



Consultations on Collaboration to Address Biodiversity Considerations in CIF-funded Wind Projects

IDB Approach on Wind Power and Biodiversity

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IDB's experience

- 2009, First 2 projects, Eurus and la Ventosa
- 2012, 15 projects (9 under preparation)

Project name	Country	Status	Category
El Libertador	Uruguay	Preparation	B
Bii Nee Stipa	Mexico	Preparation	B
Southern Lights	Argentina	Preparation	B
Chiripa	Costa Rica	Preparation	B
Palmatyr	Uruguay	Preparation	B
Confidential	Mexico	Preparation	A
Confidential	Uruguay	Preparation	B
Confidential	Panama	Preparation	A
Confidential	Chile	Preparation	A
Bani	Dominican Republic	Supervision	B
Pecasa	Dominican Republic	Supervision	B
IMPISA	Argentina, Brazil, Uruguay	Supervision	B
Eurus	Mexico	Supervision	A
La Ventosa	Mexico	Supervision	B
Marena	Mexico	Supervision	A



Standard List of Requirements

Birds survey during two migratory seasons

- Estimated flight altitude of birds that are crossing the site
- Direction in which they are flying (North East, South West etc.)
- Behaviour (hunting, flying over etc.)
- Identification of sites that represents an attraction for birds (nesting/breeding areas)
- Identification of birds (latin name, migratory or residents, IUCN Conservation status)

Methodological guidelines:

- Conducted and/or supervised by a recognized ornithologist / birds specialist
- A minimum of 7 consecutive days of observation is required
- Sufficient sampling points must be selected in order to have a full coverage of the site
- Some observations must be conducted at dawn and dusk times

When do we request a Collision Risk Assessment (CRA) ?

- Site is within a migratory corridor
- Large population on site, significant number of species with a conservation status of concern
- Presence of other wind farms in the vicinity



Standard List of Requirements

Bats survey

- Estimation of the total population of bats present within the site
- Identification of species (resident or migratory, frugivorous or insectivorous, IUCN status)
- Flight route and habits
- Habitat characterization (location of roosting sites, caves, location of feeding areas)

When do we request acoustic detection and/or thermal imaging?

- Significant population of bats species
- Conservation status of concern
- Critical habitat within the wind concession area



Current Challenges

- **EIAs not up to standard on biodiversity issues**
 - Insufficient baseline
 - Capacity on the field
 - National regulatory context
- **Lack of consideration of cumulative impacts**
 - Assessment of impacts on the overall species population level is challenging
 - What are the acceptable limits of change to a species ? To what extent the population viability of a species is compromise by the wind farms ?
 - How much uncertainty and risk we can accept for endangered and critically endangered species...



Current Challenges

- **Lack of standardized monitoring protocol and techniques**
 - Collection of data are hardly comparable to other regional or national data
 - Accuracy of impact predictions and usefulness of conducting CRA
- **What is the real effectiveness of the usual set of mitigation measures?**
 - Shut down procedure
 - Painting of the blades
 - Anti-perching devices
 - Lighting regimes
- **What kind of offset would be feasible for the wind sector ?**
- **What's coming up next ?**



Solutions

Lack of standardized monitoring protocol and techniques :

- Develop guidelines on post-construction survey methodology
 - Standardized search protocol
 - Duration and frequency
 - Number of turbines
 - Delineation of transect surveys
- Implement a mechanism to house the compiled data
- Hire a third party to analyze and present the data at country and ecological level



Some Guidance documents used as reference for due diligence and elaboration of mitigation measures

- **Bat Conservation Trust.** 'Bat surveys - Good practice guidelines, Surveying for onshore wind farms'
- **Birdlife International**
Wind farms and birds: 'An analysis of the effects of wind farms on birds, and guidance on environmental assessment criteria and site selection issues',
- **Canadian Wildlife Service.** 2007. Recommended Protocols for Monitoring Impacts of Wind Turbines on Birds, Environment Canada.
- **Canadian Wildlife Service.** Wind turbines and birds: a guidance document for environmental assessment, Environment Canada.
- **Ledec C. G. et al.** 2011. Greening the wind: Environmental and Social considerations for wind power development in Latin America and beyond. World Bank
- **Scottish Natural Heritage.** Good practice guidance - Visual Representation of Wind farm
- **Scottish Natural Heritage.** Guidance note – Cumulative effects of wind farm
- **Scottish Natural Heritage.** Good practice during wind farm construction
- **Scottish Natural Heritage.** Siting and Designing wind farms in the landscape
- **U.S. Fish and Wildlife Services.** Land-based wind energy guidelines