PROMOTION AND DEVELOPMENT OF LOCAL WIND TECHNOLOGIES IN MEXICO
Objective

Building local capacities in Mexico along the value chain for the development of medium-size wind turbines for Distributed Generation applications.
Expected Results

- Local expertise on wind turbine design
- Industrial capacity to carry out manufacturing engineering and assembly of wind turbine components
- Construction and testing of a 1.2 MW, Class 1A grid-friendly wind turbine
- Transfer of acquired know-how to industry for commercial production and deployment
Project main components

1. Design and *specification* of the wind turbine components

2. Acquisition, fabrication and assembling the WT components.

3. Assembly, start-up and test of the wind turbine.

4. Capacity building and institutional strengthening to promote wind energy Distributed Generation among small energy producers.
Positive Project Experience

- A cadre of trained Human Resources.
- Good cooperation among national R&D centers involved in the project.
- Positive response of local manufacturing industry.
- Good technical assistance from advanced International R&D centers.
- Identification of available industrial infrastructure in Mexico that could support the establishment of the supply chain.
- Available co-financing from the Mexican Government.
- Good support from the Implementing Agency, IDB.
Main Challenges

- Lack of in-country venture capital for project co-financing
- Long lead times for project evaluation and approval, national & international
- Applicable normativity to national R&D centers not agile enough for timely project development
- Limited or inadequate infrastructure to assemble the turbine power train and other large components (e.g.: WT blades)
Where we are now

- Main components of power train under construction
- Assimilation of modern wind blade technology in progress
- Ad hoc training programe underway
Next Steps…….

- Bench testing of turbine components

- Installation & testing of whole turbine at The Regional Wind Energy Technology Center (CERTE)

- Set-up bases for industrial development

- Field deployment for distributed generation
Lessons Learned

- Good experience gained in negotiating with international organizations
- Local technology development faces many uncertainties that make it difficult to comply with the original project operational plan. Project evaluation should take this into account
- Multiplier effects are different from one to another project.
- Set-up bases for industrial development.