



QUESTIONNAIRE FOR WIND ENERGY (SECTOR RELATED QUESTIONS)

The completion of this questionnaire is voluntary. However, replying to the relevant questions as completely as possible will facilitate and speed up the assessment of the environmental, social and human rights impacts of the project for which the German export supplies or services offered for cover are intended. This – together with the questionnaire not related to a particular sector, the completion and submission of which should also be considered in order to speed up the assessment procedure – can replace the description of the environmental, social and human rights impacts in the memorandum.

The questionnaire provides guidance on what information may be important for this sector. It is based on the World Bank/IFC General Environmental Health and Safety (EHS) Guidelines and the EHS Guidelines for Wind Energy. Additional information on the applicable standards can be found on our [website](#).

This is a list of possible questions. Depending on the individual case, only some of them, or perhaps also additional information, may become relevant in the course of the application procedure. Because of the specific features of each project further clarification may be required.

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A. Wind energy

A.1. Site

- Please provide the following information on the wind turbines:
 - Number
 - Total installed output in MW
 - Energy generated in GWh per year
 - Full load hours per year
 - Hub height
 - Rotor diameter
- Please describe the site of the wind farm (on-shore, off-shore, topography).

- Please provide information on any infrastructure that may be necessary (access roads, grid connection, transformer station, etc.). Please state in particular the length (in km) of the roads and overhead transmission lines.

- Please provide information on the land requirements:
 - Total area of the wind farm: ha
 - Total area of all wind turbines, access roads, transformer stations and above-ground power lines up to the connection to the electricity grid:
- Please describe the ownership structure and the previous use of the required area. Please provide also information on possible expropriation and compensation procedures in this context. Please give also details on the area required for access roads and other infrastructure.

- Is the wind farm or the related infrastructure located in or near a sensitive area²?

- Are the wind turbines located near a bird migration route? Do the wind turbines or the related infrastructure affect roosting and breeding grounds?

- Are any habitats of bats affected?

- What measures are taken to minimise the risk of collisions of birds and bats with rotor blades?

¹ The P90 (or P50) value represents the threshold the predicted long-term annual energy output is unlikely to fall short of with a probability of 90% (or 50%).

² Definition: Sensitive areas include National Parks and other protected areas identified by national or international law and other sensitive locations of international, national or regional importance such as wetlands, forests with high biodiversity value, areas of archaeological or cultural significance and areas of importance for indigenous peoples and other vulnerable groups.

- Do the wind turbines or the related infrastructure have any impacts on protected plant and animal species? If so, what mitigation measures will be implemented?
- Please give details on any other wind farms in the project's vicinity. Will the cumulative effect of the wind farms e.g. on bird migration routes, sensitive areas or visual changes of the landscape be assessed in the licensing procedure?

A.2. Noise

- Has an expert opinion on noise been prepared? If so, what are the relevant findings?
- How loud is the noise caused by the wind turbines at the nearest sensitive receptor in dB(A) at a wind speed of 10 m/s at 10 m height?
- Are noise mitigation measures required or planned? If so, what measures?
- Please state the noise impact (existing background noise level and additional noise emissions of the project) on the nearest receptors (industrial estates and residential areas) in dB(A) for day and night after completion of the project in accordance with the table below.

Noise Level Guidelines ¹				
Receptor	One Hour LA _{eq} (dBA)			
	Guideline Value Daytime (07:00-22:00)	Project Value Daytime (07:00-22:00)	Guideline Value Nighttime (22:00-07:00)	Project Value Nighttime (22:00-07:00)
Residential; institutional; educational ²	55		45	
Industrial; commercial	70		70	

Notes:
¹ Guidelines values are for noise levels measured out of doors. Source: Guidelines for Community Noise, WHO, 1999.
² For acceptable indoor noise levels for residential, institutional, and educational settings refer to WHO (1999).
Source: WORLD BANK/IFC GENERAL EHS GUIDELINES 2007, page 53

- Do the project's noise emissions lead to an increase of the background noise level at the nearest receptors by more than 3 dB(A)?
- How far is the nearest residence away?

A.3. Waste

- What types of waste are generated during construction and maintenance work and how are these collected, stored, transported and disposed of?

A.4. Occupational health and safety

- What safety measures and/or control systems are planned to prevent accidents?
- How are health and safety (in particular with regard to working at great height, electromagnetic radiation, confined spaces, electric hazards, fire and explosions, handling of toxic and dangerous substances, dust emissions, heat, cold, noise) guaranteed at the workplace?
- How are subcontractors integrated into the health and safety measures on site?

A.5. Health and safety of the population

- To what extent are shadow flicker or any other disturbing effects (glint, flicker, etc.) caused by the wind turbines to be expected?
- Up to how many hours per year and up to how many minutes per day is a receptor (e.g. a residence) affected by shadow flicker?
- Please provide information on the visual impact on the landscape. Are there, for example, any conflicts with tourism in the region?
- What measures are taken to minimise impacts on and possible hazards (e.g. through noise, ice throw, blade throw, Aviation and marine navigation safety, electromagnetic interference, impact on radar, telecommunication and television systems) for adjacent communities?
- How is access to the wind turbines by unauthorised persons prevented?
- How great is the radius of the safety zone around each individual wind turbine? How high is a wind turbine (tower plus rotor blade)?

B. Additional information

Additional information on the Common Approaches, our environmental and social due diligence and the applicable standards can be found at: <https://www.exportkreditgarantien.de/en/sustainability/sustainability/ehsr-assessment.html>

The World Bank/IFC EHS Guidelines can be found on the website: http://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/EHS-Guidelines