## Scientific and Technical Advisory Panel

The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility (Version 5)

## STAP Scientific and Technical screening of the Project Identification Form (PIF)

Date of screening: January 26, 2012 Screener: Lev Neretin

Panel member validation by: Nijavalli H. Ravindranath

Consultant(s): Margarita Dyubanova

I. PIF Information (Copied from the PIF)
FULL SIZE PROJECT GEF TRUST FUND

GEF PROJECT ID: 4374 PROJECT DURATION: 5 COUNTRIES: Belarus

PROJECT TITLE: Removing Barriers to Wind Power Development in Belarus

**GEF AGENCIES: UNDP** 

OTHER EXECUTING PARTNERS: Ministry of Natural Resources and Environmental Protection of the Republic of Belarus /

Energy Efficiency Department of State Standardization Committee of the Republic of Belarus

GEF FOCAL AREA: Climate Change

## II. STAP Advisory Response (see table below for explanation)

Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies): Consent

## III. Further guidance from STAP

The project aims at reduction of barriers to the widespread implementation of wind energy projects in Belarus. Belarus has a large potential for wind energy. STAP supports this project, but would like to suggest a number of issues/questions which could be considered.

- 1. The rationale for considering in the project only wind-to-grid energy is not clear. As a country with an important agricultural sector, promotion of wind-based microgrids and in general decentralized wind power might also be considered. This represents cost-effective and less resource-intensive effort than grid-integrated wind power applications and might have a range of environmental and social benefits. STAP recommends exploring at the PPG stage promotion of decentralized wind power sources in this project and if not feasible provide credible justification.
- 2. Integration of wind energy into the grid is not only technically challenging but also requires long-term monitoring and management as well as potential integration of energy storage capacity into the grid (when certain significant level of generation is reached) or including storage capacity outside the grid. The baseline situation with wind energy in Belarus is low and there would be a need not only for regulatory and institutional building but also long-term commitment to capacity building and mobilization of financial resources. How does the project intend to address these challenges?
- 3. One of the outcomes is the increased confidence in the profitability of wind power. How will the project ensure the profitability of the wind power which depends on the investment and O & M costs, plant load factor and energy pricing?
- 4. STAP suggests analysis of lessons learned from ongoing RE projects in Belarus and utilize this information for the current project.
- 5. There is a good listing of barriers, and potential options to address them. What is less clear is whether these are Belarus and wind energy specific barriers.

STAP advisory	Brief explanation of advisory response and action proposed
response	
1. Consent	STAP acknowledges that on scientific/technical grounds the concept has merit. However, STAP may

		state its views on the concept emphasising any issues that could be improved and the proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement.
2.	Minor revision required.	STAP has identified specific scientific/technical suggestions or opportunities that should be discussed with the proponent as early as possible during development of the project brief. One or more options that remain open to STAP include:  (i) Opening a dialogue between STAP and the proponent to clarify issues  (ii) Setting a review point during early stage project development and agreeing terms of reference for an independent expert to be appointed to conduct this review  The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.
3.	Major revision required	STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical omissions in the concept. If STAP provides this advisory response, a full explanation would also be provided. Normally, a STAP approved review will be mandatory prior to submission of the project brief for CEO endorsement.  The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.