Environmental and social due diligence
Margonin wind farm project,
Poland

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Executive Summary

ENVIRON has completed an environmental and social due diligence (ESDD) audit of the Margonin Wind Farm Project located in central Poland, in connection with a proposed EBRD and other banks financial provision for the project.

The Project to be supported by the Banks comprises development of the wind farms near Margonin, Chełmża County Wielkopolskie Voivodship, Poland. The wind farms which are currently at the final construction phase comprise in total 60 wind turbines, type Gamesa G90, 2 MW each, hub height 100 m. Further development of the Project (currently not considered for financing) assumes development of Pawłowo wind farm of similar total capacity.

Based on the evaluation of the available documents and observations taken during the on-site inspection tour as well as on information provided by the Company and local and environmental authorities representatives, ENVIRON found no significant environmental, health, safety, and social concerns related to present and future (after implementation of the project) operations of the wind farm. A number of environmental impact assessments proceeded the construction works, and based on their results no significant impact to the environment, nature and human population is expected due to farm construction and exploitation.

The project will create social benefits both to the commune and local citizens. Implementation of the project will increase income of the commune by approximately 10% as well as the income of the land leasers. Moreover, according to the opinion expressed by the Margonin Commune Head, the project will increase tourism attractiveness of the commune and ecological attitude of the inhabitants. Moreover, by-project investments (construction of the overhead power line) increased power supply reliability, which creates better conditions for business development and creation of the working places.

The operation of the wind farm will not be related to emissions of any polluting substances. However, electrical energy production by the conventional power plant in an amount equal to expected production of the Margonin wind farm would result in the following emissions (calculated based on the emission factors of the biggest Polish power plant in Bełchatów):

- carbon dioxide: 67,410 ton;
- particle matter: 8 ton;
- sulphur dioxide: 134 ton;
- nitrogen oxides:89 ton.

The operation of the Margonin wind farm will of course not result in a proportional reduction of the emissions from a conventional power plant. However, production of the energy without pollutants emissions can be understood as emission avoidance in comparison to the conventional energy production.

No issues of concern were identified with respect to environmental and social management of the company. The current practice is tailored to the size of the company and operations currently run in Poland. The company follows the general EH&S policies adopted for the entire EDP group and plans to implement a formalized environmental and health and safety management system in a 2 year horizon.

The project was assessed as generally compliant with the EBRD's Performance Requirements, Standards, IFC Performance Standards and IFC EHS Guidelines for Wind Energy (please refer to section 8, Compliance with EBRD's PR/IFC PS). In order to fully comply with these reference documents the Company will have to adopt certain measures at the later stage of the Project, that include:

- establishment of a formalized structure and procedures to properly address all environmental and social issues, following the PR1 and IFC PS1 requirements;
- implementation of a post-construction environmental monitoring program, following the PR1 and IFC PS1 requirements;
- implementation of the formalized environmental and health and safety management system, following requirements of the IFC PS1;
- implementation of the external reporting routines, following requirements of the IFC PS1;
- implementation of the stakeholder engagement plan and keeping in a formalized manner a stakeholder dialogue during the development of the further phases of the project and wind farms operation time, following requirements of the PR10;
- confirmation of a low likelihood of electromagnetic interference via conduction on additional study in this field, following IFC EHS for wind energy guidelines;
- implementation of a formalized OHS monitoring procedure as part of the future management system, following IFC EHS for wind energy guidelines;

  taking into account cumulative effect on environment and nature of the entire project, both completed and under development during procedures related to EIA of the next phases of the project in order to comply with EIA Directive requirements.

1 Introduction

ENVIRON has been requested by EDP Renovaveis to conduct an Environmental and Social Due Diligence Assessment (ESDD) of a wind farm development near the Noteć river, central Poland (the Project). The due diligence is required in relation to planned financial support to be provided by the Equator Principles Banks, including European Bank for Reconstruction and Development, European Investment Bank and others.

The Special Purpose Company "Relax Wind Park I Sp. z o.o." (further the Company) is the company that owns, and will be responsible for operation and maintenance of Margonin wind farm. EDPR is a major shareholder of Relax Wind Park I Sp. z o.o..

The subject development comprises construction of the following wind farms:

- Margonin Zachód: 22 MWe wind farm under construction
- Margonin Wschód: 98 MWe wind farm permitted and under construction
- Pawłowo: 120 MWe wind farm under development.

Among these only Margonin Wschód and Margonin Zachód wind farms are considered when it comes to current Banks financial involvement. The Pawłowo wind farm as well as construction of an overhead, 110 kV power line that transmits the generated energy from the farm to the national power grid, are taken into account within this assessment.

The project has been screened by the EBRD as an A level project that according to the bank's standards requires an Environmental and Social Impact Assessment to assess the environmental and social impacts of the project and ensure that appropriate mitigating factors are considered prior to developing the project. The major goals of this assessment are to provide the investors and lenders with the evidences, that:

- the investment which has been asked for financial help would meet national requirements and existing EU environmental standards and IFC environmental and social standards (Equator Principles);
- the project would not result in significant adverse environmental or social impacts;
- the project would include all necessary mitigation measures to minimize any adverse change in environmental, health and safety and socio-economic conditions;
- appropriate stakeholder engagement process is undertaken in line with the EBRD's Environmental and Social Policy (2008) and IFC standards as per Equator Principles, ensuring all reasonable public opinions are adequately considered prior to a development consent being granted.

The detailed scope of work was provided to us in a form of Terms of Reference (ToR) on November 3, 2009. According to the ToR and our proposal No. PLP00887 of November 6, 2009, the scope of work includes the preparation of the following deliverables:

1. Environmental and Social Due Diligence compliance assessment /Gap Analysis of the Project in terms of meeting EBRD and IFC standards per Equator Principles requirements.

2. A Stakeholder Engagement Plan (SEP) – formally referred to as a Public Consultation and Disclosure Plan (PCDP) in accordance with the EBRD's policy requirements and the IFC standards as per Equator Principles requirements.

3. An ESIA disclosure package compliant with EBRD's Environmental and Social Policy and the IFC standards as per Equator Principles requirements for the project.

This report presents findings of the Environmental and Social Due Diligence assessment/Gap analysis of the Project. The task within the assessment strictly followed requirements set-up in the ToR.

As a part of the assessment the site visit was conducted by Mr. Maciej Rozkrut, Manager of ENVIRON on November 19 and 20, 2009. During the visit the local authorities in Margonin, Wągrowiec and Gołańcz were visited and interviewed. Moreover, on December 9, 2009, Mr. Leszek Andrzejewski, Consultant of ENVIRON, visited the Regional Environmental Directorate in Poznań.

2 Nature of the Project to be Supported

2.1 General Description and Context of the Proposed Project

The EDP Renovaveis is currently developing a set of wind farms in the vicinity of Margonin village, Chodzież County (*Powiat*), Wielkopolskie Voivodship (*Województwo*), central Poland.

The Margonin Wschód and Margonin Zachód wind farms, which are considered for banks financing, comprise 49 and 11 wind turbines respectively. All of the turbines are of the same type - Gamesa G90. Each of the turbines has 2 MW capacity, hub height 100 m. Both wind farms are situated in the vicinity of the Margonin town. The Margonin Wschód wind farm is located on the plots of land that belong administratively to the villages of Sułaszewo, Próchnowo, Zbyszewice, Sypniewo, Lipiny, Lipiniec, Dębiniec and Margońska Wieś. The Margonin Zachód wind farm is located on the plots of land that belong administratively to the villages of Radwanki, Studźce and Adolfowo. The entire area has a rural character. The terrain is slightly hilly, mostly occupied by arable fields and small forest complexes. The villages in the area are communicated with local roads, in large extent the dirt ones.

The turbines are located in a distance not shorter than a few hundred meters from each other. Access to the turbines is provided by individual access roads connecting the by-turbine service yards with the network of local roads. It is assessed by the auditor that each turbine and its service yard and access road together occupy approximately 800-1000 m^2.

Power generated by the wind turbines is supplied via the underground cables to the main transformer station located south of the Sypniewo village. From the main transformer station generated power is transferred to the national power grid via an overhead 110 kV power line.

At the day of site inspection more than 50 turbines were already completed. According to the Company representative also most of the underground power cables and steering infrastructure was already completed. Based on the discussion with the Company representative, both power and steering cables are constructed along the local roads network. Most of the access roads as well as the service yards were constructed as the temporary ones. According to the Company representative, both the access roads and the service yards will be remodeled to the permanent ones prior to the final commissioning of the farms.

The construction of the Pawłowo wind farm (which is not considered as part of the Project for financing) has not started yet. The Company is currently conducting pre-investment activities, which comprise local planning adjustments and an environmental impact assessment to some extent.

Although the Margonin and Pawłowo wind farms are developed by the Company as separate projects, they form a set of farms located in a very close distance, thus their environmental impacts may cumulate.

2.2 Potential Environmental and Social Benefits of the Project

The project is developed as a purely commercial one. However, the wind energy is considered to be one of the cleanest ones, in fact during the exploitation phase of the turbines no pollutants are emitted to the atmosphere. Assuming that the Margonin wind farms (total capacity 120 MW) will operate 40% of time the energy production will equal approximately 63,000 MWh. Such production of energy in the biggest Polish power plant Bełchatów would result with the emission of:

- carbon dioxide: 67,410 ton[1] ;
- particle matter: 8 ton;
- sulphur dioxide: 134 ton;
- nitrogen oxides:89 ton.

Based on the emission factors presented on the web page http://chp.decc.gov.uk/cms/chp-emission-reductions/, the typical emission from the coal fired CHP would be even greater and could amount to:

- carbon dioxide: 170,100 ton
- particle matter: no data available;
- sulphur dioxide (for sulphur content in coal equal 1.2%): 1,260 ton;
- nitrogen oxides: 328 ton.

Exploitation of the subject wind farm can be therefore considered a measure to avoid the emissions to the atmosphere of the comparable amounts of pollutants.

The issue of social advantages of the project were widely discussed with the Mayor of the Margonin commune. The following direct advantages were agreed with the Mayor during the discussion:

- the complex of Margonin wind farms is currently the biggest wind farm in Poland; it is expected that as such it can increase attractiveness of the commune as a tourist destination as well as a place for business developments;
- the Project promotes the commune as the one of pro-environmental attitude and supports building intense relations with other regions in Poland and abroad;
- the Project helps the local authorities to promote pro-ecological behavior of the local citizens, including separate waste collection and others;

1) the emissions are calculated based on emission factors presented on the web page of Elektrownia Bełchatów: http://www.elb.pl/ for the year 2008

- the activities conducted so far by the Company have already given measurable benefits for the commune, as such renovation and construction of approximately 10 km of local roads were mentioned by the Mayor;

- Project related activities (construction of a new overhead power line and an electrical substation) have increased the power supply safety to the commune, which influences the attractiveness of the area as a place for business development

2.3 Project classification according to the EBRD's Environmental and Social Policy (2008)

The project has already been screened by the EBRD as a category A, for which environmental and social impact assessment is required.

According to the Bank's Environmental and Social Policy (ESP):

"A proposed project is classified as Category A when it could result in potentially significant and diverse adverse future environmental and/or social impacts and issues which, at the time of categorisation, cannot readily be identified or assessed and which require a formalised and participatory assessment process carried out by independent third party specialists in accordance with the PRs."

The project consists of financing the construction of a 120 MW wind farm. The wind farm is part of a much larger development being undertaken by the same Sponsor, and therefore the project is viewed as an initial stage of a 240 MW development. Moreover, the Sponsor developed an overhead, 110 kV power line that crosses the nature protection zone of European Nature 2000 network. Since operation of the subject project fully depends on transmission of generated energy to the national power grid, the overhead power line should be considered to be a part of the project. Due to its character and location, the overhead power line is to be classified as a Category A, following the Annex 1 to the Banks Environmental and Social Policy (2008), items 21 and 26. Consequently, the entire project requires a full Environmental and Social Impact Assessment (ESIA) in line with the Bank's Environmental and Social Policy.

3 Project related and near-by investments of similar nature

3.1 Electrical substation

The role of the electrical substation is to accept the electrical energy generated by the wind turbines and after voltage transformation to send it to the national electrical grid via the overhead power line 110 kV. The substation is located south of the southern bank of the Margonińskie lake at the premises of Sypniewo village.

Based on the observations on-site, the substation is an up-to-date electrical object on which all necessary environment protection measures were installed. The transformers are placed on the secondary containments which are drained through the oil-water separator. The entire substation is fenced and protected against unauthorized access.

The substation was constructed based on:

- the decision No. ROŚ/7624/21/07 on environmental conditions to accept the investment issued by the Mayor of Margonin on March 28, 2007
- the decision No. 237/007 – building permit issued on June 22, 2007 by the Head of the Chodzież county

During the administrative procedure, the Mayor of Margonin county decided, based on the opinions of the Chodzież County Office and State Sanitary Inspectorate in Chodzież, not to require any EIA of the planned investment.

3.2 Overhead 110 kV power line

The overhead power line 110 kV has been constructed in order to connect the electrical substation in Sypniewo with the main electrical substation in Krzewina and to allow transmission of the electricity generated by the wind farm to the national grid. Total length of the new power line is approximately 24,2 km.

The investor considered the following variants of the investment:

- use of existing overhead 110 kV power line – option was not technically feasible due to poor technical status of the line and its use in full capacity;
- construction of a new overhead power line along the existing one – this option has not been accepted due to its excessive impact on the Nature 2000 zone and unnecessary land use;
- construction of a new, underground power line along the existing overhead power line – this option was rejected due to significant impacts to the Nature 2000 zones and poor ground conditions at the expected route of the cable;

- demolition of the existing overhead power line and construction of a new, two-track one: this option was selected by the investor due to minimal environmental and social impacts as compared to the other variants.

An EIA of the investment was conducted. The major EIA findings were:

- For the designed high-voltage line it was forecasted that its adverse impact on bird fauna would not be significant. The line would replace an old one which had been there for many years, so the birds would became accustomed to it and learned to bypass this obstruction. In the vicinity of the investment project there is a bridge higher than the planned line supports and it is a much more serious obstruction for flying birds that the high-voltage line.

- The birds protection measures are to be implemented, these include signaling spirals mounted on horizontal transmission cables and preventing electric shock incidents. Insulators on the supports have been mounted vertically downwards, in intervals ensuring preferred protection for birds.

- The planned line conversion much reduces the unwanted intervention in the soil, in particular in the 4m wide strip of non-carrying land in Noteć valley peat-bogs. The line would stretch along the route of the existing line (planned to be deconstructed) in the Noteć valley, along the existing river bridge, which further reduced the possibilities of collisions and threats to the local temporary or permanent bird fauna.

- The planned upgrading of the 110kV line between Krzewina and Sypniewo on sections passing through farmland, forests, fallow land should not cause social conflicts. As early as in the design stage the investor's representatives make appropriate arrangements and agreements with the owners of land on the line route.

- The report hasshown that adverse impact of the project has been reduced to the minimum and is adequate to its objective. Both selection of the variant and the proposed technical solutions are also aimed at minimising the impact.

On November 19, 2007 the investor applied for the decision on the environmental conditions to accept the investment. On June 6, 2008 the Supreme Administrative Court indicated the Head of Wielkopolskie Voivodship (Wojewoda Wielkopolski) as the one in charge to opinion the investment conditions. The Head issued his positive opinion on October 22, 2008. The decision on environmental conditions to accept the investment was issued on October 31, 2008. As part of the administrative process, the public consultations have been conducted by the competent authorities. The construction of the power line was conducted based on the following building permits:

- Decision of the Head of the Wielkopolskie Province No. 12/09, dated January 9, 2009 – allowance for the power line to cross the national roads No. 191 and 193 and the railway line Chodzież-Kcynia

- Decision of the Head of the Chodzież County No. 13/09, dated January 19, 2009 – construction of the power line and development of a section No. 2 of the switching station in Krzewina; changed with the decision of the Head of the Chodzież County

No. 80/2009, dated March 10, 2009 – change due to the adjustment of the power line route;

- Decision of the Head of the Piła County No. 32, dated January 16, 2009 – permit for power line construction on the territory of the Kaczory Commune and development of the section No. 2 of the switching station in Krzewina

As reported by the Company representatives, the construction of the line is already finished and ready for the commissioning by the power lines operator. For discussion on impact on Nature 2000 zone please refer to section 4.17 - Impact on fauna and flora.

3.3 Investments of similar nature in the project area.

The following projects of similar nature have been identified in the project area

Development of the Pawłowo wind farm

The Pawłowo wind farm is to be located in Gołańcz and Wągrowiec communes which are located east and south-east of the subject farm. The investor intends to install turbines of a total capacity of 120 MW. Due to the planning restrictions, the project has been divided by the investor into 3 phases:

- 90 MW generated by 60 wind turbines 1.5 MW each, to be located in the Gołańcz commune (for this part of the project the EIA has already been elaborated and the Company applied for the administrative decision on environmental conditions to accept the investment);

- 7.5 MW generated by 5 wind turbines, 1.5 MW each, to be located in Gołańcz commune (for this part of the project the Company applied for the establishment of the local zoning plan);

- 31 wind turbines to be generated in the Wągrowiec commune (for this part of the project the Company applied for the establishment of the local zoning plan).

The project has been recently protested by the citizens of the villages of the Gołańcz commune. The protests were send to the local authorities as well as to the Regional Directorate of Environment Protection in Poznań. The protesters raised such issues as decrease of the value of land, generally negative impact of the wind farms or gaps in the EIA report prepared by the investor. The protests were partly fabricated and the case is subject to prosecutor's investigation. Some issues raised in the protests have been taken into account by the Regional Directorate of Environment Protection in Poznań during the administrative procedures. On December 15, 2009, the Regional Directorate of Environment Protection in Poznań approved the investment, however, with a total number of wind turbines reduced to 52.

Development of the 5 MW wind farm nearby the Zbyszewice village

The Altiplano Sp. z o.o. is developing a wind farm project at the grounds of the Zbyszewice village, within the area of the Margonin Wschód wind farm. The project is at a preliminary stage of development, the investor was obliged on January 19, 2009 by the Head of Margonin Commune to elaborate an EIA report. Such report was prepared by the investor. No information on the building permit issuance was available.

Development of a single-turbine wind farms in Gołańcz commune

Based on on-site observations, there is a single-turbine wind farm located in the Gołańcz commune. Based on discussion with the local authorities another two building permits were issued for construction of similar wind turbines in the area.

4 Environmental And Social Review of the Project

4.1 Site setting

The Margonin Wschód and Margonin Zachód wind farms are located in Margonin commune, central Poland. The commune area is approximately 122 km^2, among which approximately 60% are agricultural fields and 31% are occupied by forests. The land in the area is slightly hilly, the terrain altitude varies between approximately 84 and 92 m asl.

According to various geographic sources, Margonin commune is situated in the province of Central European Plain, subprovince Lakeland of the South Baltic Sea and almost whole part of it is within Chodzież Lakeland, which is part of Wielkopolskie Lakeland. According to other sources, the terminology varies; commune Margonin is part of the Gniezno Highland, strictly speaking part of Chodzież Hills.

Both farms comprise in total 60 wind turbines, 11 of them are located on the Margonin Zachód farm, located to the south-west of Margonin and west of the Margonińskie Lake. The remaining 49 turbines of the Margonin Wschód farm are located east and south-east of Margonin and east of the Margonińskie lake.

The turbines are settled individually in a distance of a few hundred meters from each other on the land of an agricultural character. Each of the turbines is connected via an access road with a network of local roads which, in majority, are the dirt ones. The turbines are not fenced.

The wind farms are located away of the environmentally sensitive areas. The nearest zones of nature or environmental are:

- Nature 2000 zone “Dolina Środkowej Noteci i Kanału Bydgoskiego” (Middle Noteć and Bydgoski Channel Valley) No. PLB300001. There are 11 habitats listed in the Habitat Directive and 18 bird species listed in the Bird directive observed at the territory of the zone. The nearest turbine is located approximately 6 km to the south of the zone;

- Landscape Protection Zone “Dolina Noteci” (Noteć Valley). The borders of the LPZ are in general the same as the Nature 2000 No. PLB300001 zone, however, include some other areas such as the Morgonińskie lake. The nearest wind turbine of the farm is located approximately 800 m to the east of the southern part of the lake;

- Landscape protection zone “Dolina Wełny i Rynna Goławiecko-Wągrowiecka” (Wełna Valley and Goławiecko-Wągrowiecka Gutter), located approximately 6 km to the east of the Margonin Wschód wind farm;

- Planned reserve “Jeziora Rgielskie” (Rgielskie Lakes), which are habitats of a number of birds. The area is located approximately 15 km to the east of the Margonin Wschód farm;

- Ecological link between the lakes Oporzyńskie-Kaliszańskie system and the Wełna river, used for migration by different species. The ecological link has been identified approximately 700 m to the east of the farm;

- Kaliszańskie lake is a habitat of water-swamp birds and predators (including eagles). It is located approximately 2.5 km to the south-east of the farm.

No habitats of birds protection zone have been identified within the area occupied by the wind farms.

The major water course in the area is the Margoninka creek which is a left tributary of Noteć river flowing towards the north. The major surface water resources are the lakes:

- Margonińskie lake of an approximate area 215 ha, the lake is located between Margonin Wschód and Margonin Zachód wind farms;

- Zbyszewickie lake;

- other smaller lakes as well as the on-field ponds.

4.2 Geology and Hydrogeology

Taking geomorphology into account, the area of Margonin wind farm is located within the postglacial, hilly moraine upland of the Chodzież stage of the Baltic Sea glaciation, which is divided with a network of tunnel valleys, partly occupied with local, small lakes. The geology of the upper soil layers was established in 2006-2007 during the geotechnical survey of the sites. The local geological conditions to the depths of 10 m bgl are represented by strata of sand and clays, however, the clay layers at this depths seem to be incontinuous.

The first groundwater aquifer at the Margonin commune territory occurs at depths between 2 and 10 m bgl. The first usable aquifer occurs at depths 20-40 m bgl, in the vicinity of the Margonińskie lake at the approximately 60 m depth. The usable aquifer is considered to be exposed to the surface impacts due to lack of poorly permeable rocks of natural contaminants migration barrier.

4.3 Site and project history

No detailed information on specific historical development of the locations of the wind turbines was available for review. Taking into account a general rural character of the area it can be assumed that the land designated for wind farm development was historically used for agricultural purposes only.

In the beginning of the 2000's, a wind farm project was developed in the Chodzież and Szamocin Communes. The project assumed location of the wind farm along the Noteć river valley, which is currently included into the Nature 2000 protection zone. In 2003, however, due to a common protests of the NGOs and potentially significant impact on birds, the Head of the Poznań Province cancelled the administrative procedure and disagreed on the project development, which resulted with the project cancellation.

The same year, approximately 15-20 km to the south of the Noteć river valley a German company GEO-WATT initiated development of the Margonin Project. In 2005 a GEO-WATT Polska (a Polish branch of the German company) gained the decision on a technical conditions for the wind farm connection with the power network operated by PSE Operator company.

In 2005/2006 the wind conditions were investigated in the area of Margonin. Based on these investigations, the DEWI company made calculations on the optimum location of the wind turbines. In 2006 the company begun negotiations and land lease contracts signing with the owners of the land plots selected for the turbines locations. In the following years the company continued project development and between 2007 and 2009 gained the building permits.

The ownership of the company developing the Margonin project changed in late2005/early 2006, when the control over the company was taken over by the Swedish company Cobcab Sweden AB. The special company Relax Wind Park I was establishes especially for the project development. In 2007 a control package of the Relax Wind Park I was purchased by the EDP Renovaveis.

4.4 Air emissions

The farm operations will not result with any air emissions. No issues of concern were identified.

4.5 Water and wastewater management

The farm operations will not require any water consumption or process wastewater generation. Rainwater collected on the service yards and access roads leading to the individual turbines will infiltrate soil without any previous collection into the drainage system. No issues of concern were identified.

4.6 Waste management

The wind farm will operate without a permanent on-site service. The maintenance operations will be conducted according to maintenance schedule and on as needed basis. During the maintenance some amounts of oil and grease and in some extent also waste parts of the turbine's construction. No waste will be stored at the sites. No issues of concern were identified with respect to waste management.

4.7 Noise

The noise issue was analyzed within the environmental impact assessments prepared for different stages of farms development on request of the Company. Based on these EIA findings the layout of the farms was prepared under technical, economical, land use and environmental assumptions, one of them was that the noise standards at the protected areas could not exceed the permissible values. The noise impact of the wind turbines was calculated with use of a certified model for the separate sets of turbines as well as for the entire Margonin Wschód and Margonin Zachód wind farms. The maximum noise emission

was taken for the calculus purposes. The results of the calculations show that the operation of the wind farms will not cause the breaches of the ambient noise standards at any of the receptor point (the receptor points were established at the residential buildings in the area) both during the daytime and nighttime, for which the permissible noise levels are 55 dB and 45 db respectively.

In order to secure the appropriate noise levels at the residential areas, 17 turbines located in the closest distance to the buildings are equipped with noise reduction systems.

The cumulative noise impact of the Margonin Wschód wind farm and future first stage of the Pawłowo wind farm was assessed by the EIA report of the first phase of Pawłowo wind farm development. No breaches of the noise environmental standards were identified at the border of the both farms.

4.8 Land use

The construction of the Margonin Wschód and Margonin Zachód has slightly changed the land use comparing to the original one. According to the EIA reports as well as the on-site observations, each of the wind turbines occupies an area of approximately 800-1000 m^2. For all of the turbines the total area of occupied land is therefore 4.8–6 ha which can be neglected comparing to the entire area of the commune (122 km^2) or to the commune area of agricultural use (approximately 72 km^2).

All of the turbines have been constructed on the agricultural land only. No forest cutting or demolitions have taken place at the site.

4.9 Visual aspects

Based on the EIAs of the wind farms the location of the Margonin wind farms will not significantly influence the visual properties of the area. The reports does not point out any negative visual influence on the landscape protection zone (along the Margonińskie lake) or cultural monuments. It should be noted, however, that the assessment of visual impact of the farm on the landscape has very individual character and may vary depending on the personal preferences.

Based on the on-site observations of the ENVIRON auditor, the wind turbines of the farms are visible across the entire area. Their presence is sometimes hidden by the natural landscape elements, like forests or buildings. The wind turbines are visible from the local and regional roads in the area and also from the southern bank of the Margoninskie lake, however, subjectively their presence is well composed with the surrounding area.

The visual impact of the wind turbines has been reduced by the Company by implementation of the following measures:

- paining in light color, which reduces visibility of the turbine when seen from the further distance;
- placing no advertisements on the turbines' masts, except for the logo of the Company on the gondola.

The rotating blades of the turbine may cause the shadow and flicker effects. These negative impacts have been mentioned in the EIA reports, however, without a detailed assessment. The intensity of such effects depends mostly on a distance to the residential areas and location of the turbines versus the Sun position and residential areas. The wind turbines of the Margonin wind farms are located in a several hundred meters distance from the nearest buildings, in majority in northern, eastern and western direction of them. The Sun is low above the horizon during the mornings and evenings, thus both flicker and shadow effects may occur. The shadow effect will be reduced mainly by a distance of the turbines to the buildings, the flicker effect by application of a non-reflex paints.

No significant issues related to visual effects of the wind farms were identified.

4.10 Transportation issues

The wind farms during the exploitation phase will not significantly affect the local traffic, thus will not be an issue of concern.

During the construction phase of the project the long elements of the turbines have to be transported to the specific locations. Each of the oversize cargo transports has been agreed with the public road management and was properly planned and secured. In some cases such transport required a local road reconstruction and preparation, which included cutting off by-road bushes or trees. The general contractor (Gamesa) has been in charge of all transports arrangements, including obtaining the permits for road remodeling and cutting off the trees. All of the arrangements done by the contractor are supervised by the Company representative.

The nuisance of transportation during the construction of the wind farms is not considered by ENVIRON as an important issue of concern, since the transportation process was taking place within a long time, thus the intensity of local traffic was not significantly increased.

4.11 Storage of chemicals

No chemicals are expected to be stored at the individual wind turbine sites, except these present in the integrated containers of the installed devices. No issues of concern were identified with respect to storage of chemicals.

4.12 Deleterious materials

Use of asbestos, PCB and ozone depleting substances is already banned in Poland. Such materials as well as radioactive materials are not expected to be present in the wind turbines installed at the subject wind farms.

4.13 Soil, Surface and Groundwater Contamination

Based on documents made available by the Company, no soil or groundwater contamination survey have ever been conducted at the site. The soil research conducted at the sites designated for individual wind turbines location was focused on local geotechnical conditions and no tests for contaminants presence were conducted.

Based on the on-site observations and likely history of the site a risk of serious soil contamination is evaluated as low, however, contamination with e.g. pesticides due to agricultural land use cannot be ultimately excluded. Such contamination – if any – cannot be directly connected with farms' construction and operations.

As observed during the site inspection the construction works are not related to extensive use of oils and other chemicals. Small amounts of fuel were observed to be present in the steel containers of capacity 20 l. No surface stains or other potential evidences of soil contamination were identified during the site inspection.

An overall risk of soil contamination due to historical, present and future site's use is evaluated as low.

4.14 Key Health and Safety Issues

The construction works on the wind farm are conducted by the general contractors, which bear full responsibility for work management a provision of proper health and safety measures. There are four general contractor companies responsible for different aspects of the Project:

- SAG Elbud Gdańsk S.A. – responsible for a turn-key Project of the overhead 110 kV electrical line, which, although is not a part of the Project, is crucial for the entire project success and power supply from the wind farms to the national electrical grid;
- GES company – responsible for a turn-key project of the electrical substation in Sypniewo, which, although is not a part of the Project, is crucial for the entire project success and power supply from the wind farms to the national electrical grid;
- IBERINCO company which is responsible for execution of the electrical and steering cable connection between the turbines and the electrical substation in Sypniewo, as well as for construction of the access roads, service yards and turbine foundations;
- GAMESA – responsible for supply, assembly and start-up of the wind turbines.

Each of these companies is fully responsible for the tasks agreed in the contracts as well as for proper organization of the works, among others in terms of H&S issues. Each of these companies is also obliged (according to the Polish law) to secure proper staff training, medical examinations and other H&S provisions, as well as to maintain the register of work related accidents. According to the Company representatives, the general contractors are obliged to report any accident at work. No such accidents were reported by the day of site inspection.

During the exploitation phase of the Project the maintenance works at the wind turbines will be conducted by specialized staff, well trained and certified in terms of working on the heights and with electrical and mechanical equipment. Based on the discussion with Gamesa employee, strict H&S safety rules apply to the maintenance staff and similar will apply during the exploitation of the farm. These regulate all aspects of working inside the wind turbines, including meteorological conditions under which access to the turbine is not permitted, safety measures required for works in the gondola, evacuation rules etc.

4.15 Control of Major Accident Hazards

The Project does not fall under the SEVESO II regulations. No risk of major industrial accident was identified.

The fall down of the wind turbine is considered to be the potential accident of the most serious consequences. In order to reduce a related risk for human and goods, the turbines are located away from the sensible areas, in a distance exceeding maximum height of the entire turbine (including the wings of the propeller).

4.16 Cultural heritage

There are approximately 200 objects on the territory of the Margonin commune which are under protection of the monuments conservation authorities. These comprise single houses, cemeteries, noble houses and parks. Moreover, there are a number of archeological stands at the territory of the commune.

All the groundworks were conducted under an archeological supervision. The scope of the supervision was defined by the permits No. 55/C/2008 of August 11, 2008, issued by the Voivodship Office of Monuments Protection (Wojewódzki Urząd Ochrony Zabytków) in Poznań.

The supervision of the works was conducted by Dolnośląskie Biuro Przedsiębioczości Krzysztof Starzyński. According to the supervision reports dated 2008/2009, the following were identified during the groundworks:

- a few parts of modern history pots were found at the territory of the Margonin Zachód wind farm, however, none of them revealed to disclosure of the historical settlement evidences;
- no potsherds were identified.

The reports on conducted archeological supervision works were disclosed to the Province Office of Monuments Protection in Poznań.

4.17 Impact on fauna and flora

The Margonin wind farm project is not located on the areas of special interest from the environmental or nature protection point of view.

Based on the EIA findings, the Margonin wind farms are not located in the region of valuable flora habitats. The turbines are located on the arable fields and their impact on the flora can be neglected. Similarly, the cable routes follow mainly the road network and do not disturb more valuable flora habitats that occur by the surface water reservoirs and streams.

The wind turbines may impact the avifauna, mainly the birds and bats. The EIA reports were elaborated at the time, when no guidelines for assessment of wind turbines on birds and bats were elaborated in Poland. The assessment for the purpose of EIA based therefore on the publicly available information as well as on a limited inventory of the birds conducted at the Margonin Wschód wind farm area during the nesting season of 2007. The observations

were done at the wind farm area and in its direct neighborhood. More than 60 bird species were identified among which 7 species listed in the Annex 1 to the Bird directive. These were observed mainly in the areas of forests, wetlands and by-water flora. None of the valuable species were observed in the vicinity of the planned turbines' locations.

The EIA of the Margonin Zachód wind farm does not recall any bird inventories and bases the assessment on the publicly available sources.

Much more detailed bird inventory was conducted for the purpose of Pawłowo wind farm development. The inventory was conducted during the whole year season, between May 1, 2008 and May 29, 2009. The methodology of the ornithological inventory was compliant with the Guidelines on Wind Farms Impact on Birds. The birds inventory included:

- point observations on birds species and number in a regular grid mesh conducted on every 10-14 days;
- observations according to Monitoring of the Common Nesting Birds rules conducted in a regular grid mesh, conducted twice during the nesting season;
- research on the birds flight intensity within the trial areas, conducted every 10-14 days;
- observations on rare bird species living areas and number.

Within the inventory 107 species were identified at the Pawłowo wind farm territory during the spring migration period and 98 species during the autumn migration season. During the nesting period 97 birds species were observed. Most of the observed were common birds, however, more attractive species (e.g. canes, eagles, storks) were observed as well. The typical observed birds fly height was 40 m, and at the height between 50 and 150 m (i.e. within the range of the wind turbine blades) only 17.8% of the observed flights took place. The observed region was characterized as typical for this part of Poland, without any special preferences for birds to nest or feed. The general conclusion of the inventory was that except for a few regions in the south-eastern and southern part of the investigated area, the potential impact on birds can be assessed as low.

In order to verify the potential impact on birds ENVIRON requested Mr Grzegorz Hebda (Ph.D), ornithological expert of Opole University, to analyze the available ornithological data. According to his opinion, the ornithological observations conducted on request of the Company at the territory of planned Pawłowo wind farm can be easily extrapolated to the Margonin farm due to close location of both developments and similar properties of the nature. Concerning the attractiveness of both areas for birds, Mr. Hebda points the Pawłowo area as more attractive than the Margonin one. Thus, the risk of a significant impact of the wind farm on birds can be evaluated as low and the conclusions presented in the EIAs reports for the Margonin developments are justified.

The potential for the wind farm impact on bats was not analyzed in EIA reports. The monitoring of birds was however conducted for the purpose of the Pawłowo wind farm development. The inventory of bats was conducted at the area of planned Pawłowo farm in

autumn 2008 and spring 2009. The applied methodology was compliant with the international methodology guide by EUROBATS in 2006.

In total 173 bats belonging to 5 species were identified during the monitoring campaign, all belonging to the most common bats in Poland. According to the monitoring reports, all observed species are potentially in a risk of collision with the wind turbines, however, due to local character of bats presence (mainly in the vicinity of the villages or small forest complexes) the wind farm can be located at the planned area.

In order to assess potential impact of the Margonin wind farm on bats, ENVIRON requested Mr. Krzysztof Badora (Ph.D.) of Opole University to analyze the available data on bats. Mr. Badora concluded, that due to a similar character of the both wind farms areas the conclusions of the bats observations at the Pawłowo farm area can be directly extrapolated to the conditions of the Margonin wind farm. Taking into consideration low attractiveness of the Margonin area for bats the potential impact of that farm can be evaluated as even lower than that of Pawłowo wind farm.

The project-related investment, construction of the overhead, 110 kV power line crosses the Nature 2000 zone in a distance of approximately 4 km. Among 123 flora species identified in the area of the line, 104 occur at the Nature 2000 zone and 48 exclusively there. There are also more than 200 bird species nesting and feeding in that area. Based on the EIA assessment elaborated for that investment, its adverse impact to the environment is not significant . Special measures implemented for birds protection include:

- construction of the line on a route of previously existing high voltage overhead power line;
- application of the signaling spirals on horizontal transmission cable and prevention from electric shock by installation of the insulators vertically downwards in the intervals ensuring protection of birds;

ENVIRON evaluates the risk of the project implementation impact on birds and bats as low. However, a post-construction monitoring of avifauna should be conducted in order to verify the actual impact.

4.18 Social impacts

The Project has direct socio-economic impacts on development of the Margonin commune and local inhabitants. The following direct impacts have been identified:

- increase of the commune tax income by approximately 10%;
- increase of the annual income of land leasers by approximately PLN 8,000 a year for each;
- improvement of the local communication routes (approximately 10 km of local roads have already been constructed or remodeled by the Company);

Moreover, the following indirect impacts have been discussed with the head of the commune:

- the wind farm is expected by the local authorities to be an interesting tourism attraction which will help development of the commune and create new sources of income for the inhabitants;
- the Project related works increase the safety of the electricity supply to the commune, which creates more attractive environment for business development.

Development of the Project has not required any displacement of the people or business. The negative impact is related to decrease of the land area used for agricultural purposes, however, such is compensated by the land lease fees.

The Company has implemented measures to compensate any damages that could result from the construction works undertaken. In general, any works-related damages reported by the land owners are immediately verified on-site by the Company representative assisted by the land owner. Then the range of damages and a compensation level is negotiated between the parties. Agreed compensation is paid to the victim. As reported by the Company representatives in all cases so far the agreement was achieved between the parties and no court trials had taken place.

No issues related to devaluation of the land were reported to ENVIRON by the local authorities.

4.19 Review of the administrative procedure

The development of the Margonin wind farms bases on the following decisions and documents:

Applications for the decisions on the environmental conditions to accept the project

- on October 5, 2007 the company applied for the decisions on environmental conditions to accept the investment for the 5 separate stages of Margonin Wschód wind farm. The applications were accompanied by the EIA reports prepared for each of the stages individually and a common one for the entire Margonin Wschód farm.
- on December 13, 2006 the company applied for the decision on environmental conditions to accept construction of 10 wind turbines of Margonin Zachód wind farm, the application was accompanied by the EIA report
- on March 21, 2008 the company applied for the decision on environmental conditions to accept construction of 1 wind turbine of Margonin Zachód wind farm, the Margoning Commune Head did not obliged the company to conduct an EIA of that turbine

Consultations of the environmental decisions with the Chodzież County Head and State Sanitary Inspectorate and public consultation

- the Chodzież County Head consulted positively the Margonin Zachód investment with the note dated March 26, 2007
- the State Sanitary Inspectorate consulted positively the Margonin Zachód investment with the note dated April 10, 2007
- the Chodzież County Head consulted positively the Margonin Wschód investment with the note dated February 20, 2008
- the State Sanitary Inspectorate consulted positively the Margonin Wschód investment with the note dated February 23, 2008

Issue of the environmental decisions

The environmental decisions were issued after the environmental impact assessment procedures conducted by the authorities. The procedures involved the public consultations.

- on April 27, 2007 the Margonin county head issued the decisions on environmental conditions for the 10 turbines of the Margonin Zachód farm (decisions No. ROŚ 7624/24/07)
- on March 31, 2008 the Margonin county head issued the decisions on environmental conditions for the 5 stages of the Margonin Wschód farm (decisions No. ROŚ 7624/96/07/08)
- on August 14, 2008 the Margonin county head issued the decisions on environmental conditions for the 11th turbine of the Margonin Zachód farm (decision No. ROŚ 7624/02/08)

The building permits

- decision No. 236/07 of the Chodzież County Head of June 21, 2007 – building permit for construction of the 10 turbines of the Margonin Zachód farm and auxiliary infrastructure;
- decision No. 456/2008 of the Chodzież County Head of December 4, 2008 – building permit for construction of the stage 1 of the Margonin Wschód farm;
- decision No. 457/2008 of the Chodzież County Head of December 4, 2008 – building permit for construction of the stage 3 of the Margonin Wschód farm;
- decision No. 458/2008 of the Chodzież County Head of December 12, 2008 – building permit for construction of the stage 4 of the Margonin Wschód farm;
- decision No. 464/2008 of the Chodzież County Head of December 9, 2008 – building permit for construction of the stage 5 of the Margonin Wschód farm;

- decision No. 465/2008 of the Chodzież County Head of December 9, 2008 – building permit for construction of the stage 2 of the Margonin Wschód farm;
- decision No. 37/2009 of the Chodzież County Head of February 2, 2009 – building permit for construction of the turbine 11 of the Margonin Zachód farm.

5 Corporate Environmental, Health and Safety Management

5.1 General description

The Company acts as a manager of the Project at the stage of development and its role will not change during the exploitation phase of the project. Based on discussions with the Company representatives, no employees of the Company are or will be involved in on-site activities, including construction and maintenance of the wind farms.

At the construction phase of the Project the on-site works are conducted by the general contractors selected for specific parts of works (see section 4.14 "Key Health and Safety Issues" above). The EH&S issues are regulated by the terms of contract for services, signed between the parties. The typical contract regulates the following EH&S responsibilities of the contractor:

- Environment
    - General environmental protection (as a general, the contractor bears full responsibility for the environment damages)
    - Requirements of the environmental agreement (this section of the contract specifies such issues as material storage, waste handling etc.)
    - Air and climate quality protection
    - Protection of soil and underground waters
    - Noise and vibration mitigation
    - Protection of the natural resources and preservation of bio-diversity
- WASTE MANAGEMENT
- OCCUPATIONAL SAFETY
    - Applicable laws and norms
    - Organization of the prevention and protection activities
    - Labour security and safety plan
    - Health and safety
        - Plan drawn up in the design phase
        - Potential risk factors from the point of view of labour, health and safety

- Minimum requirements specific to construction site jobs
  - Stability and solidity
  - Energy distribution facilities
  - Weather influences
  - Object impact
  - Falls from heights
  - Scaffoldings and stairs
  - Lifting gears
  - Vehicles and machines for excavations and material handling
  - Facilities, machines, equipments
  - Excavations, wells, underground works, tunnels, embankments
  - Demolition works
  - Metallic or concrete structures, formwork and heavy prefabricated elements
- Prevention measures for the reduction or mitigation of risks
- Fire dangers envisaged when performing the works

- Emergency situations

Based on the discussion with the Company representative, during the exploitation period all on-site works and tasks will be conducted by the contractors. Maintenance of the wind farm itself will be conducted by the GAMESA company, while the service company for the electrical substation is to be selected soon. The GAMESA company as the supplier of the equipment will provide guarantee services for the first two years of farm operation and then will provide the services for another 5 years. The service contract may be then expanded.

5.2 Organization of EHS Management

The Company has not implemented any environmental or health and safety management systems yet. As a member of EDP group, however, the Company is obliged to follow the general EDP group policies:

- the environmental policy of 1994;

- the biodiversity policy of 2007;
- safety policy;
- training policy.

With respect to the environmental policy, the company commits to:

1. implements the policy as a part of all company's activities and decisions following and abiding by the principle contamination prevention and promoting the continuous improvement of the environmental management system;

2. create a value for the society, through the integration of respect for, environment's protection and corporate social responsibility with the business' economics, leading the company towards sustainable development;

3. follow-up environmental policies efficiently and effectively as well as the other duties assumed voluntarily by the company

4. release the policy to employees, suppliers, related parties and general public.

5. develop and ensure on environmental strategy throughout trainings and awareness of employees outsources suppliers and financial consumers.

6. integrate suppliers and other interested p[arties in the Environmental Management System in what concerns duties and responsibilities.

These commitments are revised periodically by the Board of Directiors and will be implemented and developed through specific objectives and action plans, so that the stated policy is followed. The company declared, that in a 2 year period a certified environment management system will be implemented in Poland.

The responsibility for environmental matters bears an Environmental Specialist (Ms. Marta Porzuczek) that reports to the Manager of the Engineering, Construction and Environment department, however, direct responsibility for the environmental matters bear directly the contractors (in the future – servicing companies). Supervision of the H&S issues during the construction phase of the Project is held by the Company's Project Manager.

5.3 Environmental Permits

According to the Polish law, operation of the wind farm does not require any environmental permit. Such permits are required for the installations which emit substances or energy to the environment, except for the noise and electromagnetic fields emissions for which no environmental permits are issued.

5.4 Contingency Planning and Emergency Procedures

Based on findings of the audit it is concluded that the facility is not a major accident hazard site and therefore it does not need a formally approved contingency plan.

5.5 Staff Training and Supervision

The Company's employees receive standard H&S training as required by the Polish law.

Provision of the specific H&S training respective for the works conducted on-site is an obligation of the contractor. That issue is regulated by the contact between the parties and is supervised by the Project Manager of the Company.

5.6 Internal and External Stakeholder Dialogue

As a limited liability company, the Company is not obliged to publicly disclosure its environmental or health and safety performance on a regular basis. However, external stakeholder dialogue is conducted whenever it is required by the administrative procedures or law e.g. during a process of EIA when a public consultation is required and managed.

As reported by the Company representatives, the Company maintains regular contacts with the local newspapers, donated a local football club "Leśnik Margonin", co-operates with two primary schools in promotion of ecological education.

There are no working unions within the Company. The internal dialogue is conducted on day-to-day contacts among the company management and employees.

The internal and external dialogue rules are not formalized and are based on the elaborated practice.

6 Compliance with National Regulations and EU standards

Based on the analysis of presented documents and discussion with the Company representatives, the Margonin wind farms site appears to be in general compliance with the national regulations and EU standards.

The most relevant EU standards are implemented into the Polish legal framework by the Environment Protection Act, Waste Act, Water Law Act, Act on Environmental Information Disclosure and Environmental Impact Assessments and others. The wind farm is not in need of any environmental permit.

The H&S and labor EU standards are implemented in Poland in the Labor Act. No non-compliances with that Act were identified during the audit.

The pre-investment procedures required the EIA procedures to be conducted for the Margonin wind farms and the overhead power line. The EIA reports elaborated for the need of these procedures were prepared in accordance with the law in force (i.e. the Environment Protection Act - EPA). Considering required scope of the report, the EPA directly implemented the requirements of the EIA directive, however, some procedural aspects of the Polish EIA procedure were notified by the EU authorities as not compliant with the directive. The major complaint was that the Polish EIA procedure was conducted only once, at the very early stage of project development, while the directive requires such assessment to be conducted at every stage of the investment process. Also restrictions that applied to the participation of the NGOs (the NGOs could participate in the EIA procedure only if declared objectives at the very early stage of an administrative process) were raised up by EU as incompliance with the directive. From this point of view, the EIA procedures related to development of the Margonin wind farm and overhead power line were conducted in line with the Polish legal framework, but in incompliance with the EIA directive. It must be noted here, that by October 2008 all EIA procedures were conducted based on the EPA regulations, so all of such procedures were not compliant with the EIA directive.

In October 2008 Poland cancelled the part of the EPA related to disclosure of environmental information and environmental impact assessment. A new Act on Environmental Information Disclosure and Environmental Impact Assessments was issued. This act fully implements the requirements of the EU EIA directive and introduces, among others, the second stage of the EIA procedure prior to issue of the building permit. Such a second EIA may be required if the final design of the investment does not take into account requirements of the decision on environmental conditions to accept the investment, or, if the final design significantly differs from the one used while application for the environmental decision. The table below presents the consecutive stages of the Margonin wind farm pre-investment process.

Project phase	Stage of the process	Date	Comments
Margonin Zachód	Application for the decision on environmental conditions	December 13, 2006	The application was accompanied by the EIA report for 10 wind turbines.
	EIA procedure	by April 27, 2007	The procedure was conducted under the EPA regulations. Within the procedure the EIA report was evaluated and approved by the competent authorities. Public consultations was undertaken by the relevant authorities.
	Issue of the decision on environmental conditions	April 27, 2007	
	Issue of the building permit	June 21, 2007	
Margonin Wschód, stages 1 to 5	Application for the decision on environmental conditions	October 5, 2007	The application was accompanied by the individual EIA reports for each of the stages and a common EIA report for the entire wind farm. A cumulative effect of Margonin Wschód and nearby Margonin Zachód farms was not assessed.
	EIA procedure	by March 31, 2008	The procedure was conducted under the EPA regulations. Within the procedure the EIA reports were evaluated and approved by the competent authorities. Public consultations was undertaken by the authorities. Following the EU EIA directive the cumulative effect of the wind farms should be evaluated within the procedure which was not done by the authorities. However, taking into account the relatively long distance between the closest wind turbines of the both farms, such effect can be probably neglected. The procedure, however, should be formally assessed as not compliant with the EU EIA directive.
	Issue of the decision on environmental conditions	March 31, 2008	A common decision was issued for all 5 stages of the wind farm development.
	Issue of the building permits	Between December 4 and 12, 2008	Although the new Act on Environmental Information Disclosure and on EIA was

			already in force, the authorities did not request the 2nd stage of the EIA procedure. According to the Act, the 2nd stage of the EIA procedure is obligatory if the final design is significantly different that the one at the 1st stage, or, the conditions set-up by the environmental decision are not met, which is not in non-compliance with the EU EIA directive.
Turbine No. 11 at the Margonin Zachód wind farm	Application for the decision on environmental conditions	March 21, 2008	The authorities did not require an EIA report to be attached to the application
	EIA procedure	by August 14, 2008	The authorities conducted the EIA procedure based on the information provided by the company. As a part of a larger project, however, a full EIA report should be prepared by the investor. The EIA procedure should be evaluated as not compliant with the EU EIA directive.
	Issue of the decision on environmental conditions	August 14, 2008	
	Issue of the building permit	February 2, 2009	The new Act on Environmental Information Disclosure and on EIA was already in force. The authorities did not request the 2nd stage of the EIA procedure.

7 Potential for resource, energy and raw material savings

The Margonin wind farms utilize the modern and up-to-date technology. No potential for resource, energy or raw material saving was identified during the audit.

8 Compliance with EBRD's PR/IFC PS

The assessment of the project against the EBRD's Performance requirements and IFC Performance Standards is presented in the table below. The following color coding for requirements status is used:

- the green color reflects the status of compliance;
- the blue color reflects the status of partial compliance of low risk or likely future compliance;
- the magenta color reflects the status of possible compliance after implementation of the specific tasks or measures;
- the red color reflects the status of non-compliance.

Ref No.	PR/ IFC PS Requirement	Status	Reference	Comment/ Gap analysis	Recommendation
1	PR1: Environmental and Social Appraisal IFC PS 1: Social and environmental assessment	Compliant at the current stage of the Project development	EIA reports	A number of EIAs as well as other studies have been conducted by the company during the pre-investment phase of the project. The environmental and social issues were properly addressed.	The environmental and social impacts of the Project should be monitored after the Project completion (stat-up of the wind farms)
2	PR1: Organizational capacity and commitment IFC PS1: Management program, Organizational capacity	To be compliant.	None	The company has sufficient resources to properly manage environmental and social impacts of the Project	The company should establish formalized structure and procedures to properly address all environmental and social issues that may arise after the Project completion.
3	PR1: Performance monitoring and review IFC PS1: Monitoring	Compliant at the current stage of the Project To be compliant after project completion	None	The proper addressing of the environmental and social issues at the construction stage of the project is assured by the respective contract clauses with the contractors and supervision of the construction process.	The environmental and social action plan addresses the issue of appropriate post-construction monitoring program.

				The company has declared to implement the measures listed in the environmental and social action plan.	
4	IFC PS 1: Social and environmental management system	To be compliant	None	The addressing of environmental and social issues is currently not formalized and codified.	Due to the size of the Polish office of the company an implementation of the management system according to ISO standards appears to go too far. Instead, a codification in a form of internal instructions to address environmental and social issues seems to be the most effective.
5	IFC PS1: Training	Compliant	None	Although the company does not provide any training to the contractors' and service companies, the appropriate training of the staff working on-site is a requirement of the contracts. The Company's employees are trained according to EDP training policy.	
6	IFC PS1: Community engagement	Compliant	None	The community engagement was already proved at the stage of EIA processes as well as via the Company's actions undertaken so far	The further community engagement is assured by the disclosure of information foreseen by the SEP.
7	IFC PS1: Disclosure	Compliant	None	The community has already been informed about the Project risks and predicted impacts.	Further disclosure of information is foreseen by the SEP.
8	IFC PS1: Consultation	Compliant	None	The consultation process was a part of the EIAs procedures. No adverse impacts	None

				are predicted for the operational phase of the Project.	
9	IFC PS1: Grievance mechanism	Compliant	None	At the current stage of the project the grievance mechanism is implemented for the damages caused during the construction works. The grievance mechanism for the operational phase of the Project is a part of the SEP.	Develop a formalized grievance mechanism for the operational phase of the project.
10	IFC PS1: Reporting	Compliant in terms of internal reporting. To be compliant in terms of external reporting	None	The status of the project execution as well as on environmental and H&S and social issues is reported to the senior group management.	General rules of project status reporting are defined in the ESAP and SEP.
11	PR2, IFC PS2: Human resources policy	Compliant	http://www.edp.pt/en/aedp/sobre aedp/principiosepoliticas/Pages/Principios_etica_conduta.aspx	The human resources policy is a part of the EDP group code of ethics	None
12	PR2, IFC PS2: Working relationship, working conditions and terms of employment	Compliant	None	The working conditions and terms of employment are made known to the new employees and are defined in the employment contracts.	None
13	PR2, IFC PS2: workers organizations	Compliant	None	The Company respects the national law for employees to create a working organization. No such organization is present in the company	None
13	PR2, IFC PS2: forced labor, non-discrimination and equal opportunity	Compliant	None	The Company follows the Polish constitution rules	None.

14	PR 2: Wages, benefits and conditions of work	Compliant	None	The wages, benefits and conditions of work within the Company are comparable to those offered by equivalent employers in Poland.	None.
15	PR2: Occupational Health and Safety (OHS)	Compliant	None	The Company employees are properly trained on H&S rules following the Polish labor regulations. The H&S conditions and rules appropriate for the outsources tasks are regulated by the contracts with the service suppliers.	None.
16	PR2, IFC PS2: Retrenchment	Not applicable	None	The Company due to its size (small company according to Polish classification) is not obliged to evaluate a retrenchment program.	None
17	PR 2, IFC PS2: Grievance mechanism	Compliant	None	Each of the Company's employees can formulate a grievance to his boss.	The formalized procedure of internal grievance mechanism should be elaborated.
18	PR2, IFC PS2: Non-employee workers	Compliant	None	The selection of contractors is regulated by the Company's internal rules. Among others, the Contractor must meet the EDP group code of ethics.	None.
19	PR2, IFC PS2: Supply chain	Not applicable	None	The items supplied for the Project are selected based on the quality, reliability and the state-of-the-art level of development.	None
20	PR3, IFC PS3: Pollution prevention, resource	Compliant	EIA reports	The Project implements the most up-to-date technology.	None.

	conservation and energy efficiency				
21	PR3, IFC PS3: wastes	Compliant	EIA reports	The applied technology during the construction and exploitation phases reduce the types and amounts of wastes to minimum.	None.
22	PR3, IFC PS3: hazardous materials	Compliant	EIA reports	No hazardous materials are used for construction purposes. Hazardous wastes generated during the operational phase of the Project will be handled appropriately by the service companies.	None
23	PR3, IFC PS3: Emergency preparedness and response	Compliant	EIA reports	The most hazardous accidents (fall of the wind turbine) has been taken into consideration while the farm designing.	None
24	PR3: industrial production	Not applicable	EIA reports	The operation of the wind farm is not related to release of pollutants to the environment	None
25	PR3, IFC PS3: Ambient considerations	Compliant	EIA report	The ambient conditions have been taken into account within the EIAs.	None.
26	PR3, IFC PS3: Greenhouse gases emissions	Not applicable	None	The implementation of the Project will not result with greenhouse gases emissions.	
27	PR3, IFC PS3: Pesticide use and management	Not applicable	None	The implementation of the Project will not involve any use of pesticides.	None.
28	IF PS3: Technical guidelines	Compliant	EIA reports	The Project planning and designing took into account existing guidelines as well as the best management practice.	None.

29	PR4: Community H&S requirements	Compliant	EIA reports	The risks to the community have been identified and addressed in the EIS reports.	None
30	PR5, IFC PS5: Land acquisition and involuntary resettlement	Compliant	None	The land for the Project purposes was acquired based on the agreements for lease with the land owners. No physical or economical resettlement had taken place.	None
31	PR6: Appraisal of issues and impacts, habitat protection and conservation IFC PS6: Biodiversity Conservation	Compliant	EIA reports	The impacts on biodiversity was assessed at the stage of the EIAs. No significant impact on ecosystems, birds and bats was identified. .	Following the further development of the Project. i.e. construction of the Pawłowo wind farms, the cumulative impact on ecosystems will be assessed and analyzed.
32	PR6: Sustainable management and use of living resources	Not applicable	None	No living resources are used by the Project	None
33	IFC PS6: Management and Use of Renewable Natural Resources	Compliant	EIA reports	The project optimize the use of land, no natural resources except for wind are utilized.	None
34	PR7, IFC PS7: Indigenous Peoples	Not applicable	None	None	None
35	PR8, IFC PS8: Cultural heritage	Compliant	EIA Reports, Archeological Supervision Reports	The assessment of the impact on cultural heritage was a part of the EIAs. The construction works were conducted under archeological supervision. No potsherds were identified except for a few parts of the modern history pots.	None
36	PR9: Financial intermediaries	Not applicable	None	None	None

37	PR10: Engagement during project preparation	Partly compliant	None	The company was in contact with the local stakeholders since the very early stage of the Project, including selection of the construction sites. The public consultations were a part of the EIAs procedures. No stakeholder engagement plan or disclosure package was elaborated by the company at that stage.	The project preparation phase is already completed. Although the company did not follow the PR10 requirements in terms of formalized plans and disclosure packages, the public engagement at that stage is evaluated as adequate. No further actions are recommended.
38	PR10: Engagement during project implementation and external reporting	To be compliant	Stakeholder engagement plan	The company expressed its best will to follow the stakeholder engagement plan rules.	Elaborate a stakeholder engagement plant.
39	IFC EHS[1]: Visual impacts	Compliant	EIA reports	Visual impacts were considered at the stage of the turbines location selection; the turbines are of the same type and size and are painted uniformly, the lettering is reduced to logo of the company, no auxiliary structures but access roads and service yards accompany the turbines	None
40	IFC EHS: Noise	Compliant	EIA reports	The noise impact of the turbines will not exceed the level of 45 dB at night at the protected areas.	None
41	IFC EHS: Species Mortality or Injury and Disturbance	Compliant	EIA reports	The farms were designed taking into account species in the area, both nesting and passing by, location of the turbines takes into	None

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				account local ornithological and bat presence conditions	
42	IFC EHS: Shadow flicker	Compliant	EIA reports	The effect of shadow flicker has been reduced by location of the turbines away of residences and by painting of the blades with an anti-reflex paints.	None
43	IFC EHS: Habitats alteration	Compliant	EIA reports	No valuable habitats were identified at the farms area. Access roads to the turbines pass the arable fields.	None
44	IFC EHS: Occupational health and safety	Compliant	None	The construction and maintenance of the turbines is conducted by a reputable companies specialized in that kind of business, strict H&S requirements are defined in the contracts	None
45	IFC EHS: Aircraft safety	Compliant	EIA reports	The ends of the blades are painted in red, the turbines are equipped with red lights on the top	None
46	IFC EHS: Blade and ice throw	Compliant	EIA reports	The turbines are located in a safe distance to roads and buildings, a regular maintenance of the turbines is secured	None
47	IFC EHS: electromagnetic interference	Likely compliant	None	The electromagnetic interference was not analyzed by the EIAs. Due to a lack of civil and military radars, TV broadcasting stations a risk of such interference is evaluated as low.	Conduct additional study on electromagnetic interference.
48	IFC EHS: Public access	Compliant	None	The turbines are located away of the residential areas. Access to the internal	None

				part of the pillows is restricted and locked.	
49	IFC EHS: Environmental Monitoring	To be compliant	None	The company is obliged to conduct post-construction monitoring.	Conduct a post-construction monitoring on noise, bats and birds impact
50	IFC EHS: OHS monitoring	To be compliant	None	The company will have to elaborate an OHS monitoring in order to fulfill this guideline	
51	EU EIA directive	Partly compliant	EIA reports, environmental decisions	The Project is subject to EIA according to the EIA directive and its implementation into the Polish legal framework. The EIA procedures were conducted for each of the sub-parts of the project and a cumulative EIA was conducted for the Margonin Wschód wind farm. No cumulative effect of Margonin Wschód and Margonin Zachód wind farm impacts was assessed. The EIA procedures were conducted under the rules stated by the Polish Environmental Protection Act, which were complained by the EU as incompliant with the EIA Directive.	The project is at the very large stage of development and is conducted in accordance with the valid environmental and building decisions. However, further Project development (construction of the Pawłowo wind farms) would require EIAs that will fully take into account cumulative effect on environment and nature of the entire project, both completed and under development.
52	EU IPPC directive	Not applicable	None	None	None

9 Conclusions and Recommendations

9.1 Summary of Regulatory Compliance Status

No regulatory non-compliance issues were identified in this audit. Recommendations related to future needs in order to keep compliance status are presented in the Environmental Action Plan.

9.2 Key Risks and Liabilities

No significant environmental and social risks or liabilities were identified.

9.3 Environmental and Social Action Plan

An Environmental and Social Action Plan (EAP) derived from the findings of this audit is presented in a standalone report.

9.4 Stakeholder Engagement Plan

A Stakeholder Engagement Plan (SEP) derived from the findings of this audit is presented in a standalone report.

Annex A:Site Maps/Plans

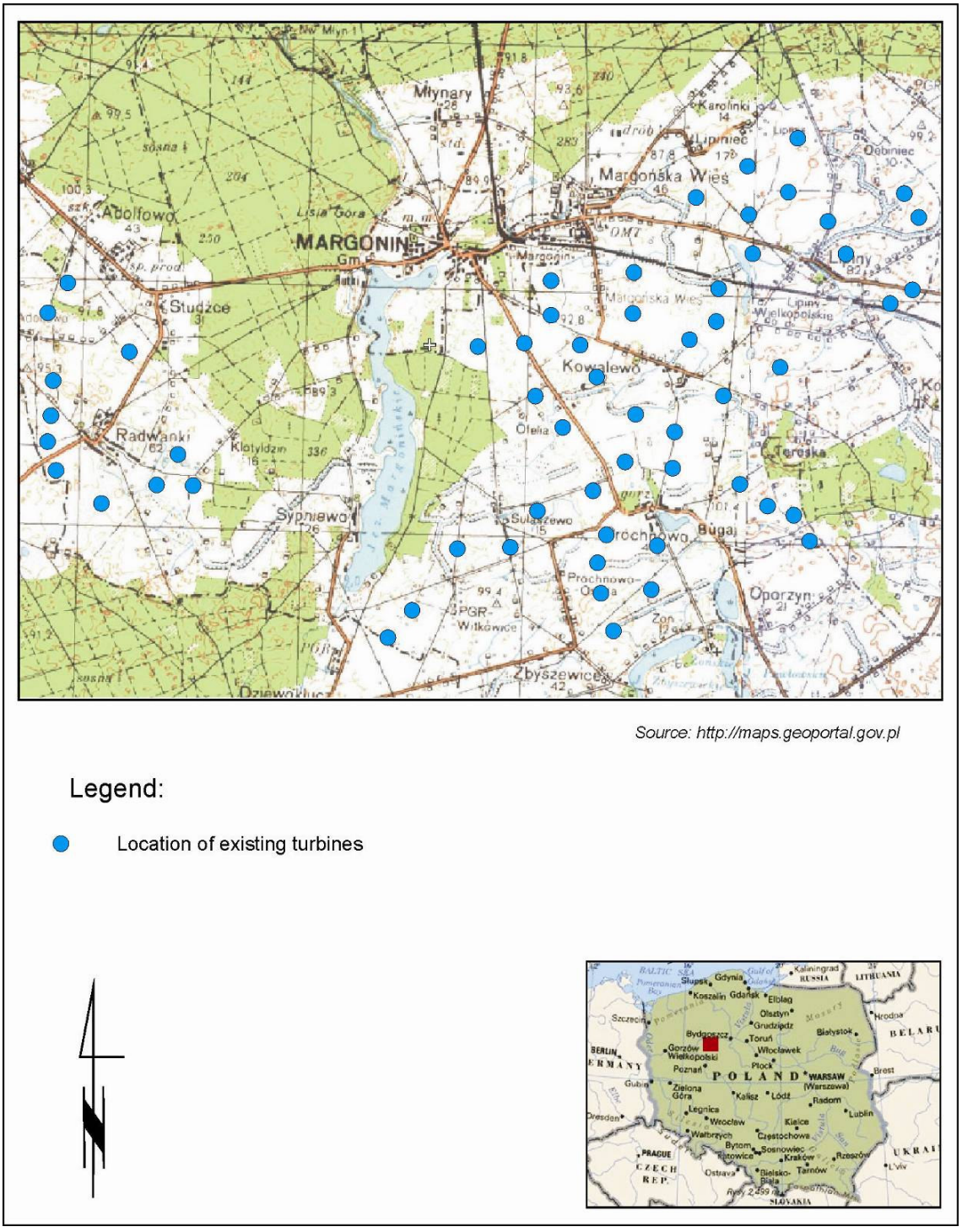

Figure 1. Location of the Margonin wind farms.

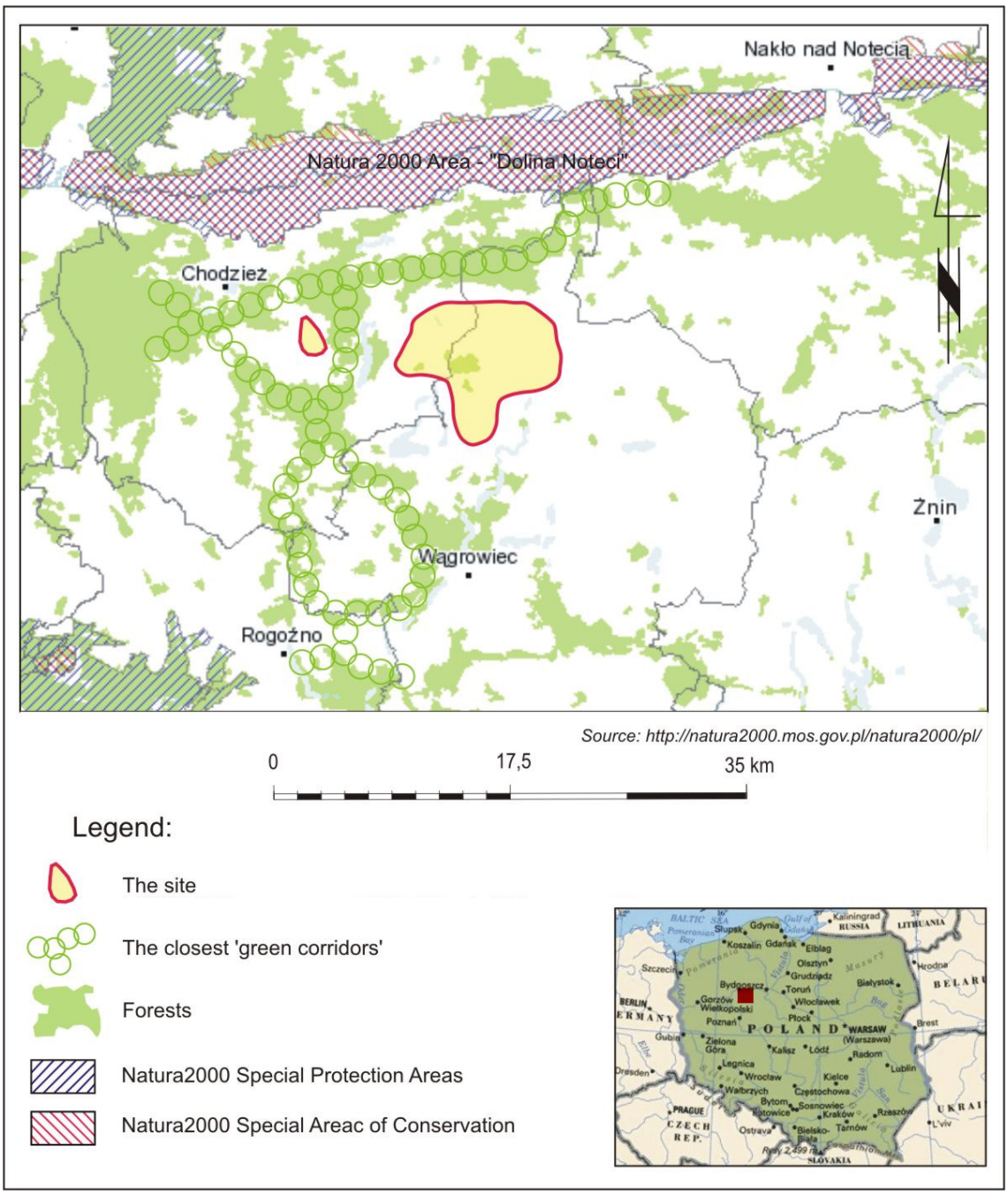

Figure 2. Location of the Margonin wind farm versus the nature protection areas.

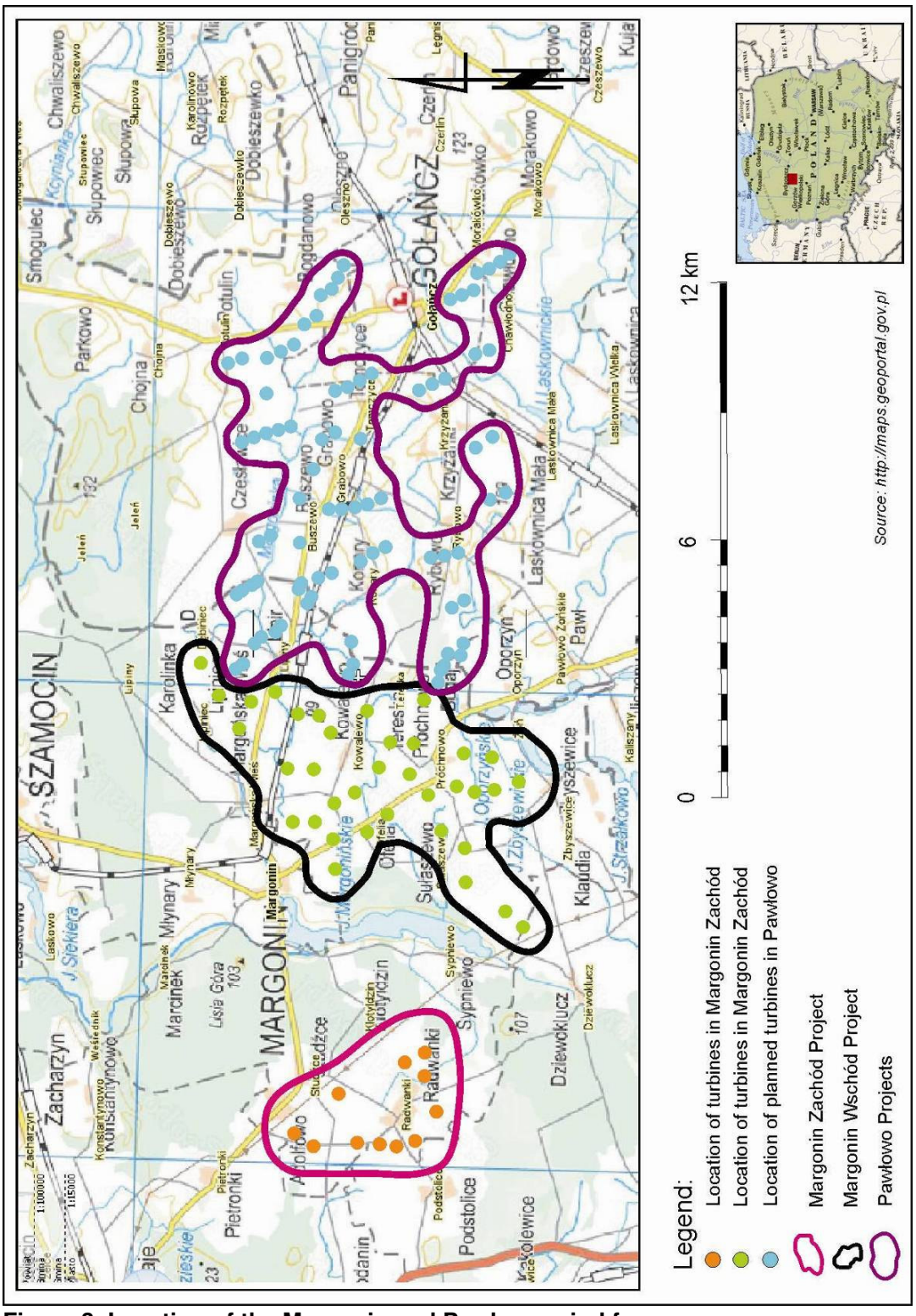

Figure 3. Location of the Margonin and Pawłowo wind farms

Annex B: Photo Log

Photo 1: **The wind turbines of the Margonin Wschód wind farm as seen from a local road**

Photo 2: **The wind turbines are located in a distance of a few hundred meters from residential areas.**

Photo 3: The wind turbines painting reduces their visibility from further distance.

Photo 4: Finishing works on a wind turbine

Photo 5: The wind turbine elements are large (a gondola)

Photo 6: The blades are assembled before mounting on the top of the tower.

Photo 7: **The electrical substation in Sypniewo – a transformer on a secondary containment.**

Photo 8: **The electrical substation in Sypniewo – installation of the underground cables.**

Photo 9: An aerial view at the Margonin wind farm

Photo 10: An aerial view at the Margonin wind farm.