

15 MW WIND ENERGY FARM AT GOPALPURA, KARNATAKA BY HZL

Document Prepared By

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Table of Contents :-

1	Project Details	3
1.1	Summary Description of the Project	3
1.2	Sectoral Scope and Project Type	3
1.3	Project Proponent	3
1.4	Other Entities Involved in the Project	4
1.5	Project Start Date.....	4
1.6	Project Crediting Period.....	4
1.7	Project Scale and Estimated GHG Emission Reductions or Removals.....	4
1.8	Description of the Project Activity	5
1.9	Project Location.....	5
1.10	Conditions Prior to Project Initiation	7
1.11	Compliance with Laws, Statutes and Other Regulatory Frameworks	7
1.12	Ownership and Other Programs	7
1.12.1	Right of Use.....	7
1.12.2	Emissions Trading Programs and Other Binding Limits.....	7
1.12.3	Other Forms of Environmental Credit	8
1.12.4	Participation under Other GHG Programs	8
1.12.5	Projects Rejected by Other GHG Programs	8
1.13	Additional Information Relevant to the Project	8
2	Application of Methodology.....	9
2.1	Title and Reference of Methodology	9
2.2	Applicability of Methodology.....	9
2.3	Project Boundary	9
2.4	Baseline Scenario.....	9
2.5	Additionality.....	9
2.6	Methodology Deviations	9
3	Quantification of GHG Emission Reductions and Removals.....	9
3.1	Baseline Emissions	9
3.2	Project Emissions	9
3.3	Leakage	9
3.4	Net Emission Reductions and Removals	9
4	Monitoring	10
4.1	Data and Parameters Available at Validation	10
4.2	Data and Parameters Monitored	10
4.3	Monitoring Plan.....	10
5	Environmental Impact	10
6	Stakeholder Comments.....	10

1 PROJECT DETAILS

1.1 Summary Description of the Project

Hindustan Zinc Ltd. (HZL), a vertically integrated natural resources enterprise, headquartered at Udaipur, Rajasthan having broad operations ranging from exploration, mining, and ore processing to smelting of non-ferrous metals is the owner and project proponent of the proposed project activity.

The project activity primarily aims at reducing Green House Gas (GHG) emissions through utilization of renewable energy technology for generation of electrical energy. The electricity generated from the project activity (approximately 34,821 MWh annually) will displace equivalent electricity generation in grid connected power plants. The project activity will reduce the anthropogenic GHG emissions (approximately 31,875 tCO₂ annually) associated with the equivalent amount of electricity generation from the fossil fuel based grid connected power plants.

Please refer section A.2 and A.4 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/DNV-CUK1353404982.34/view>

1.2 Sectoral Scope and Project Type

According to the categorization system of the Clean Development Mechanism, which is part of Green House Gas (GHG) program that has been approved by the VCS board, the project is categorized as:

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

Project Type: Renewable Energy projects

This is not a grouped project. . The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/DNV-CUK1353404982.34/view>

1.3 Project Proponent

Organization name	Hindustan Zinc Limited
Contact person	Mr. Bhagwan Lal Ahuja
Title	AGM (CDM Cell)
Address	CPP-CLZS Chanderiya Lead Zinc Smelter Putholi Chittorgarh-312021 Rajasthan INDIA
Telephone	91-1472-257950
Email	Bhagwan.ahuja@vedanta.co.in

1.4 Other Entities Involved in the Project

No other entities other than Hindustan Zinc Limited are involved. Please ref link

<http://cdm.unfccc.int/Projects/DB/DNV-CUK1353404982.34/view>

1.5 Project Start Date

31/03/2011, date of commissioning of first WTG

1.6 Project Crediting Period

Project activity has Renewable crediting period of 21 years for the CDM project.

Start date of crediting period for VCS verification: 31/03/2011 (Date of commissioning of first WTG)

End date of crediting period for VCS verification: 30/11/2012 (Date one day prior to the start date of crediting period of CDM project activity)

Total No. years of crediting period is 1.67 years.

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

The crediting period for the project is 31th March 2011 to 30rd November 2012. Please refer Section A.6.3 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/DNV-CUK1353404982.34/view>

Project Scale	
Project	Project activity falls under this category as estimated GHG emission reduction are below 300,000 tones of CO ₂ e per year as shown in below table.
Large project	Not applicable

Years	Estimated GHG emission reductions or removals (tCO ₂ e)
Year 1	31875
Year 2	31875
Year 3	31875
Year 4	31875
Year 5	31875
Year 6	31875

Year 7	31875
Total estimated ERs	223125
Total number of crediting years	7
Average annual ERs	31875

1.8 Description of the Project Activity

Please refer section A.2 and A.4 of the registered PDD. The web link for the same is mentioned below:

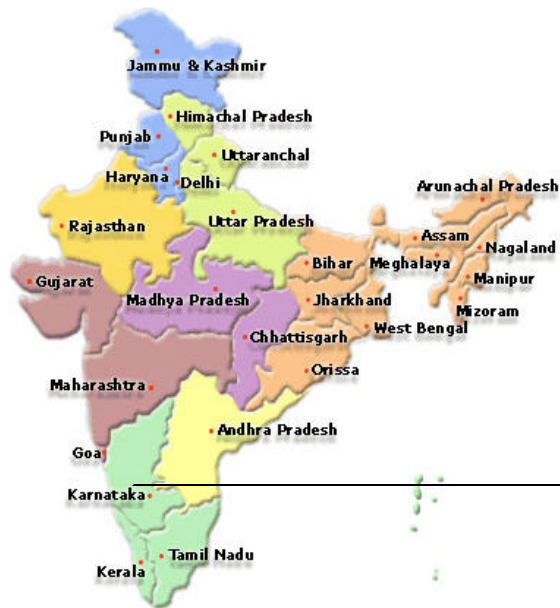
<http://cdm.unfccc.int/Projects/DB/DNV-CUK1353404982.34/view>

1.9 Project Location

The project activity consists of ten 1.5 MW wind turbine in the villages Chudanahalli, Tekanhalli, Mallappanabetta, Bittagaudanahalli in district of Hassan in the state of Karnataka, India.

The specific geographical coordinates of the individual WTGs are as follows:

Sr. No.	WTG. No.	Latitude	Longitude
1	G-02	N12° 57' 25.1"	E76° 17' 29.0"
2	G-03	N12° 57' 10.2"	E76° 17' 28.5"
3	G-04	N12° 57' 02.4"	E76° 17' 26.4"
4	G-17	N12° 55' 11.6"	E76° 17' 13.6"
5	G-23	N12° 54' 15.6"	E76° 16' 49.0"
6	G-24	N12° 54' 07.5"	E76° 16' 48.7"
7	G-28	N12° 53' 35.1"	E76° 16' 47.0"
8	G-29	N12° 53' 27.1"	E76° 16' 47.0"
9	G-30	N12° 53' 19.2"	E76° 16' 46.4"
10	G-31	N12° 53' 11.1"	E76° 16' 46.0"



KARNATAKA



1.10 Conditions Prior to Project Initiation

India is Non-annex country and there is no compliance with an emission trading program or to meet binding limits on GHG emissions for this project activity.

This project activity is voluntary initiative of Hindustan Zinc Limited and it is not to meet any local laws or regulatory compliances

The project activity is set up to produce clean power from WTGs. The project activity involves supply erection, commissioning and operation of 10 WTGs of rated capacity 1.5 MW.

This is a Greenfield project. There was no project installed prior to this commissioning of this project activity. The purpose of this project activity is to utilize renewable wind energy for generation of electricity. The project activity replaces anthropogenic emission of greenhouse gases into the atmosphere, which is estimated to be approximately 31875 tCO₂ per year, by displacing these equivalent amount of electricity generation through the operation of exiting fuel mix in the comprising mainly fossil fuel based power plant and future capacity expansion connected to the grid

Please refer section A.2 and B.4 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/DNV-CUK1353404982.34/view>

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

The project activity is not mandated by any local or national laws. Please refer UNFCCC registered CDM project with Ref No: 8303

1.12 Ownership and Other Programs

1.12.1 Right of Use

For the ownership details of the project any of the following may be referred to:

- Commissioning certificates issued by Karnataka power transmission corporation limited.
- Power purchase agreement signed between Hindustan Zinc limited and Chamundeshwari electricity Supply Corporation limited Mysore a successor entity to Karnataka Power Transmission Corporation Limited (KPTCL).

<http://cescmysore.org/about>

1.12.2 Emissions Trading Programs and Other Binding Limits

The requirement of the VCS project description pertaining to this section has been address as follow as: Where projects reduce GHG emissions from activities that are included in an emissions trading program or any other mechanism that includes GHG allowance trading, evidence shall be provided that the GHG emission reductions or removals generated by the project have not and will not be otherwise counted or used under the program or mechanism. Such evidence may include:

- 1) A letter from the program operator designated national authority or other relevant regulatory authority that emissions allowances (or other GHG credits used in the program) equivalent to the reductions or removals generated by the project have been cancelled from the program or national cap, as applicable.
- 2) Evidence of the purchase and cancellation of GHG allowances equivalent to the GHG emissions reductions or removals generated by the project related to the program or national cap.

3) Evidence from the program operator, designated national authority or other relevant regulatory authority stating that the specific GHG emission reductions or removals generated by the project or type of project are not within the scope of the program or national cap.

The host country of the project activity is India, which is a non-annex country as recognized by Kyoto protocol. Hence, there are no GHG emission target or commitment for India and it does not fall under the view of any compliance driven emission trading programmers. Furthermore, there are also no such voluntary emission trading programs similar to the VCS existing in the country. It confirms that, there is no emission trading programs prevalent the host country at the time of preparation of VCS PD.

India is Non-annex country and there is no compliance with an emission trading program or to meet binding limits on GHG emissions for this project activity.

This project activity is voluntary initiative of Hindustan Zinc Limited and it is not to meet any local laws or regulatory compliances.

Hindustan Zinc Limited will not claim for GHG emission reduction credits for the given period under any other emission trading program.

1.12.3 Other Forms of Environmental Credit

The project activity generates Carbon Credits under Clean Development Mechanism (Ref.No:8303) from 01/12/2012 ; however the VCUs that are claimed are from the date of commissioning till 30 /11/2012 since, the project is registered on 26/11/2012 but the crediting period under CDM starts only on 01/12/2012. We hereby confirm that the project activity does not result in creation of another form of environmental credit during the period for which VCUs are claimed.

1.12.4 Participation under Other GHG Programs

This is registered CDM project. The reference no. for the project is 8303 and it was registered on 26th November 2012. Please refer to the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/DNV-CUK1353404982.34/view>

1.12.5 Projects Rejected by Other GHG Programs

This project has not been rejected by any other GHG program. It is registered CDM project and the emission reductions are being claimed from date of commissioning to date before the start date of crediting under CDM the pre-registration period.

1.13 Additional Information Relevant to the Project

Eligibility Criteria

As per VCS standard 3 (v3.3) , grouped project are projects capture to allow the expansion of the project activity ,subsequent to project validation the concern project activity does not allow expansion .Hence, the concern project activity doesn't fall under grouped project.

This is not a grouped project hence the criteria is not applicable.

Leakage Management

No leakage emissions are considered for this Project activity since no energy generating equipment is transferred from another activity and/or the existing equipment is transferred to another activity. Please refer section B.6.1. of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/DNV-CUK1353404982.34/view>

Commercially Sensitive Information

There is no such information which is deemed as commercially sensitive.

Further Information

There is no additional relevant legislative, technical, economic, sectoral, social, environmental, geographic, site-specific and/or temporal information that may have a 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

2.2 Applicability of Methodology

2.3 Project Boundary

2.4 Baseline Scenario

2.5 Additionality

2.6 Methodology Deviations

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

3.1 Baseline Emissions

3.2 Project Emissions

3.3 Leakage

3.4 Net Emission Reductions and Removals

4 MONITORING

4.1 Data and Parameters Available at Validation

4.2 Data and Parameters Monitored

4.3 Monitoring Plan

5 ENVIRONMENTAL IMPACT

6 STAKEHOLDER COMMENTS

For sections 2-6 above please refer UNFCCC Ref No: 8303.

<http://cdm.unfccc.int/Projects/DB/DNV-CUK1353404982.34/view>