

MONITORING REPORT NO. 2

FOR PERIOD **01.01.2012-30.09.2012**

MOCKIAI WIND POWER

JOINT IMPLEMENTATION PROJECT

UNFCCC No. LT2000031

PREPARED BY:

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1. GENERAL INFORMATION

Project name:	Mockiai Wind Power Joint Implementation Project
Project location:	Mockiai village, Silute district, Klaipeda county at the western part of Lithuania. 
Project owner:	UAB Iverneta Reg. adr. Didžioji str. 25, LT-01128 Vilnius, Lithuania Address for correspondence: Šv. Ignoto str. 1, LT-01120 Vilnius, Lithuania
Carbon credit purchaser:	Stichting Carbon Finance (SCF), Netherlands. Emission Reduction Purchase Agreement (ERPA) as of 31 August 2010.
Project description:	The project involves 12 MW wind farm at Mockiai (consisting of 6 Enercon E82 2000 kW wind turbines). GHG emission reduction is achieved via displacement of carbon intensive electricity produced from fossil fuel sources in the Lithuanian power network. Crediting period for emission reductions: 01 January 2010 – 31 December 2012. The Mockiai wind farm was connected to the grid on June 2010 because of construction work delay caused by contractor and wind turbines supplier Enercon GmbH.
Operation during monitoring period:	During the whole monitoring period Mockiai wind farms operated without major technical interruptions.

2. IMPLEMENTATION OF THE JI PROJECT

LoE issuance by host country DFP	8 May, 2007
LoA issuance by investor country DFP	7 March, 2011
LoA issuance by host country DFP	10 September, 2010
Determination report issuance by AIE	30 May, 2011

Notes: DFP – designated focal point, LoE – Letter of Endorsement, LoA – Letter of Approval, AIE – accredited independent entity, PDD – Project design document, UNFCCC – United Nations Framework Convention on Climate Change.

3. MONITORING METHODOLOGY

Description:	<p>Monitoring is based on the procedures defined in the document “Monitoring Plan of Mockiai Wind Power Joint Implementation Project. Version 1.0 June 20, 2011”.</p> <p>The amount of net electricity supply to the grid from the JI project is defined as the key activity to monitor.</p>
Grid connection and measuring meters:	<p>The Mockiai wind farm is connected to the Main Grid (35 kV) via one coupling point to the Distribution Grid (DGO), operated by Lesto AB.</p> <p>Monitoring is based only on metering of electricity delivered to the Distribution Grid at the 35 kV side of the 20/35 kV transformer at the commercial measurement point. The commercial measuring point is equipped with two (main and duplicating) power meters. Additional power meters are installed at the 20 kV side of the transformer at the grid connection point. The power meters are periodically tested and calibrated.</p> <p>The contractual party of purchase of power generated by UAB Iverneta is also AB Lesto who issues monthly electricity production reports to UAB Iverneta which forms the basis for electricity sales invoices.</p> <p>Net power production is calculated as a difference between actual power production and active power consumption.</p> <p>In case of failure of both commercial measuring meters, electricity production data can be retrieved also from separate power meters installed at the 20 kV side of the transformer at the grid connection point and the SCADA system of Enercon.</p> <p>Calibration of measuring meters is processed according to Lithuanian legislation and standards, and the DGO, owner of the meter is responsible for the calibration and maintenance. According to the national legislation the calibration of the meters is required every 8 years.</p> <p>No meters have been changed and all meters functioned properly during the period January 1, 2010 – September 30, 2012 and can therefore be properly used as basis for the calculation of achieved emission reductions.</p>

4. ACHIEVED EMISSION REDUCTIONS

In accordance with the Monitoring Plan the formula for calculation of achieved emission reductions is the following:

$$ER_y (tCO_2e) = EG_y (MWh) \times EF_y (tCO_2/MWh)$$

Emission reductions have been calculated in accordance with the Monitoring Plan as follows:

	<u>2012*</u>
<u>Project constants</u>	
Emission factor EF _y , tCO ₂ /MWh	0,654
<u>Actual data</u>	
Net power generation EG _y , kWh, Mockiai	25626685
Annual Emission reduction, tCO ₂ , Mockiai	16 759,852
Total annual emission reduction, tCO₂e	16 760

* Data from 01.01.2012 to 30.09.2012

Mockiai Wind Power JI Project generated **16 760 tCO₂e** of emission reductions during the monitoring period 01 01 2012- 30 09 2012.

5. ANNEXES

1	Annual production report of Mockiai wind farm 2012
2	Monitoring protocol 2010-2012
3	Internal staff training records
4	Wind speed data

Tadas Navickas
Managing Director
UAB Ivermeta

Annex 1. Annual production report of Mockiai wind farm, 2012

	Actual power production (kWh)*	Active power consumption (kWh)*	Net power production (kWh)
January	3 812 264	756	3 811 508
February	3 413 276	2 349	3 410 927
March	3 781 964	657	3 781 307
April	2 777 069	974	2 776 095
May	1 969 050	618	1 968 432
June	2 304 508	1 683	2 302 825
July	1 977 281	1 909	1 975 372
August	2 365 371	1 554	2 363 817
September	3 236 650	248	3 236 402
October	-	-	-
November	-	-	-
December	-	-	-
Total 2012	25 637 433	10 748	25 626 685

* Data according to DNO Lesto AB power meter.

Annex 2. Monitoring Protocol 2010-2012

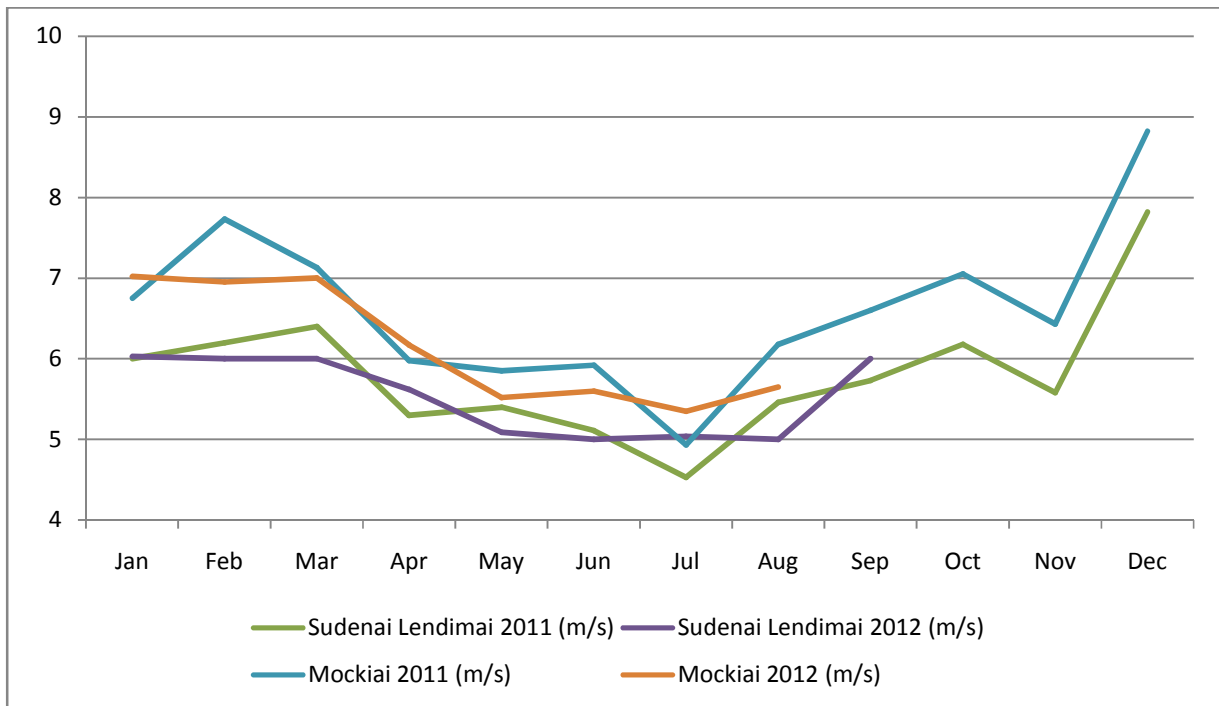
	<u>2010</u>	<u>2011</u>	<u>2012*</u>
<u>Project constants</u>			
Emission factor EF _y , tCO ₂ /MWh	0,654	0,654	0,654
<u>Actual data</u>			
Net power generation E _{Gy} , kWh	10 666 503	39 433 220	25 626 685
Annual Emission reduction, tCO ₂	6975,893	25789,326	16 759,852
Total emission reduction, tCO₂e	6976	25 789	16 760
Cumulative emission reduction of the JI project, tCO₂e	6976	32 765	49 525

* Data from 01.01.2012 to 30.09.2012

Annex 3. Internal staff trainings during the monitoring period

Date	Training by	Participants	Topic
July 2010	Hannu Lamp, 4energia JI consultant	Tadas Navickas, 4energia UAB Managing Director Julius Mikalauskas, 4energia UAB Project Manager	Preparation of improved Monitoring Plan on basis of monitoring procedure as defined in project PDD and on basis of FARs as stated in verification report of BV.
January 2011	Julius Mikalauskas, Project Manager	Ieva Vaisvilas, 4energia UAB Project Assistant	Introduction to requirements related to monitoring and verification for JI project. Produced electric power accounting and control.
February 2011	Hannu Lamp, 4energia JI Consultant	Ieva Vaisvilas, 4energia UAB Project Assistant	Preparation of Monitoring Report for 2010.
December 2011	Hannu Lamp, 4energia JI consultant	Vaida Timinskaite, 4energia UAB Project Assistant	Introduction to requirements related to monitoring and verification for JI project. Basis of monitoring procedure as defined in project PDD. Preparation of Monitoring Report for 2011.
September 2012	Vaida Timiskaite, , Project assistant	Indre Budiene 4energia UAB Administrator	Introduction to requirements related to monitoring and verification for JI project. Preparation of Monitoring Report for 2012.

Annex 4. Wind speed data



* Data from other wind park (Sudenai Lendimai) WIND TURBINE SCADA.
Mockiai data from Mockiai WIND TURBINE SCADA.