



Monitoring report form for CDM project activity
(Version 07.0)

MONITORING REPORT

Title of the project activity	75 MW wind power project in Maharashtra by Essel Mining Industries Limited	
UNFCCC reference number of the project activity	1115	
Version number of the PDD applicable to this monitoring report	04	
Version number of this monitoring report	01	
Completion date of this monitoring report	28/07/2020	
Monitoring period number	09	
Duration of this monitoring period	02/01/2016 to 31/01/2018 (Inclusive of both the days)	
Monitoring report number for this monitoring period	01	
Project participants	M/s Essel Mining & Industries Limited	
Host Party	India	
Applied methodologies and standardized baselines	ACM0002. ver. 06 – Consolidated methodology for grid-connected electricity generation from renewable sources Standardized baseline: Not applicable	
Sectoral scopes	Sectoral Scope 1 : Energy industries (renewable/ non-renewable sources)	
Amount of GHG emission reductions or net anthropogenic GHG removals achieved by the project activity in this monitoring period	Amount achieved before 1 January 2013	Amount achieved from 1 January 2013
	0 tCO ₂ e	153,648 tCO ₂ e
Amount of GHG emission reductions or net anthropogenic GHG removals estimated ex ante for this monitoring period in the PDD	246,445 tCO ₂ e	

SECTION A. Description of project activity

A.1. General description of project activity

The project activity includes successful installation and generation of 75 MW equivalent units of electricity with efficient utilization of the available wind energy by Essel Mining and Industries Limited and feeding that electricity to grid by Maharashtra State Electricity Board.

Essel Mining & Industries Limited (EMIL), a group company of Aditya Birla Group, is the owner and project proponent of this Wind Power Project under Clean Development Mechanism of Kyoto Protocol. EMIL is one of India's largest companies in the iron mining sector and believes that effective and efficient utilization of natural resources, coupled with responsible environmental considerations, is vital for sustainable development in India. This has been a guiding factor for EMIL towards conceptualization and installation of the 75MW Wind Power Project. EMIL, with a view to being in line with the sustainable development priorities of India, has developed the wind farm on barren land in the state of Maharashtra that has a deficit in power for meeting peaking electricity demands. This project has been developed with the objective of climate change mitigation through significant reduction in GHG emissions.

This 75MW wind power project, comprising of 60 WTGs of 1250 kW each which has been set up in three stages at Dhule and Nandurbar districts of Maharashtra, India. The project activity involves generation of clean electrical energy by harnessing the kinetic energy of wind by using WTG S 70 model of Suzlon.

The project was commissioned in three phases:

Stages	Capacity	Commissioning Dates
Stage I	15 MW	<ul style="list-style-type: none"> • 6 WTGs on 25/03/2005 • 6 WTGs on 31/03/2005
Stage II	30 MW	<ul style="list-style-type: none"> • 8 WTGs on 20/09/2005 • 15 WTGs on 29/09/2005 • 1 WTG on 30/09/2005
Stage III	30 MW	<ul style="list-style-type: none"> • 4 WTGs on 09/12/2005 • 7 WTGs on 06/01/2006 • 13 WTGs on 07/01/2006

In the absence of the project activity, an equivalent amount of electricity would have been from the power plants connected to the grid, majority of whom are based on fossil fuels. The entire electricity generated is being exported to the state grid maintained by Maharashtra State Electricity Board (MSEB) grid which is a part of NEWNE Grid (formerly known as Western Regional Grid). The electricity generated by wind turbine machines is exported to the connected substations through feeders. At the project site, in addition to WTGs owned by EMIL, there are other WTGs owned by other customers connected to the same feeders and substations and having a common metering facility at each feeder. There is an apportioning procedure as provided in the Power Purchase Agreement with the MSEDCL (MSEB) for apportioning the electricity generated by the WTG(s) with respect to their owner. This apportioning of the net electricity supplied to grid becomes the basis for subsequent invoicing and consequently for calculating the emission reductions from the project activity. The apportioning approach was further approved by CDM EB on 09/05/2010 in the form of revised monitoring plan (RMP).

Thus the project activity leads to reduction in GHG emission reductions due to replacement of electricity generation fossil fuel dominated grid by electricity generation using wind energy i.e. clean energy sources.

The total emission reduction achieved in the current monitoring Period (Monitoring Period: 09) from 02/01/2016 to 31/01/2018 is 153,648 tCO₂e.

A.2. Location of project activity

The following are the details of the location of the project activity:

- a) Host party: India
- b) Region/State/Province, etc: Maharashtra, India.
- c) City/Town/ Community, etc: Dhule and Nandurbar

The project is located in the Dhule and Nandurbar districts of Maharashtra, India. Dhule is one of the good wind potential areas of the state. Wind farm site is about four hours drive from Diamond city – Surat (Gujarat), the nearest city from the site. The nearest railway station is Nandurbar (50 km) and Challisgaon (50 km). Nearest airports are Aurangabad/ Baroda (250 km).

- d) Physical/ Geographical location:

Sr. No.	Location No	Latitude (N)	Longitude (E)
1	K—14	21° 10'	74° 19'
2	K—17	21° 10'	74° 19'
3	K—21	21° 11'	74° 19'
4	K—24	21° 11'	74° 19'
5	K—33	21° 11'	74° 20'
6	K—34	21° 11'	74° 20'
7	K—35	21° 11'	74° 20'
8	K—36	21° 11'	74° 20'
9	K—37	21° 11'	74° 20'
10	K—38	21° 11'	74° 20'
11	K—39	21° 11'	74° 20'
12	K—40	21° 11'	74° 20'
13	K—46	21° 12'	74° 19'
14	K—48	21° 11'	74° 20'
15	K—50	21° 11'	74° 19'
16	K—79	21° 12'	74° 21'
17	K-107	21° 13'	74° 19'
18	K-112	21° 13'	74° 20'
19	K-167	21° 13'	74° 17'
20	K-168	21° 13'	74° 17'
21	K-176	21° 13'	74° 17'
22	K-201	21° 11'	74° 16'
23	K-203	21° 11'	74° 16'
24	K-204	21° 12'	74° 15'
25	K-205	21° 12'	74° 16'
26	K-206	21° 12'	74° 15'
27	K-209	21° 12'	74° 15'
28	K-212	21° 12'	74° 15'
29	K-215	21° 12'	74° 16'
30	K-216	21° 12'	74° 15'
31	K-218	21° 12'	74° 16'
32	K-219	21° 13'	74° 15'
33	K-220	21° 13'	74° 15'
34	K-221	21° 13'	74° 15'
35	K-222	21° 13'	74° 15'

36	K-227	21° 13'	74° 16'
37	K-352	21° 14'	74° 20'
38	K-353	21° 14'	74° 20'
39	K-354	21° 14'	74° 21'
40	K-355	21° 14'	74° 21'
41	K-356	21° 14'	74° 20'
42	K-360	21° 14'	74° 21'
43	K-362	21° 14'	74° 20'
44	K-363	21° 14'	74° 21'
45	K-364	21° 14'	74° 21'
46	K-365	21° 14'	74° 20'
47	K-366	21° 14'	74° 21'
48	K-368	21° 15'	74° 21'
49	K-370	21° 14'	74° 20'
50	K-371	21° 15'	74° 20'
51	K-372	21° 15'	74° 21'
52	K-374	21° 15'	74° 20'
53	K-377	21° 15'	74° 20'
54	K-378	21° 15'	74° 21'
55	K-379	21° 15'	74° 20'
56	K-381	21° 15'	74° 21'
57	K-382	21° 15'	74° 20'
58	K-385	21° 15'	74° 21'
59	K-386	21° 16'	74° 21'
60	K-388	21° 16'	74° 21'

A.3. Parties and project participants

Parties involved	Project participants	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
India (host)	Essel Mining & Industries Limited (Private entity)	No

A.4. References to applied methodologies and standardized baselines

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

Title: Consolidated methodology for grid-connected electricity generation from renewable sources

Reference: Approved consolidated baseline methodology ACM0002, Version 06 (EB22, Annex 8)

The methodological tools applied in this project activity:

Tool for demonstration and assessment of additionality (Version 02, EB 22, Annex 8)

A.5. Crediting period type and duration

01/02/2008 – 31/01/2018 (Fixed)

SECTION B. Implementation of project activity**B.1. Description of implemented project activity**

The total capacity of the project activity is 75 MW comprising of 60 WTGs each with capacity of 1.25 MW. The WTGs are supplied by Suzlon.

The details of technical specifications of WTGs are given below:

Rotor Diameter	69.1m
Installed electrical output	1250 kW
Cut-in wind speed	3 m/s
Rated wind speed	12 m/s
Cut out wind speed	20 m/s
Rotor swept area	3750 m ²
Rotational speed	13.2 / 19.8 rpm
Rotor material	GRP
Regulation	Pitch
Generator	Asynchronous Generator, 4 / 6 poles
Rated output	250 / 1250 kW
Rotational speed	1010 / 1515 rpm
Operating voltage	690 V
Frequency	50 Hz
Protection	IP 56
Insulation class	H
Cooling system	Air cooled
Gear box	3 stage gear box, 1 planetary and 2 helical
Manufacturer	Winenergy
Gear ratio	77.848
Nominal load	1390 kW
Type of cooling	Oil cooling system
Yaw drive system	4 active electrical yaw motors
Yaw bearing	Polyamide slide bearing
Aerodynamic brake	3 times independent pitch regulation
Mechanical brake	Spring power disc brake, hydraulically
Control unit	Microprocessor controlled, indicating actual
	Operating conditions, UPS back-up system
Design standards	GL IEC

The project was commissioned in three phases – the first phase was commissioned on 25/03/2005 and the project was fully commissioned on 07/02/2006. Details of the commissioning dates of each WTG are mentioned in Annex 1.

The project activity was in operation continuously scheduled maintenance and inspection.

B.2. Post-registration changes

B.2.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents

There was no deviation from registered monitoring plan and or applied methodology during current monitoring period.

B.2.2. Corrections

There was no correction from registered PDD during current monitoring period.

B.2.3. Changes to the start date of the crediting period

There was no change in crediting period start date.

B.2.4. Inclusion of monitoring plan

Not applicable

B.2.5. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents

The monitoring plan of the registered PDD had been revised which was approved by UNFCCC on 09/05/2010. The same was approved before the start of the 1st monitoring period.

B.2.6. Changes to project design

No change in project design during current monitoring period.

B.2.7. Changes specific to afforestation or reforestation project activity

As the project activity falls under Sectoral Scope 1: Energy industries (renewable - / non-renewable sources) this section is not applicable.

SECTION C. Description of monitoring system

As per the applied monitoring methodology applied to the project, the project participant needs to monitor the net electricity supplied from project activity.

$EG_{GENTOTAL,i}$ = Total electricity exported to MSEB (MSEDCL) facility by all WTGs (WTGs of project participant as well as of other promoters) connected to feeder i (in kWh)

$EG_{AUXTOTAL,i}$ = Total electricity imported by all WTGs (WTGs of project participant as well as of other promoters) connected to the feeder i from MSEB (MSEDCL) in kWh

$EG_{CONTROLLER,i,j}$ = Electricity generation at the controller of individual WTG, j, of the project proponent connected to feeder i in kWh

$EG_{CONTROLLERTOTAL,i}$ = Total electricity generation at the controller of all WTGs (WTGs of project proponent as well as of other promoters) connected to the feeder i in kWh

$EG_{GEN,y,i}$ = Total electricity generation by the WTGs of the project proponent connected to the feeder, i (apportioned) in kWh

$EG_{AUX,y,i}$ = Auxiliary consumption by the WTGs of the project proponent connected to the feeder, i (apportioned) in kWh

$EG_{GEN,y}$ = Total electricity generation by all the wind turbines of project proponent in kWh

$EG_{AUX,y}$ = Auxiliary consumption by all the wind turbines of the project proponent in kWh

$$EG_{GEN,y,i} = (\sum EG_{CONTROLLER,i,j} / EG_{CONTROLLERTOTAL,i}) / EG_{GENTOTAL,i}$$

$$EG_{AUX,y,i} = \sum EG_{CONTROLLER,i,j} / EG_{CONTROLLERTOTAL,i} / EG_{GENTOTAL,i}$$

$$EG_{GEN,y} = \sum EG_{GEN,y,i}$$

$$EG_{AUX,y} = \sum EG_{AUX,y,i}$$

Where

i : represent the feeders

j: represent the WTGs of project participant

The net electricity supply is calculated as: $EG_y = EG_{GEN,y} - EG_{AUX,y}$

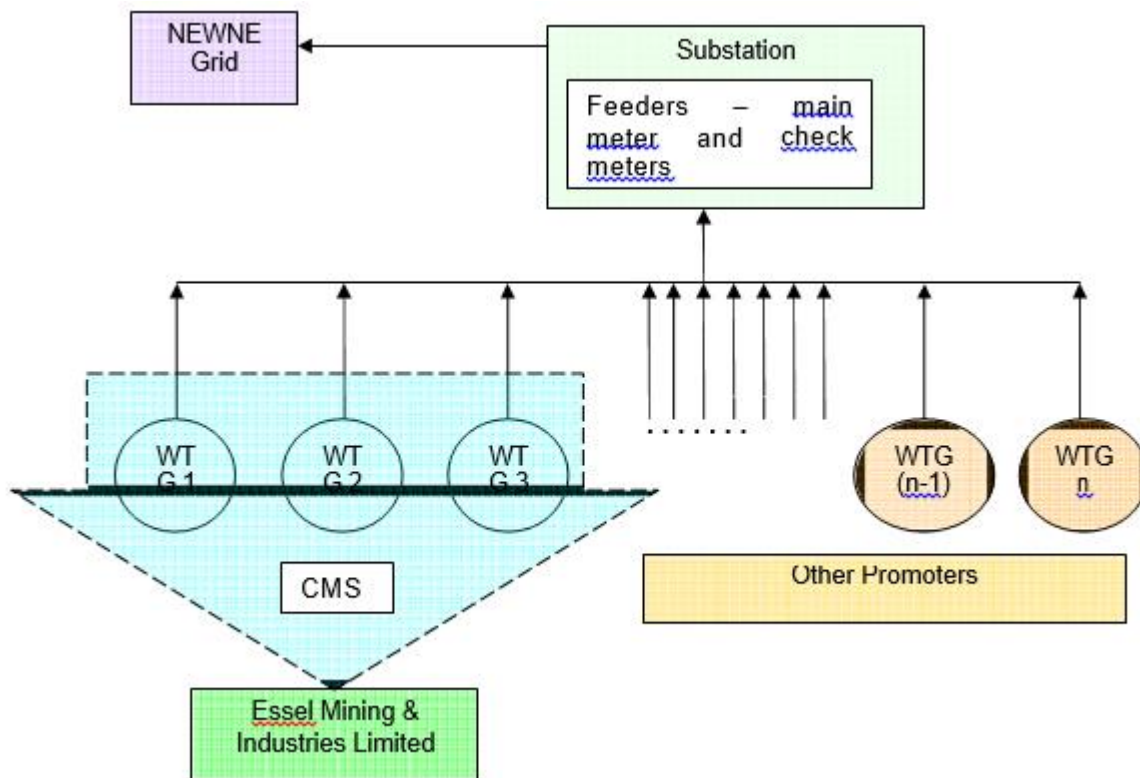
The monitoring of $EG_{GEN,y}$ and $EG_{AUX,y}$ would be as per the details provided in the Article 11 of the Power Purchase Agreement signed between the MSEB and EMIL.

As per Article 11, section 11.05 of PPA, “Wherever more than one Power Producer(s) are delivering energy produced by them using common evacuation system and through the common Metering equipment, then they shall identify a common agency responsible for joint meter reading with MSEB. The Joint Meter Reading taken at the common evacuation system shall be supported by meter readings of individual power producers using such common evacuation system. Based on this breakup, limited to energy delivered, the power generated from individual power plant shall be certified by MSEB”.

The apportioning of electricity generated by the entire wind farm is entirely under the jurisdiction of the electricity board. The project proponent has no role in computing and furnishing the apportioned electricity generated for themselves or any other promoter. The above calculation for deriving the apportioned electricity generated by the project proponent has been included only to bring clarity to the apportioning and overall monitoring procedure followed by the project proponent for the project activity.

Diagrammatic Representation

The single line diagram below is a depiction of metering point (i.e. one monitoring point) for one feeder where a set of WTGs which are part of the project activity (i.e. owned by EMIL) and a set of WTGs which are not part of the project activity (i.e. owned by other promoters), are connected to., Similar to this depiction, all sixty (60) WTGs are connected to eleven (11) metering points, through eleven (11) feeders, which are located at four (4) connected substations i.e. Valve EHV, Gangapur EHV and Jamde EHV. Each metering point (i.e. monitoring point) consists of one main meter and one check meter. A comprehensive single line diagram showing the arrangement of all metering points, all feeders and all connected substations associated with the project activity, is outlined and set out as Appendix 1 to this document. This is to further submit that the comprehensive line diagram is showing the latest metering arrangement for the project activity which was existed during this monitoring period. As declared in section B.1 above, the metering arrangement has been changed during this monitoring period due to replacement of meters, and it may change in the subsequent monitoring period(s), also, which is beyond the control of the project participant. Again as explained in the Section B.1, these changes in the metering arrangement by changing the meters do not impact the applicability of the methodology.



Analytical Representation

EG_{GEN,y} :

Let us assume there are 'n' WTGs, The power generated from individual power plant (meter readings of individual power producers hereafter referred to as controller generation of each WTG) be X_i .

Therefore, Controller generation for WTG 1 = X_1

Controller generation for WTG 2 = X_2

Controller generation for WTG n = X_n

Now, $X_1 + X_2 + X_3 + \dots + X_n = X$ (say) Let the energy delivered (Joint Meter Reading taken at the common evacuation system) be Y then as per article 11 of the PPA, Y_i , electricity generation of each WTG at (S/s feeder) is equal to the ratio of respective controller generation at that WTG and total controller generation of all WTGs connected to the feeder (common evacuation system) multiplied by the total net generation (S/s feeder) Therefore, $Y_i = (X_i/X) * Y$ The operation and maintenance of the wind farm has been outsourced to Suzlon. All the WTGs at the site are monitored from the Central Monitoring Station (CMS) at the wind farm, where electricity generation from each WTG is continuously monitored. The CMS at the wind farm reports to the main CMS at Pune, where the daily generation report is prepared and sent to EMIL by the respective CRM (Customer Relationship Management) manager.

The electricity generation reports on joint meter reading are generated by MSEDCL and sent to EMIL through Suzlon (O&M service provider) on monthly basis. Upon receipt of reports, EMIL generates invoices on sale of electricity and sends to MSEDCL via Suzlon. Thereafter, MSEDCL makes payments against the invoices within 3 months directly to EMIL.

QA/QC procedures:

Essel Mining & Industries Ltd has established, documented and implemented Integrated Management Systems. The company maintains and continually improves the effectiveness of QMS, EMS and OHSMS in accordance with the requirements of ISO 9001:2008, ISO 14001:2004

and OHSAS 18001:2007. The company has developed “Documentation structure” and it comprises of:

- Level1- Manual
- Level 2- Process approach and Procedures
- Level 3- Specifications, Process Flow Diagrams, Aspect and Hazard Register, Legal Register, Emergency Plan, Work Instructions and Management Programmes
- Level 4- Formats, Registers, Tags, Labels, Files and Records

Integrated Management Systems Manual describes the organization structure with responsibilities; and measures for documentation, implementation & control of the system. Integrated Management Procedures provide information and instructions for achieving and maintaining functional controls, meeting the requirements of International Standard ISO9001: 2000, ISO 14001:2004 & OHSAS 18001:2007 and the organization’s IMS Policy. Head of the departments (HODs) effectively implement these procedures into practice, involving all personnel concerned.

Roles and Responsibilities:

The entire operation and maintenance of the project activity has been outsourced to Suzlon, which is also the equipment supplier. The monitoring of export and import of electricity would be as per the details provided in the Article 11 of the Power Purchase Agreement signed between the MSEB and EMIL, which clearly identifies the following:

- Metering and recording process of power generation and consumption data
- Calibration of metering instruments
- Validation of data
- Recording and approving authority

EMIL has outsourced the operations and monitoring the performances of the WTGs to Suzlon Infrastructure Services Limited who sends daily and monthly performance records to EMIL. All the WTGs at the site are connected to a Central Monitoring Station of Suzlon being operated from Pune wherein data are directly captured through digital system. The captured data are then directly uploaded to the CRM (customer relationship management) system. From CRM the daily generation reports are directly sent to EMIL on a daily basis. A CRM manager deputed by Suzlon, is responsible for the monitoring of the WTGs. EMIL has daily communication with CRM manager. The electricity generation reports on joint meter reading are generated by MSEDCL and send to EMIL through Suzlon (O&M service provider) on monthly basis.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante

Data/Parameter	EF _{OM,y}
Unit	tCO ₂ / MWh
Description	Operating margin emission factor of Western grid
Source of data	CEA Computed from data sourced from Website of Central Electricity Authority of India
Value(s) applied	0.99
Choice of data or measurement methods and procedures	Calculated as per ACM0002 with 3years vintage (2002-2003, 2003-2004, 2004- 2005) data obtained from CEA database on CO ₂ baseline for Indian Power Sector. Computed once during PDD finalization (ex-ante).
Purpose of data/parameter	For the calculation of baseline emissions
Additional comments	Records to be archived for 12 years from the start of the crediting period either on paper or in electronic media

Data/Parameter	EF _{BM,y}
Unit	tCO ₂ / MWh
Description	Build margin emission factor of Western grid

Source of data	CEA Computed from data sourced from Website of Central Electricity Authority of India
Value(s) applied	0.78
Choice of data or measurement methods and procedures	Calculated as per ACM0002 with vintage (2004-2005) data obtained from CEA database on CO ₂ baseline for Indian Power Sector.
Purpose of data/parameter	For the calculation of baseline emissions
Additional comments	Records to be archived for 12 years from the start of the crediting period either on paper or in electronic media

Data/Parameter	EF_y
Unit	tCO ₂ / MWh
Description	Combined margin CO ₂ emission factor of the grid
Source of data	Estimated figure based on 75% of OM and 25% of BM values calculated using data obtained from CEA database on CO ₂ baseline emission factor for Indian Power Sector.
Value(s) applied	0.940
Choice of data or measurement methods and procedures	Calculated as per ACM0002 with 3years vintage data and option of ex ante calculation based on “75% of OM and 25% of BM values approach”. Computed once during PDD finalization. (ex-ante)
Purpose of data/parameter	For the calculation of baseline emissions
Additional comments	Records to be archived for 12 years from the start of the crediting period either on paper or in electronic media

D.2. Data and parameters monitored

Data/Parameter	EG_y
Unit	MWh
Description	Net Electricity supplied to MSEB facility
Measured/calculated/default	Calculated
Source of data	Joint Meter Readings (JMRs) and Invoices available at Project site and at EMIL Corporate Office
Value(s) of monitored parameter	163455.77
Monitoring equipment	<p>This is calculated on the basis of continuously measured data and monthly recording. The monitoring of EG_{GEN,y} and EG_{AUX,y} are as per the details provided in the Article 11 of the Power Purchase Agreement signed between the MSEB and EMIL which clearly identifies the following:</p> <ul style="list-style-type: none"> • Metering and recording process of power generation and consumption data • Calibration of metering instruments • Validation of data by both the parties • Recording and approval from authorised personnel
Measuring/reading/recording frequency	Continuous monitoring and Monthly recording
Calculation method (if applicable)	As per Section C above and detail calculation is given in ER computation sheet.

QA/QC procedures	Uncertainty level of data: Low; This data has been cross referred with the invoices raised to MSEB by EMIL and payment against the invoice. We have also calculated the EG _y (Net Electricity supplied to MSEDCL facility) based on the apportioning formulae provided in the approved RMP (in line with the Annex 1 of PPA) and results of the apportioning formulae are provided in the ER computation sheet (for each WTG)
Purpose of data/parameter	For the calculation of baseline emissions
Additional comments	EMIL has outsourced the operation and monitoring the performance of the WTGs to Suzlon Infrastructure Services Limited who sends daily and monthly performance records ² to EMIL. Records to be archived for 12 years from the start of the crediting period either on paper or in electronic media.

D.3. Implementation of sampling plan

Sampling is not applicable in this project activity

SECTION E. Calculation of emission reductions or net anthropogenic removals

E.1. Calculation of baseline emissions or baseline net removals

As described in the section above, the total emission reduction achieved in a year would be
 $ER_y = BE_y - PE_y - LE_y$

Where,

ER_y is the Emission reductions during the year y

BE_y is the Baseline emissions during the year y

PE_y is the Project emissions during the year y

LE_y is the Leakage emissions during the year y

Baseline emissions:

$$BE_y = EG_y \times EF_y$$

where,

BE_y = Baseline Emissions due to displacement of electricity during the year y (in tons of CO₂).

EG_y = Net units of electricity substituted in the grid during the year y (in MWh).

EF_y = Emission Factor of the grid (in tCO₂/ MWh) and y is any year within the crediting period of the project activity.

Carbon dioxide emission factor as per the baseline adopted, EF_y = 0.940 tCO₂/MWh.

Net Electricity supplied to MSEB facility, EG_y (taken from JMR issued by MSEDCL) = 163455.77 MWh

Baseline emissions is BE_y = EG_y * EF_y = 163455.77 MWh * 0.940 tCO₂/MWh = 153,648 tCO₂e (rounded down) (Detailed calculation is given in ER computation sheet).

Total Baseline Emissions (BE_y) = 153,648 tCO₂ e

E.2. Calculation of project emissions or actual net removals

As per methodology ACM0002, (Version 06) the project emissions are zero.

Therefore,

$$PE_y = 0 \text{ tCO}_2\text{e}$$

E.3. Calculation of leakage emissions

As per ACM0002 (Version 06), and leakage emissions are to be taken into account “If the energy generating equipment is transferred from another activity, leakage is to be considered. Since transfer of equipment is not envisaged in the project activity, the leakage emissions will be equal to zero. Therefore,

$$LE_y = 0 \text{ tCO}_2\text{e}$$

E.4. Calculation of emission reductions or net anthropogenic removals

	Baseline GHG emissions or baseline net GHG removals (t CO ₂ e)	Project GHG emissions or actual net GHG removals (t CO ₂ e)	Leakage GHG emissions (t CO ₂ e)	GHG emission reductions or net anthropogenic GHG removals (t CO ₂ e)		
				Before 01/01/2013	From 01/01/2013	Total amount
Total	153,648	0	0	0	153,648	153,648

E.5. Comparison of emission reductions or net anthropogenic removals achieved with estimates in the registered PDD

Amount achieved during this monitoring period (t CO ₂ e)	Amount estimated ex ante for this monitoring period in the PDD (t CO ₂ e)
153,648	246,445

E.5.1. Explanation of calculation of “amount estimated ex ante for this monitoring period in the PDD”

Considering the annual average emission reductions as per the registered PDD which is 118,203 tCO₂e per year, the number of days covered during the current monitoring period comes out to be 761 days, based upon which the estimated emission reductions attributed to this monitoring period comes out to be 246,445 tCO₂e. The detailed calculation can be referred from the emission reduction sheet.

E.6. Remarks on increase in achieved emission reductions

During this project activity, the actual emission reductions obtained is lower than the estimated value.

E.7. Remarks on scale of small-scale project activity

Not applicable as project activity is large scale.

Annex 1

Details of the WTGs

Serial No.	Location No.	Generator No.	Date of Commissioning
Stage I			
1	K14	478673	25/03/2005
2	K17	479432	31/03/2005
3	K21	479433	31/03/2005
4	K24	479247	31/03/2005
5	K33	479249	31/03/2005
6	K34	478680	25/03/2005
7	K35	479157	25/03/2005
8	K36	478702	25/03/2005
9	K37	478861	25/03/2005
10	K38	478862	25/03/2005
11	K39	479158	31/03/2005
12	K40	478930	31/03/2005
Stage II			
13	K219	64016841	29/09/2005
14	K220	64017874	29/09/2005
15	K221	64018485	29/09/2005
16	K222	64015302	29/09/2005
17	K216	64020221	29/09/2005
18	K168	64019647	29/09/2005
19	K227	64015942	29/09/2005
20	K167	5134897	20/09/2005
21	K209	5136457	20/09/2005
22	K212	5136465	20/09/2005
23	K215	64011924	20/09/2005
24	K201	64015940	29/09/2005
25	K203	64019648	29/09/2005
26	K204	64018482	29/09/2005
27	K205	470663	29/09/2005
28	K218	64017529	30/09/2005
29	K206	5136502	29/09/2005
30	K46	5136502	20/09/2005
31	K48	64017874	29/09/2005
32	K50	64015302	29/09/2005
33	K112	5136461	20/09/2005
34	K176	64017129	29/09/2005
35	K107	64014828	20/09/2005
36	K79	480645	20/09/2005
Stage III			
37	K356	64021776	09/12/2005
38	K362	64021435	09/12/2005
39	K364	64021773	09/12/2005

40	K365	64021434	09/12/2005
41	K352	64021431	05/01/2006
42	K353	64022374	05/01/2006
43	K354	64021775	05/01/2006
44	K360	64021432	05/01/2006
45	K363	64022375	05/01/2006
46	K366	64021774	05/01/2006
47	K368	64022239	05/01/2006
48	K355	64026133	07/02/2006
49	K370	64027704	07/02/2006
50	K371	64022243	07/02/2006
51	K372	64022244	07/02/2006
52	K374	64022377	07/02/2006
53	K377	64026127	07/02/2006
54	K378	64022241	07/02/2006
55	K379	64026703	07/02/2006
56	K381	64020225	07/02/2006
57	K382	64026704	07/02/2006
58	K385	64025701	07/02/2006
59	K386	64026128	07/02/2006
60	K388	64021777	07/02/2006

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
07.0	31 May 2019	Revision to: <ul style="list-style-type: none"> • Ensure consistency with version 02.0 of the “CDM project standard for project activities” (CDM-EB93-A04-STAN); • Add a section on remarks on the observance of the scale limit of small-scale project activity during the crediting period; • Add "changes specific to afforestation or reforestation project activity" as a possible post-registration changes; • Clarify the reporting of net anthropogenic GHG removals for A/R project activities between two commitment periods; • Make editorial improvements.
06.0	7 June 2017	Revision to: <ul style="list-style-type: none"> • Ensure consistency with version 01.0 of the “CDM project standard for project activities” (CDM-EB93-A04-STAN); • Make editorial improvements.
05.1	4 May 2015	Editorial revision to correct version numbering.
05.0	1 April 2015	Revisions to: <ul style="list-style-type: none"> • Include provisions related to delayed submission of a monitoring plan; • Provisions related to the Host Party; • Remove reference to programme of activities; • Overall editorial improvement.
04.0	25 June 2014	Revisions to: <ul style="list-style-type: none"> • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from <i>F-CDM-MR</i> to <i>CDM-MR-FORM</i>; • Editorial improvement.
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB 70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01.0	28 May 2010	EB 54, Annex 34. Initial adoption.

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