

TUPPADAHALLI WIND ENERGY PROJECT

Document Prepared By Tuppadahalli Energy India Private Limited

Project Title	Tuppadahalli Wind Energy Project
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1 PROJECT DETAILS

1.1 Summary Description of the Project

1.2 Sectoral Scope and Project Type

The project activity is considered under UNFCCC – CDM category “Zero emissions – grid connected electricity generation from renewable sources” with capacity greater than 15 MW. As per the scope of the project activity enlisted in the ‘list of sectoral scopes and related approved baseline and monitoring methodologies’, the project activity may be principally categorized as –

Category: 1; Energy industries (renewable/non-renewable sources)

Approved consolidated baseline methodology **ACM0002¹“Consolidated baseline methodology for grid connected electricity generation from renewable sources”**; Version 12.2.0

1.3 Project Proponent

The project proponent, Tuppadahalli Energy India Private Limited is a company created for a specific purpose and its objective is the promotion of renewable energy projects. [The project proponent is responsible for the emission reduction program, whereas the day to day O&M has been contracted to the WTG manufacturer.](#)

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¹<http://cdm.unfccc.int/methodologies/DB/C505BVV9P8VSNNV3LTK1BP3OR24Y5L>

1.4 Other Entities Involved in the Project

1.5 Project Start Date

The project activity began on the date of placing work orders for wind turbines: 13/09/2010. Contract was executed for the WTGs by Acciona Energy India Pvt. Ltd. with the technology supplier, and was later assigned to the SPV formed to house the project named Tuppadahalli Energy India Private Limited. The project commissioning started with commissioning the first WTG on 29 July 2011 which is the start date for the GHG emission reductions.

1.6 Project Crediting Period

The starting date of the first crediting period for the project will be the date the wind farm begins its commissioning. The project owner wishes to claim VCUs from project commissioning on 29 July 2011 until the midnight falling between 31 March 2012 and 1 April 2012. The expected operational lifetime of the project activity is 20 years and the project proponent expects to go for a renewable crediting period of 7 years. So, the first crediting period will go from 1 April 2012 to 31 March 2019 since the project is registered under UNFCCC. The project has a seven year twice renewable project crediting period and will not go for VCU issuance beyond the end of those periods. Although the project was registered under the UNFCCC Kyoto Protocol as a CDM project with effect from 26 March 2012, the project owner will claim VCUs until 31 March 2012 and confirms that CERs will not be claimed under the UNFCCC or any other GHG mechanism for the period 26 March 2012 until 31 March 2012 and there will be no double counting of carbon credits. The change in start date has been informed to UNFCCC and they have acknowledged the change in start date to 1 April 2012.

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

Project	X
Mega-project	

Years	Estimated GHG emission reductions or removals (tCO ₂ e)
Year 2012-13	128,809
Year 2013-14	128,809
Year 2014-15	128,809
Year 2015-16	128,809
Year 2016-17	128,809
Year 2017-18	128,809
Year 2018-19	128,809
Year 2019-20	128,809

Year 2020-21	128,809
Year 2021-22	128,809
Total estimated ERs	1,288,090
Total number of crediting years	10 ²
Average annual ERs	128,809

The claim for emission reductions from 2012-13 to 2018-19 would be under the UNFCCC CDM program. The project proponent will make a choice of claiming the emission reductions for the subsequent years before 2018-19.

1.8 Description of the Project Activity

1.9 Project Location

The project site is located near Village of Tuppadahalli in the Hollalkere and Chennagiri Taluk in the district of Shimoga and Chitradurga in the Indian state of Karnataka. Tuppadahalli is approximately 55 km from Chitradurga town and approximately 260 km from Bangalore, the capital city of Karnataka. The nearest rail head from the project site is Ramgere Railway station which is about 12 km from the project site and the nearest airport is Bangalore airport which is about 260 km from the project site. The site of Tuppadahalli is located at a latitude and longitude of around 13° 50' 00" – 14° 00' 00" N and 76°00' 00" – 76°05'00" E.

The location of the project site in the state map of Karnataka, India, is shown below³:

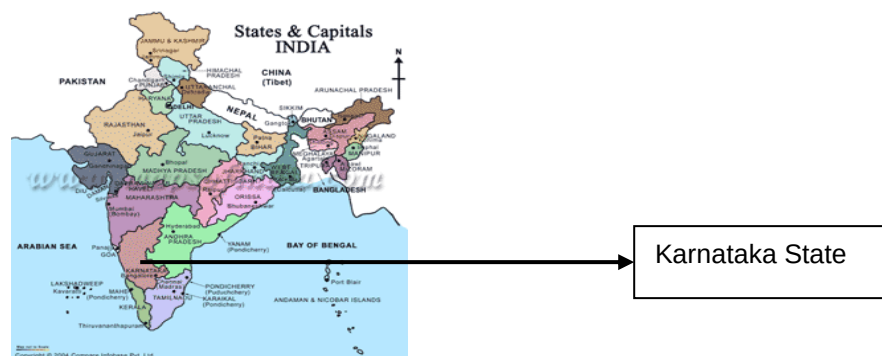


Fig 1: Location of Karnataka State in India Map

² Twice renewable for 10 years each after this period.

³ www.mapsofindia.com

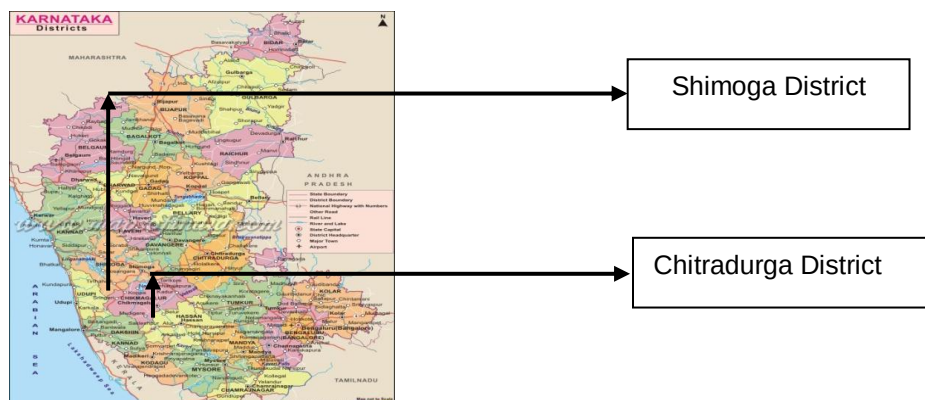


Fig 2: Location of Districts in Karnataka State Map

The latitude and longitude details of each of the WTGs at the project site are as follows:

GPS COORDINATES:

Location No.	Easting(X)	Northing(Y)
TH-01	609405	1534027
TH-02	609027	1534293
TH-03	609282	1534470
TH-04	609501	1534630
TH-05	609497	1534848
TH-06	609704	1535054
TH-07	609718	1535315
TH-08	610277	1535583
TH-09	610530	1535717
TH-10	610573	1536254
TH-11	609875	1536351
TH-12	608947	1536700
TH-13	609865	1536746
TH-14	611105	1536762
TH-15	611169	1537003
TH-16	611243	1537261

TH-17	611388	1537489
TH-18	611598	1537685
TH-19	611339	1537838
TH-20	611310	1538103
TH-21	611212	1538500
TH-22	611150	1538812
TH-23	611358	1539217
TH-24	611626	1539342
TH-25	611763	1539627
TH-26	611887	1539842
TH-27	612043	1540027
TH-28	612134	1540357
TH-29	612160	1540628
TH-30	612539	1540911
TH-31	612857	1541623
TH-32	613062	1541896
TH-33	613154	1542117
TH-34	613303	1542494

1.10 Conditions Prior to Project Initiation

The project area is located in the centre south of Karnataka State near the village of Tuppadahalli between Shimoga and Chitradurga Municipalities about 70 kilometers South from Davangere town. The nature of land is hilly and rocky crest with dispersed vegetation comprising 1 to 2 meter high trees mixed with 30 to 40 centimetre high grassland. Of the total project area of about 73.741 Hectares, although about 72.527 Hectares is classified as forest land by the government, it is heavily degraded and leased by the government as per prevailing policy and also compensated by afforestation on an equivalent land in an adjoining area. All conditions stipulated by the government as part of the land lease in addition like plantation of trees are being adhered to by the project. The nearest villages are about a kilometre from the project site.

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

1.12 Ownership and Other Programs

1.12.1 Proof of Title

The Project Proponent has executed the 20 year Power Purchase Agreement with the State utility MESCOM on 2 May 2011

1.12.2 Emissions Trading Programs and Other Binding Limits

Not applicable. There is no emission trading program or binding limits on GHG emissions in Karnataka, India.

1.12.3 Participation under Other GHG Programs

Tuppadahalli Energy India Pvt. Ltd. has registered this project under the UNFCCC on March 26th, 2012 with registration number 5198. The project owner wishes to claim VCUs from project start on 29 July 2011 until the midnight falling between 31 March 2012 and 1 April 2012, with the cut-off more clearly defined by the meter reading done by the utility for this time and will take the necessary steps to assure that CERs are claimed effective 1 April 2012 and VCUs are not claimed for electricity generation for the same period to avoid 'double counting'.

1.12.4 Other Forms of Environmental Credit

Tuppadahalli wind project is not eligible to receive voluntary Renewable Energy Credits (RECs).

1.12.5 Projects Rejected by Other GHG Programs

1.13 Additional Information Relevant to the Project

Eligibility Criteria

Not applicable. This project is single project, not a grouped project.

Leakage Management

Not applicable.

Commercially Sensitive Information

No commercially sensitive information is given.

Further Information

All relevant information for the eligibility of the project activity and the quantification of emissions has been provided. No additional information is necessary for the determination of project eligibility or emission reduction quantification.

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 Summary of GHG Emission Reductions and Removals

4 MONITORING

4.1 Data and Parameters Available at Validation

4.2 Data and Parameters Monitored

4.3 Description of the Monitoring Plan

5 ENVIRONMENTAL IMPACT

6 STAKEHOLDER COMMENTS