

**MONITORING REPORT FORM (CDM-MR)**  
**Version 01****CONTENTS**

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**Appendix 1:** Metering arrangement for the project activity.



**MONITORING REPORT**  
**Version 1.0 and Date 13/12/2010**

**Title: Bundled wind power project in Chitradurga (Karnataka in India) managed by Enercon (India) Ltd.**  
**Project Reference No: 0276**  
**Monitoring Period – THIRD MONITORING PERIOD: FROM 01/07/2007 TO 31/12/2009**  
**(including first and last day)**

**SECTION A. General description of the project activity**

**A.1. Brief description of the project activity: >>**

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The project activity includes development, design, engineering, procurement, finance, construction, operation and maintenance of wind farm connected to the grid, with aggregate installed capacity of 16.8 MW, located within a wind park. The individual subprojects of the project activity are as follows:

1. Enercon Wind Farms (India) Limited (EWFIL) with capacity of 8.4 MW
2. CEPCO Industries Limited (CEPCO) with capacity of 8.4 MW

The aggregate 16.8 MW project activity comprises of 28 numbers of Enercon-make E-40 wind converters, with each machine having a capacity of 600kW. Enercon (India) Ltd (EIL) is the turbine supplier and is the operations and maintenance contractor. The generated electricity is being supplied to Karnataka Power Transmission Company Limited (“KPTCL”) under long-term power purchase agreement (PPA). The purpose of the project is to generate clean energy by displacing grid power which is majorly fossil fuel based in the host country, thereby ultimately leading to sustainable economic and environmental development. The specifications of E-40 machine are given in section A.4 of the monitoring report.

The first machine under the project activity was commissioned on 3<sup>rd</sup> August 2001 and last machine under the project activity was commissioned on 4<sup>th</sup> June 2002. The expected operational lifetime of the project is for 20 years. The total emission reductions achieved under this monitoring period (01 July 2007 to 31 December 2009) is **1, 12,851 tCO<sub>2</sub>**.

**A.2. Project Participants**

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Name of Party involved ((host) indicates a host Party)	Private and/or public entity(ies) project participants (*) (as applicable)	Kindly indicate if the Party involved wishes to be considered as project participant (Yes/No)
Govt. of India (Host)	Enercon India Limited (EIL)	No
Govt. of Netherlands	IFC-Netherlands Carbon Facility (INCaF)	No

**A.3. Location of the project activity:**



&gt;&gt;

The project activity is located in the Jogimatti Wind Zone at Chitradurga District in Karnataka, India. The existing EIL's wind farms are located between 15°10'N and 15°12'N latitude and 76°38'E and 76°42'E longitude. The nearest railway station is at Chitradurga.

**A.4. Technical description of the project**

&gt;&gt;

The Project Activity involves 28 numbers of Enercon made E-40, 600 kW rated Wind energy Converters (WECs) with internal electrical lines connecting the projects with local evacuation facility including local receiving station at Kakkeharavu and a 32 km long 66 kV Double Circuit line connecting the Wind Park with the local KPTCL 66 kV substation.

- Gearless Construction - Rotor & Generator Mounted on same shaft eliminating the Gearbox.
- Variable Speed function ensuring optimum efficiency at all times, having speed range of 18 to 33 RPM.
- Variable Pitch functions ensuring maximum energy capture.
- Near Unity Power Factor at all times.
- Minimum drawl (less than 1 % of kWh generated) of Reactive Power from the grid.
- No voltage peaks at any time.
- Operating range of the WEC with voltage fluctuation of -20 to +20%.
- Less Wear & Tear since the system eliminates mechanical brake, which are not needed due to low speed generator which runs at maximum speed of 33 rpm and uses Air Brakes.
- Three Independent Braking System.
- Generator achieving rated output at only 33 rpm.
- Incorporates lightning protection system, which includes blades.
- Starts Generation of power at wind speed of 3 m/s.

**A.5. Title, reference and version of the baseline and monitoring methodology applied to the project activity:**

&gt;&gt;

The applied baseline and monitoring methodology for the project activity is 'Consolidated baseline methodology for grid-connected electricity generation from renewable sources', **ACM0002, Version 03** and 'consolidated monitoring methodology for zero-emissions grid-connected electricity generation from renewable sources', **ACM 0002, Version 03**

**A.6. Registration date of the project activity:**

&gt;&gt;

12/05/2006

**A.7. Crediting period of the project activity and related information (start date and choice of crediting period):**

&gt;&gt;

Crediting period of the project activity as per registered PDD is from 3 June 2002 to 2 June 2012 (Fixed).

**A.8. Name of responsible person(s)/entity(ies):**

&gt;&gt;

Contact Information of Enercon (India) limited is given in the table below:

Organization:	Enercon (India) Limited
Street/P.O.Box:	Kolsite House, Plot No. 31, Shah Industrial Estate, Veera Desai Road, Andheri (West)
Building:	
City:	Mumbai
State/Region:	Maharashtra
Postfix/ZIP:	400 053
Country:	India
Telephone:	+91-22-5673 0085
FAX:	+91-22-5673 0092
E-Mail:	<a href="mailto:yogesh.mehra@enerconindia.net">yogesh.mehra@enerconindia.net</a>
URL:	
Represented by:	
Title:	Managing Director
Salutation:	Mr.
Last Name:	Mehra
Middle Name:	
First Name:	Yogesh
Department:	CEO
Mobile:	
Direct FAX:	+91-22-5673 0092
Direct tel:	+91-22-5673 0085
Personal E-Mail:	<a href="mailto:yogesh.mehra@enerconindia.net">yogesh.mehra@enerconindia.net</a>

Organization:	The Netherlands represented by its Ministry of Housing, Spatial Planning and the Environment acting through the International Finance Corporation, in its capacity as a Trustee of the IFC-Netherlands Carbon Facility (INCaF).
Street/P.O.Box:	2121 Pennsylvania Ave NW
Building:	
City:	Washington
State/Region:	DC
Postfix/ZIP:	20433
Country:	USA
Telephone:	202 473 4194
FAX:	202 974 4404
E-Mail:	<a href="mailto:carbonfinance@ifc.org">carbonfinance@ifc.org</a> , <a href="mailto:mparaan@ifc.org">mparaan@ifc.org</a>
URL:	<a href="http://www.ifc.org/carbonfinance">www.ifc.org/carbonfinance</a>
Represented by:	
Title:	Program Manager
Salutation:	Mr.



Last Name:	Widge
Middle Name:	
First Name:	Vikram
Department:	Carbon Finance, Environmental Finance Group, Environment and Social Development Department
Mobile:	
Direct FAX:	202-974-4404
Direct tel:	202-473-1368
Personal E-Mail:	<a href="mailto:carbonfinance@ifc.org">carbonfinance@ifc.org</a>

## SECTION B. Implementation of the project activity

### B.1. Implementation status of the project activity

&gt;&gt;

The first machine under the project activity was commissioned on 3<sup>rd</sup> August 2001 and last machine under the project activity was commissioned on 4<sup>th</sup> June 2002. The project activity consists of 28 machines (600 kWh) of Enercon make E-40. The commissioning date for all the machines included in the project activity is given in the table below.

Customer Name	No. Of Machines Commissioned	Date of Commissioning
Enercon Wind Farms (India) Limited	7	4 June 2002
	7	29 September 2001
Cepco Industries Limited	9	30 August 2001
	5	3 August 2001

The project activity does not involve any exchange of equipment or any special events during the said monitoring period; there has not been any change in the project activity after the commissioning. There are no issues during the monitoring period which may impact the applicability of the methodology.

### B.2. Revision of the monitoring plan

&gt;&gt;

The revision in monitoring was applied for by the PP and was approved by UNFCCC on 26-March 10.

### B.3. Request for deviation applied to this monitoring period

&gt;&gt;

Not Applicable

### B.4. Notification or request of approval of changes

&gt;&gt;

Not Applicable

## SECTION C. Description of the monitoring system

&gt;&gt;

**Metering:**



The Delivered Energy is metered at the high voltage side of the step up transformer installed at the Project Site. There are two project owners in the project activity (1) EWFIL with the capacity of 8.4 MW and (2) CEPCO with the capacity of 8.4 MW. All the 14 WEC's of EWFIL (E-1 to E-14) are pooled together at pooling station comprising of one main and one check meter. The 14 WEC's of CEPCO have the similar arrangement.

The meter readings are taken and recorded jointly by the representatives of transmission/distribution utility and Enercon. The monthly meter readings at the pooling station are taken on the first day of each month at 12 noon.

The delivered energy is transmitted to Enercon receiving station at Kakkeharavu, and then further transmitted to KPTCL substation at Pandarahalli as per the PPA. Other customers of the wind farm are also connected in Kakkeharavu receiving station. The transmission losses are calculated till the Kakkeharavu receiving station by the representatives of KPTCL as per the PPA .

The net electricity supplied to the grid is calculated by the transmission/distribution utility by subtracting the transmission losses measured at Kakkeharavu receiving station from the meter readings recorded at the pooling stations. The monthly meter readings at Kakkeharavu receiving station is also taken on first day of each month at 12 noon. The net electricity supplied to the grid is sourced from the Joint Meter Reading (Form B) and can be cross checked from the invoice.

The metering arrangement for the project activity is given in the diagram in **Appendix 1**.

**Metering Equipment:** Pooling station for both the customers and receiving station at Kakkeharavu contains a set of main and check meter of 0.2 accuracy class. The metering equipment shall be maintained in accordance with electricity standards. Such equipment shall have the capability of recording half-hourly and monthly readings.

**Procedure for computing net electricity supplied to the grid as given in the JMR (Form B) for the project activity is as follows:**

$$EGy = \sum j((Eej - 115\% * Eij) - Lj)$$

EGy : Electricity supplied to grid by the project activity

Eej : Electricity export noted at pooling station by individual sub projects j

Eij : Electricity import noted at pooling station by individual sub projects j

Gi : Generation of electricity by individual sub projects i (measured at the pooling station: Export-Import)

Lj : Transmission loss<sub>i</sub> allotted on each sub project j

The details of meters installed at the site for measuring export and import by project activity are provided below:

Meter and Sub-Project Owner	Serial Number	Accuracy Class	Make
Main Meter-Enercon Pooling Station	01987500	0.2	L&T



Check Meter-Enercon Pooling Station	01987519	0.2	L&T
Main Meter-CEPCO Pooling Station	01987490	0.2	L&T
Check Meter- CEPCO Pooling Station	01987484	0.2	L&T

The details of meters installed at receiving station at Kakkeharavu for the purpose of measuring and allotting transmission losses are provided below:

Meter Details	Serial Number	Accuracy Class	Make
Main Meter at receiving station (Line 1)	01958995	0.2	L&T
Check Meter at receiving station (Line 1)	01959004	0.2	L&T
Main Meter at receiving station (Line 2)	03074058	0.2	L&T
Check Meter at receiving station (Line 2)	03074065	0.2	L&T

#### Quality Control and Quality Assurance:

The QA/QC procedures have been applied as per the revised monitoring plan the details are as follows:

The readings of main meter and check meter have been checked continuously for maintaining the meter accuracy and for it the readings of main meter and check meter have been checked for any major variation i.e. more than 0.2%, There is no instance during the monitoring period wherein the difference between the main meter and check meter for net energy is greater than 0.2%.

The main and check meters of the sub-projects (EWFIL and CEPCO) are located at the respective pooling stations. The energy generated from the wind farm is transmitted to receiving station of Enercon (33/66 kV) located at Kakkeharavu which is further connected via 66 kV lines to KPTCL substation of Pandarahalli, the KPTCL substation of Pandarahalli is not used for the purpose of metering.

The details of calibration of meters installed at the site for measuring export and import by project activity are provided below:

Meter Location	Meter Serial Number	Calibration Dates	Calibration Certificate Reference number
CEPCO pooling station/main meter	01987490	21.08.2007	Dvg/RT/WF-05/505-09
		02.06.2008	Dvg/RT/F-WF-15/58/08-09/131-35
		13.08.2009	NA



CEPCO pooling station/check meter	01987484	21.08.2007	Dvg/RT/WF-05/505-09
		02.06.2008	Dvg/RT/F-WF-15/58/08-09/131-35
		13.08.2009	NA
EWFIL pooling station/ main meter	01987500	21.08.2007	Dvg/RT/WF-08/520-24
		02.06.2008	Dvg/RT/F-WF-15/58/08-09/131-35
		13.08.2009	NA
EWFIL pooling station/ check meter	01987519	21.08.2007	Dvg/RT/WF-08/520-24
		02.06.2008	Dvg/RT/F-WF-15/58/08-09/131-35
		13.08.2009	NA

The details of the meter calibration for the meters at receiving station at Kakkeharavu are provided below:

<b>Meter Details</b>	<b>Meter Serial Number</b>	<b>Calibration Dates</b>	<b>Calibration Certificate Reference number</b>
Main Meter at receiving station (Line 1)	01958995	21.08.2007	DVG/RT/WF-15/560-64
		02.06.2008	Dvg/RT/F-WF-15/58/08-09/131-35
		08.06.2009	WF-15
Check Meter at receiving station (Line 1)	01959004	21.08.2007	DVG/RT/WF-15/560-64
		02.06.2008	Dvg/RT/F-WF-15/58/08-09/131-35
		08.06.2009	WF-15

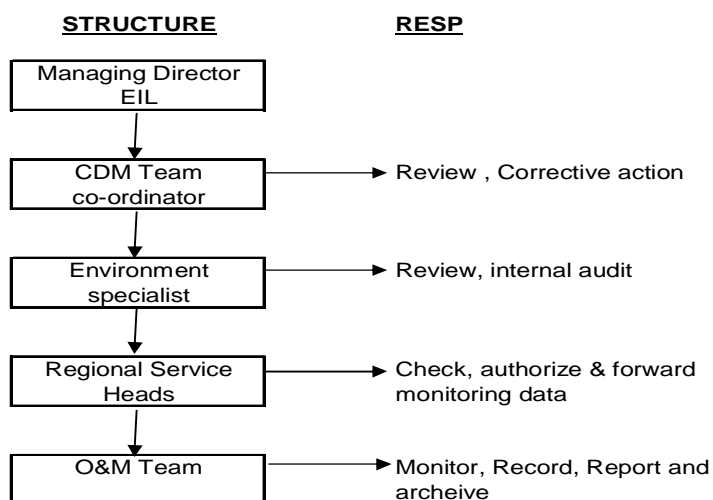




Main Meter at receiving station (Line 2)	03074058	21.08.2007	DVG/RT/WF-58/565-69
		02.06.2008	Dvg/RT/F-WF-15/58/08-09/131-35
		08.06.2009	WF-58
Check Meter at receiving station (Line 2)	03074065	21.08.2007	DVG/RT/WF-58/565-69
		02.06.2008	Dvg/RT/F-WF-15/58/08-09/131-35
		08.06.2009	WF-58

The meter calibration reports clearly indicate that the error is within the permissible limits of + or – 0.2% of accuracy class of meters for the said monitoring period.

The project activity has followed following organization structure for the purpose of monitoring:



**ORGANOGRAM OF THE CDM PROJECT MONITORING**

## SECTION D. Data and parameters

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### D.1. Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors



<b>Data / Parameter:</b>	$EF_{OM,y}$		
Data unit:	tCO <sub>2</sub> e/MWh		
Description:	Operating Margin Emission Factor of Southern Regional Electricity Grid		
Source of data used:	Table 5.5, 6.1 CEA General Review, <i>CEA data is available at <a href="http://www.cea.nic.in">www.cea.nic.in</a></i>		
Value(s) :	2001 – 02	1.232715	
	2002 – 03	1.358714	
	2003 – 14	1.041711	
	<b>Average</b>	<b>1.211047</b>	
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline Emissions		
Additional comment:	None		

<b>Data / Parameter:</b>	$EF_{BM,y}$		
Data unit:	tCO <sub>2</sub> e/MWh		
Description:	Build Margin Emission Factor of Southern Regional Electricity Grid		
Source of data used:	Table 2.4, 2.7, 3.4, 6.6 CEA General Review, <i>CEA data is available at <a href="http://www.cea.nic.in">www.cea.nic.in</a></i>		
Value(s) :	0.7157286		
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline Emissions		
Additional comment:	None		

<b>Data / Parameter:</b>	$EF_{CM,y}$		
Data unit:	tCO <sub>2</sub> e/MWh		
Description:	Combined Margin Emission Factor of Southern Regional Electricity Grid		
Source of data used:	Calculated		
Value(s) :	0.9633877		
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline Emissions		
Additional comment:	None		

**D.2. Data and parameters monitored**

<b>Data / Parameter:</b>	EGy
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Data unit:	MWh (Mega-Watt hour)
Description:	Net electricity supplied to the grid by the Project
Measured /Calculated /Default:	Calculated by applying transmission loss to directly measured Eej & Eij. The transmission losses are calculated till the Kakkeharavu receiving station by the representatives of KPTCL as per the PPA
Source of data:	Electricity supplied to the grid as per the tariff invoices raised on state Utility.
Value(s) of monitored parameter:	Annual electricity supplied to the grid by the Project as per the JMR and tariff invoices 1 July 2007 to 31 December 2009 = 117154.4 MWh
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline Emissions
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	<p>Type- Trivector Meter Accuracy Class-0.2</p> <p><b>Pooling Station-EWFIL</b></p> <p>Serial Number of Main Meter- 01987500 Serial Number of Check Meter- 01987519 Frequency of Calibration- 1 year Last date of Test- 13 August 2009 Validity of Test- 1 year</p> <p><b>Pooling Station- CEPCO</b></p> <p>Serial Number of Main Meter: 01987490 Serial Number of Check Meter: 01987484 Frequency of Calibration- 1 year Last date of Test- 13 August 2009 Validity of Test- 1 year</p> <p><b>Receiving Station-Line 1</b></p> <p>Serial Number of Main Meter: 01958995 Serial Number of Check Meter: 01959004 Frequency of Calibration- 1 year Last date of Test- 8 June 2009 Validity of Test- 1 year</p> <p><b>Receiving Station-Line 2</b></p> <p>Serial Number of Main Meter: 03074058 Serial Number of Check Meter: 03074065 Frequency of Calibration- 1 year Last date of Test- 8 June 2009</p> <p>Validity of Test- 1 year</p>



Measuring/ Reading/ Recording frequency:	Monthly: The reading is jointly noted by the representatives of state utility and Enercon. The value of EGy for the project activity is also provided in the JMR (Form B) and is applied directly for calculation of emission reductions.
Calculation method (if applicable):	$EG_y = \sum j((E_{ej} - 115\% * E_{ij}) - L_j)$ Refer section C for details and description of the Eej, Eij and Lj.
QA/QC procedures applied:	QA/QC procedures are implemented by state utility pursuant to the provisions of the power purchase agreement. Refer section C of QA/QC procedures.

## SECTION E. Emission reductions calculation

### E.1. Baseline emissions calculation

&gt;&gt;

“The baseline is the kWh produced by the renewable generating unit multiplied by an emission coefficient (measured in kg CO<sub>2</sub>e/kWh) calculated in a transparent and conservative manner as the weighted average emissions (in kg CO<sub>2</sub>e/kWh) as described in registered PDD.

$$BE_y = EG_y * EF_y$$

Where,

**BE<sub>y</sub>** is baseline emissions in year y, tCO<sub>2</sub>e

**EG<sub>y</sub>** is the net electricity supplied to the grid in year y and is applied directly from JMR (Form B) certified by state utility. This value can also be cross checked from the invoice.

**EF<sub>y</sub>** is the CO<sub>2</sub> emission factor of the grid (963.3877 tCO<sub>2</sub>e/GWh fixed ex-ante).

Month	From	To	Net Energy Supplied by CEPSCO [kWh]	Net Energy Supplied by EWFIL [kWh]	Baseline Emission Factor (EF <sub>y</sub> ) [tCO <sub>2</sub> e/MWh]	Baseline Emissions (tCO <sub>2</sub> e) BE <sub>y</sub> [tCO <sub>2</sub> e]
Jul-07	1 July 2007	1 August 2007	3543792	4125472	0.9633877	7388
Aug-07	1 August 2007	1 September 2007	3436066	4291636	0.9633877	7444
Sep-07	1 September 2007	1 October 2007	2637736	3227888	0.9633877	5650
Oct-07	1 October 2007	1 November 2007	1334450	1206006	0.9633877	2447
Nov-07	1 November 2007	1 December 2007	666835	987061	0.9633877	1593
Dec-07	1 December 2007	1 January 2008	1244091	1731919	0.9633877	2867
Jan-08	1 January 2008	1 February 2008	968764	1410547	0.9633877	2292
Feb-08	1 February 2008	1 March 2008	486089	624668	0.9633877	1070
Mar-08	1 March 2008	1 April 2008	855227	1203649	0.9633877	1983
Apr-08	1 April 2008	1 May 2008	964524	831462	0.9633877	1730
May-08	1 May 2008	1 June 2008	2916219	2415535	0.9633877	5136
Jun-08	1 June 2008	1 July 2008	3060366	3788273	0.9633877	6597
Jul-08	1 July 2008	1 August 2008	3232127	3802510	0.9633877	6777
Aug-08	1 August 2008	1 September 2008	2554770	3028172	0.9633877	5378



Sep-08	1 September 2008	1 October 2008	2226769	2507234	0.9633877	4560
Oct-08	1 October 2008	1 November 2008	863353	1073032	0.9633877	1865
Nov-08	1 November 2008	1 December 2008	887733	1130661	0.9633877	1944
Dec-08	1 December 2008	1 January 2009	966725	1401823	0.9633877	2281
Jan-09	1 January 2009	1 February 2009	1096357	1605225	0.9633877	2602
Feb-09	1 February 2009	1 March 2009	665016	840903	0.9633877	1450
Mar-09	1 March 2009	1 April 2009	505187	611269	0.9633877	1075
Apr-09	1 April 2009	1 May 2009	1176964	1098521	0.9633877	2192
May-09	1 May 2009	1 June 2009	2480841	2208580	0.9633877	4517
Jun-09	1 June 2009	1 July 2009	2924995	3004250	0.9633877	5712
Jul-09	1 July 2009	1 August 2009	3927898	5315693	0.9633877	8905
Aug-09	1 August 2009	1 September 2009	2647438	3303599	0.9633877	5733
Sep-09	1 September 2009	1 October 2009	2019486	2355353.5	0.9633877	4214
Oct-09	1 October 2009	1 November 2009	1321629	1719388.5	0.9633877	2929
Nov-09	1 November 2009	1 December 2009	930943	1275180	0.9633877	2125
Dec-09	1 December 2009	1 January 2010	924234	1562263	0.9633877	2395
<b>Total</b>			53466624	63687773	<b>Total CERs</b>	112851

**E.2. Project emissions calculation**

&gt;&gt;

Since the project activity is a renewable energy project which generates electricity using wind power and hence does not result in project emissions.

**E.3. Leakage calculation**

&gt;&gt;

No leakage is considered from the project activity as per approved methodology ACM0002.

**E.4. Emission reductions calculation / table**

&gt;&gt;

The total emission reductions achieved during the monitoring period is calculated as:

$$ER_y = EG_y * EF_y$$

Where,

**EG<sub>y</sub>** is the net electricity supplied to the grid in year y and is applied directly from JMR (Form B) certified by state utility. This value can also be cross checked from the invoice.

**EF<sub>y</sub>** is the CO<sub>2</sub> emission factor of the grid (963.3877 tCO<sub>2</sub>e/GWh fixed ex-ante).

Emission reductions are equal to baseline emissions as emissions due to project activity and leakage are zero.

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Total baseline emissions: 1, 12, 851 tCO<sub>2</sub>

Total project emissions: Zero

Total leakage: Zero

Thus Emission reductions for project activity is

$$ER_y = BE_y = 112,851 \text{ tCO}_2$$

Month	From	To	Baseline Emissions [tCO <sub>2</sub> e]	Project Emissions [tCO <sub>2</sub> e]	Leakage Emissions [tCO <sub>2</sub> e]	Emission Reductions [tCO <sub>2</sub> e]
Jul-07	1 July 2007	1 August 2007	7,388	0	0	7,388
Aug-07	1 August 2007	1 September 2007	7,444	0	0	7,444
Sep-07	1 September 2007	1 October 2007	5,650	0	0	5,650
Oct-07	1 October 2007	1 November 2007	2,447	0	0	2,447
Nov-07	1 November 2007	1 December 2007	1,593	0	0	1,593
Dec-07	1 December 2007	1 January 2008	2,867	0	0	2,867
Jan-08	1 January 2008	1 February 2008	2,292	0	0	2,292
Feb-08	1 February 2008	1 March 2008	1,070	0	0	1,070
Mar-08	1 March 2008	1 April 2008	1,983	0	0	1,983
Apr-08	1 April 2008	1 May 2008	1,730	0	0	1,730
May-08	1 May 2008	1 June 2008	5,136	0	0	5,136
Jun-08	1 June 2008	1 July 2008	6,597	0	0	6,597
Jul-08	1 July 2008	1 August 2008	6,777	0	0	6,777
Aug-08	1 August 2008	1 September 2008	5,378	0	0	5,378
Sep-08	1 September 2008	1 October 2008	4,560	0	0	4,560
Oct-08	1 October 2008	1 November 2008	1,865	0	0	1,865
Nov-08	1 November 2008	1 December 2008	1,944	0	0	1,944
Dec-08	1 December 2008	1 January 2009	2,281	0	0	2,281
Jan-09	1 January 2009	1 February 2009	2,602	0	0	2,602
Feb-09	1 February 2009	1 March 2009	1,450	0	0	1,450
Mar-09	1 March 2009	1 April 2009	1,075	0	0	1,075
Apr-09	1 April 2009	1 May 2009	2,192	0	0	2,192
May-09	1 May 2009	1 June 2009	4,517	0	0	4,517
Jun-09	1 June 2009	1 July 2009	5,712	0	0	5,712
Jul-09	1 July 2009	1 August 2009	8,905	0	0	8,905
Aug-09	1 August 2009	1 September 2009	5,733	0	0	5,733
Sep-09	1 September 2009	1 October 2009	4,214	0	0	4,214
Oct-09	1 October 2009	1 November 2009	2,929	0	0	2,929
Nov-09	1 November 2009	1 December 2009	2,125	0	0	2,125



Dec-09	1 December 2009	1 January 2010	2,395	0	0	2,395
<b>Total</b>			112,851	0	<b>0</b>	112851

Total Emission Reductions for the monitoring period are **1,12, 851**.

#### **E.5. Comparison of actual emission reductions with estimates in the CDM-PDD**

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<b>Item</b>	<b>Values applied in ex-ante calculation of the registered CDM-PDD</b>	<b>Actual values reached during the monitoring period</b>
<b>Emission reductions (tCO<sub>2</sub>e)</b>	41,531 for each year, the monitoring period contains 2 years 6 months hence estimated CER's as per the PDD are 103,827	112,851

The CER's for the said monitoring period are 8.69% higher as estimated in the PDD.

#### **E.6. Remarks on difference from estimated value in the PDD**

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The CER's for the said monitoring period are 8.69% higher than as estimated in the PDD. This is due to higher PLF than estimated during the monitoring period.



### Appendix 1

#### Metering Arrangement for the Project Activity

