WIND POWER PROJECT IN GUJARAT

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Document Prepared By EKI Energy Services Limited

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Prepared By	EKI Energy Services Limited
Contact	Mr. Prakash Kr. Sahu Project Manager Email ID : prakash@enkingint.org T +91 731 42 89 086, M +91 9589899649 Address: Office no. 201, Plot 48, Scheme 78 part 2 Vijay Nagar, Near Brilliant Convention Centre Indore - 452010 (M.P, India) Website www.enkingint.org

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1 PROJECT DETAILS

1.1 Summary Description of the Project

Mytrah Energy (India) Limited (MEIL), formerly Caparo Energy (India) Limited is entering into the renewable energy sector with an objective to build wind power assets in India. MEIL has set up 25.20 MW wind power project in Rajkot District and Surendranagar District of Gujarat State. The project activity comprises of 12 Wind Electric Generators (WEGs) of Suzlon Energy Limited's (SEL) S88 model, with a capacity of 2.1 MW each.

The objective of the proposed CDM project is to generate electricity from environmentally benign sources of energy in the Indian state of Gujarat in order to use renewable and clean electricity to contribute towards combating global warming. The project will lead to reduced greenhouse gas emissions as it displaces electricity from the Northern Eastern Western North-Eastern (NEWNE) grid dominated by fossil fuel based electricity generation plants.

The project activity will help to reduce the supply demand gap in the state and also helps in contributing to the sustainable development by using wind energy as the source of power generation and reduction of GHG Emissions. In the project site, there are other wind projects owned by other customers connected to the same substation. There is an apportioning procedure which is approved by the state nodal agency for apportioning the electricity to each and every customer.

Purpose of the project activity:

The technology of electricity generation from renewable wind resource is environment friendly as it does not use any fossil fuel. The power (electricity) thus produced by the project activity would be transmitted to the state electricity grid, thereby displacing equivalent amount of power in the grid which is dominated by emission intensive thermal power plants. It is estimated the proposed project would approximately generate 50662.584 MWh of electricity per annum. The project activity will therefore displace an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant grid. The project proponent plans to avail CDM benefits for the project.

Pre project scenario and Baseline Scenario:

In the absence of the project activity, the equivalent amount of electricity would have been generated by power plants connected to the NEWNE grid which is dominated by conventional sources of energy (fossil fuels)[1].

The project activity is a zero emissions wind based power generation project connected to NEWNE grid. The project is expected to export 50662.584 MWh to NEWNE Grid every year. Hence, the baseline for the project as per Version 12.3.0 of ACM 0002[2] is defined as "*Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources*" approved in EB65. The project harnesses renewable resources in the region, thereby displacing non-renewable natural resources and leading to sustainable economic development of the locality.

[1] http://www.cea.nic.in/reports/monthly/executive_rep/aug11/8.pdf
[2] http://cdm.unfccc.int/methodologies/DB/C505BVV9P8VSNNV3LTK1BP3OR24Y5L

Suzlon Energy Limited (SEL) is the WEG supplier and the operations and maintenance contractor for the project. The electricity generated from the proposed wind farm will be supplied to common local substation through local transmission lines duly metered and measured by Gujarat Urja Vikas Nigam Limited (GUVNL) on a monthly basis at the substation of the wind farm.

The project scenario thus,

- provides additional generation from a clean and renewable source of energy
- strengthens the regional grid (NEWNE grid of India)
- contributes towards conservation of non-renewable fossil fuels
- helps in combating global warming

1.2 Sectoral Scope and Project Type

As per the categorisation by UNFCCC, the project activity falls under 'Scope 1, Sectoral Scope: Energy industries (renewable/non-renewable).

Methodology applied is ACM 0002, version 12.3.0[2]

The project is not a grouped project activity

1.3 Project Proponent

Organization name	Mytrah Energy (India) Limited
Contact person	Ms. Mangal Jyoti
Title	Deputy Manager
Address	1st Floor, 8001, 8th Floor, Q-City, Nanakramguda, Gachibowli Hyderabad 500032, Telangana, INDIA
Telephone	-
Email	-

1.4 Other Entities Involved in the Project

Organization name	EKI Energy Services Limited
Role in the project	Project Consultant
Contact person	Mr. Prakash Kr. Sahu
Title	Project Manager
Address	Office No. 201, EnKing Embassy, Plot No. 48, Scheme No. 78, Part II, Vijay Nagar INDORE – 452010, India.
Telephone	+91 99 31 158 863
Email	prakash@enkingint.org

1.5 Project Start Date

The start date considered for the project activity is 06/08/2011 i.e., the date on which first WTG is commissioned.

1.6 Project Crediting Period

The project is registered under Clean Development Mechanism (CDM) of UNFCCC with 10 years crediting period (Reference No: 8823)[3]. Crediting period of the project under CDM starts on 26th December 2012 and ends on 25th December 2022. For VCS project, same crediting period is considered.

VCS Crediting period: 26/12/2012 to 25/12/2022 (10 years fixed)

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

The project falls under Project category since the emission reductions are less than 300,000 tCO_2e per annum.

Project Scale	
Project	✓
Large project	

Year	Estimated GHG emission reductions or removals (tCO_2e)
Year 1	48273
Year 2	48273
Year 3	48273
Year 4	48273
Year 5	48273
Year 6	48273
Year 7	48273
Year 8	48273
Year 9	48273
Year 10	48273
Total estimated ERs	482730
Total number of crediting years	10 Years (fixed)

[3] http://cdm.unfccc.int/Projects/DB/SGS-UKL1355741006.12/view

Average annual ERs	48273

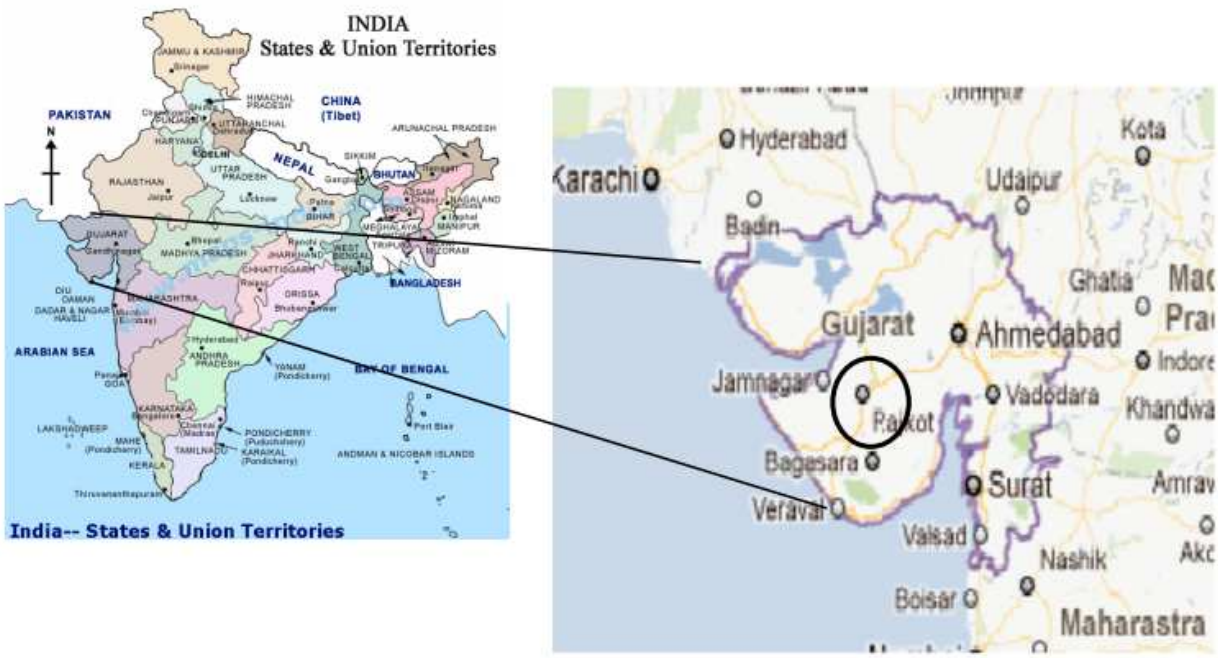
1.8 Description of the Project Activity

Not Applicable as project is registered under CDM.

1.9 Project Location

The wind power project is located in Rajkot and Surendranagar district, Gujarat, India. The geo-coordinates of the project location is as follows:

Sr. No	Location No.	Village and Tehsil	District	Latitude	Longitude	Model
1	JSD 038	Bhadla	Rajkot	22° 11' 41.9"	71° 05' 44.4"	S88
2	JSD 041	Dahisara	Rajkot	22° 11' 41.4"	71° 08' 7.5"	S88
3	JSD 042	Dahisara	Rajkot	22° 11' 31.3"	71° 08' 28.3"	S88
4	MAH013	Bhojpari	Surendranagar	22° 17' 48.5"	71° 10' 15.8"	S88
5	MAH014	Bhojpari	Surendranagar	22° 17' 1.3"	71° 10' 19.1"	S88
6	MAH015	Bhojpari	Surendranagar	22° 16' 46.2"	71° 10' 21.3"	S88
7	MAH016	Chobari	Surendranagar	22° 15' 39.8"	71° 11' 42.3"	S88
8	MAH018	Chobari	Surendranagar	22° 15' 29.2"	71° 11' 27.5"	S88
9	MAH021	Tajpar	Surendranagar	22° 14' 53.6"	71° 10' 39.8"	S88
10	MAH022	Sakhpar	Surendranagar	22° 14' 56.6"	71° 11' 13"	S88
11	MAH041	Bhojpari	Surendranagar	22° 17' 27.5"	71° 10' 9.9"	S88
12	MDW 021	Kabran	Surendranagar	22° 17' 48.0"	71° 08' 24.1"	S88



1.10 Conditions Prior to Project Initiation

The project is a Greenfield wind power project. Compliance with Laws, Statutes and Other Regulatory Frameworks

The Project is a CDM registered project (Project ID 8823[35]) and complied with all laws, statutes and regulations.

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

Not Applicable

1.12 Ownership and Other Programs

1.12.1 Project Ownership

The project activity comprises of 12 WEGs with a capacity of 2.1 MW each owned by Mytrah Energy India Limited. The ownership is also justified through commissioning certificate and Power Purchase Agreement.

1.12.2 Emissions Trading Programs and Other Binding Limits

Net GHG emission reductions or removals generated by the project will not be used for compliance with an emissions trading program or to meet binding limits on GHG emissions. The project is registered under Clean Development Mechanism (CDM) and UNFCCC (Registration ID 8823[35]). Letter of Approval issued by National CDM Authority, Ministry of Environment and Forests (MoEF) which is the Designated National Authority of India is submitted as the evidence.

Project Proponent (PP) has submitted undertaking that they will not claim same GHG emission reductions of the project from CDM and VCS. PP would not use net GHG emission reductions by the projects for compliance with emission trading program to meet binding limits on GHG emissions.

1.12.3 Other Forms of Environmental Credit

Project has been registered with the UNFCCC under the CDM program. Registration reference number is 8823. PP has submitted undertaking for not availing other forms of environmental credit for the same crediting period under consideration.

1.12.4 Participation under Other GHG Programs

The project is registered under Clean Development Mechanism (CDM) of UNFCCC with 10 years crediting period (Reference No: 8823). Crediting period of the project under CDM starts on 26th December 2012 and ends on 25th December 2022.

1.12.5 Projects Rejected by Other GHG Programs

No, the project activity is not rejected by other GHG programs.

1.13 Additional Information Relevant to the Project

Eligibility Criteria

The project does not fall under Agriculture, Forestry and Other Land Use (AFOLU) category, hence not applicable.

Leakage Management

Not applicable to the project activity.

Commercially Sensitive Information

No commercially sensitive information has been excluded from the public version of the project description.

Sustainable Development

Contribution to sustainable development:

Ministry of Environment and Forests, has stipulated economic, social, environment and technological wellbeing as the four indicators of sustainable development. The project contributes to sustainable development using the following ways.

Social wellbeing: The project would help in generating employment opportunities during the construction and operation phases. The project activity will lead to development in infrastructure in the region like development of roads and also may promote business with improved power

generation. The project proponent will contribute 2% of net revenue realised from sale of CERs towards community development initiatives.

Economic wellbeing: The project is a clean technology investment in the region, which would not have been taken place in the absence of the CDM benefits. The project activity will also help to reduce the demand supply gap in the state.

The project activity will generate power using zero emissions wind based power generation which helps to reduce GHG emissions and specific pollutants like SOx, NOx, and SPM associated with the conventional thermal power generation facilities.

Technological wellbeing: The successful operation of project activity would lead to promotion of wind based power generation and would encourage other entrepreneurs to participate in similar projects

Further Information

Not Applicable

2 APPLICATION OF METHODOLOGY

2.1 Title and Reference of Methodology

Not Applicable

2.2 Applicability of Methodology

Not Applicable

2.3 Project Boundary

Not Applicable

2.4 Baseline Scenario

Not Applicable as project is registered under CDM having UNFCCC project number 8823[35].

2.5 Additionality

Not Applicable as project is registered under CDM.

2.6 Methodology Deviations

There is no methodology deviation for the project activity.

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

3.1 Baseline Emissions

Not Applicable

3.2 Project Emissions

Not Applicable

3.3 Leakage

Not Applicable.

3.4 Net GHG Emission Reductions and Removals

Not Applicable

4 MONITORING

4.1 Data and Parameters Available at Validation

Not Applicable

4.2 Data and Parameters Monitored

Not Applicable

4.3 Monitoring Plan

Not Applicable

5 SAFEGUARDS

5.1 No Net Harm

Not Applicable

5.2 Environmental Impact

Not Applicable

5.3 Local Stakeholder Consultation

Not Applicable

5.4 Public Comments

Not Applicable