MONITORING REPORT FORM (F-CDM-MR)
Version 02.0

MONITORING REPORT

Title of the project activity	Çanakkale WPP
Reference number of the project activity	GS 906
Version number of the monitoring report	3
Completion date of the monitoring report	29/11/2012
Registration date of the project activity	03/08/2012
Monitoring period number and duration of this monitoring period	1st periodic monitoring report 11/02/2011- 31/08/2012 (both days are included)
Project participant(s)	Enerjisa Enerji Üretim A.Ş.
Host Party(ies)	Turkey
Sectoral scope(s) and applied methodology(ies)	Sectoral Scope:1, category "Energy Industries (renewable/ non- renewable sources)" Applied methodology: ACM0002 version 12.1
Estimated amount of GHG emission reductions or net anthropogenic GHG removals by sinks for this monitoring period in the registered PDD	55,878 tCO2e/year
Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period	79,298 tCO2e

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

Çanakkale Wind Power Plant is located between Üvecik Village and Mahmudiye Town of Çanakkale Province in the Western part of Turkey. The total installed capacity is 29.9 MW and annual electricity generation is estimated to be 91,570 MWh. The project consists of 13 Siemens SWT 101 wind turbines, each having a capacity of 2.3 MWs. The electricity will be transmitted to an existing substation at Çanakkale Natural Gas Fired Power Plant via an underground power line.

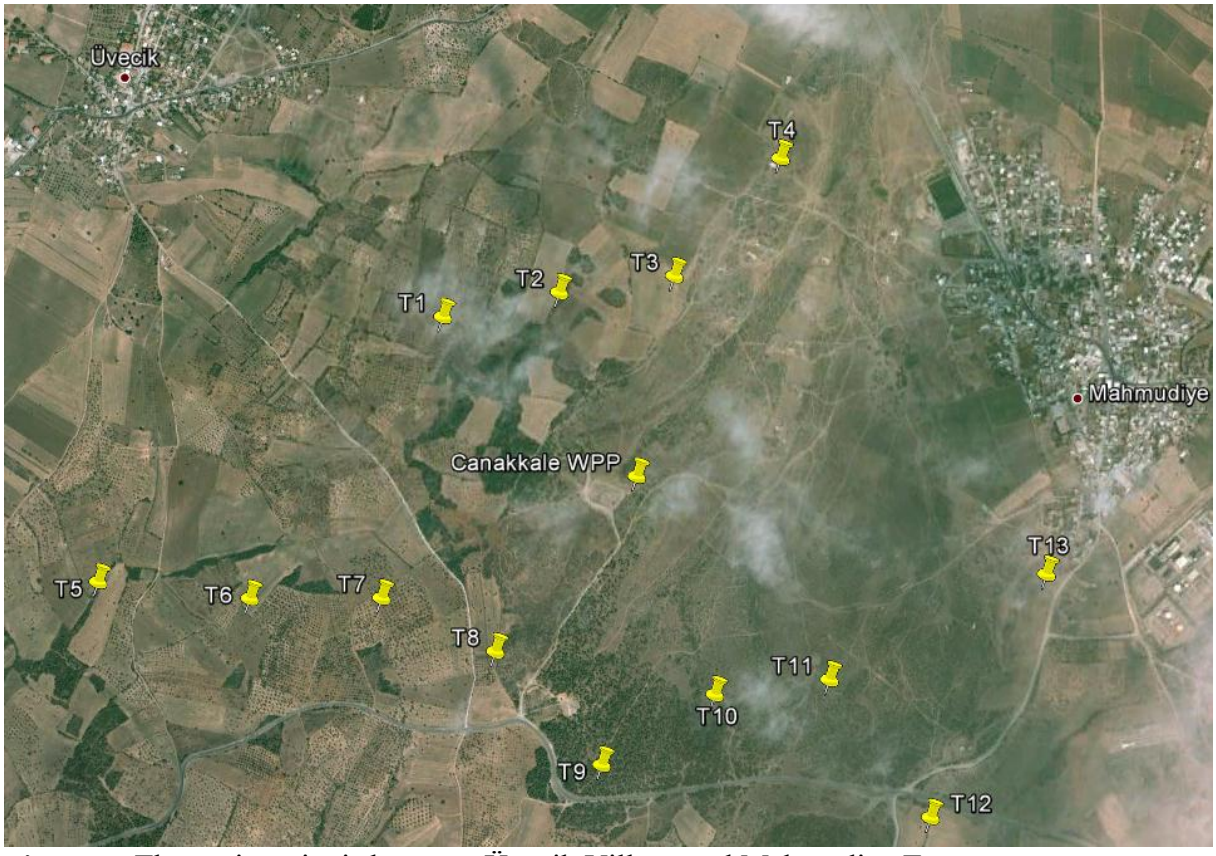


Figure.1. The project site is between Üvecik Village and Mahmudiye Town.

The purpose of the Project is to produce renewable electricity using wind as the power source and to contribute to Turkey's growing electricity demand through a sustainable and low carbon technology. The project will displace the same amount of electricity generated by the grid dominated with fossil fired power plants. The annual emission reduction estimated by the project is 55,878 tonnes of CO2eq.

The project was operational on 11/02/2011[1] and registered on 03.08.2012 under the Gold Standard Registry with the registration number GS906.The project timeline is given in the table below:

Table.1. Time schedule of the project development

[1] The temporary ministry acceptance protocol dated 11/02/2011 is provided to the DOE.

Activity	Date
License	21.02.2008
Consultancy agreement for carbon asset development	19.12.2008
Finance secured	02.03.2009
Board decision	25.03.2009
Turbine purchase and service agreement	01.04.2009
Stakeholder meeting	14-15.07.2009
Feasibility study finalized	08.09.2009
EIA exemption letter	September.2009
Construction agreement	28.04.2010
Commissioning	11.02.2011 and 06/05/2011
Final Validation Report	13.09.2012
Registration	03.08.2012

A.2. Location of project activity

Mahmudiye Town and Üvecik Village, Çanakkale Province, Turkey. Please see below the coordinates of the turbines as per the current generation license:

Table 2: Coordinates of the turbines

	E	N
T1	433141	4414154
T2	433435	4414261
T3	433739	4414308
T4	434019	4414624
T5	432220	4413490
T6	432626	4413451
T7	432986	4413460

	E	N
T8	433289	4413317
T9	433558	4413026
T10	433854	4413211
T11	434154	4413253
T12	434422	4412897
T13	434727	4413532

With regard to the project coordinates, the latitude is 39° 52' 14.83" N, and the longitude is 26° 13' 26.86" E, a representative midpoint which has been selected for the project coordinates.

A.3. Parties and project participant(s)

Party involved ((host) indicates a host Party)	Private and/or public entity(ies) project participants (as applicable)	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
Turkey (host country)	Enerjisa Enerji Üretim A.Ş. (Private entity)	No

A.4. Reference of applied methodology

The applied methodology is ACM0002 "Consolidated baseline methodology for grid connected electricity generation from renewable sources", version 12.1.[2]

A.5. Crediting period of project activity

Crediting period of seven years. The first crediting period is from 11/02/2011 to 10/02/2018.

SECTION B. Implementation of project activity

B.1. Description of implemented registered project activity

The Project Scenario entails the installation of thirteen Siemens SWT 101 wind turbines, each having a capacity of 2.3 MW. The turbines are 3 bladed with a horizontal axis. The turbine blades have the ability to change angles according to wind direction. The towers will have a hub height of 80 m. The diameter of the blades is 101m.

[2] For more information regarding methodologies please refer to http://cdm.unfccc.int/methodologies/index.html

The turbines are connected to the substation at the natural gas fired power plant operated by the project owner, then to the grid via 154kV Çan electricity transmission line. The metering has been done at substation before electricity is fed into the grid.
The turbines have a predicted life of 20 years from the manufacturer. The wind speeds in the area and predicted capacity factors are within the manufacturer's specifications for this predicted life. The Load Factor was derived from research done by Natural Power and is taken to be 35%.[3]
The amount of electricity generated by the project is not influenced by factors outside the project boundary such as other power plants or demand for electricity. Rather, the governing factor is the wind speed at the project site.

With regard to the actual operation of the project activity, the first temporary acceptance protocol signed by the Ministry of Energy and Natural Resources is dated 11/02/2011 for the commissioning of the 11 turbines. The second temporary acceptance protocol with the Ministry was signed on 06/05/2011 for the remaining two turbines.[4]

Please see below the meter specifications:

Table 3: Specifications of the meters

Specifications	**Main Meter**	**Back-up Meter**
Manufacturer:	ACTARİS	ACTARİS
Type:	SL761A071	SL761BXXX
Serial No:	53035219	35004263
Accuracy class:	0.2	0.5
Date of initial installation:	21/04/2009	03/08/2009
Date of initial calibration:	21/04/2009	03/08/2009
Calibration frequency:	Every 10th year	Every 10thyear

During the first monitoring period, neither special events such as overhaul times, downtimes of equipment, exchange of equipment nor events which may affect the applicability of the methodology have been experienced.

B.2. Post registration changes

B.2.1. Temporary deviations from registered monitoring plan or applied methodology

No deviations occurred.

B.2.2. Corrections

None.

B.2.3. Permanent changes from registered monitoring plan or applied methodology

None.

[3] Table 1.1 on Page 1 of "Wind Speed Analysis and Power Production Assessment for Mahmudiye Wind Farm (P50 Value is a load of 3,062 hours per year)
[4] Both of the Ministry acceptance protocols have been presented to the DOE.

B.2.4. Changes to project design of registered project activity

None.

B.2.5. Changes to start date of crediting period

None.

B.2.6. Types of changes specific to afforestation or reforestation project activity
N/A

SECTION C. Description of monitoring system

Monitoring parameters

According to the methodology applied, ACM0002, the electricity supplied to the national grid by the proposed project and the electricity consumed by the project activity shall be monitored. The net electricity is the difference of the electricity supplied and consumed by the project and shall be taken into account for emission reduction calculations.

Monitoring Organization and System

The Project Owner is responsible for the overall management of the monitoring procedures including recording, data collection, calculating emission reductions and project emissions.
Monthly power meter readings are the basis for monitoring net electricity fed into the grid. Those readings are done by governmental officers accompanied with an observer from the project owner company at the end of each month. A measuring protocol is prepared including day, peak and night hour electricity generation of the plant and signed and approved by both parties.[5]
The gross electricity produced is controlled and managed by means of a sophisticated electronic system (Web WPS SCADA). This system offers remote control and a variety of status views and useful reports from a standard internet web browser. The status view present electrical and mechanical data, operation and fault status, meteorological data and grid station data. The system offers remote control and a variety of status views and useful reports from a standard internet web browser. The status views present electrical and mechanical data, operation and fault status, meteorological data and grid station data. In addition to Web WPS SCADA system, the turbine is equipped with a web-base Turbine Condition Monitoring (TCM) system. The TCM system carries out precise condition diagnostics on main turbine components continuously and in real time. It gives early warning of possible component failures by continuous comparison of current vibration spectra with previously established reference spectra. The TCM system has various alarm levels, from informative through alerting level to turbine shutdown.
The gross electricity generated does not comprise the energy losses through transformer before electricity fed into the national grid. Therefore, subtracting the internal consumption from the gross generation the project owner cross-checks the data presented in the monthly power meter reading reports.

[5] The monthly reading protocols are provided to the DOE.

Data Management and Quality Control

Two power meters are installed at the grid interface of the proposed project. One is the main meter and the other is the back-up meter of the main meter for cross-checking. Both meters are jointly inspected and sealed in order to be protected from interference by any of the parties.
The main and spare meter readings are recorded monthly and cross-checked whether calibration is required. The capacity of the transmission line connected is 154 kVA, the accuracy class for main power meter has been defined in the Communiqué for Power Meters[6] as 0.2S class. The back-up meter has accuracy class of 0.5S. The calibration will be implemented in accordance with the related standard procedures (IEC-EN 60687) by either TEIAS or the provider company in the name of TEIAS.
When the main meter has a breakdown, the readings of the back-up meter will be used. If both meters fail, conservative data substitution procedures based on the internal SCADA data will be used.
All data collected as part of monitoring will be archived electronically by the project owner and be kept at least for 2 years after the end of the last crediting period.

Monitoring data for Sustainable Development Matrix Indicators

Environmental and social commitments of the project have been monitored and reported by a third party consultant. Two reports were prepared for the construction period:

1. Auditing Environmental and Social Commitments of Çanakkale Wind Farm Project –July 2010

2. Auditing Environmental and Social Commitments of Çanakkale Wind Farm Project – October 2010

The consultants audit the environmental status of the project and detect non-compliance issues. The following environmental and social parameters are reviewed:

Parameter	Audit Activity
Noise	Main noise generating activities are detected. If received, complains are evaluated and compliance with Turkish Regulations on Assessment and Management of Environmental Noise and IFC/WB limits are confirmed.
Air Quality	Main air pollutants during construction period are monitored by site visits. Mitigation measures are checked.
Waste	Waste is classified in three categories: hazardous, non-hazardous and domestic waste. The regulation for Waste Management General Principles requires in general that waste production and its negative impacts should be minimize, different types of wastes should be separately collected, waste should be stored, transported and disposed in a way that they will not cause pollution in environmental components e.g. soil, groundwater, surface water, air, human health. Compliance with the regulation is evaluated.
Hazardous Waste	Hazardous waste should be stored in proper storage areas and any leakage incidents should be reported.
Water Supply	How water is supplied and possible impacts on existing water resources

[6] http://www.epdk.gov.tr/web/elektrik-piyasasi-dairesi/44

	are evaluated.
Wastewater	Main wastewater resources are determined and whether they are properly discharged or not is checked.
Contaminated Soil	During the transfer or use of additives and fuels, the potential release and impact on soil are evaluated.
Natural Resources	Possible impacts on flora and fauna are evaluated.
Cultural Estates	Above and underground cultural and natural resources or archeological remains are determined.
Visual Management	General visual impacts are observed. The campsite should be compact, kept clean and well maintained.
Environmental Permits	Legal compliance with existing laws is reviewed.
Audits	Other environmental audits undertaken by different parties are reviewed.
Social Commitments	Social activities are determined and summarized. Quantity of employment is also reported. Compliance with the commitments is checked.

Seasonal monitoring during migration periods are done and academic report is prepared.

Quality of employment is monitored through the job related trainings and certificates given to the personnel. The personnel names and training certificates are listed below:

No	Personnel Name	Training Certificate
1	Olgu Durdu	Otoprodüktör Temel Eğitimi (Ç.B.)
2	Erdinç Bora	Otoprodüktör Eğitimi
3	Halil Gençel	Özel sektör Otoprodüktör (Elektrik) Eğitimi
4	Kadir Durmaz	Otoprodüktör Elektrik Eğitimi

Quantity of employment is showed by social security records.

Technology transfer and technological self-reliance is shown by the expenses paid to the purchase of equipment and service received from Siemens.

SECTION D. Data and parameters
D.1. Data and parameters fixed ex ante or at renewal of crediting period

Data/Parameter	EF
Unit	tCO2e/MWh
Description	Emission factor of the Turkish grid estimated ex-ante
Source of data	Calculated
Value(s) applied	0.610
Purpose of data	To calculate the emission reduction of the project activity
Additional comment	-

D.2. Data and parameters monitored

Data/Parameter	EG_y
Unit	MWh
Description	Net electricity generated by the power plant in year y
Measured/Calculated /Default	Measured
Source of data	Monthly official electricity metering reports issued by governmental officers and signed by both parties.
Value(s) of monitored parameter	
Monitoring equipment	Electricity meters
Measuring/Reading/ Recording frequency	Continuously measured,monthly recorded
Calculation method (if applicable)	The net electricity is the difference of the electricity supplied and consumed by the project and shall be taken into account for emission reduction calculations.
QA/QC procedures	-
Purpose of data	To determine the annual emission reduction by displacing the same amount of electricity that would otherwise been used from the national grid which is heavily composed of fossil fuel fired plants.
Additional comment	Both the project participant and TEİAŞ perform the readings and compare the values. The results are cross checked from the official website of TEİAS. TEİAS is responsible for calibration and maintenance of the devices.

No		1
Indicator		Air quality
Mitigation measure		Dust mitigation measures will be implemented to minimize dust generation during construction.
Chosen parameter		Dust dispersion
Current situation of parameter		Below the limits of the related regulation.[7]
Estimation of baseline situation of parameter		There is no construction activities at the project area.
Future target for parameter		To keep at minimum during construction.
Way of monitoring	**How**	Audit reports dated July 2010 and October 2010 prepared by AECOM[8] and pre- EIA Report Dokay Environmental Engineering Company dated September 2009.
	When	Quarterly during construction
	By who	Third party consultant; AECOM

No	2

[7] As per the regulation on the air pollution control, the limit is 1.5 kg/h. Please see section 1.e.1.3 of the pre-EIA Report. prepared Dokay Environmental Engineering Company dated September 2009.

[8] Both of the reports have been presented to the DOE.

Indicator		Water quality and quantity
Mitigation measure		Wastewater generated will directly be connected to the sewage of the Municipality.
Chosen parameter		Wastewater connection to the sewage.
Current situation of parameter		Water Pollution Control regulation has been complied.[9]
Estimation of baseline situation of parameter		No wastewater discharge to the environment.
Future target for parameter		No wastewater discharge to the environment.
Way of monitoring	**How**	Audit reports dated July 2010 and October 2010 prepared by AECOM
	When	Quarterly during construction
	By who	Third party consultant; AECOM

No		3
Indicator		Soil condition
Mitigation measure		Excavated material and domestic waste will be deposited and disposed properly.
Chosen parameter		Storage of excavated material and waste.
Current situation of parameter		The excavated material has been used for landscaping and domestic waste has been collected at waste containers and transferred to Mahmudiye Municipality waste storage site.[10]
Estimation of baseline situation of parameter		No waste or excavated material exists in the field.
Future target for parameter		None
Way of monitoring	**How**	Audit reports dated July 2010 and October 2010 prepared by AECOM and pre- EIA Report Dokay Environmental Engineering Company dated September 2009.
	When	Quarterly during construction
	By who	Third party consultant; AECOM

No		4
Indicator		Soil condition
Mitigation measure		Hazardous waste (waste oil and fuel) will be handled appropriately in closed containers and transported by licensed transporters to the licensed processing and disposal facilities.
Chosen parameter		Storage of hazardous waste.
Current situation of parameter		Handling of hazardous waste has been conducted as per the related regulation, "Household Hazardous Waste" [11]
Estimation of baseline situation of parameter		No chemical leakage exists in the project site.
Future target for parameter		No hazardous waste leakage.
Way of monitoring	**How**	Audit reports dated July 2010 and October 2010 prepared by AECOM and the pre-EIA prepared by Dokay Environmental Engineering Company dated September 2009.
	When	Quarterly during construction and once for each year of operation
	By who	Third party consultant during construction and then the project

[9] Official Gazette No. 25687 dated December 31, 2004.
[10] Please see sections 1.c.1 and 1.c.2 of the pre- EIA Report Dokay Environmental Engineering Company dated September 2009.and AECOM Audit Report October 2010 section 2.8 and section 2.3
[11] Please see section 1.c.9 of pre- EIA.

		owner

No		5
Indicator		Soil condition
Mitigation measure		The installation of turbines will be realized without giving any damage to agricultural activities.
Chosen parameter		The installation of turbines
Current situation of parameter		No damage to agricultural activities.
Estimation of baseline situation of parameter		Damage to agricultural activities during turbine installation
Future target for parameter		No damage to agricultural activities.
Way of monitoring	**How**	Audit reports dated July 2010 and October 2010 prepared by AECOM
	When	Quarterly during construction
	By who	Third party consultant during construction

No		6
Indicator		Other pollutants
Mitigation measure		-Turbines with reduced noise operation systems will be selected. -Positioning will be done in terms of possible noise emissions. -The turbines are equipped with optional noise reduced power operation mode. -Mitigation measures to lower the noise pollution in the nearest houses.
Chosen parameter		Noise monitoring during daytime and nighttime including the nearest residents.
Current situation of parameter		Below limits (51.7 dBA) allowed by Turkish regulations. [12]
Estimation of baseline situation of parameter		Below limits allowed by Turkish regulations.
Future target for parameter		Limits provided in Regulation on Assessment and Management of Environmental Noise.
Way of monitoring	**How**	The Noise measurement reports prepared by third parties for the operational phase dated 10/02/2011 and 16/02/2012[13] for the first monitoring period and local interviews.
	When	Once for each year of operation
	By who	Project site team

With respect to ***FAR#01*** *(raised by the validation DOE): It has be checked during the first verification if the noise measurements were carried out complete and a professional way (third party expert) considering adverse conditions like high wind speed and wind direction to the house. Also it has to be checked if any additional measures have been addressed.):*

Noise monitoring is done annually and in case any complaints are received. So far, two noise measurement reports, dated 10/02/2011 and 27.12.2011 were prepared by the third party. In both of these reports, it has been contented that the measured values stay below the values presented in the related regulation.[14]

[12] The regulation requires that the noise level during operatinal phase should be below 55 dBA. Please see the pre-EIA Report section 1.e.1.5. page 18_

[13] The noise measurement reports have been provided to the verifying DOE.

[14] Both of the noise measurement reports have been presented to the DOE.

No		7
Indicator		Biodiversity
Mitigation measure		-Wind turbines will be painted and lighting will be installed of minimize the risk of bird collision. -Storm water management measures.
Chosen parameter		Number of effected birds and bats
Current situation of parameter		No bird fatalities, 9 bat fatalities
Estimation of baseline situation of parameter		No barrier for bird and bat flights
Future target for parameter		None
Way of monitoring	**How**	Bat and Bird monitoring report dated January 2012 prepared by a third party[15]
	When	At the end of the first and second year of operation
	By who	Project site team

No		8
Indicator		Biodiversity
Mitigation measure		-New trees are planted for the compensation of trees that were cut during the construction phase.[16] -Compensation is paid.[17]
Chosen parameter		Number of trees planted
Current situation of parameter		250 trees are planted
Estimation of baseline situation of parameter		No trees are planted
Future target for parameter		None
Way of monitoring	**How**	Biodiversity monitoring
	When	First and second year of operation
	By who	Project site team

No		9
Indicator		Quality of Employment
Mitigation measure		The project will train all employees on construction and operation of the plant. The project owner is willing to ensure safety at the site.
Chosen parameter		Number of operation related trainings
Current situation of parameter		Employees have been trained.
Estimation of baseline situation of parameter		Labour culture as usual.
Future target for parameter		All of the workers will be trained on environmental and health & safety issues.
Way of monitoring	**How**	Certificates, Training records[18]
	When	First year of operation
	By who	Project site team

No		10

[15] The report has been provided to the DOE.
[16] The supporting document is dated 2010 and presented to the DOE.
[17] The compensation document has been presented to the DOE.
[18] Training records and certificates have been presented to the DOE.

Indicator		Livelihood of the poor
Mitigation measure		Resettlement Action Plan[19] to be implemented to ensure that people and enterprises affected by the projects are compensated.
Chosen parameter		Payment of compensation to land owners and affected people without a land title.
Current situation of parameter		Compensation paid to the affected villages.
Estimation of baseline situation of parameter		No land acquisition
Future target for parameter		To be determined by buyer-seller agreements or independent evaluators.
Way of monitoring	**How**	Completion Audit Report dated June 2012 prepared by Social Risk Management, LLC[20] and Resettlement Action Plan dated March 2010 prepared by Social Risk management, LLC.
	When	At the end of first year of operation.
	By who	Third party consultant

No		11
Indicator		Livelihood of the poor
Mitigation measure		N/A
Chosen parameter		Improved sanitation.
Current situation of parameter		Drinking water pipes are made of asbestos-cement pipes.
Estimation of baseline situation of parameter		Undeveloped sanitation
Future target for parameter		Water pipes to be replaced by plastic ones.
Way of monitoring	**How**	Completion Audit report dated June 2012 prepared by Social Risk Management, LLC
	When	At the end of construction phase
	By who	Third party consultant

No		12
Indicator		Human and institutional capacity
Mitigation measure		N/A
Chosen parameter		Support to education.
Current situation of parameter		Education supported.
Estimation of baseline situation of parameter		No support to education
Future target for parameter		Improved educational activities
Way of monitoring	**How**	Completion Audit report dated June 2012 prepared by Social Risk Management, LLC.
	When	At the end of construction phase
	By who	Third party consultant

No	13
Indicator	Quantitative employment and income generation
Mitigation measure	N/A
Chosen parameter	Number of temporary and permanent jobs created for local people.
Current situation of parameter	Jobs created.
Estimation of baseline situation of	Jobless locals

[19] Resettlement Action Plan has been presented to the DOE.
[20] The Completion Audit Report has been presented to the DOE.

parameter		
Future target for parameter		Construction workers and security guards to be employed from the neighbouring town and the village.
Way of monitoring	**How**	Social security records
	When	Once during construction and once in first year of operation.
	By who	Project site team

No		14
Indicator		Quantitative employment and income generation
Mitigation measure		N/A
Chosen parameter		Support to local economical activities
Current situation of parameter		The village square needs improvement to attract tourists for shopping.
Estimation of baseline situation of parameter		None
Future target for parameter		The shops and the pool will be re-organized.
Way of monitoring	**How**	Completion Audit report dated June 2012 prepared by Social Risk Management, LLC.
	When	At the end of construction phase
	By who	Third party consultant

No		15
Indicator		Technology transfer and technological self-reliance
Mitigation measure		N/A
Chosen parameter		Expenditures for imported equipment.
Current situation of parameter		Equipment imported.
Estimation of baseline situation of parameter		No technology transfer
Future target for parameter		13 turbines exported from Germany
Way of monitoring	**How**	Purchase contracts for turbines and origin certificates[21]
	When	Once
	By who	Project team, and theverification DOE validated on site visit that the equipment are imported from Siemens.

D.3. Implementation of sampling plan
N/A

SECTION E.

SECTION F. Calculation of emission reductions or GHG removals by sinks
F.1. Calculation of baseline emissions or baseline net GHG removals by sinks

According to the baseline methodology ACM0002, the emission reduction ERy by the project activity during a given year y is defined as;
$ER_y = BE_y - PE_y$

[21] The EM Contract has been presented to the DOE.

Where:
ER_y: Emission reductions achieved by the project activity in year y (tCO2e).
BE_y: Baseline Emission in year y (tCO2e).
PE_y: Project Emission in year y (tCO2e).
Project emissions are taken as zero as per the methodology. Therefore;
$ER_y = BE_y$

The electricity meters are measuring two parameters: The electricity supplied to the grid (EG_{export}) and the electricity consumption from the grid (EG_{import}). To achieve the net amount of supplied electricity, the difference has to be calculated:

$$GEN_y = EG_{export} - EG_{import}$$

Where:

GEN_y = Net electricity supplied to the Grid in MWh
EG_{export} = Electricity supplied to the Grid in MWh
EG_{import} = Electricity consumption from the Grid in MWh
According to the applied methodology version the emission reduction is the baseline emissions calculated as the net electricity supplied to the grid multiplied by the grid emission factor.

The baseline emissions are the product of electrical energy baseline EGBL, y expressed in MWh of electricity produced by the renewable generating unit multiplied by the grid emission factor:

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

where :

BE_y	: Baseline emissions in year y (tCO_2/y)
$EG_{PJ,y}$	: Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y (MWh)
$EF_{grid,CM,y}$	:Combined margin CO_2 emission factor for grid connected power generation in year y calculated by using the latest version of the "Tool to calculate the emission factor for an electricity system " (tCO_2/MWh)

$EF_{grid,CM,y}$ value is fixed as **0.610 tCO_2/MWh** for the crediting period of seven years.

The table below shows the baseline emissions for the verification period:

Months	(A) Electricity Supplied to the Grid (MWh)	(B) Electricity Consumed by the Project (MWh)	(C) = (A)- (B) Net Electricity Supplied (EG) (MWh)	(ER= EG*EF) Emission reductions achieved (tCO2)
11-28 February 2011	4,896.44	3.99	4,892.450	2,984
March 2011	6,789.561	13.230	6,776.331	4,133
April 2011	6,070.470	10.770	6,059.700	3,696
May 2011	5,213.242	19.900	5,193.342	3,167
June 2011	4,659.860	22.660	4,637.220	2,828
July 2011	4,849.000	25.470	4,823.530	2,942
August 2011	9,827.820	6.710	9,821.110	5,990
September 2011	7,255.300	7.950	7,247.350	4,420
October 2011	8,919.470	9.100	8,910.370	5,435
November	7,760.730	12.440	7,748.290	4,726
December 2011	7,866.400	17.150	7,849.250	4,788
Vintage '11			**73,958.92**	**45,114**
January 2012	9,650.64	9.53	9,641.11	5,881
February 2012	6,927.26	14.95	6,912.31	4,216
March 2012	5,806.81	19.21	5,787.6	3.530
April 2012	8,360.48	8.53	8,351.95	5.094
May 2012	3,820.42	29.55	3,790.87	2.312
June 2012	6,930.83	19.69	6,911.14	4.215
July 2012	7,899.17	11.99	7,887.18	4.811
August 2012	6,773.97	15.16	6,758.81	4,122
Vintage'12			**56,040.97**	**34,184**
Sum			**129,999.89**	**79,298**

F.2. Calculation of project emissions or actual net GHG removals by sinks

None

F.3. Calculation of leakage

No leakage is to be accounted by the Project. This is in line with the registered PDD and applicable methodology ACM0002 version 12.1. Therefore;
L= 0 tCO2-eq

F.4. Summary of calculation of emission reductions or net anthropogenic GHG removals by sinks

The total emission reductions can be calculated with the results of the below described equation:
ER = BE − PE − L
Where:
ER = Emission reductions in tCO2-eq
BE = Baseline emissions in tCO2-eq
PE = Project emissions in tCO2-eq
L = Leakage emissions in tCO2-eq

Total baseline emissions (BE): 79,298 tCO2-eq
Total project emissions (PE): 0 tCO2-eq
Total leakage (L): 0 tCO2-eq
It can be followed that the emission reductions of the project activity is equal to the baseline emissions.

The emission reductions per vintage and for the period which is covered by this monitoring report are therefore:

Time Period	Baseline emissions or baseline net GHG removals by sinks (tCO_2e)	Project emissions or actual net GHG removals by sinks (tCO_{2e})	Leakage (tCO_2e)	Emission reductions or net anthropogenic GHG removals by sinks (tCO_2e)
11/02/2011-31/12/2011	45,114	0	0	45,114
01/01/2012-31/08/2012	34,184	0	0	34,184
11/02/2011-31/08/2012	79,298	0	0	79,298

F.5. Comparison of actual emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Item	Values estimated in ex-ante calculation of registered PDD	Actual values achieved during this monitoring period
Emission reductions or GHG removals by sinks (tCO_2e)	55,878 tCO2e/year	79,298 tCO2e

F.6. Remarks on difference from estimated value in registered PDD

The estimated annual emission reduction value calculated ex-ante in the registered PDD can be regarded as consistent with the actual values. The values estimated in ex-ante calculation of registered PDD covers one year of operation whereas the actual emission reduction calculation covers the one and a half year of operation.
The estimated emission reduction per month is 4,656.5 tCO2e. The first monitoring period entails the one-and-a-half year of electricity generation; therefore the actual emission reduction per month can be averaged as 4,173 tCO2e. As a result, the difference between the estimated and actual values can be regarded as negligible.

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History of the document

Version	Date	Nature of revision
02.0	EB 66 13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01	EB 54, Annex 34 28 May 2010	Initial adoption.
Decision Class: Regulatory **Document Type**: Form **Business Function**: Issuance		