

Determination Report

JSC Energogrupe

DETERMINATION OF THE TRACK 2 JI-PROJECT:

"KREIVENAI WIND POWER PARK", LITHUANIA

REPORT NO. 1244021

17 August 2010

TÜV SÜD Industrie Service GmbH
Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY



Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
1244021	27-04-2009	08	17-08-2010	-

Subject: Determination of a JI track 2	Project		
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy Westendstr. 199 80686 Munich Germany	,"	TÜV SÜD Contra	ct Partner:
The Contractor (PP):		Project Site(s):	
JSC Energogrupe, Naujoji g. 3 Alytus, LT-62119, Lithuania Another PP: Ecocom BG LTD, The boulevard Cherni Vrah 41 1407 Sofia, Bulgaria (The Netherlands)		Taurage district near of village Kreivenai in Lithuania GPS coordinates: N 55°10'22" E 022°04'30" (Latitude: 55.17277; longitude: 22.07500)	
Project Title: Kreivenai Wind Po	wer Park		
Applied Methodology / Version:		c methodology SREC JI Project	Scope: 1 Technical Area: 1.1
First PDD Version:		Final PDD versio	n:
Date of issuance: 01-10-2008 Version No.: 01 Starting Date of GSP 22-10-2008		Date of issuance: Version No.:	31-09-2009 06
Estimated Annual Emission Reduct	ion:	33,988 tCO₂equiv	alent
ERUs in 2009: ERUs in 2010: ERUs in 2011: ERUs in 2012:		15,766 tCO ₂ equiva 34,398 tCO ₂ equiva 34,398 tCO ₂ equiva 34,398 tCO ₂ equiva	alent alent alent
Assessment Team Leader:		Further Assessm	nent Team Members:
Thomas Kleiser		Laura Vaida (Trai	nee)
Technical Review:		Madis Maddison (GHG Auditor)	
Javier Castro		Robert Mitterwallr	ner (GHG Auditor)

Determination of the JI Project: Kreivenai Wind Power Park Page 3 of 20



Summary	of the Determination Opinion:
	The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the JI. Hence TÜV SÜD will recommend the project for registration by the JI Supervisory committee in case letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively.
	The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the JI Supervisory committee and will inform the project participants and the JI Supervisory committee on this decision.



Abbreviations

AAU Assigned Amount Unit

ACM Approved Consolidated Methodology

AIE Accredited Independent Entity (also verifier)

BM Build Margin

BASREC Baltic Sea Region Energy Co-Operation

CAR Corrective action request

CR Clarification request

DFP Designated Focal Point

DP Determination Protocol

DVM Determination and Verification Manual

EIA Environmental Impact Assessment

ER Emission reduction

ERU Emission Reduction Unit

FAR Forward Action Request

GHG Greenhouse gas(es)

GSP Global Stakeholder consultation Process

JI Joint Implementation

JISC JI Supervisory Committee

JSC Joint Stock Company

KP Kyoto Protocol

MOEW Ministry of Environment and Water of Bulgaria

MP Monitoring Plan

MS Management System

NAP National Allocation Plan due the EU Emissions Trading Scheme

OM Operating Margin

PDD Project Design Document

PIN Project Idea Note

SCADA Supervisory Control And Data Acquisition

TÜV SÜD TÜV SÜD Industrie Service GmbH

UAB Joint Stock Company (in Lithuania)

UNFCCC United Nations Framework Convention on Climate Change

WPP Wind Power Park



Table	of Contents	Page
1	INTRODUCTION	6
1.1	Objective	6
1.2	Scope	6
2	METHODOLOGY	7
2.1	Appointment of the Assessment Team	8
2.2	Review of Documents	9
2.3	Follow-up Interviews	9
2.4	Further cross-check	10
2.5	Resolution of Clarification and Corrective Action Requests	10
2.6	Internal Quality Control	10
3	SUMMARY	11
3.1	Approval	11
3.2	Participation	11
3.3	Project design document	11
3.4	Project description	11
3.5	Baseline and monitoring methodology	12
3.5.1	Applicability of the selected methodology	12
3.5.2	Project boundary	12
3.5.3	Baseline identification	13
3.5.4	Algorithm and/or formulae used to determine emission reductions	14
3.5.5	Project emissions	15
3.5.6	Leakage	15
3.5.7	Emission Reductions	15
3.6	Additionality	15
3.6.1	Prior consideration of the JI project	15
3.6.2	Identifications of alternatives	16
3.6.3	Investment analysis	16
3.6.4	Barrier analysis	16
3.6.5	Common practice analysis	17
3.7	Monitoring plan	17
3.8	Sustainable development	17
3.9	Local stakeholder consultation	17
3.10	Environmental impacts	
4	COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS	
5	DETERMINATION OPINION	20
A	L. Datarmination Dratage	

Annex 1: Determination Protocol Annex 2: Information Reference List Determination of the JI Project: Kreivenai Wind Power Park Page 6 of 20



1 INTRODUCTION

1.1 Objective

The determination objective is an independent assessment by a Third Party (Accredited Independent Entity = AIE) of a proposed project activity against all defined criteria set for the registration under the Joint Implementation requirements. Determination is part of the JI project cycle and will finally result in a conclusion by the executing AIE whether a project activity is valid and should be submitted for registration under the JI track 2 procedure to the JISC. The ultimate decision on the registration of a proposed project activity rests at the JISC and the Parties involved.

The project activity discussed by this determination report has been submitted under the project title: **Kreivenai Wind Power Park** (in short: Kreivenai WPP)

Initially, the project name in the GSP PDD was "Kreivenai Wind Power Park Joint Implementation Project". The name has been changed in the MoC (IRL-No. 32) and final PDD because the LoA of Lithuania (IRL-No. 31) has been issued for the project name "Kreivenai Wind Power Park". The LoA of the Netherlands (IRL-No. 30) still refers to the initial project name. A confirmation letter for the change of project name is available (IRL-No. 33). The change of project name is deemed to be not substantial for AIE.

1.2 Scope

UNFCCC criteria refer to:

- Kyoto Protocol Article 6 criteria
- Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords.
- JI guidelines & procedures as for http://ji.unfccc.int/Sup_Committee/index.html
- Baselines and monitoring methodologies (including GHG inventories)
- Management systems and auditing methods
- Environmental issues relevant to the sectoral scope applied for
- Applicable environmental and social impacts and aspects of JI project activity
- Sector specific technologies and their applications
- Current technical and operational knowledge of the specific sectoral scope and information on best practice.

The determination is not meant to provide any consulting towards the project participant (PP). However, stated requests for clarifications, corrective actions and/or forwards actions may provide input for improvement of the project design.

Once TÜV SÜD receives a first PDD version, it is made publicly available at the UNFCCC webpage and at TÜV SÜD's webpage for starting a 30 day global stakeholder consultation process (GSP). In case of any request a PDD might be revised (under certain conditions the GSP could be repeated) and the final PDD will form the basis for the final evaluation as presented in this report. Information on the first and the final PDD version is presented in page 1.

The only purpose of a determination is its use during the registration process as part of the JI project cycle. Hence, TÜV SÜD cannot be held liable by any party for decisions made or not made based on the determination opinion, which will go beyond that purpose.



2 METHODOLOGY

The project assessment applies standard auditing techniques to assess the correctness of the information provided by the project participants. The assessment is mainly based on the Validation and Verification Manual (VVM) 2008 from the CDM as only available Manual at the time of starting the determination process. The report also covers all items of the DVM that exists since the end of 2009. The work starts with appointment of team covering the sectoral scope and technical area and relevant host country experience for evaluating the JI project activity to cover all the necessary expertise to determine a JI track 2 project. Once the project is made available for the stakeholder consultation process, members of the team carry out the desk review, follow-up actions, resolution of issues identified and finally preparation of the determination report. The prepared determination report and other supporting documents then undergo an internal quality control by the CB "climate and energy" before submission to the JISC.

In order to ensure transparency, assumptions are clear and explicitly stated; the background material is clearly referenced. TÜV SÜD developed methodology-specific checklists and protocol customised for the project. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team and the results from validating the identified criteria. The determination protocol serves the following purposes:

It organises, details and clarifies the requirements a JI project is expected to meet;

It ensures a transparent determination process where the determinator will document how a particular requirement has been validated and the result of the determination and any adjustment made to the project design.

The determination protocol consists of three tables. The different columns in these tables are described in the figure below.

The completed determination protocol is enclosed in Annex 1 to this report.

Determination Protocol Table 1: Mandatory Requirements					
Requirement	Reference	Conclusion	Cross reference / Com- ment		
The requirements the project must meet.	Gives reference to the legislation or agreement where the requirement is found.	This is either acceptable based on evidence provided (Yes), or a Corrective Action Request (CAR) of risk or noncompliance with stated requirements. The corrective action requests are numbered and presented to the client in the determination report. O is used in case of an outstanding, currently not solvable issue, AI means Additional Information is required.	Used to refer to the relevant checklist questions in Table 2 or to PDD to show how the specific requirement is validated. This is to ensure a transparent determination process.		



Determination Protocol Table 2: Requirement checklist					
Checklist Question	Reference	Comment	Draft and/or Final Conclusion		
The various requirements in Table 1 are linked to checklist questions the project should meet. The checklist is organised in six different sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.	Gives reference to documents where the an- swer to the checklist ques- tion or item is found.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request is used when the independent entity has identified a need for further clarification or more information.		

Determination Protocol Table 3: Resolution of Corrective Action and Clarification Requests					
Clarifications and cor- rective action re- quests by determina- tion team	Ref. to table 2	Summary of project owner response	Determination conclusion		
If the conclusions from the draft determination are either a Corrective Action Request or a Clarification Request, these should be listed in this section.	Reference to the checklist question number in Table 2 where the Corrective Action Request or Clarification Request is explained.	The responses given by the Client or other project participants during the communications with the independent entity should be summarised in this section.	This section should summarise the independent entity's responses and final conclusions. The conclusions should also be included in Table 2, under "Final Conclusion".		

In case of a denial of the project activity more detailed information on this decision will be presented in table 4.

Determination Protocol Table 4: Unresolved Corrective Action and Clarification Requests					
Clarifications and corrective action requests	ld. of CAR/CR 1	Explanation of the Conclusion for Denial			
If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.	the	This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion with a clear reference to the requirement which is not complied with.			

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body "climate and energy". The composition of an assessment team has to be approved by the Certification Body (CB) ensuring that the required skills are covered by the team. The CB TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:



- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

Name	Qualification	Coverage of sectoral scope	Coverage of technical area	Host country experience
Thomas Kleiser	ATL			\square
Laura Vaida	Т			
Madis Maddison	GHG-A	\square	\square	Ø
Robert Mitterwallner	GHG-A	\square		\square

2.2 Review of Documents

A first version of the PDD was submitted to the AIE in October 2008. The first PDD version submitted by the PP and additional background documents related to the project design and baseline were reviewed to verify the correctness, credibility and interpretation of the presented information, furthermore a cross check between information provided and information from other sources (if available) have been done as initial step of the determination process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.

2.3 Follow-up Interviews

In the period of November 14-15, 2008 TÜV SÜD performed an on-site visit and interviews with project stakeholders to confirm selected information and to resolve issues identified in the initial document review. Representatives of the project proponent Energogrupe JSC and the consultant - PDD compiler Mr. Arturas Strolia were interviewed. Also the mayor of the Municipality of Taurage and local office of Environment Protection Department were interviewed.

The main topics of the interviews are summarised in annex 1, Table 1 and 2. The complete and detailed list of all persons interviewed and documents revised are enclosed in annex 2 to this report.

Table 1: Interview topics

Interviewed organisa- tion	Interview topics
Energogrupe JSC	Project design and technological possibilities, business plan, monitoring plan, stakeholder comments, monitoring procedures, measurement equipment, documentation, archiving of data
Municipality of Kavarna	Approval of the project, land-use planning, stakeholder comments, national and sectoral policy; approval procedure
Klaipeda regional Envi- ronment Protection De- partment, Taurage agency	Approval of the project, environmental impact assessment, stakeholder comments, national and sectoral policy; approval procedure
Consultant Mr. Arturas Strolia	Project design, baseline, monitoring plan and procedures, environmental impacts, stakeholder comments, additionality

Determination of the JI Project: Kreivenai Wind Power Park Page 10 of 20



2.4 Further cross-check

During the determination process, the team makes reference to available information related to similar projects or technologies as the JI project activity. The documentation has also been reviewed against the approved/presented methodology/ies applied to confirm the appropriateness of formulae and correctness of calculations.

2.5 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for TÜV SÜD's conclusion on the project design. The CARs and CRs raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the determination process, the concerns raised and responses that have been given are documented in more detail in the determination protocol in annex 1.

The final PDD version dated 31 September 2009 (version 6) serves as the basis for the final assessment presented herewith. Changes are not considered to be significant with respect to the qualification of the project as a JI project based on the two main objectives of the JI, i.e. to achieve a reduction of anthropogenic GHG emissions and to contribute to a sustainable development.

2.6 Internal Quality Control

As final step of a determination the final documentation including the determination report and the protocol have to undergo an internal quality control by the CB "climate and energy", i.e. each report has to be finally approved either by the head of the CB or the deputy. A qualified technical reviewer has been appointed by CB for this project.

After confirmation of the PP the determination opinion and relevant documents are submitted to the EB through the UNFCCC web-platform.

Determination of the JI Project: Kreivenai Wind Power Park Page 11 of 20



3 SUMMARY

The assessment work and the main results are described below in accordance with the VVM reporting requirements. The reference documents indicated in this section and Annex 1 are stated in Annex 2.

3.1 Approval

The Parties involved in the project do not want to be considered Project Participants. The Host party is Lithuania represented by Energogrupe JSC while Investor party – the Netherlands represented by Company Ecocom BG Ltd. Both parties Lithuania and The Netherlands meet the requirements to participate in the JI. A MoC is available (see IRL-No. 32).

The DFP of Lithuania has issued a Letter of Endorsement (IRL 4) on 08 May 2008 accepting the Project as JI activity. TÜV SÜD received this letters from the client directly and considers the provided letters as authentic.

The company Ecocom BG decided to use Investor party The Netherlands. Any entities worldwide can participate in JI project by the Dutch DFP (see IRL no: 25) if they meet requirements given in Dutch Ministerial Decree (see IRL no: 26).

TÜV SÜD considers the requirements of the VVM 2008 from CDM to be complied with.

3.2 Participation

According to national Joint Implementation Project development rules, the final Project approval or Letter of Approval might be issued only after draft Project determination report submission to Lithuanian DFP. LoA of Lithuania (IRL-No. 31) and LoA of the Netherlands (IRL-No. 30) are available.

3.3 Project design document

The PDD is compliant with relevant form and guidance as provided by UNFCCC.

The most recent version of the PDD form according to the JI webside (http://ji.unfccc.int/Ref/Documents/JI PDD form.pdf) was used.

TÜV SÜD considers that the guidelines for the completion of the PDD in their most recent version have been followed. Relevant information has provided by the participants in the applying PDD sections. Completeness was assessed through the checklist included to Annex 1 of this report.

3.4 Project description

The project consists of construction of a 20 MW, grid-connected, renewable energy wind power park in the district of Taurage, Lithuania (the "Project"). The Project will consist of a new electrical substation and 10 pcs of Enercon E-82 wind turbine/generators, each with a capacity of 2 MW. The Project is expected to deliver an annual average of 33,988 MWh into the national electrical grid being operated by national grid operator AB Lietuvos Energija. The Project qualifies as the JI track 2 project as the renewable electricity produced by Kreivenai WPP will displace carbon intensive electricity produced from fossil fuel sources in the Lithuanian grid. New installations under the JI scheme have special reserve in Lithuania in the national allocation plan 2008 – 2012. Hence, double counting of the emission reductions can be excluded.

Start of Project activities (decision of the board on preparation business plan for Project development including JI consideration) was on 06.02.2006.

The delivery and installation of turbines started in March 2009, so the Kreivenai Wind Power Park's energy generation was planned from March 2009 onwards with start-up works from June 2009 to August 2009. Meanwhile, electricity is produced for almost 1 year.

Determination of the JI Project: Kreivenai Wind Power Park Page 12 of 20



The generated ERUs will be supplied by JSC Energogrupe to the Lithuanian electric power network, operated by AB Lietuvos Energija.

The information presented in the PDD on the technical design is consistent with the actual planning and implementation of the project activity as confirmed by:

- review of data and information (see annex 2), cross check the same with other sources if available.
- An on-site visit has been performed and relevant stakeholder and personnel with knowledge
 of the project were interviewed, in case of doubt further cross checks through additional interviews have been done (IRL-No. 16).
- Finally information related to similar projects or technologies as the JI project activity have been used if available to confirm the accuracy and completeness of the project description (IRL-No.6 to 18).

In light of the above, TÜV SÜD confirms that the project description as included to the PDD is sufficiently accurate and complete in order to comply with the requirements of the JI.

3.5 Baseline and monitoring methodology

3.5.1 Applicability of the selected methodology

According BASREC Regional Handbook on Procedures for Joint Implementation in the Baltic Sea Region (Version 3 – June 2007) currently there are no approved methodologies specifically reflecting the circumstances of a JI project in Eastern Europe. JI baselines can be developed either on the project specific basis or on a more standardized basis referring to the CDM methodology ACM0002 and related tools.

The country's baseline methodology was developed in 2006 and it was used by Lithuanian Environment Ministry as baseline scenario and with baseline emissions factor in the field of JI during National Allocation Plan (NAP) preparation for First commitment period (2008-2012). The European Commission that supervised NAP did not reject country's baseline methodology. The NAP indicates that Lithuanian baseline emissions factor is 0,626 tCO2/ MWh and it should be used for all home country's JI projects. This figure can be considered conservative taking into account available CDM methodologies and tools. It was also confirmed by the letter from Lithuanian DFP (see IRL 27). The Baseline methodology is calculated referring to historic data as this method is best suited for Lithuanian power market.

The Methodology specific protocol included to the Annex 1 documents the assessment process, including the steps taken. The results on the compliance check as well as the relevant evidence are explicitly presented in annex 1.

TÜV SÜD confirms that the chosen baseline and monitoring methodology is applicable to the project activity.

Emission sources which are not addressed by the applied methodology and which are expected to contribute more than 1% of the overall expected average annual emissions reduction have not been identified.

3.5.2 Project boundary

The project boundary was assessed in the context of physical site inspection, interviews and based on the secondary evidence received on the design of the project.



• The project boundary is determined as theoretical boundary which includes physical boundaries of the Project (Kreivenai WPP wind turbines, generators, transformer station) and power plant of AB Lietuvos Elektrine, the power generation of which the wind power plants will replace.

The most relevant documentation assessed in order to confirm the project boundary are following:

- > Detail planning approvals (IRL 6);
- > Technical design documents, 0809-TP, UAB Alytaus Statybos Koncernas, Alytus 2008 (IRL 8);
- > Detailed plan on wind park and substation location (IRL 20);
- > Electric wiring diagram showing placement of meters (IRL 22);
- Lithuania's National Allocation Plan for Greenhouse Gas Emission Allowances for the Period 2008 to 2012

The same have been validated during the determination process using standard audit techniques, further details of any observation are transparently presented in the annex 1.

Hence TÜV SÜD confirms that the identified boundary and the selected sources and gases as documented in the PDD are justified for the project activity.

3.5.3 Baseline identification

In the PDD the following baseline scenario has been defined:

- Baseline the amount of GHG that would be emitted to the atmosphere during the crediting period of the project, i.e. in 2009-2012, in case the Project would not be implemented.
- In case of additional power supply (as this Project) to the grid, the production will be reduced in the main Lithiuanian power plant Lietuvos Elektrine.

The information presented in the PDD has been validated by a first document review of all the data, further confirmation based on the on-site visit and a final step by cross checking the information with similar relevant projects and/or technologies. The sources referenced in the PDD have been quoted correctly. The information was cross-checked based on verifiable and credible sources, such as:

- JI PDD of Rudaiciai Wind Power Park project published at the UNFCCC website http://ji.unfccc.int/UserManagement/FileStorage/W1WQBGABVVWXBDF135LVP71PVD7RE
- 2. Other JI track 2 projects listed at the UNFCCC website http://ji.unfccc.int/JI_Projects/ProjectInfo.html
- 3. Letter on baseline calculations. Ministry of Environment of Lithuania. 2009-01-28, Nr. (10-7)-D8-760 (IRL 27)

TÜV SÜD has determined that no reasonable alternative scenario has been excluded.

Based on the validated assumptions on calculations TÜV SÜD considers that the identified baseline scenario is reasonable.

TÜV SÜD confirms that all relevant JI requirements, including relevant and / or sectoral policies and circumstances, have been identified correctly taken into account in the definition of the baseline

A verfiable description of the baseline scenario has been included to the PDD.



In regard to item 86 of the CDM Validation and Verification Manual as well as to the DVM, TÜV SÜD confirms that:

- 1. All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
- 2. All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
- 3. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- 4. Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD:
- 5. The chosen baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed JI project activity.

3.5.4 Algorithm and/or formulae used to determine emission reductions

TÜV SÜD has assessed the calculations of project emissions, baseline emissions and leakage and emission reductions. Corresponding calculations were carried out based on calculation spreadsheets. The parameters and equations presented in the PDD and further documentation have been compared with the information and requirements presented in the methodology and respective tools. The equation comparison has been made explicitly following all the formulae presented in the calculation files (IRL-No. 23).

The assumptions and data used to determine the emission reductions are listed in the PDD and all the sources have been checked and confirmed.

Based on the information reviewed it can be confirmed that the sources used are correctly quoted and interpreted in the PDD.

The values presented in the PDD are considered reasonable based on the documentation reviewed, further references and the result of the interviews.

The baseline methodology has been correctly applied following the requirements.

The estimated of the baseline emissions can be confirmed as the same have been replicated by the audit team using the information provided.

Detailed information on the verification of the parameters used in the equations can be found in the annex 1. The algorithms for the determination of the baseline, project and leakage are discussed in the following sections.

3.5.4.1 Baseline Emissions

For determination of the baseline it was used fuel consumption and production efficiency data as well as production of electric and thermal power in Lietuvos Elektrine during 2002-2005 (IRL-No. 23).

The emission factor of the power plant was calculated by the proportion of the emissions of natural gas, oil and orimulsion times the emission factor of the best natural gas, oil and orimulsion power plant as published in Official edition "Lietuvos energetika" (Lithuanian energy sector) year 2002-2006. The emission factors were calculated for years 2002 – 2005. Then the average was established as 0.626 tCO2/MWhe.

As a result, the annual emission reduction equals the annual baseline emissions.

Determination of the JI Project: Kreivenai Wind Power Park Page 15 of 20



3.5.5 Project emissions

Project emissions are considered for wind power production as zero.

3.5.6 Leakage

There is no leakage of emissions in wind power utilities.

3.5.7 Emission Reductions

In summary, the calculation of the baseline emissions (project emissions and leakage being zero) and the emission reductions, respectively, can be considered as correct.

Net electricity delivered to the grid will be the basis for calculating the emission reductions.

3.6 Additionality

The additionality of the project has been presented in the PDD using following approach:

- Additionality of the Project is proven using the version 05.2 of the CDM Tool for the Demonstration and Assessment of Additionality as approved by the CDM Executive Board;
- Using steps 1 (sub-steps 1a and 1b), step 2 (applying investment comparison analysis (option II)) and step 4. The EB guidance Annex 35 of EB 39 on benchmarkd analysis used to prove additionality is not officially applied by the JISC. Hence, the investment comparison analysis is accepted here and has been applied as well for the already registered projects.

The approach use in the PDD has been assessed first based on a document review, where following relevant documents have been reviewed:

Business Plan, UAB Energogrupe, 2006 (IRL 18).

On site the additionality has been discussed principally with Mr. Justinas Vilpišauskas. Furthermore some documents have been reviewed on-site (for details see annex 2).

Based on this determination step we can confirm that the documentation assessed is appropriate for this project. There is no feed-in-tariff system in Lithuania that would make wind energy more attractive. Hence, the project activity is deemed to be additional.

3.6.1 Prior consideration of the JI project

The starting date of the project activity is determined by Decision of the board of Energogrupe JSC to develop the Project. In order to confirm the same the assessment team has reviewed the following documents:

• Business Plan, UAB Energogrupe, 2006 (IRL 18).

Additionally, the assessment team cross checked this information during the on-site interview with Mr. Justinas Vilpišauskas.

The starting date of the project activity is determined to be December 2008 which was the starting of the constructional works. The PPs have presented to the assessment team following documentation:

The minutes (No: 06-8 (11) from 29.11.2006) of the shareholders meeting (IRL 16)

Determination of the JI Project: Kreivenai Wind Power Park Page 16 of 20



The original of the documentation presented has been reviewed and cross checked based on interviews with Mr. Justinas Vilpišauskas, hence the document can be considered appropriate to confirm the prior consideration.

Hence the project complies with the requirements to demonstrate the prior consideration of the JI.

3.6.2 Identifications of alternatives

The output of the project is electricity generated by WPP.

The list of alternatives to supply the outputs mentioned above, which is presented in the PDD includes the project activity undertaken without being registered as JI project. The rest of the alternatives presented do include all plausible scenarios taking into account the local and sectoral situations for the outputs mentioned. Hence the list of alternatives is considered to be complete.

3.6.3 Investment analysis

The PP uses the investment comparison analysis to demonstrate additionality.

The choice of the tool demonstrating additionality was justified in the PDD as follows: project participant does not have other choice to make an investment on installation of new energy production technology (wind) which will help to produce the same product – electricity.

Project does not have alternative that is based on continuation of existing situation for supply electricity to the grid without investments therefore the benchmark approach is not considered as appropriate.

The financial returns of the proposed project are insufficient to justify the investment.

The parameters used in the financial calculations have been validated based on a revision of the sources presented in the PDD, inter alia:

- Land lease agreements (IRL 9)
- Supply contract # W-7110 with Enercon GmbH for generators; # W-03657 for electrical infrastructure (IRL 10)
- Business Plan, UAB Energogrupe, 2006 (IRL 18).

The same was confirmed verbally on-site by Mr. Justinas Vilpišauskas. The parameters are plausible and can be considered acceptable under the project situation.

The benchmark used for the financial comparison has been obtained from CHP plant example (Panevezys CHP) where the project IRR is 16,2% (UNFCCC webpage, JI Project - Rudaiciai wind power park, PDDs supporting documentation Enclosure3 – IRR for cogeneration plant Panevezys).

The financial calculation (IRL No.23) has been completely checked, all the calculation files were checked and no mistakes have been found. Hence it can be confirmed that the calculations are correct. The calculated project IRR of less than 10% is lower than the benchmark IRR.

Project case fully corresponds this approach because alternative B (the electric power in the Lithuanian network will be produced by new modern cogeneration power plants) to the Project activity clearly indicates that Project participant has possibilities to invest into energy generation technology that is more financially attractive comparison to the Project activity.

3.6.4 Barrier analysis

The project participants have not used the barrier analysis.

Determination of the JI Project: Kreivenai Wind Power Park Page 17 of 20



3.6.5 Common practice analysis

The region for the common practice analysis has been defined as Republic of Lithuania. The project activity's technology can be currently found in only two wind energy parks (Rudaiciai and Benaciai), which are already registered as JI projects (see webpage: http://ji.unfccc.int/JI Projects/DeterAndVerif/Verification/FinDet.html).

The assessment team has revised official sources as UNFCCC webpage, JI Project - Rudaiciai wind power park and Benaiciai wind power park. This information confirms that the list of similar projects presented in the PDD is complete. Additionally the team made a further cross check of the information based on the interviews and available national websites and information tools.

Hence it can be confirmed that the proposed JI activity is not a common practice in the defined region.

3.7 Monitoring plan

The monitoring plan presented in the PDD complies with the requirement of the methodology. The assessment team has checked all the parameters presented in the monitoring plan against the requirements of the methodology; no deviations relevant for the project activity have been found in the plan.

The procedures have been revised by the assessment team through document review and interviews with the relevant personnel; this information together with a physical inspection allows the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The major parameters to be monitored have been discussed with the PPs especially regarding the location of the meters, the data management and in general the quality assurance and quality control procedures to be implemented in the context of the project.

The main and only parameter to be monitored will be the Net electricity supplied to the grid E_{VP} . It will be established as balance between electricity supplied to the grid and electricity consumed from the grid. These will be measured by two-directional power meter installed on the connection point with national grid operated by Lietuvos Energija (IRL 22). This meter will have parallel control meter which will serve as back-up meter. There will not be any other connections to the grid – in case of power failure the installed emergency batteries will be used as emergency power source. The only likely project emissions due to transportation for maintenance are deemed to be insignificant.

Hence it is expected that he PPs will be able to implement the monitoring plan and the emission reductions achieved can be reported ex-post and verified.

3.8 Sustainable development

The use of wind power to generate electricity indicates clearly that the project contributes to the sustainable development of the host Party Lithuania.

3.9 Local stakeholder consultation

The relevant local stakeholders have been invited via local newspapers "Taurages Balsas" and "Taurages Kurjeris". The evidence of these invitations is IRL 21. The assessment team has review the documentation in order to validate the inclusion of relevant stakeholders and using the local expertise it can be confirmed that the communication method used to invite the stakeholders can be considered appropriate. The summary of comments presented in the PDD has been cross checked with the documentation of the stakeholder consultation and it is found to be complete.

Stakeholders did not express any objections; the same has been cross check with the information obtained during the interviews.

Determination of the JI Project: Kreivenai Wind Power Park Page 18 of 20



Hence the local stakeholder consultation has been adequately performed according to the JI requirements.

3.10 Environmental impacts

The project participants undertake an analysis of environmental impacts. The assessment team made a document review of the information presented. The IRL 19 conclusions that Environment Impact Assessment is not required by Klaipeda Regional Environment Protection Department of Ministry of Environment; #(9.14.2.)-V4-411 and #(9.14.5)-LV-4697 confirms the correctness of the approach used by the PPs. Hence the PPs followed the requirements of the host country regarding the environmental impacts.

Determination of the JI Project: Kreivenai Wind Power Park Page 19 of 20



4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on UNFCCC website by installing a link to TÜV SÜD's own website and invited comments by Parties, stakeholders and non-governmental organisations during a period of 30 days.

The following table presents all key information on this process:

webpage: http://www.netinform.de/KE/Wegweiser/Guide2_1.aspx?ID=5637&Ebene1_ID=26&Ebene2_ID=1754&mode=1					
Starting date of the global stakehol 2008-10-22	Starting date of the global stakeholder consultation process: 2008-10-22				
Comment submitted by:	Issues raised:				
-	-				
Response by TÜV SÜD:					
No comments have been received					



5 DETERMINATION OPINION

TÜV SÜD has performed a determination of the following proposed JI project activity:

Kreivenai Wind Power Park.

Standard auditing techniques have been used for the determination of the project. Methodology-specific checklists and protocol customised for the project have been prepared to carry out the audit and present the outcome in a transparent and comprehensive manner.

The review of the project design documentation, the subsequent follow-up interviews and the further cross check of references have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol. In our opinion, the project meets all relevant UNFCCC requirements for the JI track 2. Hence TÜV SÜD will recommend the project for registration by the JI Supervisory committee.

An analysis as provided by the applied methodology demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

The determination is based on the information made available to us and the engagement conditions detailed in this report. The determination has been performed following the DVM requirements. The only purpose of this report is its use during the registration process as part of the JI project cycle. Hence, TÜV SÜD cannot be held liable by any party for decisions made or not made based on the determination opinion, which will go beyond that purpose.

Munich, 17-08-2010

Munich, 17-08-2010

Certification Body "climate and energy"
TÜV SÜD Industrie Service GmbH

Cinyun Thoug

Rachel Zhang

Assessment Team Leader
Thomas Kleiser

Determination of the JI Project: Kreivenai Wind Power Park



Annex 1: Determination Protocol

and

Annex 2: Information Reference List

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010

Number of Pages: 36



TABLE 1 CHECKLIST FOR DETERMINATION OF JI-PROJECTS

	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD		
A. G	A. General description of the project						
A.1.	Title of the project:						
A.1.1.	Does the used project title clearly enable to identify the unique JI activity?	2, 3	Yes	$\overline{\checkmark}$	V		
A.1.2.	Are the sectoral scopes to which the	2, 3	No.	CAR#1	$\overline{\mathbf{A}}$		
	project pertains identified.		CAR#1. Corrective Action Request				
			Indicate the sectoral scopes to which the project pertains (as required by Guidelines for Users of the JI PDD Form Version 03).				
A.1.3.	Are there any indication concerning the revision number and the date of the revision?	2, 3	Yes, <u>GSP-version is version 01, 01 October 2008</u> and final version is 03 of 30. January 2009	V	V		
A.1.4.	Is this consistent with the time line of the project's history?	2, 3	Yes	V	V		
A.2.	Description of the project:						
A.2.1.	Is the description delivering a transparent	1, 2,	Partly yes.	CAR#2	$\overline{\checkmark}$		
	overview of the project activities?	3	Planned location of Kreivenai wind power park is in Taurage district near of village Kreivenai in Lithuania. It is planned to install 10 units of Enercon E-82 type wind turbines manufactured by German company Enercon GmbH with total capacity 20 MW.				
			CAR#2. Corrective Action Request				
			Include here also baseline scenario, project scenario (ex-				

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
			pected outcome, including a technical description) and briefly summarize the history of the project (incl. its JI component). As required by Guidelines for Users of the JI PDD Form Version 03.		
A.2.2.	that the project description is in compliance with the actual situation or plan-	5, 6, 7, 8, 9, 10,	Some proofs for demonstration compliance of project description with actual situation are indicated in the PDD version 01: like wind measurements		
		11, 12	These and further proofs were provided, such as:		
			Approval of Municipality General Plan		
			detail planning approvals,		
			technical design documents,		
			land lease agreements,		
			 production forecast/survey of the whole wind farm, 		
			 supply and installation contracts with Enercon GmbH, 		
			 Approval of the grid connection tender, 		
			Building permits.		
			Grid connection Agreement will be signed after completion of the installations	CAR#3	
			CAR#3. Corrective Action Request		
			Indicate already issued building permits in table 4 in PDD		
A.2.3.	Is the information provided by these proofs consistent with the information provided by the PDD?	1	Yes, it was verified on site	V	V

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
A.2.4.	Is all information provided consistent with details provided by further chapters of the PDD?	1, 3	Yes.	V	V
A.3. P	roject participants:				
A.3.1.	Is the form required for the indication of project participants correctly applied?	3	Yes	V	\square
A.3.2.	Is the participation of all listed entities or	3	Yes.	$\overline{\checkmark}$	$\overline{\checkmark}$
	Parties confirmed by each one of them?		Energogrupe UAB ordered TÜV SÜD to determine the project.		
			Neither of the Parties wishes to be considered as project participant.		
A.3.3.	Is all information provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	3, 25,	Yes, but see CR#1 below	CR#1	$\overline{\checkmark}$
		26	CR#1. Clarification Request		
	the 199 (in particular almox 1).		Please clarify the country of investor: Bulgaria or Switzerland.		
A.4. T	echnical description of the project:				
A.4.1.	Location of the project:				
A.4.1.1	• • • • • • • • • • • • • • • • • • •	1, 3	Yes.	$\overline{\mathbf{A}}$	$\overline{\checkmark}$
	cation of the project activity allow for a clear identification of the site(s)?		GPS coordinates of the turbine #7 near the transformer site were verified on site by auditor: N 55°10'22" E 022°04'30"		
A.4.1.2	. How is it ensured and/or demonstrated, that the project proponents can implement the project at this site (ownership,	6, 7, 9, 10, 11,	The project proponents should be capable to implement the proposed project. It is demonstrated by the following:	Ø	Ø

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



(CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
	licenses, contracts etc.)?	12, 20	- Approval of the grid connection tender		
			- Land lease agreements,		
			 Approved Municipality General Plan includes the project on this site 		
			 Detail plans for the sites are prepared and approved 		
			 supply and installation contracts with Enercon GmbH, 		
			- Building permits		
A.4.2.	Technology(ies) to be employed, or me	asures,	operations or actions to be implemented by the project:		
A.4.2.1.	Does the project design engineering reflect current good practices?	3, 8,	The project reflects a professional standard scale wind park as it can be found in many European countries. The planned wind turbines are modern state-of-the-art turbines. It is, moreover, not likely that the project technology will be substituted by a more efficient technology	Ø	Ø
A.4.2.2.	Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance?	1, 3, 8, 10	See comment above A.2.2. It will be 10 turbines with a total 20 MW installed (Rotor diameter 82 m; Total power plant height 119 m; Cut in wind speed 2,5 m/s), it was verified on site as well.	I	4
A.4.2.3.	Is the technology implemented by the project activity environmentally safe?	19	Mainly yes. As mentioned in the PDD that Klaipeda Regional Department of Environment of Lithuanian Ministry of Environment concluded that the environmental impact assessment (EIA) of the planned economic activity – is not required.	V	V
A.4.2.4.	Is the information provided in compliance with actual situation or planning?	1, 3, 20	Yes, it was verified on site	\square	

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



(CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
A.4.2.5.	Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	3, 10	The planned wind turbines are modern state-of-the-art turbines. In Lithuania there are up to now few wind turbines erected which are all quite new and therefore comparable to the planned turbines.	V	V
A.4.2.6.	Is the project technology likely to be substituted by other or more efficient technologies within the project period?	3, 10	It is not expected that today's highly efficient wind turbines will be substituted by better technologies within the project period.	V	V
A.4.2.7.	Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	13, 14	Yes. It is planned that the operation and maintenance (O&M) works will be done by company Enercon Gmbh that will have an agreement on such services with UAB "Energogrupe": - First two years will be a warranty period when En-		Ø
			ercon will operate and maintain the WF according to the Service and Maintenance Contract, which will be signed at the takeover of the facility. The guaranteed availability will be 97%.		
			 Next 12 years it is planned that Enercon will continue O&M of the WF according to the proposed Enercon Partner Concept Contract. 		
A.4.2.8.	Is information available on the demand and requirements for training and maintenance?	13, 14	Yes, see the comment above	V	V
A.4.2.9.	Is a schedule available for the implementation of the project and are there any risks for delays?	3, 15, 29	Yes, a rough time schedule is provided in PDD. Detailed schedule for construction works was provided during onsite visit.	CAR#4	V
			At the time of the on-site viste the works were far advanced: construction of access roads 80%, construction of		

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



(CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD			
			the foundations was started already (turbines ##7 and 9).					
			Erection of turbine towers depends on the weather conditions. Heavy winds will not allow high cranes to operate. This could cause a delay. However the time schedule is conservative enough and project owner is aware of such a risk.					
			CAR#4. Corrective Action Request					
			Indicate in the timetable (table 3 in PDD) also the date for early JI consideration and the start date of the project activity. Provide documented proof.					
A.4.3.	posed small-scale project, including wh	ny the ei	nissions of greenhouse gases by sources are to be reduc mission reductions would not occur in the absence of the for sectoral policies and circumstances:					
A.4.3.1.	Is the form required for the indication of projected emission reductions correctly applied?	2, 3	CAR#5. Corrective Action Request The table A.4.3.1 does not comply with the form	CAR#5				
A.4.3.2.	Are the figures provided consistent with other data presented in the PDD?	5, 23, 24	Yes. Production forecasts are based on 10 year long term wind measurements (Baltic Wind Atlas, where measurements were made on the same site) and on-site wind measurements 2007-2008	Ø				
A.4.4.	Not applicable							
	A.5. Project approval by the Parties involved:							
A.5. Pro	oject approval by the Parties involved	:						

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD					
B. Ba	B. Baseline									
B.1. D	Description and justification of the base	eline ch	osen							
B.1.1.	Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	2, 3	Yes. It is a project specific methodology. The Baseline methodology is indicated as BASREC JI Project Guidelines (see section B.1 in PDD). The version number (2 – June 2006) is mentioned. CAR#6. Corrective action request The version number and issuing date of baseline methodology should be mentioned in the PDD. The current version (3rd Edition - January 2007) should be applied. CAR#7. Corrective Action Request Use the step-wise approach to describe and justify the baseline chosen. Provide the key information in table form. As required by Guidelines for Users of the JI PDD Form	CAR#6 CAR#7	V					
B.1.2.	Is the applied version the most recent one and / or is this version still applicable?	2, 3	Version 03. No, see CAR#6	CAR#6	$\overline{\checkmark}$					
B.1.3.	Is the applied methodology considered being the most appropriate one?	2, 3, 23, 27	Mainly yes CR#2. Clarification request Please clarify why the data for recent years 2006 and 2007 has not been used for baseline calculations. Please clarify: what is "toe" in the title row of table 8.	CR#2	\square					
B.1.4.	Does baseline methodology apply to electricity capacity additions from wind	2, 3	Yes, the used methodology is in principle applicable for	V	V					

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD				
	sources?		additional capacity from wind power plants.						
B.1.5.	Can the geographic and system boundaries for the relevant electricity grid clearly be identified and is the information on the characteristics of the grid available	2, 3	Yes, the geographic and system boundaries for the Lithuanian electricity grid can clearly be identified. Relevant information on the characteristics of the grid are available. However, see CR#2.	CR#2	V				
	B.2. Description of how the anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the JI project								
Description	on of how the baseline scenario is identified a	nd desc	ription of the identified baseline scenario						
B.2.1.	Have all technically feasible baseline	2, 3	Yes.		$\overline{\checkmark}$				
	scenario alternatives to the project activity been identified and discussed by the PDD? Why can this list be considered as being complete?		There are no other realistic alternatives	CAR#8					
			CAR#8. Corrective Action Request	CAR#9					
			The title and correct version number of the CDM Tool for Demonstration and Assessment of Additionality should be referenced.						
			CAR#9. Corrective Action Request						
			Use the step-wise approach to demonstrate that the project provides reductions in emissions. As required by Guidelines for Users of the JI PDD Form Version 03.						
B.2.2.	Have realistic and credible alternatives been identified providing comparable outputs or services? (step 1a)	2, 3	Yes	V	\square				
B.2.3.	Is the project activity without JI included in these alternatives? (step 1a)	2, 3	Yes		$\overline{\checkmark}$				
B.2.4.	Is a discussion provided for all identified alternatives concerning the compliance	2, 3	Yes		$\overline{\checkmark}$				

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
	with applicable laws and regulations? (step 1b)				
B.2.5.	In case the PDD argues that specific laws are not enforced in the country or region: Is evidence available concerning that statement? (step 1b)	2, 3	Not applicable	I	7
B.2.6.	In case of applying step 2 of the additionality tool: Is the analysis method appropriately identified (step 2a)?	2, 3	CAR#10. Corrective Action Request A benchmark analysis has to be applied to prove additionality	CAR10	V
B.2.7.	In case of Option I (simple cost analysis): Is demonstrated that the activity produces no economic benefits other than JI income?	2, 3	Not applicable	V	Ø
B.2.8.	In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	2, 3	However the "Tool for the demonstration and assessment of additionality" (Version 05.2) considers an investment comparison analysis inappropriate if the alternative to the project activity is the supply of electricity from a grid (guidance nr.14).	V	Ø
B.2.9.	In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified?	2, 3	See B.2.6	CAR#10	V
B.2.10.	In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?	2, 3	See B.2.6	CAR#10	V

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
B.2.11.	In case of Option II or Option III: Is the analysis presented in a transparent manner providing public available proofs for data?	2, 3	See B.2.6.	V	ď
B.2.12.	In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	2, 3	Not applicable	I	V
B.2.13.	In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?	2, 3	Not applicable	V	V
B.2.14.	In case of applying step 3 (barrier analysis): Is it transparently shown that at least one of the alternatives is not prevented by the identified barriers?	2, 3	Not applicable		V
B.2.15.	Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	2, 3	Yes, similar project activities have been identified. All of them are foreseen receiving JI support.		V
B.2.16.	If similar activities are occurring: Is it demonstrated that in spite these similarities the project activity would not be implemented without the JI (step 4b)?	2, 3	Yes. See comment above.	V	V
B.2.17.	Is it appropriately explained how the approval of the project activity will alleviate the economic and financial hurdles or other identified barriers?	2, 3	Yes, additional revenues from ERUs sale during crediting period will increase IRR from 7.47% up to 7,70%	V	V

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PDD in GSP	Final PDD					
B.3. De	B.3. Description of how the definition of the project boundary is applied to the project:										
B.3.1.	Do the spatial and technological boundaries as verified on-site comply with the discussion provided by the PDD?	1, 6, 8, 20, 22	Yes, it was verified on-site.		V	V					
	on of the sources and gases included in the p he methodology applied and comment at lea		oundary (Fill in the required amount of sub check line answered with "No")	dists for sour	ces and ga	ses as					
	Source:	2, 3			$\overline{\checkmark}$	$\overline{\checkmark}$					
	Emissions from electricity generation in fos- sil fuel fired power plants of any connected electricity system Gas(es): CO2 Type: baseline emissions		Boundary checklist	Yes / No							
			Source and gas(es) discussed by the PDD?	Yes							
			Inclusion / exclusion justified?	Yes							
Тур			Explanation / Justification sufficient?	Yes							
			Consistency with monitoring plan?	Yes							
	irther baseline information, including t ng the baseline	the date	e of baseline setting and the name(s) of the	ne person(s)/entity(ie	es) set-					
B.4.1.	Is there any indication of a date when determining the baseline?	2, 3	Yes, the date of the baseline setting is indicate ber 2008)	d (01 Octo-	V	Ø					
B.4.2.	Is this in consistency with the time line of the PDD history?	2, 3	Yes.		V	V					
B.4.3.	Is information of the person(s) / enti- ty(ies) responsible for the application of the baseline methodology provided in consistency with the actual situation?	2, 3	Baseline was set by UAB "Energogrupe" (Proje pant), represented by Director Justinas Vilpišas was confirmed on site.		V	V					
B.4.4.	Is information provided whether this per-	2, 3	Yes, see the comment above.		V	V					

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
	son / entity is also a project participant?				
C.					
C.1.	Are the project's starting date and operational lifetime clearly defined and reason-	2, 3	Yes, the operational lifetime is correctly indicated and reflect the envisioned schedule for the implementation.		V
	able?		CR#3. Clarification Request	CR#3	
			Clarify the starting date of the project activity compared to the starting date of the crediting period		
			CAR#11.	CAR #11	
			The starting date of the project in C.1 is not consistent with the one in table 3	OAIC #11	
C.2.	Is the assumed crediting time clearly defined and reasonable (crediting period between 2008 and 2012)?	2, 3	Yes, start of the crediting period is October 2009 and end is December 2012, which is 3 months and 3 years.	V	V
C.3.	Length of the crediting period	2, 3	CAR#12. Corrective Action Request	CAR#12	$\overline{\mathbf{V}}$
			The crediting period should not be longer than December 2012. Credits above 2012 should not be claimed.		
D. Mor	nitoring plan	•		,	
D.1. C	Description of monitoring plan chosen:				
	Is the applied methodology considered	2, 3	The requirements are in principle fulfilled.	CR#2	$\overline{\checkmark}$
	being the most appropriate one?		The used methodology is not based on any CDM metho-	CR#4	
			dology. It is based on BASREC JI Handbook. The main requirements of the Kyoto-Protocol, Annex B of Chapter 6 are mentioned in the PDD. However see CR#2	CAR#13	

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
		CAR#13. Corrective Action Request		
		Use the step-wise approach to describe the monitoring plan. As required by Guidelines for Users of the JI PDD Form Version 03.		
D.1.1. Option 1 – Monitoring of the emissions in	the proje	ct scenario and the baseline scenario		
In the following "data checklists" are si lists" for all data which have to be mon		r all data which are fixed at determination time, and "mon uring the life-time of the project.	itoring che	eck-
D.1.1.1. Data to be collected in order to monitor	emission	ns from the project and how these data will be archived		
Is the list of parameters presented by chapter D.1.1.1 considered to be complete with regard to the requirements of the applied methodology?	2, 3, 22	Yes. Net electricity supplied to the grid is the relevant parameter to be monitored.	V	V
D.1.1.2. Description of formulae used to estimat	e project	emissions		
Are formulae required for the estimation of project emissions correctly presented enabling a complete identification of parameter to be used and / or monitored	2, 3	No project emissions are expected. Hence there is no need to monitor project emissions.		\square
D.1.1.3. Data to be collected in order to determi	ne the b	aseline emissions within the project boundary and how the da	ata is archiv	/ed
Parameter Title: E _{VP} Net electricity supplied to the grid	2, 3	The project proponents decided to use the net energy production (energy which is fed into the grid minus energy which is taken from the grid in times where the wind farm does not produce enough energy to cover its auxiliary demand). Therefore no project emissions have to be taken into account for the externally provided auxiliary energy. The baseline emission factor will not be changed during the crediting period. Yes. Net electricity supplied to the grid is the relevant pa-		V

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PDD in GSP	Final PDD
		rameter to be monitored. The designs include installation of commercial meter (with parallel control meter). No back-up feed is foreseen – batteries will be installed for emergency situations.			
		Monitoring Checklist	Yes / No		
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided for estimation?	Yes		
		Has this value been verified?	Yes		
		Measurement method correctly described?	Yes		
		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	No		
		QA/QC procedures appropriate?	No		
		CAR#14. Corrective action request		CAR#14	
		Monitored data cannot be recorded constantly			
		CAR#15. Corrective action request		CAR#15	
		QA/QC procedures of meter calibration and data transfer procedures shall be described			

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD		
D.1.1.4. Description of formulae used to estimate baseline emissions							
Is it explained how the procedures provided by the methodology are applied by the pro-	2, 3	Partly yes	CAR#1	$\overline{\checkmark}$			
posed project activity?		CAR#16. Corrective Action Request It shall be clearly indicated that parameter E _{VP} is the net power dispatched to the grid from Kreivenai wind power park. Which means the difference between supplied and consumed power.	6				
D.2. Quality control (QC) and quality assurance (QA) procedures undertaken for data monitored:							
D.2.1.							
D.3. Please describe the operational and management structure that the project operator will apply in implementing the monitoring plan:							
D.3.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?	2, 3, 13, 14	Not yet.	CAR#1	V			
		It is planned that the operation and maintenance (O&M) works of Kreivenai wind power park will be done by company Enercon Gmbh that will have an agreement on such services with UAB "Energogrupe" (see comment A.4.2.7).	7				
		CAR#17. Corrective Action Request					
		Provide description of the O&M structure					
D.3.2.	Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	2, 3	No, see comment above.	CAR#1 7			
D.3.3.	Does the monitoring plan provide current good monitoring practice?	2, 3	See comments above	CAR#1 7			

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



(CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD			
D.3.4.	Is there any monitoring manual for the personnel elaborated which describes detailed procedures and useful information enabling a better understanding and the implementation of the envisioned	2, 3	See comments above Worksheets for calculations of ERU-s and log book for entering monitored data is developed and attached to Monitoring Plan.	CAR#17	Ø			
D.4. Na	monitoring provisions? D.4. Name of person(s)/entity(ies) establishing the monitoring plan:							
D.4.1.	Is information of the person(s) / enti- ty(ies) responsible for the monitoring plan provided in consistency with the ac- tual situation?	2, 3	The person who is in charge for the monitoring plan is indicated: UAB "Energogrupe" (Project participant), represented by Director Justinas Vilpišauskas. It was confirmed on-site.	V	V			
D.4.2.	Is information provided whether this person / entity is also a project participant?	2, 3	Yes, it is mentioned that this person is a project participant. See the comment above.	Ø	V			
E. Estin	nation of greenhouse gas emission	reduc	tions					
E.1. Es	stimated project emissions and formul	ae used	d in the estimation					
E.2. Es	stimated leakage and formulae used in	the es	timation, if applicable:					
E.2.1.	Are formulae required for the estimation of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	2, 3	There are no leakage of emissions in wind power utilities, therefore formulae are not required	Ø	Ø			
E.3. Th	E.3. The sum of E.1. and E.2.:							
E.3.1.	Is the data provided under this section in consistency with data as presented by	2, 3	Yes		$\overline{\checkmark}$			

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD			
	other chapters of the PDD?							
E.4. E	E.4. Estimated baseline emissions and formulae used in the estimation:							
E.4.1.	Are formulae required for the estimation of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	2, 3	Yes	V	V			
Exp	planation of methodological choices							
E.4.2.	Is it explained how the procedures provided by the methodology are applied by the proposed project activity?	2, 3	Yes	V	Ī			
E.4.3.	Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	2, 3	Not applicable	V	V			
E.4.4.	Are the formulae required for the determination of project emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	2, 3	Yes	V	V			
Ex-	Ex-ante calculation of emission reductions							
E.4.5.	Is the projection based on the same procedures as used for future monitoring?	2, 3	Yes.	V				
E.4.6.	Are the GHG calculations documented in a complete and transparent manner?	2, 3	Yes	V				
E.4.7.	Is the data provided under this section in consistency with data as presented by	2, 3	Yes	V	$\overline{\mathbf{A}}$			

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD		
	other chapters of the PDD?						
E.4.8.	Is the choice of options to determine the emissions factor (OM, BM) justified in a suitable and transparent manner?	2, 3	Yes	V	V		
E.4.9.	In case of alternative weighing factors for the Combined Margin: Is the quantifica- tion of the alternative weighing factor jus- tified in a suitable and transparent man- ner?	2, 3	No alternative weighing factor is used.	V	V		
E.4.10.	In case of alternative weighing factors for the Combined Margin: Is the guidance for the PDD concerning the acceptability of alternative weights considered in the dis- cussion?	2, 3	Not applicable as no alternative weighing factor is used		V		
E.5. Di	fference between E.4. and E.3 represe	nting tl	ne emission reductions of the project:				
E.5.1.	Are formulae required for the determination of emission reductions correctly presented?	2, 3	Yes	V	V		
E.6. Ta	E.6. Table providing values obtained when applying formulae above:						
E.6.1.	Will the project result in fewer GHG emissions than the baseline scenario?	2, 3	Yes, the project emissions and leakages are zero. Hence in comparison to the baseline scenario the project result in fewer GHG emissions.	V	V		
E.6.2.	Is the form/table required for the indica-	2, 3	No	CAR#18	V		
	tion of projected emission reductions cor- rectly applied?		CAR#18. Corrective Action Request				
	τεσιιγ αργιιευ:		Apply the correct form. Credits after 2012 cannot be claimed				

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
E.6.3.	Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	2, 3	Yes	Ø	V
E.6.4.	Is the data provided under this section in consistency with data as presented by other chapters of the PDD?	2, 3	Yes	V	V
F. Envi	ronmental impacts				
	ocumentation on the analysis of the encordance with procedures as determine		nental impacts of the project, including transboundar the host Party:	y impact	s, in
F.1.1.	Has an analysis of the environmental impacts of the project activity been sufficiently described?	1, 2, 3	The most relevant environmental impacts are sufficiently described in the PDD. An EIA was not necessary, which is confirmed by a letter from Ministry of Environment.		
F.1.2.	Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	1, 19	The concerned municipality has decided that an EIA is not necessary.	Ø	V
F.1.3.	Will the project create any adverse envi- ronmental effects?	1, 2, 3, 19	No. However the requirement for monitoring of the noise level is described in PDD.		
			CR#4. Clarification Request	CR#4	
			Clarify how the monitoring of noise level will be implemented.		
			CR#5. Clarification Request	CR#5	$\overline{\checkmark}$
			Clarify how the area was explored for archaeological objects in line with the Cultural heritage law of Lithuania.		

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD	
			FAR # 1. Forward action request		FAR #1	
			The implementation for the monitoring of the noise level will be checked during the first periodic verification.			
F.1.4.	Are transboundary environmental impacts considered in the analysis?	1, 2, 3	The site is situated approximately 15 km north from the Russian border.	CAR#19	V	
			CAR#19. Corrective Action Request			
			A discussion should be added if there are any impacts on the Russian side (e.g. settlements) which could be af- fected.			
cl		ıg docu	icant by the project participants or the host Party, pr mentation of an environmental impact assessment une host Party:			
F.2.1.	Have identified environmental impacts been addressed in the project design?	1, 2, 3, 19	No environmental impacts have to be considered as significant. In accordance with local and national laws the siting of the wind turbines has been chosen in such a way that no residents will be disturbed.	V	V	
			It was verified on site as well.			
F.2.2.	Does the project comply with environ- mental legislation in the host country?	1, 19	It can be assumed that the project complies with the environmental legislation in the host country.	V	\square	
G. Stakeholders' comments						
G.1. In	formation on stakeholders' comments	on the	project, as appropriate:			
G.1.1.	Have relevant stakeholders been consulted?	1, 21	Yes	Ø	$\overline{\mathbf{A}}$	
		1	While preparing the detailed plans, compulsory public			

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



	CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
			consideration procedures were undertaken where all stakeholders may participate. Compulsory written agreements of residents in surrounding areas were obtained during the process of detailed planning and technical project preparation process. Stakeholders have not expressed any objections.		
G.1.2.	Have appropriate media been used to invite comments by local stakeholders?	21	Yes, announcements in local newspapers "Taurages Balsas" and "Taurages Kurjeris".	V	V
			Project detailed plan was published for comments in the Taurages municipality website.		
G.1.3.	If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	1, 21	Yes, provided information deems that the consultation process was carried out according the national regulations.	<u> </u>	
G.1.4.	Is the undertaken stakeholder process described in a complete and transparent manner?	1, 21	Yes	V	V
G.1.5.	Is a summary of the stakeholder com- ments received provided?	1, 2, 3, 21	Yes, stakeholders have not expressed any objections.	V	V
G.1.6.	Has due account been taken of any stakeholder comments received?	1, 2, 3, 21	No comments were received	V	V

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



H. Annexes 1 – 4								
Annex	Annex 1: Contact Information							
H.1.1.	Is the information provided in consistency with the one given under section A.3?	1, 2, 3	Yes	V	V			
H.1.2.	Is information on all private participants and directly involved Parties presented?	2, 3	Yes	V	V			
Annex	2: Baseline study							
H.1.3.	If additional background information on baseline data is provided: Is this information in consistency with data presented by other sections of the PDD?	2, 3	See CR#2	CR#2	V			
H.1.4.	Is the data provided verifiable? Has sufficient evidence been provided to the determination team?	2, 3	CAR#20. Corrective Action Request Source of the data used in Baseline Study shall be mentioned.	CAR#20	V			
H.1.5.	Does the additional information substantiate statements given in other sections of the PDD?	2, 3	See the comment above.	V	V			
Annex 3: Monitoring Plan								
torin tenc	additional background information on moni- ig is provided: Is this information in consis- y with data presented by other sections of PDD?	2, 3	All information given in Annex 3 is consistent with the PDD information.	Ø	V			

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



H.1.7. Is the information provided verifiable? Has sufficient evidence been provided to the audit team?	2, 3, 22	Yes the information will be verifiable. The commercial meter will have parallel control meter. Additionally process meters will be installed in every turbine and additionally two line meters will be installed on the entrance to the transformer station. These meters could be used to cross-check the monitored data.	Ø	V
---	-------------	--	---	---

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010

Number of Pages: 36



Table 2 Resolution of Corrective Action and Clarification Requests

Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion
CR#1 Please clarify the country of investor: Bulgaria or Switzerland.	A.3.3	The Kreivenai Wind Power Park Joint Implementation Project's Host party is Lithuania while Investor party – Switzerland. Investor party represents Bulgarian company Ecocom BG Ltd that intends to purchase Project Emission Reduction Units	The issue remains unclear. Letter of Approval between Switzerland and Bulgarian company could serve as proof. Alternatively, it has to be a unilateral statement, meaning no investor country and company stated.
Second round of clarification CR#1 Clarify how the country of Switzerland can represent the Bulgarian company? Is there an agreement or any other document available? Provide documented agreement or statement.		After clarification it is clear that Swiss Designated Focal Point (DFP) are ready to issue LoA for non Swiss based companies only if project pass Final determination (some time before Swiss DFP announced that LoA for CDM projects might be issued at any project stage). According to project participants understanding Final Determination is not possible without Investor party LoA. Based on this fact company Ecocom BG decided to change Investor party from Switzerland to the Netherlands.	participate in JI project by the Dutch DFP (see IRL no: 25) if they meet requirements given in Dutch Ministerial Decree
		According to the Netherlands DFP public information "Companies, international organisations and natural persons ('entities') worldwide are eligible to be granted approval for participation in a JI-project by the Dutch DFP-JI, if they meet the conditions set out in the Ministerial Decree".	

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion
		Dutch Ministerial Decree is enclosed.	
Please clarify why the data for recent years 2006 and 2007 has not been used for baseline calculations. Please clarify: what is "toe" in the title row of table 8.	B.1.3	The date of 2006 and 2007 weren't used do to reason that Lithuania has united baseline methodology which attitudes are transferred into National Allocation Plan for first commitment period (2008-2012). The NAP indicates that Lithuanian baseline emissions factor for JI projects is 0,626 tCO2/MWhe. According to representatives of Lithuanian Ministry of Environment it is strictly recommended to use this baseline emissions factor. The PDD is adjusted according to above mentioned reason. The meaning of "toe" and "tne" is the same – tones oil equivalent. The "toe" is English version and "tne" – Lithuanian. The PDD is adjusted and expression "toe" is used.	The issue of "toe" is clear and the answer is acceptable. However the issue of fixed baseline emissions factor needs additional clarification and documented proof. It seems obvious to use most recent data for baseline calculations and it is unclear why the recent data cannot be used.
Second round of clarification CR #2 Provide the written statement of the DFP that the most recent available baseline data has been used.		The Lithuanian DFP confirms that Project baseline setting methodology and used data satisfy national requirements. The official letter on this issue is enclosed.	Lithuanian DFP approves use of baseline calculations which were also presented in National Allocation Plan (see IRL No: 27). Therefore the issue is considered to be clarified.
CR#3 Clarify the starting date of the project activity compared to the starting date of the crediting period.	C.1	The Kreivenai Wind Power Park's energy generation is planed from March 2009. First crediting period consist 3 years and 10 months (2009 04 –2012 12). The note under Table 3 indicates start-up time of each wind turbine. The Table 6, Tables 16 and Table 17 were ad-	The crediting period corresponds to starting date of project activity. The issue is clarified now.

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion
		justed based on each wind turbine start-up time (expected).	
CR#4 Clarify how the monitoring of noise level will be implemented.	F.1.3	After installing the wind-power plants the compulsory measurements of the noise level will be undertaken. The measurements will be done by Taurages centre of public health side on its equipment.	The PDD is updated with the correct information, but the implementation for the monitoring of the noise level has to be checked during the first periodic verification. See FAR # 1
CR#5 Clarify how the area was explored for archaeological objects in line with the Cultural heritage law of Lithuania.	F.1.3	No valuable cultural heritages are registered in the Project area.	The issue is clarified now because by the IRL 19 it was presented "Conclusions that Environment Impact Assessment is not required by Klaipeda Regional Environment Protection Department of Ministry of Environment; #(9.14.2.)-V4-411 and #(9.14.5)-LV-4697".
CAR#1 Indicate the sectoral scopes to which the project pertains (as required by Guidelines for Users of the JI PDD Form Version 03).	A.1.2.	According to list of sectoral scopes (version 02) – Project belongs for the sectoral scope - (1) Energy industries (renewable/non-renewable sources).	Needed amendment was done to PDD. The issue is resolved now.
CAR#2	A.2.1.	PDD is adjusted according to Guidelines for Users of the JI PDD Form Version 03 requirements.	Needed amendment was done to PDD. The issue is

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion
Include here also baseline scenario, project scenario (expected outcome, including a technical description) and briefly summarize the history of the project (incl. its JI component). As required by Guidelines for Users of the JI PDD Form Version 03.			resolved now.
CAR#3	A.2.2	The Table 4 was updated. It was fixed the date of re-	The obtained Building Permit
Indicate already issued building permits in table 4 in PDD.		ception of Constructional permit on 7 wind turbines and substation erection. It was indicated the expected date on reception of Constructional permit on last 3 wind turbines erection.	(IRL no: 12) is indicated in the table. The issue is solved.
CAR#4	A.4.2.9	The Table 3 was updated. It were fixed dates of Deci-	The start of project activities is indicated before the JI
Indicate in the timetable (table 3 in PDD) also the date for early JI consideration and the start date of the project activity. Provide documented proof.		sion of the board to develop Project including JI consideration, Start of Project activities, Reception of LoE. Additionally it were indicated dates on reception of LoA and conclusion Final Determination. It were adjusted dates of Transportation of wind turbines, Laying down the power cables and Start-up works	consideration. The project should be additional to any that would have occurred without the project. It has to be indicated that this project was not considered to implement without JI.
Second round of clarification CAR #4		No activities were performed without JI consideration.	It is not acceptable. The early
Explain which Project activities took place before JI consideration.		Start of project activities (2006 10 05) - indicates date when decision of the board to participate into AB Lietuvoe energija competition for the permit reception on connection into national grid was issued.	JI consideration shall be be- fore the project start activity. Otherwise the project would not be additional.
		The prepared business plan includes JI consideration at early stage. The business plan was submitted for IAE during onsite visit.	

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion	
Third round of clarification CAR #4		Any activities weren't taken before JI consideration.	The issue is clarified now –	
Explain what where the project start activities, which took place before JI consideration.		Official project activities started 06/02/2006 from boards on 06.02.2006 from board decision on preparation of business plan for project development including JI consideration. Prepared business plan already includes revenues from emission reduction sale (all related documentation was submitted during onsite visit). After preparation of business plan the board made decision on investment into project as well as on development of JI project. All board decisions are archived and might be used for evidence on most important project stages development.	the JI revenues were considered before any investment decision was taken and before the start of the project activity which was the start of construction works in December 2008. The issue is considered solved.	
CAR#5	A.4.3.1	The Table 4.3.1. was changed. The emission reduc-	The Table 4.3.1. is filled up	
The table A.4.3.1 does not comply with the form.		tions units volume during year 2008 were recalculated according to the wind energy start-up time (expected). The spreadsheet is enclosed.	correctly now. The issue is considered solved.	
CAR#6	B.1.1	The PDD is adjusted according to attitudes of BASREC Regional Handbook on Procedures for Joint Implementation in the Boltic See Region (Version 3.1 June 2007)	The PDD is updated with the	
The version number and issuing date of			correct information.	
baseline methodology should be mentioned in the PDD. The current version (3rd Edition - January 2007) should be applied.		tation in the Baltic Sea Region (Version 3 – June 2007).	The issue is considered solved.	
CAR#7	B.1.1.	PDD is adjusted according to Guidelines for Users of	The key information is pro-	
Use the step-wise approach to describe and ustify the baseline chosen. Provide the key		the JI PDD Form Version 03 requirements.	vided in the table form as required.	
information in table form. As required by Guidelines for Users of the JI PDD Form Version 03.			The step-wise approach to describe and justify the base-line chosen has been fol-	

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion
			lowed. There is no need to provide special titles to the steps to follow exactly the lay-out of the Guidelines for Users of the JI PDD Form Version 03.
			The issue is considered solved.
CAR#8	B.2.1	The version 05.2 of the CDM Tool for the Demonstra-	The PDD is updated with the correct information.
The title and correct version number of the CDM Tool for Demonstration and Assessment of Additionality should be referenced.	DM Tool for Demonstration and Assess- PDD. It was written 5.02 early but that number does not		The issue is considered solved.
CAR#9	B.2.1.	PDD is adjusted according to Guidelines for Users of	The step-wise approach to
Use the step-wise approach to demonstrate that the project provides reductions in emissions. As required by Guidelines for Users of the JI PDD Form Version 03.		the JI PDD Form Version 03 requirements.	demonstrate that the project provides reductions in emissions is followed. There is no need to provide special titles to the steps to follow exactly the lay-out of the Guidelines for Users of the JI PDD Form Version 03.
			The issue is considered solved.
CAR#10	B.2.6.	Additionality is proven by an investment comparison	The approach to demonstrate
A benchmark analysis has to be used to prove additionality.		analysis due to reason that alternatives are based on necessity to make investments. It was removed misleading attitude that one alternative does not require in-	additionality is not accepta- ble. The choice of tool de- monstrating additionality

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion
		vestments.	needs to be justified in more detail; to be justified why in this case the benchmark analysis is not applicable.
Second round of clarification of CAR#10 A benchmark analysis might be used to prove additionality.	B.2.6.	According to CDM Additionality toll version 05.2 section 15 "If the proposed baseline scenario leaves the project participant no other choice than to make an investment to supply the same (or substitute) products or services, a benchmark analysis is not appropriate and an investment comparison analysis shall be used. If the alternative to the project activity is the supply of electricity from a grid this is not to be considered an investment and a benchmark approach is considered appropriate". Project participant does not have other choice only to make an investment on installation of new energy production technology (wind) which will help to produce the same product – electricity. Project does not have alternative that is based on continuation of existing situation for supply electricity to the grid without investments therefore the benchmark approach is not considered as appropriate. According to CDM Additionality toll version 05.2 section 15 "The purpose of an investment analysis in the context of the CDM is to determine whether the project is less financially attractive than at least one alternative in which the project participants could have invested" Project case fully corresponds this altitude because alternative B (the electric power in the Lithuanian network will be produced by new modern cogeneration power	The EB guidance Annex 35 of EB 39 is not officially applied by the JISC until now. The investment comparison analysis is accepted for the already registered projects that can be used as reference. This issue is considered closed.

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion
		plants) to the Project activity clearly indicates that Project participant has possibilities to invest into energy generation technology that is more financially attractive comparison to the Project activity.	
		According to CDM Additionality toll version 05.2 section 15 "The benchmark analysis is therefore suited to circumstances where the baseline does not require investment or is outside the direct control of the project developer, i.e. cases where the choice of the developer is to invest or not to invest".	
		Project case fully contravenes this altitude because Project baseline is based on Investments and is on direct control of the project developer.	
CAR#11	C.1.	Start of Project activities (decision of the board on	•
The starting date of the project in C.1 is not consistent with the one in table 3		preparation business plan for Project development including JI consideration) was on 06 02 2006	correct information. The issue is considered solved.
CAR#12	C.3	The starting date of the crediting period is set to 1 st	The PDD is updated with the
The crediting period should not be longer than December 2012. Credits above 2012 should not be claimed.		March, 2009. First crediting period consist 3 years and 10 months (2009–2012). In case of additional international treaties between the parties of Kyoto protocol are signed, the crediting period may be extended for additional internationally agreed period.	correct information. The issue is considered solved.
CAR#13 Use the step-wise approach to describe the	D.1.	PDD is adjusted according to Guidelines for Users of the JI PDD Form Version 03 requirements	The key information is provided in the table form as required.

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion	
monitoring plan. As required by Guidelines for Users of the JI PDD Form Version 03.			The step-wise approach to describe the monitoring plan is followed according to the Guidelines for Users of the JI PDD Form Version 03.	
			The issue is considered solved.	
CAR#14	D.1.1.3	Recording frequency was changed from Constantly to	The Table D.1.1.3 is filled up	
Monitored data cannot be recorded constantly.		Monthly.	correctly now. The issue is considered solved.	
CAR#15	D.1.1.3	QA/QC procedures of meter calibration and data trans-	Commercial power metering	
QA/QC procedures of meter calibration and data transfer procedures shall be described		fer procedures are described into Table D.2.	devices will be installed and will be operated by AB Lietuvos energija. This company will carry out its periodical supervision, calibration and maintenance.	
			The issue is considered solved.	
CAR#16	D.1.1.4	It is adjusted into PDD that EVP – net power dispatched	The PDD indicates now	
It shall be clearly indicated that parameter EVP is the net power dispatched to the grid from Kreivenai wind power park. Which means the difference between supplied and consumed power.		to the grid from Kreivenai wind power park (difference between supplied into grid power and consumed from the grid power), kWh	clearly the EVP parameter. The issue is considered solved.	
CAR#17	D.3.1	It was provided additional data about UAB "Ener-	The management structure is	

Project Title: Kreivenai Wind Power Park

Date of Completion: 21 June 2010



Clarifications and corrective action requests by determination team	Ref. to table 2	Summary of project owner response	Validation team conclusion	
Provide description of the O&M structure		gogrupe" management structure and planed information	simple but sufficient.	
·		and invoices changes between AB Lietuvo energija and Project developer.	The issue is considered solved.	
CAR#18	E.6.2	The table with Estimated emission reduction after year	The Table 18 is filled up cor-	
Apply the correct form. Credits after 2012 cannot be claimed.		2012 was removed.	rectly now. The issue is considered solved.	
CAR#19	F.1.4	The Project does not have any transboundary impact	The discussion is sufficient.	
A discussion should be added if there are any impacts on the Russian side (e.g. settlements) which could be affected.		because the borderline of Russian Federation is over approx. 15 km from Project location side. Project implementation and operation are fully under regulation of national legal acts.	The issue is considered solved.	
CAR#20	H.1.4	Sources are mentioned	Titles of referenced docu-	
Source of the data used in Baseline Study shall be mentioned.			ments are still missing. See also CR#2	
Second round of clarification CR #20		Sources are mentioned	Titles of referenced docu-	
Titles of referenced documents shall be men-			ments are mentioned now.	
tioned.			The issue is considered solved.	
FAR # 1	F.1.3	See response to CR#4	Is derived from CR#4.	
The implementation for the monitoring of the noise level will be checked during the first periodic verification.			Shall be checked during next verification audit.	

Information		Determination of Kreivenai Wind Power Park Joint Implementation Project
Information Reference	2010-06-21	Information Reference List
List		

Page 34 of 36



Reference No.	Document or Type of Informati	on		
1.	Interview and on-site visit at Kreivenai Wind Power Park Joint Implementation Project, conducted 14-15.11.2008			
	Determination auditors on-site:			
	Madis Maddison	OÜ Projektkeskus, Tallinn, Estonia		
	Interviewed persons:			
	Justinas Vilpišauskas	UAB Energogrupe, project developer		
	Arturas Strolia	Consultant		
	Sarune Betaite	Taurage Municipality, Department of Architecture and Infrastructure		
	Romas Jurgelionis	Klaipeda regional Environment Protection Department, Taurage agency, director		
2.	PDD, published version 01, issued 0	1 October 2008		
3.	PDD, last version 06, 31 September 2009			
4.	Letter of Endorsement (LoE) by Ministry of Environment of the Republic of Lithuania, issued on 08.05.2008 No.(10-5)- D8-3946			
5.	Production forecast (micrositing), Enercon GmbH Aurich, 17.12.2007			
6.	Detail planning approvals by Taurage Municiaplity, Nr. 1-704 (17.07.2008) and by Taurage County Nr. DT 36/08 (13.10.2008)			
7.	Approval of Municipality General Plan, 13.11.2008 Nr.1-1-850			
8.	Technical design documents, 0809-TP, UAB Alytaus Statybos Koncernas, Alytus 2008 (reviewed on site)			
9.	Land lease agreements, ##: 08/28 (1), (2), (3); 08/02/11-(3,00); 07/08/06-(8,27); 07/08/06-(10,44), (reviewed on site)			
10.	Supply contract # W-7110 with Enercon GmbH for generators from 20.05.2007; # W-03657 for electrical infrastructure, from 25.07.2007 (reviewed on site)			
11.	Approval of the grid connection tender by Lietuvos Energija Nr. 211-8620 (21.12.2006)			

Information Reference List	
Reference	
List	

2010-06-21

Determination of Kreivenai Wind Power Park Joint Implementation Project Information Reference List

Page 35 of 36



Reference No.	Document or Type of Information
12.	Building Permits # NS-97 (29.10.2008) for 7 turbines and # 02-103 (03.09.2008) for access roads and turbine foundations
13.	Service and Maintenance Contract Draft, Enercon from 20.01.2004
14.	Enercon Partner Concept Contract Draft, Enercon from 20.01.2004
15.	Detailed schedule for construction works, UAB Energogrupe, 12.11.2008
16.	The minutes (No: 06-8 (11) from 29.11.2006) of the shareholders meeting
17.	Permit to enhance the energy generation capacity No. LP-0132, by Lithuanian Ministry of Economy 15.03.2007
18.	Business Plan, UAB Energogrupe, 2006
19.	Conclusions that Environment Impact Assessment is not required by Klaipeda Regional Environment Protection Department of Ministry of Environment; #(9.14.2.)-V4-411 and #(9.14.5)-LV-4697, 13.10.2004
20.	Detailed plan on wind park and substation location, UAB Energogrupe
21.	Reports on stakeholder consultation process, UAB Energogrupe, 20.05.2008 and 16.09.2008
22.	Electric wiring diagram showing placement of meters, UAB Energetikos Projektai, 12.08.2008
23.	Baseline and ERU calculation worksheet, Kreivenai economical figures_Secret(v2).xls, from 20.05.2009
24.	Baltic Wind Atlas, 27.10.2003
25.	Homepage of SenterNovem, an agency of the Dutch Ministry of Economic Affairs http://www.senternovem.nl/carboncredits/approval_procedure/participation_in_ji_projects.asp , (accessed 02.02.09)
26.	Dutch Ministerial Decree, 13.04.2006
27.	Letter on baseline calculations. Ministry of Environment of Lithuania. 2009-01-28, Nr. (10-7)-D8-760
28.	Photos of the project activity
29.	The minutes (No: 06-2 (5) from 06.02.2006) of the shareholders meeting (Document proofing the date for early JI consideration)
30.	LoA of Netherlands, issued 25.02.2010

Information Reference List	Determination of Kreivenai Wind Power Park Joint Implementation Project Information Reference List	Page 36 of 36	
----------------------------------	--	------------------	--



Reference No.	Document or Type of Information
31.	LoA of Lithuania, issued 15.01.2010
32.	MoC, issued 21.01. 2010
33.	Letter from PP Ecocom BG LTD to TÜV SÜD confirming confidentiality, revised project name and MoC, 31.03.2010
34.	Production data of electric and thermal power in Lietuvos Elektrine during 2002-2005