



**Project design document form
(Version 11.0)**

BASIC INFORMATION

Title of the project activity	Wind Power Project by Ushdev International Limited in Tamil Nadu
Scale of the project activity	<input type="checkbox"/> Large-scale <input checked="" type="checkbox"/> Small-scale
Version number of the PDD	05
Completion date of the PDD	31/08/2020
Project participants	M/s Ushdev International Ltd.
Host Party	India
Applied methodologies and standardized baselines	AMS-I.D. ver. 18 - Grid connected renewable electricity generation Standardized baselines used: N/A
Sectoral scopes	1 : Energy industries (renewable - / non-renewable sources)
Estimated amount of annual average GHG emission reductions	22,421 tCO ₂ e

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

Ushdev International Limited (UIL), a leading exporter, service provider, trader of steel stainless steel and electricity, has commissioned 6 x 1.65 MW Wind Turbine Generators (WTGs) in the Theni district of Tamil Nadu state in India with the objective to generate clean energy (electricity) by utilizing potential of wind. UIL has considered this activity as Clean Development Mechanism (CDM) project and is referred as Project Proponent (PP) for this project activity.

WTGs considered in this project activity are of model number V82 and supplied by Vestas Wind Technology India Private Limited (Vestas). Further, the PP has appointed Vestas for Operation & Maintenance (O&M) and monitoring of this project activity. The estimated emission reduction of this project activity is 22,421 tCO₂e per annum.

Power generated from the project activity is supplied to Unified Indian Grid through Tamil Nadu Electricity Board. In the absence of the project activity, similar amount of electricity would have been generated by other power plants connected to the Grid. Hence, the Grid mix is considered as baseline scenario for this project activity. As the majority of the power plants connected to the Grid are fossil fuel based, the project activity is avoiding GHG emissions by avoiding the need to generate similar amount of power from these Grid connected plants.

Scenario existing prior to start of implementation of project activity & Baseline:

This is a greenfield project activity and no power generation equipment or technology was present at the site prior to this. The Indian power sector is dominated by fossil fuel based power plants. The electricity in the region is being generated by such power plants which are connected to the Unified Indian Grid. Hence, the Unified Indian Grid is considered as baseline scenario for this project activity.

Project activity's contribution to sustainable development indicator stipulated by National CDM Authority (NCDMA) [Ministry of Environment and Forests (MoEF), Government of India (GoI)], are as below,

Social well being:

Due to installation of WTGs by PP in rural area various new employment opportunities are available for locals. These direct and indirect employment opportunities results in improved household income and quality of life of people.

Economic well being:

Development of wind farms, which is collective wind projects by entities like PP, also results in development of infrastructure in the region such as Road, Electricity and Communication. This leads to creating of new economic opportunities in the region. Further, the project activity leads to addition of power generation capacity in India, which is currently facing the huge demand supply gap, hence improving availability power and thereby better economic development in the region.

Environment well being:

As mentioned above, this project activity replaces the generation of power at Grid connected power plants and hence consumption of fossil fuels. Further, there are no emissions associated with generation of power from the wind. Hence, the project activity helps in reduction in emission of GHG, improvement of air quality and conservation of natural resources such as coal, oil etc.

Technological well being:

The project activity involves the successful installation and operation of MW size WTGs. The implementation of these new technologies helps in improving confidence of investor in this technology. This results in increasing investment in similar technology.

A.2. Location of project activity

Host Party: India

Region/State/Province etc.: Tamil Nadu

City/Town/Community etc.: WTGs of the project activity are located in Mottanuthu, Marikundu, Shanmugasudarapuram, Seepalaikottai and Poomalaikundu villages. These villages are part of Theni district. Exact locations of WTGs are given in table A.2.



Figure: A.1: Satellite Image of India, highlighting site location – Andipatti village
(Source: Google Earth)

The project activity is located in Theni district of Tamil Nadu state. Site is approximately 60 km away from the Madurai by road. It is also the nearest railway station and airport location from the site.

Table A.2: Location of WTGs

Sr. No.	WTG No.	Village	Taluka	GPS Coordinates	
				Latitude (N)	Longitude (E)
1	T – 29	Mottanuthu	Andipatti	9°58'21.1"	77°33'38.8"
2	T – 30	Marikundu	Andipatti	9°57'53.7"	77°33'35.5"
3	T – 31	Shanmugasudarapuram	Andipatti	9°58'51.2"	77°33'25.8"
4	T – 32	Marikundu	Andipatti	9°58'27.8"	77°33'07.3"
5	T – 36	Seepalaikottai	Uthamapalayam	9°51'38.1"	77°27'18.3"
6	T – 39	Poomalaikundu	Theni	9°54'07.8"	77°27'42.0"