithological observations were conducted for the project.

Birds monitoring was conducted between March 2009 and April 2013 at future Radzyń wind farm area.

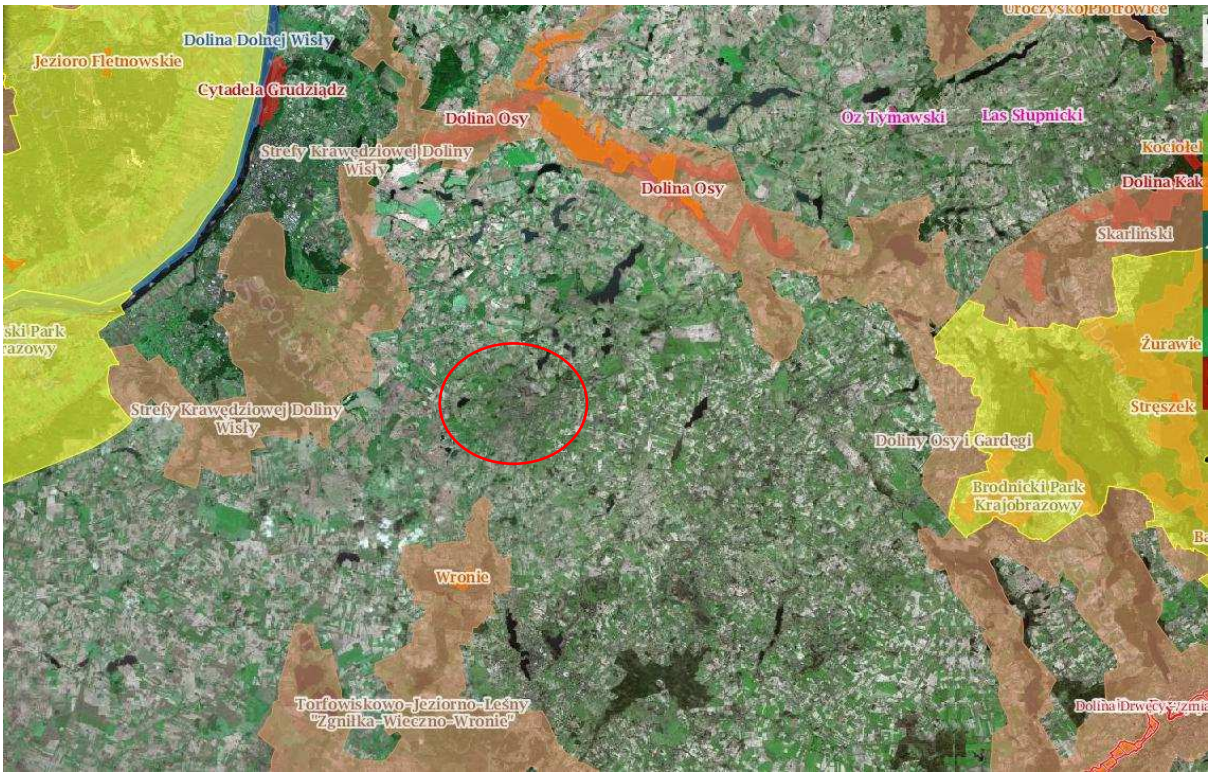
Birds monitoring at the future Wąbrzeźno wind turbine location (stage 2) allowed identifying presence of White stork (*Ciconia ciconia*), White-tailed Eagle (*Haliaeetus albicilla) or*

Common raven (*Corvus corax*). According to the EIA the subject area is of average significance from the ornithological point of view and it should not affect local avifauna. The most valuable areas are located over 3 km from the investment (wetlands grown with willows are situated at Sicieński canal, Blizienko village and in the vicinity of Pojezierze Chełmińskie lakes).

In Radzyń commune 105 bird species were identified, including 92 protected ones and 7 partly protected. These included White stork (*Ciconia ciconia*), White-tailed Eagle (*Haliaeetus albicilla),* marsh-harrier *(Circus aeruginosus*) or Crake (*Crex crex*). According to the EIA the subject area is of average significance from the ornithological point of view and the wind farm development should not affect local avifauna.

For each of the wind farms, there were a year-lasting bats observations conducted. No bats were identified in the area of Wąbrzeźno wind turbine. During observations at Radzyń location, bats belonging 5-6 bats species, depending on the season, were identified. Bats were identified in 3 the listening points, located close to water reservoirs, at fields with rows of trees and close to forested areas. No bats activity was noted at open spaces. 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, however temporary limitation of wind turbines operations at the subject listening points area, was recommended in the EIA.

Below you will find a map presenting distances of the WTGs in Radzyń Chełmiński commune to the nearest nature protection areas (*source: http.geoserwis gdos.gov.pl/mapy/)*. The red circle indicates an approximate location of Project No.1.

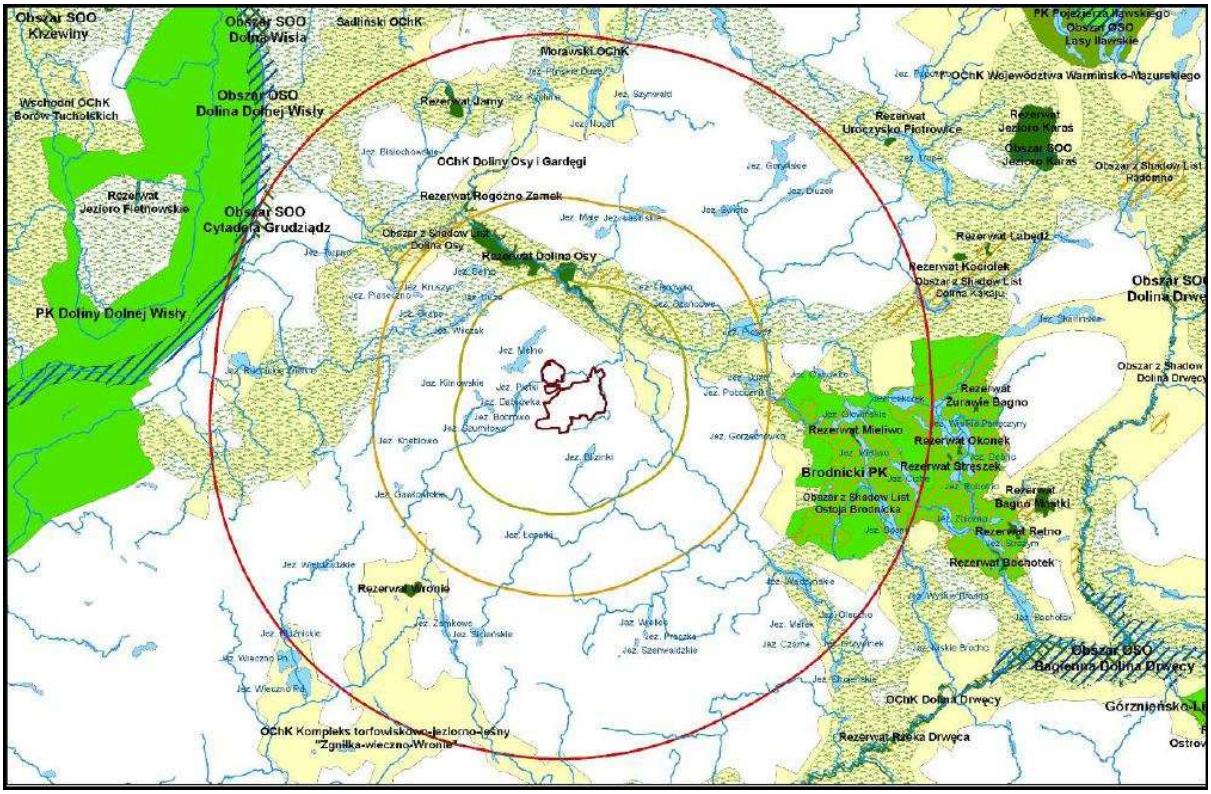


Project No.2

Birds monitoring was conducted between April 2008 and March 2009 at the future Gruta wind turbine area.

With respect to the Gruta wind turbine the investment is not expected to influence birds transportation routes. Among the most valuable bird species identified were White stork (*Ciconia ciconia*), Black stork (*Ciconia nigra),* Mute swan (*Cygnus olor),* White-fronted goose (*Anser albifrons)* and mallard (*Anas platyrhynchos*), and a few others.
The Environmental Impact Assessments conducted for the wind farms showed the locations should not have influence on the migration of birds.

Below you will find a map presenting distance of the WTG 12G location to the nearest nature protection areas (*source: Raport o oddziaływaniu na środowisko przedsięwzięcia polegającego na budowie farmy wiatrowej o łącznej mocy 50 MW w okolicy miejscowości Linowo I miejscowościach sąsiednich)*



Social impacts

Development of the Project has not required any displacement of the people or business - no physical or economical resettlement had taken or will need to take place. The land for the Project purposes was achieved based on lease contracts signed with the land owners.

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

- increase of the commune tax income;
- increase of the annual income of land leasers for each;
- improvement of the local communication routes;

- donations from the investor for heath programs.

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 Company is going to implement measures to compensate any damages that could result from the construction works undertaken. 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 there be?

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 is going to implement the best practice to limit the nuisance of the construction works. To limit the impact the investor is going to apply such measures as:

- to use construction equipment complying with noise and exhaust fumes abatement levels while excavating for foundations and building provisional access roads;
- to plan 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;
- to provide protection of trees within the access roads construction site with protective bands which should be removed immediately upon completion of construction works.
- to prevent contamination of construction site with polluting substances, e.g. by well sealed fuel distribution to equipment and vehicles operated during construction and maintenance;
- to conduct waste management in line with the provisions of Waste Act and local commune regulations.

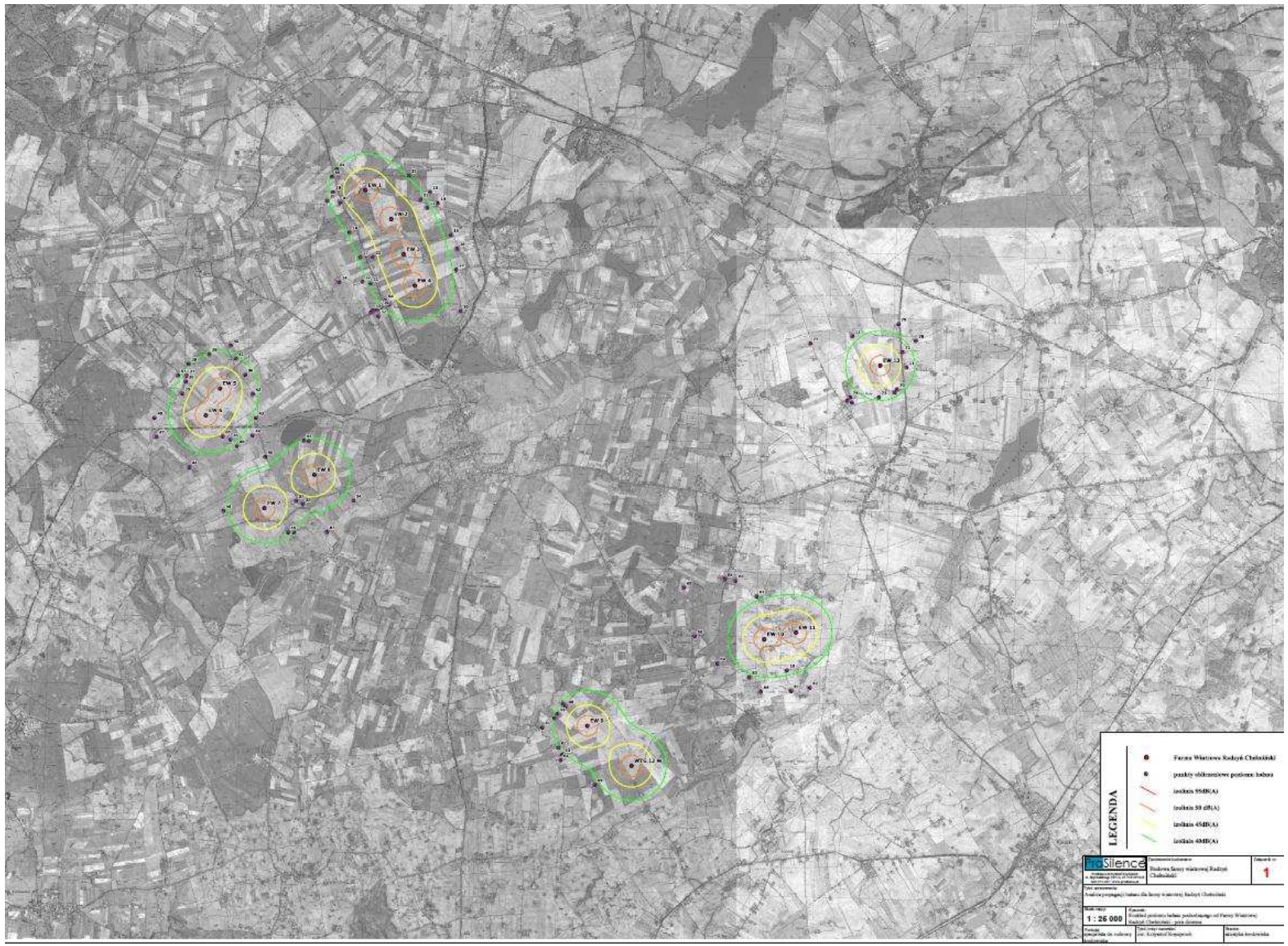
What will be the impacts during operation?

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. In addition, issues connected with shadow flickers and electromagnetic fields are presented in this summary.

Noise generation

Due to the predicted impact on the acoustic climate of the neighboring areas the developer has completed noise level analyses. The purpose of such impact analysis of the planned investment was to define conditional circumstances it should comply with, in order to guarantee that its impact on acoustic climate will not exceed binding environmental quality standards, as set for homestead housing - amounting to 55 dB for daytime and 45 dB for nighttime.

Based on planned technical solutions and site development project for the investment, range and level of the acoustic impact on the environment was defined. The values of noise emissions obtained, showed that the noise levels will not exceed the amounts allowed for the homestead housing for daytime and nighttime in the area where the housing is situated. The map illustrating acoustic climate constitutes Project No.1 (Radzyń Chełmiński and Wąbrzeźno communes) is presented below (*source: Analiza propagacji hałasu dla farmy wiatrowej Radzyń Chełmiński):*


LEGENDA
Farma Wiatrowa Radzyń Chełmiński
punkty obliczeniowe poziomu hałasu
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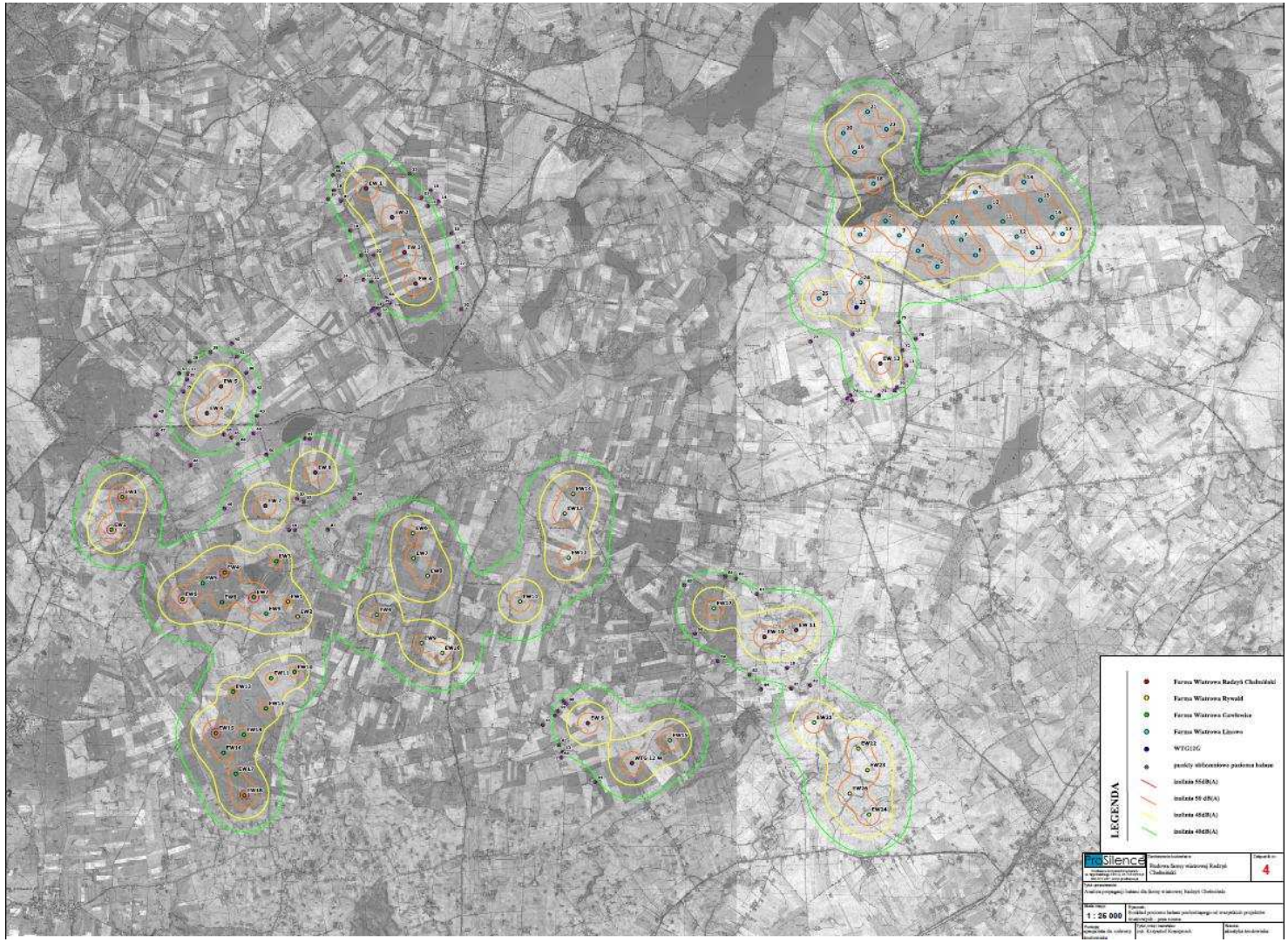
The map illustrating acoustic climate constitutes Project No.1 (Radzyń Chełmiński and Wąbrzeźno communes) and Project No.2 (Gruta commune) is presented below (*source: Analiza propagacji hałasu dla farmy wiatrowej Radzyń Chełmiński)*. The map also includes an acoustic climate constitute existing Linowo wind farm .



Birds and bats

The location of the Project No.1, which comprises 13 WTGs (1 in Wabrzeźno commune and 12 in Radzyń Chełmiński commune) and location of the Project No.2 comprising 1 WTG (in Gruta commune) will create a 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 observation on the areas of the planned wind farms. In a view of the pre-investments monitoring results the identified avifauna was classified as typical for the areas of kujawsko-pomorskie area, characterized as with lots of observed bird species but insignificant records of rare and infrequent species. The areas included in this 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 farm is not on a migration route and is 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.

In line with EUROBATS guidelines (dealing with impact of wind farms on bats) the identified species of bats belongs to a group with high risk of collision with wind turbines. However taking into account the spatial distribution of wind turbines and areas where bats were observed it was concluded that the risk may be significantly reduced by moving the turbines from forested areas and borders of residential areas – as it was in this case. Due to the need of bats conservation the location of the wind farm has been approved by the reports on bats population. Nevertheless post-construction bats monitoring has been required.

Taking into account the characteristics of the investment, it has been concluded that the undertaking will have no negative impact on the species and habitats protected under 'Natura 2000'.

Visual impacts

The development of the Radzyn Chełmiński wind farm project (encompassing 13 wind turbines with the maximal level above the ground outlined by the blade of 200 m – tower plus blade) and Gruta wind turbine project (encompassing 1 wind turbine with the maximal level above the ground outlined by the blade of 150 m – tower plus blade) will influence the landscape of the subject communes. 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 projects will gain supporters and critics taking into account the influence on landscape.

The pictures below present the rural landscape for the sites under development.

Further, taking into account the lack of both nature landscape protection zones as well as protected man-made parks complexes the influence on the landscape in the final version of the wind farms has been significantly limited.

Finally, it must be pointed that the influence on the landscape is not permanent, given the expected “lifetime of the product” i.e. 25 years. After this period the disassembly of the wind farms is planned, reconstruction is also possible.

The development apart from the stable visually intrusive change will create so called shadow flicker caused by rotating turbine blades. This impacts residents living in close proximity to the rotating shadow source. The Investor has completed a shadow flicker analyses for wind turbines located in the vicinity of all three wind farms, further the results for Radzyń are summarized. The results showed that the turbines will impact the nearby residential dwellings by the flickering shadows between 01:37 and 19:25 hours per year in maximum and from 0.28 hour to 1.46 hour per day maximum. While lack of clouds and barriers between the receptor and wind turbine was assumed the results showed only the theoretical and maximal impact. In fact it is expected that the real influence would be significantly lower than the outputs of the calculations.

Electric and magnetic fields

The main sources of electromagnetic fields directly linked to the Project No. 1, is a WTG and transformer output. These elements are placed inside the nacelle on top of the tower (at a height of approx. 80 m to approx. 142.5 m). According to information included in the EIA

report, elements of WF are working with low voltage of about 400 V. Only the output of the transformer is 30 kV medium voltage, which will be forwarded to the electricity grid,

Due to the location of the turbine at such high altitudes, the level of the electromagnetic field, generated by the elements of power 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 power plant will not affect the shape of the electromagnetic climate.

Second potential source of electromagnetic field with a frequency of 50 Hz, associated with the Project No. 1, are electromagnetic cable 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.

Another potential source of the electromagnetic force is the construction of power stations (GPO). The investment will involve the implementation underground cable connections. In the case of modern power stations, the radiation of the electric and magnetic fields does not occur in practice. The intensity of the fields will be a maximum of 30 A / m, which is much lower than the permissible value (60 A / m). Since the location of the GPO is provided at a distance of at least 50 meters from residential areas, it is clear that there will be a negative impact.

Based on the information presented in the EIA reports related to the Project No. 1, it can be summarized that:

- Project No. 1 is not the source of the electromagnetic field with a frequency of 50 Hz or electromagnetic radiation in the range of medium wave with values higher than acceptable;
- Implementation of Project No. 1 does not affect the quality of the received broadcast radio - television, radio relay transmission will not interfere and will not cause interference with electronic equipment;
- In accordance with point 33 of Annex 1 of the Regulation of the Minister of Environment dated 30.10.2003, regarding acceptable levels of electromagnetic fields in the environment and ways to keep checking these levels [Dz.U.2003.192.1883] investor has no obligation to make measurements of electromagnetic fields in the surroundings of the investment's area.

The WTG 12G located in Gruta commune (Project No.2) will be connected directly to the electricity grid (medium – voltage line located approx. 2 -3 km from the WTG). In this case WTG itself is the only source of non – ionizing electromagnetic radiation, which can cause an adverse effects to the human health (occurring in the situation of long – term exposure in close distances – up to several meters). According to the EIA report, the investor will apply new generation WTG, so the negative influence on the human health created by the WTG will be reduced. Moreover placement of the WTG on high distance from the ground level (approx. 100 m) reduces to minimum the potential negative impact.

Measure Aiming at Limitation of the Impact

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 purchase 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 investor is in course of choosing modern installations of well-known producers with minimum level of emitted noise.

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

In Radzyń Chełmiński wind farm the layout has been changed in order to exclude from the investment the most valuable areas with the biggest concentration of birds recognized within the pre-investment monitoring.

Post construction monitoring

Noise

Environmental decisions conditions obliges the investor to conduct post construction noise level surveys for the wind farms one month after the project start-up. The results should be presented to the Regional Environmental Directorate in Bydgoszcz, Voivodship Environmental Inspectorate in Bydgoszcz and the Head of the respective commune.
If the measurements indicate that permissible noise levels are exceeded, then noise reducing action will be necessary to be completed (i.e. reduction of the acoustic power of the subject wind turbine(s).

Birds

Birds monitoring has been required by the local authorities for 3 years within the 5-year period after project start-up.

The scope of monitoring should be identical as observations conducted during the pre-investment observations and it should include:

- investigation of birds colliding with the turbines to discover any dead and hurt birds in the vicinity of the wind turbines,
- evaluation of the wind farm operation impact on life conditions of birds living at the investment area,
- description of the reaction of migrating species and species feeding within the wind farm area on the operating wind farm (particularly in spring and autumn),
- evaluation on methods used in order to minimize the probability of birds collisions with the turbines.

The results of the monitoring should be presented in written and electronic forms to the Regional Environmental Directorate in Bydgoszcz and the Head of the respective commune.

Bats

Bats monitoring has been also recommended for the Radzyń Chełmiński wind farm. In line with good practice guidelines of EUROBATS 2006 a 3-year long post-development bats monitoring has been proposed. The scope of the monitoring should include:

- results of the listening monitoring and comparison with results of the pre-development monitoring,
- assessment of bats colliding with turbines, taking into account local and migrating species and description of the reactions on the presence of wind turbines
- monitoring of deaths, including information on species, location and inaccuracy of the investigation, resulting e.g. from collection and consumption of death birds by other animals

The results of the monitoring should be presented in written and electronic forms to the Regional Environmental Directorate in Bydgoszcz and the Head of Relevant Commune.

Additional information and grievance procedure

The mechanism for the claim procedure will be implemented by the company as a part of the project management system. The procedure assigns a coordinator of the integrated system, who will be responsible for reacting in case of complaints.

The Company welcomes ongoing comments and suggestions on the project. A grievance form is attached to this non-technical summary.

A full EIA is available for the project and copies can be found in the Commune Hall. A hard copy can be requested from the Company.

All requests for additional information related to the Wind farm should be addressed to Green Bear Corporation Poland Sp. z o.o.:

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