

CECEP Gansu Yumen Changma Daba North Wind Farm Project

Document Prepared By Beijing Ruifang Technology Co., Ltd.

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1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

CECEP Gansu Yumen Changma Daba North Wind Farm Project (hereafter referred to as the Project) is located at Changma, Yumen Town, Gansu Province, China, which is a new-built project and operated by CECEP Wind Power (Gansu) Co., LTD.

The total installed capacity of the Project is 48 MW equipped with 16 sets of wind turbine generators with a unit capacity of 3 MW.

The purpose of this project is to export electricity to Northwest Power Grid (NWPG) to replace equivalent electricity that would have been provided by other fossil fuel power plants. And the electricity delivered by this Project is 101.04 GWh annually, equivalent to 2105 operating hours with full capacity. By replacing equal amount of electricity which is originally generated by the fossil fuel fired power plants within the grid system, the Project with almost zero emission would reduce GHG emission. It is estimated that the resulting CO₂ emission reductions would be about 90,531 tCO₂ annually.

The Project started construction on 10/11/2011.

The Project started commissioning on 01/01/2013.

This is the second monitoring period from 01/01/2016 to 30/06/2019. The total emission reduction of this monitoring period is 343,390tCO₂e.

1.2 Sectoral Scope and Project Type

According to UNFCCC sectoral scopes definition for CDM projects, the Project Activity is included in the Sectoral Scope 1, category "Energy industries (renewable - / non- renewable sources)".

The project is a single Greenfield project and is not part of a project group or bundle.

1.3 Project Proponent

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1.4 Other Entities Involved in the Project

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1.5 Project Start Date

This project starts on 01/01/2013 (project started commissioning, which means that the wind turbines came into operation and started to generate electricity and emission reductions).

1.6 Project Crediting Period

The first VCS crediting period of the Project is from 01/01/2013 to 31/12/2022 (10years). It could be renewed twice. Therefore, the total crediting period is 30 years (01/01/2013 to 31/12/2042).

1.7 Project Location

The Project is sited at Changma, southwest of Yumen Town, Gansu Province, P.R. China. The Project has central geographical with east longitude of 96.7843° and north latitude of 40.0841° in a region with the approximate scope of (E96.7597°, N40.0972°), (E96.8333°, N40.0972°), and (E96.7597°, N40.0578°), shown from the official approval document. More details are shown as the following Figure 1.

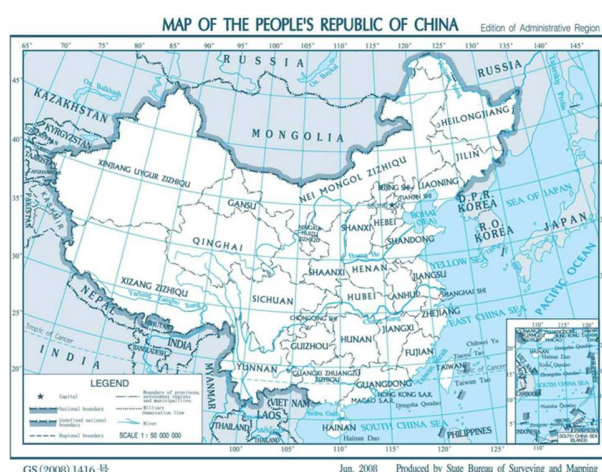




Figure 1. Project location

1.8 Title and Reference of Methodology

The approved consolidated baseline and monitoring methodology ACM0002: “Consolidated methodology for grid-connected electricity generation from renewable sources”, Version 12.2.0, in effect as of EB 65¹.

The following tools are also used:

Tool for the demonstration and assessment of additionality (Version 6.0.0), and
Tool to calculate the emission factor for an electricity system (Version 02.2.1).

1.9 Other Programs

This project has been registered as a CDM project on 17/07/2012, and the registration number is 6596. The project has not claimed any other forms of environment credit. It has once issued carbon credits under CDM mechanism with monitoring period from 01 January 2013 to 31 December 2015.

1.10 Sustainable Development

The Project promotes sustainable development through the following aspects:

By replacing electricity from fossil fuel power plants with renewable electricity, this project could reduce greenhouse gas emissions compared to the business-as-usual scenario;

Help to stimulate the growth of the wind power industry in China and promotion of advanced wind turbine manufacturing industry;

Create local employment opportunities during the construction and operation of the Project;

¹ https://cdm.unfccc.int/EB/archives/meetings_11.html#65

Stimulate the development of local tourism industry.

2 IMPLEMENTATION STATUS

2.1 Implementation Status of the Project Activity

The Project started construction on 10/11/2011. The Project started commissioning on 01/01/2013.

During this monitoring period(from 01/01/2016 to 30/06/2019), the Project is operated and implemented well. All the electricity meters are calibrated annually. All the data were recorded and checked by the leader of project monitoring team. And all materials are well kept. The equipment and production activities were supervised by the production technician. No emergencies (including of overhaul times, downtimes of equipment, exchange of equipment, etc.) happened in this monitoring period.

There are no changes compared to the project design.

The technologies employed by the project are owned domestically, thus no technology transfer is involved. Major technical parameters of the key equipment employed by the project are illustrated in Table 1.

Table 1. Major technical parameters of the key equipment

Key Parameter	Type: SL3000/113
Rated power (kW)	3000
Rotor diameter (m)	113.3
Cut in wind speed (m/s)	3
Rated wind speed (m/s)	11
Cut out wind speed (m/s) (average in 10mins.)	25
Extreme(survival) wind speed (maximum in 3 seconds) (m/s)	52.5
Rated life time (year)	20
Number of blades	3
Swept area(m ²)	10039.7
Length of the blade (m)	55
Generator capacity (kW)	3100
Rated generator voltage (V)	690

The electricity generated by the Project was exported to the local Yumen town grid via a newly built 35kV/110kV transformer station located within the Project site, which was then exported to the NWPG via local Yumen town grid. There are electric meters (accuracy level: no less than 0.5S) in the onsite substation to measure the electricity import/export.

The technical process in the Project can be shown as following diagram:

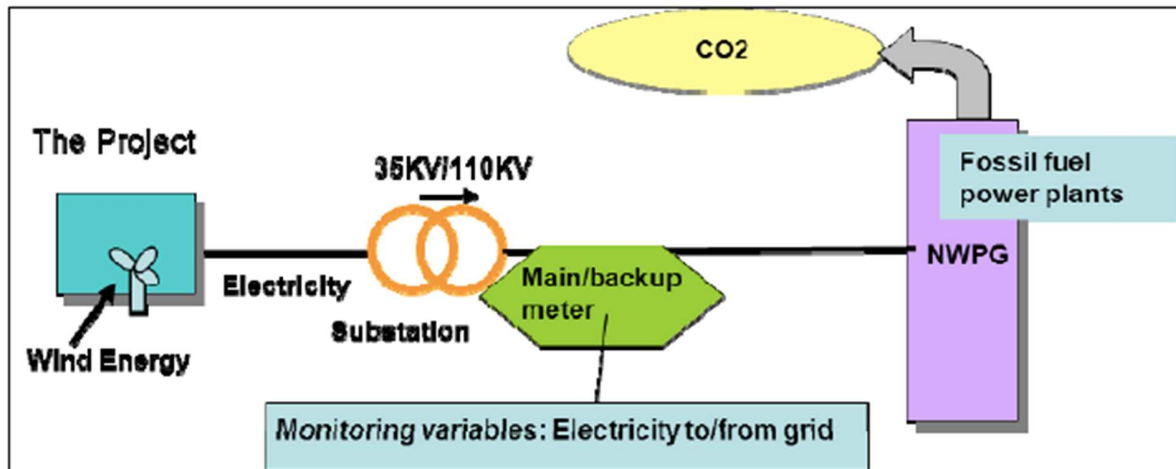


Figure2. The technology flow diagram of the Project

2.2 Deviations

2.2.1 Methodology Deviations

There were no methodology deviations in this monitoring period.

2.2.2 Project Description Deviations

There were no project deviations in this monitoring period.

2.3 Grouped Project

This is not grouped project.

2.4 Safeguards

2.4.1 No Net Harm

The project uses wind to generate electricity. It is environmentally friendly and there is no harm to the environment.

Environmental Impact Assessment (EIA) has been performed by qualified third party and approved by Environmental Protection Bureau of Gansu Province on Feb. 17, 2011. Through the assessment of the EIA, this project has no harm to environment. The detail could be referenced from section D.1 of the registered CDM PDD.

Therefore, no net harm is generated in this project.

2.4.2 Local Stakeholder Consultation

On 04/08/2011, consultations were carried out in the Changma County by CECEP Wind Power (Gansu) CO., LTD. The consultations, which included two parts, one is the discussions among local people with the developer and another, a questionnaire survey.

The developer introduced the background of the Project firstly according to the meeting schedule and respondents filled in a questionnaire, and then a discussion meeting is raised to get the comments and suggestions from local people.

- Project brief introduction
- Respondents' information on name, gender, education level etc.
- Questions on:
 1. Do you think whether the Project will benefit to the mitigation of Greenhouse Gas?
 2. Do you feel any negative impact on surrounding environment (air, noise & water) by the project construction?
 3. Are there any adverse impacts on your and your family's life, work and study by the project construction? (if yes, please explain in the attached pages.)
 4. Whether the completion of the Project will bring about positive impacts to local economic development?
 5. What is the issue that you are most concerned with during the construction and operation period of the Project? (Options: Noise, air pollution, equipment safety, waste water, electromagnetic interference, or landscape destroy)
 6. Do you agree with the development & construction of the Project?
 7. Do you think which environmental protection measures should be undertaken during the construction and operation period of the Project?
 8. Do you have any further comment and suggestion about the Project and to the project owner?

The questionnaires were sent to 49 respondents and the survey had a 100% response rate.

Through the answer sheets, the stakeholders are very supportive of this project and looking forward to the operation of the Project as early as possible. And the project owner will strengthen the communication with the stakeholders, and confirm the measurements given in the EIA report will be implemented totally to solve the issues the local people concern mostly.

3 DATA AND PARAMETERS

3.1 Data and Parameters Available at Validation

Data / Parameter	$FC_{i,y}$
Data unit	ton or m ³
Description	Amount of fuel i consumed within the project electricity system, in years y, not including low operating cost/must run power sources.
Source of data	China's Energy Statistical Yearbook, 2008-2010

Value applied	The value is in the annex 3 of the registered PDD
Justification of choice of data or description of measurement methods and procedures applied	Based on official national statistics
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	GEN_y
Data unit	MWh
Description	Electricity generated by all power sources serving the project grid system, not including low-cost/must-run power plants/units, in year y.
Source of data	China's Energy Statistical Yearbook, 2008-2010
Value applied	The value is in the annex 3 of the registered PDD
Justification of choice of data or description of measurement methods and procedures applied	The choice of data satisfies the guidance in the methodology ACM0002 and its deviation approach. The data is used to calculate OM emission factor.
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	AER_y
Data unit	%
Description	The self-service electricity rate of all power sources serving the NWPG.
Source of data	China's Energy Statistical Yearbook, 2008-2010
Value applied	The value is in the annex 3 of the registered PDD
Justification of choice of data or description of measurement methods and procedures applied	Based on official national statistics
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	NCV_i
Data unit	GJ/ton or GJ/km ³
Description	Net calorific value (energy content) per mass or volume unit of a fuel i.
Source of data	China's Energy Statistical Yearbook, 2009

Value applied	The value is in the annex 3 of the registered PDD
Justification of choice of data or description of measurement methods and procedures applied	The choice of data satisfies the guidance in the methodology ACM0002. The data is used to calculate the emission coefficient of the fuel.
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	$EF_{CO_2,i,j,y}$
Data unit	tCO ₂ / GJ
Description	CO ₂ emission factor per unit of energy of the fuel i.
Source of data	"2006 IPCC Guidelines for National Greenhouse Gas Inventories", Volume 2
Value applied	The value is in the annex 3 of the registered PDD
Justification of choice of data or description of measurement methods and procedures applied	The choice of data satisfies the guidance in the methodology ACM0002. The data is used to calculate the emission coefficient of the fuel.
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	$CAP_{j,y}$
Data unit	MW
Description	The total installed capacity of province j in year y
Source of data	China Electric Power Yearbook, 2008-2010
Value applied	The value is in the annex 3 of the registered PDD
Justification of choice of data or description of measurement methods and procedures applied	The choice of data satisfies the guidance in the methodology ACM0002. The data is used to calculate the BM emission factor
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	$EF_{j,Adv}$
Data unit	%
Description	The efficiency level of the best technology commercially available in China's power grid for each fuel type.
Source of data	Notification of NDRC, China

Value applied	The supply efficiency for coal is 39.45%; for oil and gas is 51.77%
Justification of choice of data or description of measurement methods and procedures applied	The choice of data satisfies the guidance in the methodology ACM0002. The data is used to calculate the BM emission factor
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	$F_{j,i,y}$
Data unit	tce
Description	The consumption of fuel i in province j in year y.
Source of data	China Energy Statistical Yearbook, 2008-2010
Value applied	The value is in the annex 3 of the registered PDD
Justification of choice of data or description of measurement methods and procedures applied	Based on official national statistics
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	Import Electricity from other regional grids
Data unit	MWh
Description	The net imported electricity from other regional grids, which should be considered as one power source j, j = imports.
Source of data	China Energy Statistical Yearbook, 2008-2010
Value applied	The value is in the annex 3 of the registered PDD
Justification of choice of data or description of measurement methods and procedures applied	Based on official national statistics
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	EF_{OM}
Data unit	tCO ₂ /MWh
Description	Operating margin emission factor of the project grid system
Source of data	China Energy Statistical Yearbook, 2008-2010
Value applied	The value is in the annex 3 of the registered PDD

Justification of choice of data or description of measurement methods and procedures applied	Based on official national statistics
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

Data / Parameter	EF_{BM}
Data unit	tCO ₂ /MWh
Description	Building margin emission factor of the project grid system
Source of data	China Electric Power Yearbook, 2008-2010; China Energy Statistical Yearbook, 2008-2010
Value applied	The value is in the annex 3 of the registered PDD
Justification of choice of data or description of measurement methods and procedures applied	Based on official national statistics
Purpose of the data	Calculation of $EF_{grid,CM,y}$
Comments	/

3.2 Data and Parameters Monitored

Data / Parameter	$EG_{to grid,y}$
Data unit	MWh
Description	Quantity of annual electricity exported to the grid by the Project
Source of data	electricity meter
Description of measurement methods and procedures to be applied	The electricity exported is monitored by the electricity meter and recorded by working staff.
Frequency of monitoring/recording	Monitoring continuously and recorded monthly
Value monitored	386308.560 (total electricity exported to the grid in this monitoring period)
Monitoring equipment	There are two electricity meters. One is main meter and the other one is backup meter. The serial number and calibration information is in following table.
QA/QC procedures to be applied	The metering equipment are calibrated and checked for accuracy periodically (once a year) according to the industry standards so that the metering equipment shall have sufficient accuracy.

	Serial No.	Calibration date	Valid	Accuracy
	211650972 Main meter	08/12/2015 11/11/2016 07/11/2017 26/10/2018	07/12/2016 10/11/2017 06/11/2018 25/10/2019	0.2s
	211650857 Backup meter	08/12/2015 11/11/2016 07/11/2017 26/10/2018	07/12/2016 10/11/2017 06/11/2018 25/10/2019	0.2s
Purpose of the data	Calculation of baseline emissions			
Calculation method	/			
Comments	/			

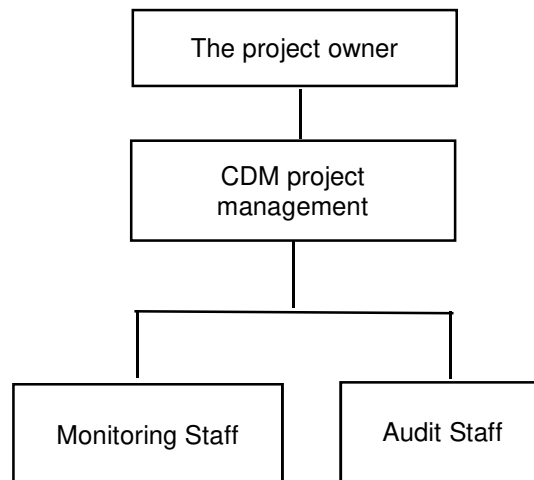
Data / Parameter	EG _{fromgrid,y}			
Data unit	MWh			
Description	Quantity of annual electricity imported from the grid by the project			
Source of data	Electricity meter			
Description of measurement methods and procedures to be applied	The electricity imported is monitored by the electricity meter and recorded by working staff.			
Frequency of monitoring/recording	Monitoring continuously and recorded monthly			
Value monitored	3034.416 (total electricity imported from the grid in this monitoring period)			
Monitoring equipment	There are two electricity meters. One is main meter and the other one is backup meter. The serial number and calibration information is in following table.			
QA/QC procedures to be applied	Serial No.	Calibration date	Valid	Accuracy
	211650972 Main meter	08/12/2015 11/11/2016 07/11/2017 26/10/2018	07/12/2016 10/11/2017 06/11/2018 25/10/2019	0.2s
	211650857 Backup meter	08/12/2015 11/11/2016 07/11/2017 26/10/2018	07/12/2016 10/11/2017 06/11/2018 25/10/2019	0.2s
Purpose of the data	Calculation of baseline emissions			
Calculation method	/			

Comments	/		
Data / Parameter	EG _{facility,y}		
Data unit	MWh		
Description	Net electricity supplied to the grid by the Project		
Source of data	Electricity meter		
Description of measurement methods and procedures to be applied	It is calculated with $EG_{to\text{grid},y} - EG_{from\text{grid},y}$		
Frequency of monitoring/recording	Monitoring continuously and recorded monthly		
Value monitored	383274.144 (total net electricity supplied to the grid in this monitoring period)		
Monitoring equipment	There are two electricity meters. One is main meter and the other one is backup meter. The serial number and calibration information is in following table.		
QA/QC procedures to be applied	The metering equipment are calibrated and checked for accuracy periodically (once a year) according to the industry standards so that the metering equipment shall have sufficient accuracy.		
	Serial No.	Calibration date	Valid
	211650972 Main meter	08/12/2015 11/11/2016 07/11/2017 26/10/2018	07/12/2016 10/11/2017 06/11/2018 25/10/2019
	211650857 Backup meter	08/12/2015 11/11/2016 07/11/2017 26/10/2018	07/12/2016 10/11/2017 06/11/2018 25/10/2019
Purpose of the data	Calculation of baseline emissions		
Calculation method	/		
Comments	/		

3.3 Monitoring Plan

1. Monitoring system organization

Overall responsibility for monitoring and carrying out the monitoring following this monitoring plan lies with CECEP Wind Power (GANSU) CO.,LTD. The company will assign dedicated people responsible for the monitoring and reporting of the generation and emission reductions of the project activity. The operating and management structure is illustrated as followed:



2. Data collection and management

As described in the monitoring plan in the monitoring PDD, the monitoring data are read from the electricity meter within the project site and recorded monthly.

The net electricity supplied to the grid by the project ($EG_{\text{facility},y}$) has been continuously monitored through the bi-directional meters (one main meter M1 and one backup meter M2) installed at the high voltage side of 35kV/110kV Substation, located within the project site.

The cut off time is 00:00 of the penultimate day of each month. Designated personnel of the wind farm read and record the readings monthly, then report the readings to the grid company. After confirmed by the grid company, the Electricity Transaction Notes (ETNs) are issued by the grid company. The ETNs are serving as the sales receipts. The meters were calibrated according to national regulations.

All paper-based information will be stored by the technology department of the proposed Wind farm and all the material will have a copy for backup. All data collected as part of monitoring is archived electronically and is kept until 2 years after the end of the total crediting period of the Project.

3. Calibration of meters

The metering equipment will be calibrated and checked by qualified third party for according to national standards so that the metering equipment shall have sufficient accuracy of no less than 0.5S. Both meters shall be jointly inspected and sealed on behalf of the parties concerned and shall not be interfered with by either party except in the presence of the other party or it accredited representatives.

All the meters installed shall be tested by the NWPG within 10 days after: the detection of a difference larger than the allowable error in the readings of both meters; the repair of all or part of meter caused by the failure of one or more parts to operate in accordance with the specifications. If any errors are detected, the party owning the meter shall repair, recalibrate or replace the meter giving the other party sufficient notice to allow a representative to attend during any corrective activity. Should any previous month's reading of the main meter be inaccurate by more than the allowable error, or otherwise functioned improperly, the net generation output shall be determined by:

- (a) First, by reading backup meter, unless a test by either party reveals it is inaccurate;
- (b) If the backup system is not with acceptable limits of accuracy or operation is performed improperly the project owner and the grid company shall jointly prepare a reasonable and conservative estimate of the correct reading, and provide sufficient evidence that this estimation is reasonable and conservative when DOE undertakes verification; and
- (c) If the two parties fail to agree then the matter will be referred for arbitration according to agreed procedures.

4. Quality control

Monthly net generation data will be approved by monitoring and auditing staff before it is accepted and stored.

This audit will check compliance with operational procedures in this monitoring plan.

This internal audit will also identify potential improvements to procedures to improve monitoring and reporting in future years. If such improvements are proposed these will be reported to the DOE and only operated after approval from the DOE.

4 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

4.1 Baseline Emissions

According to latest ACM0002 (Version 12.2.0), the baseline emissions calculated as follows:

$$BE_y = EG_{PJ,y} * EF_{grid,CM,y}$$

Where:

BE_y	Baseline emissions in year y (tCO ₂ /yr)
$EG_{PJ,y}$	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/yr)
$EF_{grid,CM,y}$	Combined margin CO ₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO ₂ /MWh)

The Project is the installation of a new grid-connected renewable power plant/unit at a site where no renewable power plant was operated prior to the implementation of the Project. So:

$$EG_{PJ,y} = EG_{facility,y}$$

Where:

$EG_{facility,y}$ Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

$$EG_{facility,y} = EG_{to grid,y} - EG_{from grid,y}$$

So,

$$BE_y = (EG_{to\text{grid},y} - EG_{from\text{grid},y}) * EF_{grid,CM,y}$$

Where:

BE_y = Baseline emissions in year y (tCO₂/yr)

$EG_{to\text{grid},y}$ = The electricity delivered to the grid by the proposed project activity in y year

$EG_{from\text{grid},y}$ = The electricity purchased by the proposed project activity from the grid in y year, when wind resources not sufficient or wind turbine might shut down for regular maintenance.

$EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant to the grid in year y (MWh/yr)

$EF_{grid,CM,y}$ = Combined margin CO₂ emissions factor in year y (tCO₂/MWh)

Monitoring period	$EG_{facility,y}$ (MWh)	$EF_{grid,CM,y}$ (tCO ₂ /MWh)	BE_y (tCO ₂)
1/1/2016-30/06/2019 (1277days)	383274.144	0.8960	343,390

The monthly data and ER breakdown are shown in appendix 1.

4.2 Project Emissions

According to the ACM0002 methodology, the project emissions (PE_y) are zero for wind power projects, and therefore the emission reductions are equal to the baseline emissions.

4.3 Leakage

According to ACM0002, no leakage needs to be considered.

4.4 Net GHG Emission Reductions and Removals

$$ER_y = BE_y - PE_y = BE_y = 343,390$$

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
01/01/2016-31/12/2016	98,245	0	0	98,245
01/01/2017-31/12/2017	98,259	0	0	98,259
01/01/2018-31/12/2018	98,489	0	0	98,489

01/01/2019- 30/06/2019	48,397	0	0	48,397
Total	343,390	0	0	343,390

The estimated annual emission reductions are 90,531tCO₂e as per registered PDD. The monitoring period covers 1277 days. The ex-ante emission reductions during this monitoring period are $90,531/365 \times 1277 = 316,734$ tCO₂e. The actual emission reductions in this period are 343,390 tCO₂e, which are 8% more than the estimated value. This will not influence the additionality. The increase may be because of the following two reasons, first, wind volume is larger than the wind volume estimation of project design. Second, the wind turbine generators operate well.

Appendix 1. Electricity Record and ER breakdown

Year	Month	EG _{to grid,y} (MWh)	EG _{from grid,y} (MWh)	EG _{facility,y} (MWh)	Sales receipt (MWh)	Min (EG _{facility} , receipt)	EF (tCO ₂ /MW h)	ER (tCO ₂)
2016	01/01/2016- 29/01/2016	8387.544	76.560	8310.984	8310.984	8310.984	0.8960	7446
	30/01/2016- 26/02/2016	7458.528	79.728	7378.800	7378.800	7378.800	0.8960	6611
	27/02/2016- 29/03/2016	12255.672	77.088	12178.584	12178.584	12178.584	0.8960	10912
	30/03/2016- 28/04/2016	15913.128	77.880	15835.248	15835.248	15835.248	0.8960	14188
	29/04/2016- 29/05/2016	11439.384	73.656	11365.728	11365.728	11365.728	0.8960	10183
	30/05/2016- 28/06/2016	11308.704	75.768	11232.936	11232.936	11232.936	0.8960	10064
	29/06/2016- 29/07/2016	8692.728	77.616	8615.112	8615.112	8615.112	0.8960	7719
	30/07/2016- 29/08/2016	5815.920	79.992	5735.928	5735.928	5735.928	0.8960	5139
	30/08/2016- 28/09/2016	7552.512	82.896	7469.616	7469.616	7469.616	0.8960	6692
	29/09/2016- 29/10/2016	7758.696	79.464	7679.232	7679.232	7679.232	0.8960	6880
	30/10/2016- 28/11/2016	6345.768	77.088	6268.680	6268.680	6268.680	0.8960	5616
	29/11/2016- 29/12/2016	7063.320	76.296	6987.024	6987.024	6987.024	0.8960	6260
	30/12/2016- 31/12/2016	601.920	4.752	597.168	597.168	597.168	0.8960	535
	Total in 2016	110593.824	938.784	109655.040	109655.040	109655.040		98245
2017	01/01/2017- 29/01/2017	7815.720	67.056	7748.664	7748.664	7748.664	0.8960	6942
	30/01/2017- 26/02/2017	7474.896	73.920	7400.976	7400.976	7400.976	0.8960	6631
	27/02/2017- 29/03/2017	12346.224	70.752	12275.472	12275.472	12275.472	0.8960	10998
	30/03/2017- 28/04/2017	16060.968	72.072	15988.896	15988.896	15988.896	0.8960	14326
	29/04/2017- 29/05/2017	11508.552	67.584	11440.968	11440.968	11440.968	0.8960	10251
	30/05/2017- 28/06/2017	11381.304	69.168	11312.136	11312.136	11312.136	0.8960	10135
	29/06/2017- 29/07/2017	8727.048	69.960	8657.088	8657.088	8657.088	0.8960	7756
	30/07/2017- 29/08/2017	5813.280	72.072	5741.208	5741.208	5741.208	0.8960	5144
	30/08/2017- 28/09/2017	7570.728	74.712	7496.016	7496.016	7496.016	0.8960	6716
	29/09/2017- 29/10/2017	7794.072	71.808	7722.264	7722.264	7722.264	0.8960	6919

	30/10/2017-28/11/2017	6359.760	71.016	6288.744	6288.744	6288.744	0.8960	5634
	29/11/2017-29/12/2017	7078.896	74.712	7004.184	7004.184	7004.184	0.8960	6275
	30/12/2017-31/12/2017	599.280	4.488	594.792	594.792	594.792	0.8960	532
	Total in 2017	110530.728	859.320	109671.408	109671.408	109671.408		98259
2018	01/01/2018-29/01/2018	8024.280	71.808	7952.472	7952.472	7952.472	0.8960	7125
	30/01/2018-26/02/2018	7658.112	78.408	7579.704	7579.704	7579.704	0.8960	6791
	27/02/2018-29/03/2018	12547.656	74.976	12472.680	12472.680	12472.680	0.8960	11175
	30/03/2018-28/04/2018	14435.520	76.560	14358.960	14358.960	14358.960	0.8960	12865
	29/04/2018-29/05/2018	11790.504	71.544	11718.960	11718.960	11718.960	0.8960	10500
	30/05/2018-28/06/2018	11659.824	73.392	11586.432	11586.432	11586.432	0.8960	10381
	29/06/2018-29/07/2018	8940.624	73.920	8866.704	8866.704	8866.704	0.8960	7944
	30/07/2018-29/08/2018	5955.840	76.824	5879.016	5879.016	5879.016	0.8960	5267
	30/08/2018-28/09/2018	7756.320	79.728	7676.592	7676.592	7676.592	0.8960	6878
	29/09/2018-29/10/2018	7984.680	76.296	7908.384	7908.384	7908.384	0.8960	7085
	30/10/2018-28/11/2018	6515.520	75.240	6440.280	6440.280	6440.280	0.8960	5770
	29/11/2018-29/12/2018	6970.920	79.992	6890.928	6890.928	6890.928	0.8960	6174
	30/12/2018-31/12/2018	601.920	5.016	596.904	596.904	596.904	0.8960	534
	Total in 2018	110841.720	913.704	109928.016	109928.016	109928.016		98489
2019	01/01/2019-29/01/2019	6434.208	49.632	6384.576	6384.576	6384.576	0.8960	5720
	30/01/2019-26/02/2019	6248.352	55.968	6192.384	6192.384	6192.384	0.8960	5548
	27/02/2019-29/03/2019	10320.288	53.592	10266.696	10266.696	10266.696	0.8960	9198
	30/03/2019-28/04/2019	12395.856	54.912	12340.944	12340.944	12340.944	0.8960	11057
	29/04/2019-29/05/2019	9620.160	51.216	9568.944	9568.944	9568.944	0.8960	8573
	30/05/2019-28/06/2019	8721.504	52.272	8669.232	8669.232	8669.232	0.8960	7767
	total (1/1/2019-28/6/2019)	53740.368	317.592	53422.776	53422.776	53422.776	0.8960	47863.000
	29/06/2019-30/06/2019	601.920	5.016	596.904	596.904	596.904	0.8960	534
	Total in 2019	54342.288	322.608	54019.680	54019.680	54019.680		48397
	Total (1/1/2016-28/6/2019)	385706.640	3029.400	382677.240	382677.240	382677.240		342856

	Total (1/1/2016- 30/6/2019)	386308.560	3034.416	383274.144	383274.144	383274.144		343390
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