

Environmental and Social Data Sheet

Overview

Project Name:	WIELKOPOLSKIE ONSHORE WIND
Project Number:	2019-0231
Country:	Poland
Project Description:	The Project consists of a portfolio of four grid connected wind farms, located in Wielkopolska Province (Greater Poland Province), Slupca Kolaczkowo (45 MW) Jarocin Kozmin (42.5 MW), Jarocin Wschod (5 MW) and Krotoszyn (10 MW).
EIA required:	yes (for 3 out of 4 sub projects)
Project included in Carbon Footprint Exercise ¹ :	yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

Environmental Assessment

The project consists of four individual wind farms: Slupca Kolaczkowo (15 x 3 MW), Jarocin Kozmin (17 x 2.5 MW), Jarocin Wschod (2 x 2.5 MW) and Krotoszyn (4 x 2.5 MW). The turbine hub height is 141.5m for Slupca Kolaczkowo) respectively 120 for the other three wind farms,

The wind farms are located in the province of Greater Poland (Wielkopolska Voivodship) about 50 to 90 km east to south east of Poznan, extending over the municipalities of Kolaczkowo, Kozmin and Krotoszyn. The closest distance between two wind farms is about 6 km, the most distant is about 70 km. Each project has its own grid connection, the two small projects connect at medium voltage to existing substations, the two large projects have an own transformer station each and connect at high voltage (110 kV) level to the national grid. Slupca Kolaczkowo also includes a HV power line of about 18 km length.

The landscape of the whole area is flat with at an altitude of about 90 to 140 m. It is characterised mainly by extensive agricultural use, mostly fields, some small patches of forested land, trees or bushes and small villages as well as individual farm buildings. All turbines will be located on agricultural land; long-term land lease agreement have been concluded with private owners and in some cases with agricultural cooperatives.

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO₂e/year absolute (gross) or 20,000 tonnes CO₂e/year relative (net) – both increases and savings.

Luxembourg, 15th October 2019

The wind farms fall under Annex II of the EIA Directive (2011/92/EU, as amended by Directive 2014/52/EU) and three of them have been screened in, requiring full EIAs including public consultations. Only the Jarocin Wschod wind farm was screened-out by the competent authorities and thus not requiring an EIA.

Assessments were carried out individually for the wind farms including the electrical works. For Slupca Kolaczkowo the EIA comprises the project owned transformer station and the HV line. For Jarocin Kozmin a separate EIA for the transformer station was not required by the authorities.

For **Slupca Kolaczkowo** the closest Natura 2000 areas of protection are (partly overlapping each other) Dolina Środkowej Warty (PLB300002), Lasy Żerkowsko-Czeszewskie (PLH300053) and Ostoja Nadwarciańska" (PLH 300009) at a distance of about 4 to 5 km. PLB300002 includes wetlands along the river valley of the Wartha and is an important breeding area for birds, hosting also more than 30 species listed in Annex I of the Bird Directive (including black and white stork, the honey buzzard, red kite, white-tailed eagles, corncrake or crane). A separate study on the wind farm's impact on birds and bats was conducted, including on-site monitoring during migration, breeding and wintering season. The study concluded that the wind farm will not constitute a barrier to migrating birds and that the site is not attractive to birds and bats with comparatively low population. The study does not expect a significant negative impact on the integrity of the nearby Natura 2000 sites, no appropriate assessment was therefore carried out.

For **Krotoszyn** the closest Natura 2000 areas are the (largely identical) PLH 3000002 Uroczyska Płyty Krotoszyńskiej and PLB300007 Dąbrowy Krotoszyńskie, an oak forest habitat complex, hosting inter alia, 12 bird species listed in Annex I of the bird directive, in about 2 km distance. Birds and bats observations took place in 2008 to 2009 during migrating, breeding and wintering season in connection with the local development planning and the specification of wind power development zone. On this basis, the EIA concludes that presence of protected birds at the wind farm site is limited with a very low risk of collision. Further, the EIA does not expect significant negative impact on the integrity of the Natura 2000 site, no appropriate assessment was therefore carried out.

The **Jarocin Kozmin** wind farm is located about 14 km away from the closest Natura 2000 area and no particular investigation on the wind farms' impact on the protected areas was carried out. The EIA study had evaluated earlier ornithological observations, which were made in connection with the local development plans, coming to the result that the wind farm area is not particularly used by protected bird species and will not create a barrier or particular danger of collision to birds.

In the EIA studies noise emission and noise levels at nearby receptors were calculated, which revealed the necessity to reduce the noise emission of particular turbines in order to maintain the maximum noise level (40 dB at night for residential buildings).

The EIA studies investigated further potential impact for example from electromagnetic field, emissions during operation and construction or production of waste and wastewater, but concluded that the effects were not significant. Shadow flicker assessment is not required under the national legislation, however the promoter has agreed to carry out a flicker modelling and to provide EIB with the results.

Potential cumulative effects with regard to further planned wind farms in the vicinity of Slupca Kolaczkowo and of Jarocin Kozmin have been taken into account.

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Final “Environmental Decisions” (permits), which are required for all further building and operating permits, were issued in 2013 by the mayors of the respective municipalities (as designated competent authority), based on the advice provided by Regional Director of Environmental Protection and State District Health Inspector. They are valid for 18 turbines at Słupca Kolaczkowo, 29 turbines at Jarocin Kozmin, 2 turbines at Jarocin Wschod and 6 turbines at Krotoszyn and contain conditions and obligations for implementation and operation, to limit potential negative environmental impact. The most important ones are the obligation for further bird and bat monitoring, operational limitations regarding the noise level and noise monitoring obligations.

The promoter had decided to reduce the total number of turbines in order to limit the noise emission and to optimise the production, but some turbines still need to operate at a noise reduced power mode during the night.

EIB Carbon Footprint Exercise

The direct CO₂ equivalent emissions of the wind farms are considered negligible.

In accordance with the Bank’s current Carbon Footprint methodology it is calculated that based on the avoidance of electricity generation from a combination of existing and new power plants in Poland (75% operating margin and 25% build margin), the total relative effect of the project is a net reduction in CO₂ equivalent emissions by 260 kt CO₂e/yr.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project.

Social Assessment, where applicable

There is no formal obligation to carry out CSR measures in the concerned communities; however, the project will support some projects (mainly renovation and refurbishment of community buildings and schools).

No significant social impacts were identified through the EIA.

Public Consultation and Stakeholder Engagement

EIAs and environmental decisions were published in accordance to the Polish regulations at designated boards at municipality and village level. No comments or complaints were received.

Other Environmental and Social Aspects

n/a

Conclusions and Recommendations

The project is fully permitted and in line with the local development plans. Based on EIA conclusions, the environmental permits confirmed that the projects will not have significant negative impact on the environment or on the integrity of the nearest Natura 2000 areas. Nevertheless, following the precautionary principle, monitoring of the wind farms’ impact on birds and bats as well as the noise level at the nearest sensitive receptors was set as a condition in the permits.



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The project is acceptable for EIB financing under the following conditions:

- *Bird and bat monitoring shall be carried out as per Environmental Decision; copies of the monitoring reports to the environmental authorities shall be provided to the EIB (for the first two years of operation)*
- *Noise monitoring at closest receptors shall be carried out as defined in the Environmental Decision; copies of the reports to the environmental authorities shall be submitted to EIB*