

# MRMPL WIND POWER PROJECT



Document Prepared by Infinite Solutions

<b>Project Title</b>	MRMPL Wind Power Project
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## 1 PROJECT DETAILS

### 1.1 Summary Description of the Project

The project sponsor is Modern Road Makers Pvt. Ltd. (herein referred to as MRMPL). It is a subsidiary of IRB Infrastructure Developers Limited (IRBIDL). It is involved in the construction, operation and maintenance of roads through various infrastructure projects in the road sector and is one of the major road developers in India.

The project is the generation of electricity from wind power by installation of 16 Wind Turbine Generators (WTG) at Jaisalmer, Rajasthan. Each WTG has an installed capacity of 1.25 MW. The total installed capacity of the project is 20 MW. The purpose of the project is to produce power from clean source and to reduce the dependence on fossil fuels for energy requirements. Project proponent has signed a power purchase agreement (PPA) with “Jodhpur Vidyut Vitran Nigam Limited” (JVVNL) to export the electricity to local grid.

The project displaces electricity from the grid (North East West North East (NEWNE) grid, India). This helps in significant reduction of GHG emissions as the NEWNE Grid is mostly dependent on fossil fuel generated electricity. The estimated annual emission reduction is 32,788 tCO<sub>2</sub>e per year.

The project is registered with UNFCCC CDM (UN ref. no. 3839) on 27/11/2010 with crediting period 27/11/2010 to 26/11/2020.

### 1.2 Sectoral Scope and Project Type

Project type: Renewable energy projects

Sectoral Scope: 1- Energy Industries (renewable/non-renewable sources).

Project Type : I - Renewable Energy Projects

Methodology : ACM0002: Grid-connected electricity generation from renewable sources - Version 10

(The project is registered with CDM against applied version 10 of Methodology ACM0002)

The project is not a grouped project activity.

### 1.3 Project Proponent

Organization name	Modern Road Makers Pvt Ltd.
Contact person	A. D. Yadav
Title	Chief Financial Officer
Address	A – 201, Universal Business Pard, 2 <sup>nd</sup> Floor, Kamani Oil Mill Road, Chandivli Estate, Andheri (East)
Telephone	+91 22 6733 5959

Email	<a href="mailto:info@irb.co.in">info@irb.co.in</a>
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#### 1.4 Other Entities Involved in the Project

Organization name	Infinite Solutions
Role in the project	Project Consultant
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Title	Head – Sustainability
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#### 1.5 Project Start Date

Project Start Date: 28-September-2008

The project start date is the date on which first 5 MW of the project was commissioned.

#### 1.6 Project Crediting Period

Crediting Period Start date: 01-May-2012

Crediting Period End date: 30-April-2022

The project activity adopts renewable crediting period of 10 years period which can be renewed for 2 times.

#### 1.7 Project Scale and Estimated GHG Emission Reductions or Removals

As the estimated annual average GHG emission reductions or removal per year is 32,788 tCO<sub>2</sub>e which is less than 300,000 tonnes of CO<sub>2</sub>e per year, thus the project falls in the category of Project.

Project Scale	
Project	√
Large project	

Year	Estimated GHG emission reductions or removals
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	(tCO <sub>2</sub> e)
Year 1	32,788
Year 2	32,788
Year 3	32,788
Year 4	32,788
Year 5	32,788
Year 6	32,788
Year 7	32,788
Year 8	32,788
Year 9	32,788
Year 10	32,788
<b>Total estimated ERs</b>	<b>3,27,880</b>
<b>Total number of crediting years</b>	<b>10</b>
<b>Average annual ERs</b>	<b>32,788</b>

### 1.8 Description of the Project Activity

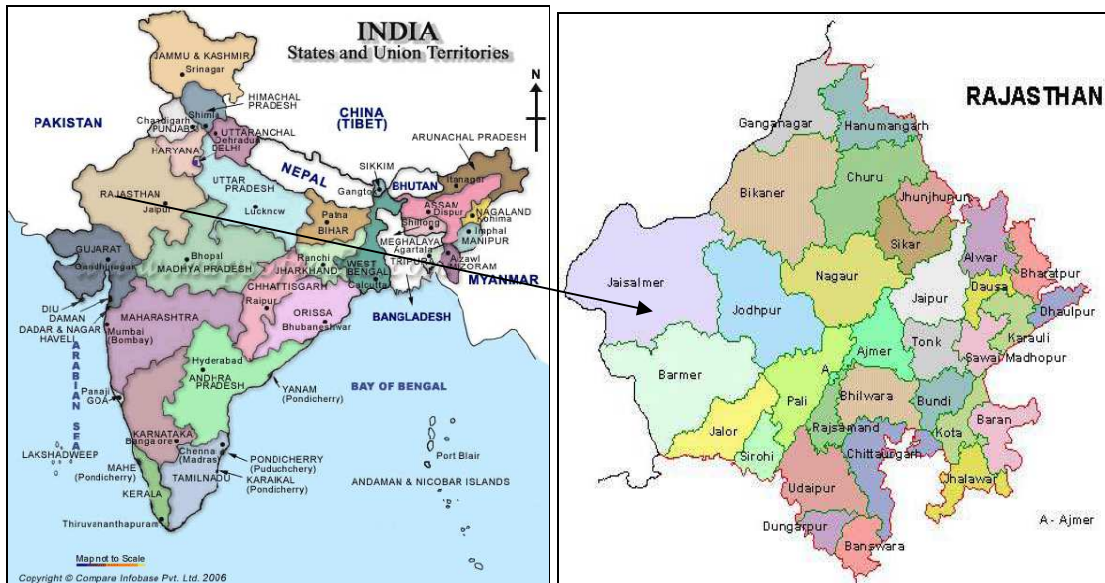
Not Applicable as project is registered under CDM.

### 1.9 Project Location

The project activity is located at villages Mudari, Ganesh ki Dhani, Dhava and Dedha in the district of Jaisalmer, Rajasthan. The nearest railway station and airport to reach the site is the town of Jaisalmer located approximately 30 kms from the project site. The coordinates of the WTGs have been tabled below:

Sr No.	Location No.	Latitude	Longitude
1	R060	N 260 48' 45.8"	E 700 44' 16.3"
2	R061	N 260 48' 36.8"	E 700 44' 26.1"
3	R078	N 260 49' 15.4"	E 700 51' 35.4"
4	R007	N 260 48' 58.4"	E 700 51' 37.2"
5	R008	N 260 48' 41.7"	E 700 51' 39.4"
6	R063	N 260 48' 54.6"	E 700 43' 33.2"
7	R064	N 260 48' 45.1"	E 700 43' 43.5"
8	R069	N 260 48' 36.8"	E 700 43' 23.5"
9	R070	N 260 48' 27.3"	E 700 43' 33.8"
10	R071	N 260 48' 17.7"	E 700 43' 44.2"
11	R072	N 260 48' 08.2"	E 700 43' 54.5"
12	R073	N 260 47' 58.6"	E 700 44' 04.9"
13	R074	N 260 47' 49.1"	E 700 44' 15.2"
14	R016	N 260 49' 21.4"	E 700 49' 30.9"
15	R062	N 260 48' 25.3"	E 700 44' 37.1"
16	R067	N 260 48' 00.3"	E 700 44' 34.7"

The map of the project location is shown below:



### 1.10 Conditions Prior to Project Initiation

This is a Greenfield project. In the Pre- project scenario the equivalent amount of electricity delivered to the grid by the project activity, would have otherwise been generated by the operation of grid-connected fossil fuel based power plants and by the addition of new generation sources.

As the project activity is the installation of a new grid-connected wind power plant/unit, as per ACM0002, Version 10, the baseline scenario is the following:

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, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system" (Version 02) described step wise in CDM registered PDD.

Please refer CDM registered PDD. The web link for the same is mentioned below:

<https://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1278588174.29/view>

### 1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

Not Applicable as project is registered under CDM.

## 1.12 Ownership and Other Programs

### 1.12.1 Project Ownership

The Project is owned by Modern Road Makers Pvt. Ltd., hence it possess right of use of ER credits. The Ownership is demonstrated through the following documents.

1. Commissioning certificates for WTGs in the name Modern Road Makers Pvt. Ltd. issued by state nodal agencies.
2. Power Purchase Agreement with Jodhpur Vidyut Vitran Nigam Limited" (JVNL) for sale of electricity by the Modern Road Makers Pvt. Ltd.

### 1.12.2 Emissions Trading Programs and Other Binding Limits

The project is registered under CDM mechanism, project no. 3839. Project Proponent has submitted undertaking that they will not claim same emission reductions of the project from CDM and VCS for the same monitoring period.

The emission reductions from the VCS monitoring period would not be used for compliance with emission trading program to meet binding limits on GHG emissions.

### 1.12.3 Other Forms of Environmental Credit

The Project is registered with as CDM project, no. 3839. The Project Proponent has submitted undertaking for not availing other forms of environmental credit for the same monitoring period under consideration.

### 1.12.4 Participation under Other GHG Programs

The project is registered under CDM mechanism, project id 3839. Project Proponent has submitted undertaking that they will not claim same emission reductions of the project from CDM and VCS for the same monitoring period.

The project has undergone CDM verification till 30-04-2012, the current monitoring period is from 01/05/2012 to 31/05/2018. The Project Proponent has submitted undertaking for not availing other forms of environmental credit as well participation in other GHG programs for the same monitoring period under consideration.

### 1.12.5 Projects Rejected by Other GHG Programs

The Project is not rejected by other GHG programs.

## 1.13 Additional Information Relevant to the Project

### Eligibility Criteria

The project does not fall under AFOLU category or Grouped, hence not applicable

### Leakage Management

Project does not involve any leakage emissions other than methodology requirement for wind power project. Hence there are no any extra Leakage Management Plan and risk mitigation measures are required.

#### Commercially Sensitive Information

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

#### Sustainable Development

The project proponent has considered the sustainable development of the region due to the project activity. Ministry of Environment and Forests, Govt. of India has stipulated the following indicators for sustainable development in the interim approval guidelines for CDM projects:

##### **Social well-being:**

- The project activity contributes towards local socio-economic development around its area of operation through provision of employment opportunities (direct and indirect) for local population.
- It contributes towards improving the India's power deficit situation by contributing to the power grid and making power accessible to more people.

##### **Environmental well-being:**

- The project activity causes sustenance and improvement in regional air quality by avoiding commonly used fossil fuels for power generation. It thereby, also, results in maintenance of the ecosystem and human health due to avoidance in the use of GHG emissive fuels such as coal.
- It also leads to conservation of natural resources such as coal, oil etc.

##### **Economic well-being:**

- By providing employment opportunities, this project activity leads to development in the local economy.
- Through bringing in revenue to India through CDM process, it demonstrates how certain real and perceived financial barriers can be overcome for implementing clean energy measures.

##### **Technological well-being:**

- The successful implementation of the project activity will result in encouraging the use of cleaner technology. This will lead to replacement of the non-eco-friendly sources of power generation like thermal energy which are the major sources of power in the country.

#### Further Information

There are no information or incidents that will have bearing on the eligibility of the project, the net GHG emission reductions or removals, or the quantification of the project's net GHG emission reductions or removals.

## **2 APPLICATION OF METHODOLOGY**

### **2.1 Title and Reference of Methodology**

Not Applicable as project is registered under CDM.

### **2.2 Applicability of Methodology**

Not Applicable as project is registered under CDM.

### **2.3 Project Boundary**

Not Applicable as project is registered under CDM.

### **2.4 Baseline Scenario**

Not Applicable as project is registered under CDM.

### **2.5 Additionality**

Not Applicable as project is registered under CDM.

### **2.6 Methodology Deviations**

Not Applicable for the project as there are no methodology deviations.

## **3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS**

### **3.1 Baseline Emissions**

Not Applicable as project is registered under CDM.

### **3.2 Project Emissions**

Not Applicable as project is registered under CDM.

### **3.3 Leakage**

Not Applicable as project is registered under CDM.

### **3.4 Net GHG Emission Reductions and Removals**

Not Applicable as project is registered under CDM.

## **4 MONITORING**

### **4.1 Data and Parameters Available at Validation**

Not Applicable as project is registered under CDM.

### **4.2 Data and Parameters Monitored**

Not Applicable as project is registered under CDM.

### **4.3 Monitoring Plan**

Not Applicable as project is registered under CDM.

## **5 SAFEGUARDS**

### **5.1 No Net Harm**

Not Applicable as project is registered under CDM.

### **5.2 Environmental Impact**

Not Applicable as project is registered under CDM.

### **5.3 Local Stakeholder Consultation**

Not Applicable as project is registered under CDM.

### **5.4 Public Comments**

Not Applicable as project is registered under CDM.