



CER *Fact Sheet*

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| NAME | Bundled Wind Power project in Tamil Nadu, India. Co-ordinated by Tamil Nadu Spinning Mills Association (TASMA-II) |
| LOCATION | Tamil Nadu, India |
| PROJECT TYPE | Wind power |
| METHODOLOGY | ACM0002 ver. 12 - Consolidated baseline methodology for grid-connected electricity generation from renewable sources |
| REGISTRATION DATE | 19 December 2011 |
| UNIT TYPE | CERs |
| VOLUME | Volume available upon request |
| UNFCCC NUMBER | 4760 |
| CDM REGISTRY LINK | https://cdm.unfccc.int/Projects/DB/SIRIM1304303877.26/view |
| SUSTAINABLE DEVELOPMENT | Document attached |



Photos from actual project

WIND POWER PROJECT IN TAMIL NADU, INDIA

Location

Bundled Wind power project is located in various sites in the State of Tamil Nadu, India and co-ordinated by Tamil Nadu Spinning Mills Association (TASMA-II).

General description of the project activity

TASMA-II involves bundling of 812 small wind mill sub projects and the generated wind power is used for meeting the captive needs and or to export to the grid. All the wind mills are connected to the grid of the Tamil Nadu Electricity Board (TNEB) / Southern Grid.

Without development of alternative sources of energy and India's growing energy demands and limited domestic fossil fuel reserves will leave negative impact on rural areas.

The intent of the Project was to reduce GHG emission and promote sustainable development by use of renewable wind energy for generation of power by bringing together a number of investors with small power requirements to invest into wind turbines. The Project assists the State of Tamil Nadu in stimulation and acceleration the commercialization of grid connected renewable energy technologies.

The project activity generates approximately 804 GWh of power, using wind energy through wind turbine technology, enabling displacement of Grid energy of that quantum and also contributes to delaying the addition to the capacity of new conventional power plants.

The maximum portion of the energy generated from the project has been utilized for self-consumption and the remaining is being sold to the utility thereby meeting the power needs of the State and narrowing the demand supply gap. Project promotes best practices among its members which includes green practices such as wind based electricity generation and energy efficiency.



Contribution to Economic Value

Development of Rural / Backward areas

- * Provides national energy security, especially when global fossil fuel reserves threaten the long term sustainability of the Indian economy.
- * Contributes towards reducing power shortage in state of Tamil Nadu.
- * Land Values of area have considerably increased. In 2012 values of properties of agricultural lands have, on an average, gone up by 270 per cent and the values of properties in residential areas have seen an average 170 per cent rise.

- * Local trade and commercial activities such as shops, lodging-houses etc. have increased.
- * New business areas like weigh- bridges etc. have opened up.

Contributions to Environment

- * Wind power is a renewable energy and there is no depletion of resources and it ensures sustainable development through generation of eco-friendly power.
- * The Project promotes conservation of natural resources including, land, forests, minerals, water and ecosystems.
- * About 17 river basins, 61 reservoir and 41948 tanks can be protected by windmills.
- * 2000 species of wildlife and 3000 species of fauna are preserved.
- * Local nurseries are flourishing.
- * There is no emission in wind power, no treated effluent since there is no water consumption, no problem of solid waste handling and there are not much of noise and heat emissions.
- * By developing this project in Tamil Nadu, was conserved has almost 90% of India's lignite reserves, 45% of magnetite and over 40% of garnet.
- * The windmills are used for pumping water for drinking purposes or minor irrigation that is very important in rural areas, where potable water for most locals are less than 40 litres per person per day.
- * There are no hazardous waste eliminated into the air, that cause acid rain harming forest, wildlife and human health.
- * State's official trees Palmyra have been protected. Trees are growing taller.
- * The area around the windmill will be used for plantation. TASMA has planted to plant Jatropha (Oil from Jatropha curca seeds are used for making Bio-Fuel) in all the sites.





Contributions to Social Value

- * Most of the sites where these wind mills are located are backward areas and the large scale presence of windmills here increases direct and indirect employment opportunities to approximately 500 new direct employments.
- * Education for over 100 local children.
- * Most of the local labor is trained in wind mill operation and maintenance resulting in skill improvement and local people are exposed to new technology.
- * Life style and culture of the local people have improved with better economic and living conditions in the state.
- * Transport facilities including roads and rails have improved, that gives access to schools and other education institutions, improving literacy and skills in whole region.
- * Communication has improved drastically in the villages and in the remote hilly terrains, where the projects are situated. This allows people living in the hilly area access to education, jobs, hospitals and culture events integrating them into society.

- * The windmill sites and approach paths have facilitated grazing of cattle and also windmill does not disturb ecosystem, which is important for rivers, because the state is one of the leaders on fisheries production.
- * Immunization maintain keeping over 1000 people free from.
- * Lives have been protected by over 500 new jobs.

