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Determination Report

JSC Energogrupe

DETERMINATION OF THE JI-PROJECT:

"DETERMINATION OF THE:

MOCKIAI WIND POWER JOINT IMPLEMENTATION PROJECT", LITHUANIA (TRACK 2)

REPORT NO. 1066655

27 May 2011

TÜV SÜD Industrie Service GmbH

Carbon Management Service
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Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
1066655	01-09-2009	4	27-05-2011	-

Subject: Determination of a JI Project

Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich Germany	**TÜV SÜD Contract Partner:** TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich Germany
The Client: UAB Iverneta Sv Ignoto 1, Vilnius, LT 01120,Lithuania **Further project participant:** Stichting Carbon Finance (SCF), Netherlands	**Project Site(s):** Mockiai village at Silute district at the western part of Lithuania. GPS coordinates Longitude 55.475 and Latitude 21.3327
Project Title: Mockiai Wind Power Joint Implementation Project	
Applied Methodology / Version: Project specific methodology based on BASREC JI Project Guidelines	**Scope(s):** 1 **Technical area (TA):** 1.1
First PDD Version: Date of issuance: 05-February-2009 Version No.: 1.0 Starting Date of GSP 07-03-2009	**Final PDD version:** Date of issuance: 26-May-2011 Version No.: 1.7
Estimated Annual Emission Reduction:	21 710 tCO_2e
Assessment Team Leader: Robert Mitterwallner **Further Assessment Team Members:** Madis Maddison (GHG Auditor-Determiner) Georgios Agrafiotis (Project Manager, Auditor-Determiner)	**Technical Reviewer:** Thomas Kleiser **Responsible Certification Body Members:** Rachel Zhang

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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 Track 2. 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
CAR	Corrective action request
CR	Clarification request
DFP	Designated Focal Point
DP	Determination Protocol
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
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
DVM	Determination and Verification Manual
WPP	**W**ind **P**ower **P**ark

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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 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:

Mockiai Wind Power Joint Implementation Project (in short: Mockiai WPP). See UNFCCC link:

http://ji.unfccc.int/JI_Projects/DB/HBUEZQTG4H5T7QW5252VHHG1SKL47A/PublicPDD/4DW6H4GZTB21JZET566WZQKH53JX86/view.html

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.
- 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) under the link:

http://www.netinform.de/KE/Wegweiser/Guide2_1.aspx?ID=5971&Ebene1_ID=26&Ebene2_ID=1900&mode=1

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 based on the "Joint Implementation Determination and Verification Manual" version 01, from 19th JISC meeting (IRL 29). The work starts with appointment of team covering the technical areas, sectoral scopes and relevant host country experience for evaluating the JI project activity. 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 determiner 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: Requirement checklist			
Checklist Question	***Reference***	***Comment***	***Draft and/or Final Conclusion***
The checklist is organised in six different sections. Each section is then further subdivided. The lowest level constitutes a checklist question.	*Gives reference to documents where the answer to the checklist question 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 2: Resolution of Corrective Action and Clarification Requests			
Clarifications and corrective action requests by determination team	***Ref. to table 1***	***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 1 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 3.

Determination Protocol Table 3: Unresolved Corrective Action and Clarification Requests		
Clarifications and corrective action requests	**Id. 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.	*Identifier of the Request.*	*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:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor-Determiner (D)
- 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 scope	Coverage of technical area	Coverage of financial aspect	Host country experience
Robert Mitterwallner	ATL	☑	☑		
Madis Maddison	D	☑	☑	☑	☑
Georgios Agrafiotis	D	☑		☑	

2.2 Review of Documents

A first version of the PDD was submitted to the AIE in March 2009. 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 09-10 March, 2009 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 UAB Iverneta and the consultant PDD developer Mr. Hannu Lamp were interviewed. Also the Municipality of Šilute 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 organisation	Interview topics
Iverneta UAB	Project design and technological possibilities, business plan, monitoring plan, stakeholder comments, monitoring procedures, measurement equipment, documentation, archiving of data
Municipality of Šilute	Approval of the project, land-use planning, stakeholder comments, national and sectoral policy; approval procedure
Klaipeda regional Environment Protection Department, Šilute agency	Approval of the project, environmental impact assessment, stakeholder comments, national and sectoral policy; approval procedure
Consultant Mr. Hannu Lamp	Project design, baseline, monitoring plan and procedures, environmental impacts, stakeholder comments, additionality

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 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 23 CARs and 9 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 (version 1.7) that was submitted in May 2011 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 track 2 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. In case one of these two persons is part of the assessment team approval can only be given by the other one.

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

3 SUMMARY

The assessment work and the main results are described below in accordance with the JI determination and verification manual, JISC 19, Annex 4 (and the CDM VVM reporting requirements, as published for the CDM scheme during EB 44). The VVM for CDM has been used alternatively for this JI project, since at the time of the beginning of the determination there was no specific JI manual. The reference documents indicated in this section and Annex 1 are stated in Annex 2.

3.1 Approval

The project has been presented at the beginning as a unilateral project with only one PP from Lithuania. In the mean time a further participant, a company from Netherlands was included. The Host party is Lithuania represented by Iverneta UAB while Investor party will be the organization Stichting Carbon Finance (SCF) from Netherlands.

The DFP of Lithuania has issued a Letter of Endorsement (IRL 4) on 08 May 2007 accepting the Project as JI activity. TÜV SÜD received this letters from the client directly and considers the provided letters as authentic.

Final LoAs have been delivered from Lithuania (IRL 34), and Netherlands (IRL 37).

TÜV SÜD considers the requirements of the JI DVM (§§ 19-21) (and CDM VVM, §§ 45-48) 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. This step is fulfilled, LoA has been issued.

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 was used. Since the project is a small scale project the JI form for SSC has been used. Thus §§ 11-14 of DVM are fulfilled. The documentation that is being submitted for registration is in English, no confidential documents are included and the documents that were in Lithuanian have been thoroughly checked by the local auditor of TÜV SÜD who speaks fluently Lithuanian.

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 12 MW, grid-connected, renewable energy wind power park at Mockiai village in the district of Silute, Lithuania (the “Project”). Thus the proposed project falls under Type I of Small Scale Activities, according to which the energy is generated from renewable sources and the installed capacity is smaller than 15 MW. Thus the § 50 of DVM is fulfilled. The proposed project is not a debundled component. Thus § 51 of the DVM is fulfilled. The Project will consist of a new electrical substation and 6 units of Enercon E-82 wind turbine/generators, each with a

capacity of 2 MW. The Project is expected to deliver an annual average of 33,196 MWh (with average load factor 31.6%) into the national electrical grid being operated by national grid operator AB Lietuvos Energija. The Project qualifies as the JI-project since the renewable electricity produced by Mockiai WPP will displace carbon intensive electricity produced from fossil fuel sources in the Lithuanian grid.

Mockiai WPP start of its operation was on 1st September 2010. The generated ERUs will be supplied by UAB Iverneta.

The information presented in the PDD on the technical design (IRL 22 & IRL 23) 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.
- 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.

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 JI requirements.

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 methods for developing JI baselines, and baselines can be developed either on the project specific basis or on a more standardized basis.

The Baseline methodology is calculated referring to historic data as this method is best suited for Lithuanian power market. Lietuvos Elektrine, power plant with the second largest installed capacity in Lithuania at the time of beginning of the determination (after Ignalina nuclear power plant –INPP) is operating on the power grid as a marginal plant. In the meantime, since December 2009, Ignalina NPP has been shut down. The electricity from Mockiai WPP will replace electricity from LE generated from fossil fuels. In any case the EF is calculated ex-ante and will be applicable through-out the JI crediting period.

Taking into consideration the specifics of the Lithuanian power market, the methodology based on historical data is used. Using the data for years 2005, 2006 and 2007 (IRL 25) an estimated annual average (2005-2007) emission factor for Lietuvos Elektrine is 0.654 tCO_2/MWh. This figure is used to estimate emission reductions for this project. 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. Thus § 22 of DVM is fulfilled, since it foresees that the PDD shall clearly state if a project specific approach or a CDM methodology is used.

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 (Mockiai WPP wind turbines, generators, transformer station) and power plant 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:

  - Technical Designs (IRL 22)
  - Detailed plan on wind park and substation location (IRL 23);
  - Electric wiring diagram showing placement of meters (IRL 12);
  - Geographical coordinates of project site

The same have been validated during the determination process using standard audit techniques, furhter 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. §§ 32a-d of DVM are fulfilled.

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 2010-2012, 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.

Since December 2009 the Ignalina Nuclear Power Plant (INPP) has been shut down. As long as INPP was in operation it covered the base load. The rest of the demand was covered by other sources and mainly the power plants of AB Lietuvos Elektrine (LE). After the shut-down of INPP the base load is covered by various power plants in Lithuania (they receive quotas from the government), power plants that use renewable sources and the rest of the demand is covered by power plants of LE (mainly fossil fuel power plants). The LE electricity from renewable sources has priority in comparison to electricity from fossil fuels. Lietuvos elektrine was marginal plants before the closure of INPP as well as after the closure of INPP. One other reason why the LE power plants are marginal (which means they are the last to be used and this when the existing power is not covering the demand).

This information is included in the PDD and proved by several independent sources as:

1) Law on electricity of the republic of Lithuania (see link)

http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=347154&p_query=electricity%20market%20&p_tr2=2

2) RE support system in Lithuania is regulated by Regulation from Lithuanian Government (see link)

http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=342973

According to the above it is correct to calculate the EF that applies for the Mockiai WPP based on the electricity that will be replaced. This will be electricity generated from LE. Criteria 23a-f of the DVM are fulfilled.

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:

1. EU ETS GHG emission reports
   http://ec.europa.eu/environment/climat/emission/pdf/citl_data_2005_2007.xls

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 scenario.

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

In regard to DVM for JI track 2 projects, 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.

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.
The crediting period is stated in chapter C.3 of the PDD to be from 1st January 2010 to §1st December 2012. The PPs reserve the right to extend the crediting period if a prolongation is finally decided by the authorities. The irreversible act which serves as start of the crediting period is mentioned and it is the signing of purchase contracts of the wind turbines. The starting date is after 2000. The crediting period is stated in years and months. The starting date of the JI project activity is before the beginning of the crediting period. §§ 34a-d of DVM are fulfilled.

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 2005-2007.

The same approach has been applied for another JI Track 2 wind power project in Lithuania, which has been already registered at JISC. The only difference is the years that were used to retrieve data, this project has been submitted earlier than Mockiai WPP and thus the data were from 2002-2005. (see link).

http://ji.unfccc.int/JI_Projects/DB/1NVP32RTS66N4B535AH045O31Z2ZPS/Determination/TUEV-SUED1198257093.66/viewDeterminationReport.html

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, IRL 25) year 2002-2006. The emission factors were calculated for years 2005 – 2007. Then the average was established as 0.654 tCO_2/MWh. The EF will be checked ex-post during each verification.
This EF has been confirmed by the Lithuanian DFP on 4th May 2010, by Mrs Jurga Rabazauskaite Pollution Prevention Department, Climate Change and Hydrometeorology Division Chief Desk Officer (IRL 30).

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

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. Thus §40a of DVM is fulfilled.

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.

The ERs are directly assessed. The yearly ERs are estimated to be 21,710 tCO2. There is no leakage and thus no need for adjustment. The estimation is on a yearly periodic basis, from the beginning until the end of the crediting period (2010-2012). The formulae used for the calculation of the ERs are consistent throughout the whole PDD. Data sources are clearly identifiable and reliable. §§ 42-47 of the JI DVM are thus fulfilled.

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 (IRL 26) as approved by the CDM Executive Board;
- Using step 1 (sub-steps 1a and 1b), step 2 (applying investment comparison analysis (option II)), step 3 and step 4.

Thus § 31a of the DVM is fulfilled.

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

- Financial projections worksheet (IRR calculations), 2006 (IRL 14).
- Example_CHP_cash-flow_March_2008 (IRL 24)

On site the additionality has been discussed principally with Mr. Tadas Navickas and Mr. Hannu Lamp. 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.

3.6.1 Prior consideration of the JI project

The Decision of the board of Freenergy AS (the previous owner of the Project) to develop the project according to JI requirements was taken on 5th March 2008. In order to confirm that the assessment team has reviewed the following documents:

- Extract from the Board decision protocol no. 12 from 05.03.2008 (IRL 19)

additionally the assessment team cross checked this information during the on-site interview with Mr. Tadas Navickas.

The starting date of the project activity is determined to be August 26, 2008 (signing of the contract for delivery of wind turbines, IRL 7) which was before the GSP. However the decision to develop the Project using revenues from ERU was taken at 05.03.2008, when the board of Freenergy AS decided to purchase Mockiai Wind Park. The PPs have presented to the assessment team following documentation:

- Supply contract # W-04226 with Enercon GmbH for supply and installations (IRL 7)

The original of the documentation presented has been reviewed and cross checked based on interviews with Mr. Tadas Navickas, hence documents 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 the additionality.

The financial returns of the proposed project are less than the returns of a Combined Heat Power (CHP) project of the same scale.

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-04226 with Enercon GmbH for supply and installations (IRL 7)
- Business Plan, Mockaia financial projection.xls (IRL 14).
- Loan contracts with Swedbank (IRL 27)
- Explanation of March 2008 forecasts (IRL 38)

The same was confirmed verbally on-site by Mr. Tadas Navickas. The parameters are plausible and can be considered acceptable under the project situation. §§ 31d-e of DVM are fulfilled.

The CHP plant example (Example_CHP_cash-flow_March_2008.xls, prepared by UAB COWI Baltic, IRL-24) where the project IRR (without income from ERUs) is 14.9 % has been compared with Mockiai WPP which shows IRR of 8.1% (again without ERUs). The investment analysis for the CHP option uses values that were applicable in March 2008 when the board decision to proceed with this JI project was taken.

The financial calculation 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.

3.6.4 Barrier analysis

Four barriers that would prevent the implementation of type of the proposed project activity are identified. The list of barriers is considered to be sufficient and it is shown that the identified barriers would not prevent the implementation of at least one of the alternatives. Barrier analysis is in any case not the main instrument to demonstrate the additionality. Similar barriers are mentioned in other registered JI projects in Lithuania in the wind power sector.

TÜV SÜD has validated this barrier against the letter from the bank (Swedbank) that finally granted the loan. In this letter (IRL 27) the bank states that the serious possibility of additional income from the ERUs plays a decisive role in order to grant the requested loan.

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 some wind energy parks (Ciuteliai, Kreivenai, Sudenai & Lendimai, Rudaiciai and Benaciai), which are also developed as JI projects.

The assessment team has revised official sources as UNFCCC webpage.

http://ji.unfccc.int/JI_Parties/DB/U1TUO9IG05C2669GVJJECR9DQM8MZB/viewDFP

TÜV SÜD has determined the above mentioned projects and thus 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.

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 $EG_{y.}$ 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 meters installed on the connection point with national grid operated by VST (IRL 22). The main 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.

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. §§ 35-37 are fulfilled.

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.

3.9 Local stakeholder consultation

The relevant local stakeholders have been invited via local newspapers “Pamarys”. The evidence of these invitations is IRL 18. The assessment team has review the documentation in order to validate the inclusion of relevant stakeholders and using the local expertise can 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 checked with the information obtained during the interviews.

Hence the local stakeholder consultation has been adequately performed according to the JI requirements. § 49 of the DVM is fulfilled.

3.10 Environmental impacts

The project participants undertook an analysis of environmental impacts. The assessment team made a document review of the information presented. The IRL 17 Conclusions that Environment Impact Assessment is not required by Klaipeda Regional Environment Protection Department of Ministry of Environment. Hence the PPs followed the requirements of the host country regarding the environmental impacts. §§ 48a-b of the DVM are fulfilled.

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=5971&Ebene1_ID=26&Ebene2_ID=1900&mode=1	
Starting date of the global stakeholder consultation process: 2009-03-08	
Comment submitted by: None	**Issues raised:** -
Response by TÜV SÜD: -	

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5 DETERMINATION OPINION

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

Mockiai Wind Power Joint Implementation Project.

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. 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,27-05-2011

Certification Body “climate and energy”
TÜV SÜD Industrie Service GmbH

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Munich, 27-05-2011

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Annex 1: Determination Protocol

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Table 1: Requirements Checklist

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
A. General Description of Project Activity The project design is assessed.					
A.1. Project Boundaries Project boundaries are the limits and borders defining the GHG emission reduction project.					
A.1.1. Are the project's spatial (geographical) boundaries clearly defined?	1, 2, 3, 6, 21	DR I	Yes. Planned location of Mockiai wind power park is at Mockiai village at Silute district at the western part of Lithuania. GPS coordinates 55°28'30N and 021°19'58E	☑	☑
A.1.2. Are the project's system (components and facilities used to mitigate GHGs) boundaries clearly defined?	1, 2, 3,	DR	It is planned to install: • 6 units of Enercon E-82 type wind turbines manufactured by German company Enercon GmbH with total capacity 12 MW; • A transformer 35/20 kV and • Commercial meters on the 35 kV side, which will belong to the grid operator (UAB VST). No back-up supply line is foreseen. The	**CAR#1**	☑

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			emergency power will be supplied from the batteries. **CAR#1. Corrective Action Request** Pls revise PDD, p.5 since there will be finally a transformer		
A.2. Technology to be employed Validation of project technology focuses on the project engineering, choice of technology and competence/ maintenance needs. The validator should ensure that environmentally safe and sound technology and know-how is used.					
A.2.1. Does the project design engineering reflect current good practices?	1, 2, 3, 7	DR	Yes. 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.	☑	☑
A.2.2. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	1, 2, 3, 7	DR	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	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			comparable to the planned turbines.		
A.2.3. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1, 2, 3, 7	DR	It is not expected that today's highly efficient wind turbines will be substituted by better technologies within the project period.	☑	☑
A.2.4. Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	1, 7	DR I	The additional extensive training is not necessary, as operational-maintenance-management set-up is foreseen to operate several wind parks in Baltic states by the same entities/ people. Although, in other wind parks the JI projects are developed as well.	☑	☑
A.2.5. Does the project make provisions for meeting training and maintenance needs?	1, 7	DR I	**CR#1. Clarification Request** Clarifiy if some training is foreseen to be provided to the operating staff by Enercon. Present documental evidence of such an agreement.	**CR#1**	☑
A.3. Project Participants					
A.3.1. Is the form required for the indication of project participants correctly applied?	1, 2, 3	DR I	Yes. It is named only the developer – UAB Iverneta.	☑	☑
A.3.2. Is the participation of all listed entities or Parties confirmed by each one of them?	1, 2, 3	DR I	Yes. UAB Iverneta ordered TÜV SÜD to	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			determine the project.		
A.4. Technical Description					
A.4.2.1 To which category(ies) is the project activity belonging to? Is it correctly identified and indicated?Is the form required for the indication of project participants correctly applied?	2, 3	DR	The project belongs to the sectoral scope 1 – energy industry. The renewable electricity produced by the wind power plant will displace carbon intensive electricity produced from fossil fuel sources in the Lithuanian grid.	☑	☑
A.4.2.2 Is a schedule available for the implementation of the project and are there any risks for delays?	3, 11	DR	A rough time schedule is provided in PDD. **CAR#2. Corrective Action Request** Provide more detail time schedule in PDD, describing also the project history (early JI decision, project start activities, LoA, design etc).	**CAR#2**	☑
A.4.5.1 Confirmation that the proposed small-scale project is not a debundled component of a larger project. Is there any wind farms in the neighbor-hood, which has the same participants?	2, 3	DR I	There exist wind turbines in the neighborhood and. **CAR#3. Corrective Action Request** It shall be described with more detailness the ownership-, operational- and any other aspects in the PDD, showing, that this Wind Park and neighbouring Wind Parks are not the debundled component of a	**CAR#3**	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			larger project.		
B. Project Baseline The validation of the project baseline establishes whether the selected baseline methodology is appropriate and whether the selected baseline represents a likely baseline scenario.					
B.1. Baseline Methodology It is assessed whether the project applies an appropriate baseline methodology.					
B.1.1. Is the discussion and selection of the baseline methodology transparent?	1, 2, 3	DR	Yes. The selection of project specific methodology is transparently justified. This methodology was also used for already approved JI Projects in Lithuania (Rudaiciai and Benaiciai WPs). **CAR#4. Corrective Action Request** Specify the most recent version of BASREC Regional Handbook on Procedures for Joint Implementation in the Baltic Sea Region.	**CAR#4**	☑
B.1.2. Does the baseline methodology specify data sources and assumptions?	1, 2, 3	DR	Yes. See comment to B.5.5.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
B.1.3. Does the baseline methodology sufficiently describe the underlying rationale for the algorithm/formulae used to determine baseline emissions (e.g. marginal vs. average, etc.)	1, 2, 3	DR I	Not completely. **CR#2. Clarification Request** Clarify how exactly are the CO_2 emissions calculated in Table 11. **CAR#5. Corrective Action Request** For all the calculations and tables in section B in PDD the underlying worksheet (calculation tables) shall be presented separately to the audit team.	**CR#2** **CAR#5**	☑
B.1.4. Does the baseline methodology specify types of variables used (e.g. fuels used, fuel consumption rates, etc)?	1, 2, 3	DR	Yes	☑	☑
B.1.5. Does the baseline methodology specify the spatial level of data (local, regional, national)?	1, 2, 3	DR	Yes. The national data is used.	☑	☑
B.2. Baseline Determination The choice of baseline will be validated with focus on whether the baseline is a likely scenario, whether the project itself is not a likely baseline scenario, and whether the baseline is complete and transparent.					
B.2.1. Is the application of the methodology and the discussion and determination of the chosen baseline transparent?	1, 2, 3	DR	Yes. All the steps are explained in detail.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
B.2.2. Has the baseline been determined using conservative assumptions where possible?	1, 2, 3	DR	Mostly yes, however see CR#4	CR#4	☑
B.2.3. Has the baseline been established on a project-specific basis?	1, 2, 3	DR	Yes, the methodology based on historical data	☑	☑
B.2.4. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	1, 2, 3	DR	No, the relevant discussion is not present. **CAR#6. Corrective Action Request** Discuss the relevant national and/or sectoral policies, macro-economic trends and political aspirations in relation to baseline setting in PDD.	**CAR#6**	☑
B.2.5. Is the baseline determination compatible with the available data?	1, 2, 3	DR	Yes	☑	☑
B.2.6. Does the selected baseline represent a likely scenario in the absence of the project?	1, 2, 3, 20	DR	Yes, in case of additional power supply (as this JI Project) to the grid, the production will be reduced in Lietuvos Elektrine power plant.	☑	☑
B.2.7. Is it demonstrated that the project activity itself is not a likely baseline scenario (e.g. through (a) a flow-chart or series of questions that lead to a narrowing of potential baseline options, (b) a qualitative or quantitative assessment of different potential options and an indication of	1, 2, 3	DR	Yes, however see the comments to chapter B.3. “Additionality”.	CAR#10 CAR#11 CAR#12	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
why the non-project option is more likely, (c) a qualitative or quantitative assessment of one or more barriers facing the proposed project activity or (d) an indication that the project type is not common practice in the proposed area of implementation, and not required by a Party's legislation/regulations)?					
B.2.8. Have the major risks to the baseline been identified?	1, 2, 3	DR	No. **CAR#7. Corrective Action Request** Discuss the major risks to the baseline in PDD.	**CAR#7**	☑
B.2.9. Is all literature and sources clearly referenced?	2, 3	DR	Yes.	☑	☑
B.3. Additionality					
B.3.1. Is the discussion of how emission reductions are achieved by the project scenario in comparison to the identified baseline scenario provided in a transparent manner?	2, 3	DR	Yes. All the steps are explained in detail. "Tool for the demonstration and assessment of additionality" is used.	☑	☑
B.3.2. In case of using calculation models in order to demonstrate emission reductions: Are all formulae and input data based on provable records?	2, 3, 14, 15	DR	Yes, the information sources are indicated. The source documents are issued by official national authorities. However the calculation of sensitivity analysis is not presented in the	**CAR#8** **CR#3**	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			underlaying excel worksheet. **CAR#8. Corrective Action Request** The calculations for sensitivity analysis shall be presented in detail in the worksheet. And provide the discussion of the results of sensitivity analysis in PDD. **CR#3. Clarification Request** Clarify what is the content of Financial Costs (cell H13) in the underlying excel worksheet. The Guidance no:9 to financial analysis (Methodological Tool "Tool for the demonstration and assessment of additionality" (Version 05.2), Annex: Guidance on the Assessment of Investment Analysis) does not allow inclusion of financial expenditures into IRR calculation. **CAR #9:** Pls revise PDD p.15. Finally Option III Benchmark analysis must be applied since the alternative to project activity is electricity from the grid, something that is not an investment. Benchmark has to be relevant to the project, this means form		

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			energy sector.		
B.3.3. Does the PDD clearly demonstrate the additionality?	2, 3	DR	Partly yes, however see CAR#10 and CAR#12.	CAR#10 CAR#12	☑
B.3.4. In case of using the additionality tool: Are all steps followed in a transparent and provable manner?	2, 3	DR	Yes, however see CAR#10 and CAR#12.	CAR#10 CAR#12	☑
B.3.5. Does the discussion sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	2, 3	DR	Partly yes. **CAR#10. Corrective Action Request** It shall be explained in sub-step 1b that alternative scenarios are in compliance with mandatory legislation and regulations. **CR#5 Clarification Request** In PDD sub-step 2d it is stated '' Power production of the wind farm and ERU price has been altered to see the effect on projects' profitability''. Below the ERUs are deleted. Clarify if it is finally used or not. Elaborate in PDD why it is not likely that power generation will increase above +10% or even more.	CAR#10 CR#5	☑
B.3.6. Is the approach for demonstrating additionality provided by the most recent (or still applicable) methodology correctly applied?	2, 3	DR	No, Tool for the Demonstration and Assessment of Additionality version 2 is used.	CAR#11	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			CAR#11. Corrective Action Request Use the most recent version of the Tool for the Demonstration and Assessment of Additionality.		
B.3.7. Are other proofs than anecdotal evidence for all assumptions and statements used by the additionality discussion?	2, 3, 7, 8, 13, 14, 19	DR	Yes, however the reference for IRR of new cogeneration plants increases up to 15% is not given. **CAR#12. Corrective Action Request** Reference for IRR of new cogeneration plants shall be given in PDD. **CAR#13. Corrective Action Request** Show the reference for the statement "increasing civil construction price in Lithuania" (sub-step 3a). **CAR#19 Corrective Action Request** Provide proof for the following: • of non-existence of funding for Wind farms (e.g. loan refusal letters from banks); • The source of information that	CAR#12 CAR#13 CAR#19 CAR#20 CR#6 CR#7 CR#8 CR#9 CAR#21 CAR#22	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			proves that ''No financial support for renewable electricity generation is foreseen under the EU…'' and mention it in PDD. • The evidence that proves that prices of Wind Turbines increase and name it in PDD. • of requirement for down-payment and mention it in PDD • of 15% tax rate on income the contract of bank loan of 12.348 Mio € where it is also stated that reason for granting the loan are the ERUs. **CAR#20 Corrective Action Request** The comment of lack of know-how in Lithuania regarding wind parks is quite weak, especially since below there are stated several wind power projects. Better if this barrier is taken out. **CR#6 Clarification Request** How is the total estimated amount of investment justified? Provide in pdf the FSR, contracts for wind turbines and other		

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			significant costs. **CR#7 Clarification Request** In the financial analysis principal repayment (line 68) and capital repayment (line 62) are the same thing but named differently. Why? If there is no difference please name the same way. **CR#8 Clarification Request** In the financial analysis Cell D58: Why is the loan amount 15.716 Mio € and not 12.348 Mio €? **CR#9 Clarification Request** In the financial analysis are running costs and S&M costs the same? If yes, please use the same name. Why increase 3% yearly of running costs? Please add the units of S&M costs. Is it €, th €? **CAR#21 Corrective Action Request** Add in PDD a table where the basic data of the two investments that are being compared.		

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			CAR#22 Corrective Action Request The tables that show what is Lietuvos Elektrine power generation are not needed. Actually, baseline scenario is the production of power from the grid equal to the estimated power from the wind park. The whole LE production does not lead to any conclusion. Please remove the tables and leave only a calculation of baseline emissions. **Corrective Action Request** In Finacial Projection it is estimated to have an efficiency (average usage of capacity) of 35% while many other wind parks are operating about 23-30% maximum. Use more realöistic value of 30-28 %.		
B.4. Project Boundary					
B.4.1. Are all emission related to the baseline scenario clearly identified and described in a complete manner?	2, 3	DR	Yes. The source and gases are discussed in PDD. Inclusion / exclusion is justified and explained.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			The project's theoretical boundary is drawn around the physical boundary of the wind power plant (see comment to A.1.1.) and the power plants of AB Lietuvos Elektrine, the power generation of which the wind power plants would replace		
B.4.2. In case of grid connected electricity projects: Is the relevant grid correctly identified due to the JISC guidance and the underlying methodology?	2, 3	DR	Yes, the Lithuanian national grid is identified as a relevant grid.	☑	☑
B.4.3. Are all emission related to the project scenario clearly identified and described in a complete manner?	2, 3	DR	Yes.	☑	☑
B.4.4. Are all emission related to leakage clearly identified and described in a complete manner?	2, 3	DR	Not applicable, no leakage occur in this project (see comments to D.3.)	☑	☑
B.5. Detailed Baseline Information					
B.5.1. Is there any indication of a date when determine the baseline?	2, 3	DR	Yes, the Baseline Study is dated to Nov. 6 2007.	☑	☑
B.5.2. Is this in consistency with the time line of the PDD history?	2, 3	DR	It is not clear, see CAR#2.	CAR#2	☑
B.5.3. Is all data required provided in a complete manner by annex 2 of the PDD?	2, 3	DR	Not applicable	☑	☑
B.5.4. Is all data given in compliance with the	2, 3	DR	It is not clear, see CR#2	CR#2	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
methodological approach?					
B.5.5. Is all data evidence by official data sources or replicable records?	2, 3, 20	DR	Yes, The sources are Lietuvos Elektrine; Lietuvos Energetika; Energy in Lithuania 2004; Lietuvos energetikos institutas, 2005; Statistical Department of Lithuania; National GHG inventory report 2007 of the Republic of Lithuania and EU ETS GHG emission report.	☑	☑
B.5.6. Is the vintage of the baseline data correct?	2, 3	DR	No, the data used (from the years 2002-2005) is not the most recent. **CR#4. Clarification Request** Clarify why the most recent data is not used for baseline setting.	CR#4	☑
C. Duration of the Project/ Crediting Period It is assessed whether the temporary boundaries of the project are clearly defined.					
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	11	DR	Yes, the starting of construction works is by first quarter of 2009 and operational lifetime is 20 years.	☑	☑
C.1.2. Is the project's crediting time clearly defined?	2, 3	DR	Yes, the total crediting period is 3 years.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D. Monitoring Plan The monitoring plan review aims to establish whether all relevant project aspects deemed necessary to monitor and report reliable emission reductions are properly addressed.					
D.1. Monitoring Methodology It is assessed whether the project applies an appropriate baseline methodology.					
D.1.1. Does the monitoring methodology reflect good monitoring and reporting practices?	2, 3	DR	Yes.	☑	☑
D.1.2. Is the selected monitoring methodology supported by the monitored and recorded data?	2, 3, 12	DR	Yes, net electricity supplied to the grid will be measured directly and recorded monthly.	☑	☑
D.1.3. Are the monitoring provisions in the monitoring methodology consistent with the project boundaries in the baseline study?	2, 3	DR	Yes.	☑	☑
D.1.4. Have any needs for monitoring outside the project boundaries been evaluated and if so, included as applicable?	2, 3	DR	There is no need for monitoring outside the project boundaries.	☑	☑
D.1.5. Does the monitoring methodology allow for conservative, transparent, accurate and complete calculation of the ex post GHG emissions?	2, 3	DR	Partly yes, methodolgy is transdparent and accurate. However see CAR#14	**CAR#14**	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D.1.6. Is the monitoring methodology clear and user friendly?	2, 3	DR	Yes.	☑	☑
D.1.7. Does the methodology mitigate possible monitoring errors or uncertainties addressed?	2, 3	DR	Not yet. The grid operator UAB VST will be the owner of commercial meters. There will be installed two parallel meters: main and control. **CAR#14. Corrective Action Request** There shall be established and described in Monitoring Plan a standard routine for conservative estimation of GHG emissions in case of failure of measurement equipment.	**CAR#14**	☑
D.2. Monitoring of Project Emissions It is established whether the monitoring plan provides for reliable and complete project emission data over time.					
D.2.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions within the project boundary during the crediting period?	2, 3	DR	Not applicable, as there are no project emissions.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D.2.2. Are the choices of project GHG indicators reasonable?	2, 3	DR	Not applicable, as there are no project emissions.	☑	☑
D.2.3. Will it be possible to monitor / measure the specified project GHG indicators?	2, 3	DR	Not applicable, as there are no project emissions.	☑	☑
D.2.4. Will the indicators enable comparison of project data and performance over time?	2, 3	DR	Not applicable, as there are no project emissions.	☑	☑
D.3. Monitoring of Leakage It is assessed whether the monitoring plan provides for reliable and complete leakage data over time.					
D.3.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining leakage?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑
D.3.2. Have relevant indicators for GHG leakage been included?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑
D.3.3. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining leakage?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑
D.3.4. Will it be possible to monitor the specified GHG leakage indicators?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D.4. Monitoring of Baseline Emissions It is established whether the monitoring plan provides for reliable and complete project emission data over time.					
D.4.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining the baseline emissions during the crediting period?	2, 3	DR	Partly yes, see CAR#16	CAR#16	☑
D.4.2. Is the choice of baseline indicators, in particular for baseline emissions, reasonable?	2, 3	DR	Yes.	☑	☑
D.4.3. Will it be possible to monitor the specified baseline indicators?	2, 3, 12	DR I	Yes, there will be installed following meters: 1. The main commercial meter belonging to the grid operator (will be the main monitoring equipment); 2. The control commercial meter belonging to the grid operator (will be the back-up monitoring equipment); **CAR#15. Corrective Action Request** The location of the metering equipment in D.3. is wrong – there will not be any 110	CAR#15	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			kV transformer.		
D.5. Monitoring of Environmental Impacts It is checked that choices of indicators are reasonable and complete to monitor sustainable performance over time.					
D.5.1. Does the monitoring plan provide for the collection and archiving of relevant data on environmental impacts?	2, 3	DR	Not applicable as monitoring of environmental aspects is not required. See comments to chapter F.	☑	☑
D.5.2. Will it be possible to monitor the specified environmental impact indicators?	2, 3	DR	Not applicable as monitoring of environmental aspects is not required. See comments to chapter F.	☑	☑
D.6. Project Management Planning It is checked that project implementation is properly prepared for and that critical arrangements are addressed.					
D.6.1. Is the authority and responsibility of project management clearly described?	2, 3	DR	Yes, system. The management and operation of the project is the responsibility of UAB Iverneta. UAB Iverneta The daily monitoring and verification tasks will be outsourced to 4Energia. Tadas Navickas is mentioned as person establishing the monitoring plan.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D.6.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	2, 3	DR	Yes, UAB Iverneta's manager Tadas Navickas will be in charge of and accountable for the generation of ERs including monitoring, record keeping, computation of ERs and verification	☑	☑
D.6.3. Are procedures identified for training of monitoring personnel?	2, 3	DR	Yes, the training procedures are identified in general. As the monitoring is very simple and straight forward, no special procedures are required in this stage of the project.	☑	☑
D.6.4. Are procedures identified for emergency preparedness where emergencies can result in unintended emissions?	2, 3	DR	Not yet, see CAR#14.	CAR#14.	☑
D.6.5. Are procedures identified for calibration of monitoring equipment?	2, 3	DR	Yes, the calibration procedures are identified in general.	☑	☑
D.6.6. Are procedures identified for maintenance of monitoring equipment and installations?	2, 3	DR	Yes, the maintenance procedures are identified in general.	☑	☑
D.6.7. Are procedures identified for monitoring, measurements and reporting?	2, 3	DR	Yes	☑	☑
D.6.8. Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)?	2, 3	DR	Not yet, see CAR#16	CAR#16	☑

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D.6.9. Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	2, 3	DR	Yes, but very generally. It needs to be detailized. **CAR#16. Corrective Action Request** The separate monitoring worksheet shall be introduced to Monitoring Plan allowing recording of the energy supplied to the grid and the energy used from the grid. And also the calculation of the monitored data variable - EG_y (Net electricity supplied to the grid).	CAR#16	☑
D.6.10. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	2, 3	DR	No. **CAR#17. Corrective Action Request** Identify the procedures for internal audits. By internal is meant if the audited company has a Monitoring manual where regular meetings between the responsible people for measuring are hold, if these meetings are soundly recorded and archived etc.	CAR#17	☑
D.6.11. Are procedures identified for project performance reviews?	2, 3	DR	Yes, the project performance reviews are identified in general.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D.6.12. Are procedures identified for corrective actions?	2, 3	DR	Yes, the corrective actions procedures are identified in general.	☑	☑
E. Calculation of GHG Emissions by Source It is assessed whether all material GHG emission sources are addressed and how sensitivities and data uncertainties have been addressed to arrive at conservative estimates of projected emission reductions.					
E.1. Predicted Project GHG Emissions The validation of predicted project GHG emissions focuses on transparency and completeness of calculations.					
E.1.1. Are all aspects related to direct and indirect GHG emissions captured in the project design?	2, 3	DR	Not applicable, as there are no project emissions.	☑	☑
E.1.2. Are the GHG calculations documented in a complete and transparent manner?	2, 3	DR	Not applicable, as there are no project emissions.	☑	☑
E.1.3. Have conservative assumptions been used to calculate project GHG emissions?	2, 3	DR	Not applicable, as there are no project emissions.	☑	☑
E.1.4. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	2, 3	DR	Not applicable, as there are no project emissions.	☑	☑
E.1.5. Have all relevant greenhouse gases and source categories listed in Kyoto Protocol Annex A	2, 3	DR	Not applicable, as there are no project emissions.	☑	☑

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
been evaluated?					
E.2. Leakage Effect Emissions It is assessed whether there leakage effects, i.e. change of emissions which occurs outside the project boundary and which are measurable and attributable to the project, have been properly assessed.					
E.2.1. Are potential leakage effects beyond the chosen project boundaries properly identified?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑
E.2.2. Have these leakage effects been properly accounted for in calculations?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑
E.2.3. Does the methodology for calculating leakage comply with existing good practice?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑
E.2.4. Are the calculations documented in a complete and transparent manner?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑
E.2.5. Have conservative assumptions been used when calculating leakage?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑
E.2.6. Are uncertainties in the leakage estimates properly addressed?	2, 3	DR	Not applicable as no leakage will occur.	☑	☑

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
E.3. Baseline Emissions The validation of predicted baseline GHG emissions focuses on transparency and completeness of calculations.					
E.3.1. Have the most relevant and likely operational characteristics and baseline indicators been chosen as reference for baseline emissions?	2, 3	DR	Yes, the following indicators are used: EG_y – Net electricity supplied to the grid; EF_y – Emission factor of the power plants of AB Lietuvos Elektrine.	☑	☑
E.3.2. Are the baseline boundaries clearly defined and do they sufficiently cover sources and sinks for baseline emissions?	2, 3	DR I	Yes.	☑	☑
E.3.3. Are the GHG calculations documented in a complete and transparent manner?	2, 3	DR	Yes.	☑	☑
E.3.4. Have conservative assumptions been used when calculating baseline emissions?	2, 3	DR	See comment to B.2.2	☑	☑
E.3.5. Are uncertainties in the GHG emission estimates properly addressed in the documentation?	2, 3	DR	See comment to B.2.8	☑	☑
E.3.6. Have the project baseline(s) and the project emissions been determined using the same appropriate methodology and conservative assumptions?	2, 3	DR	Yes.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
E.4. Emission Reductions Validation of baseline GHG emissions will focus on methodology transparency and completeness in emission estimations.					
E.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	2, 3	DR I	Yes	☑	☑
F. Environmental Impacts Documentation on the analysis of the environmental impacts will be assessed, and if deemed significant, an EIA should be provided to the validator.					
F.1.1. Has an analysis of the environmental impacts of the project activity been sufficiently described?	2, 3, 16	DR I	Yes.	☑	☑
F.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	2, 3, 17	DR I	Klaipeda Regional Department of Environment of Lithuanian Ministry of Environment concluded at 17 August 2006 that EIA is not required.	☑	☑
F.1.3. Will the project create any adverse environmental effects?	2, 3, 16	DR I	No, it is discussed in detail in PDD.	☑	☑
F.1.4. Are transboundary environmental impacts considered in the analysis?	2, 3	DR I	No. **CAR#18. Corrective Action Request** Discuss transboundary environmental	CAR#18	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			impacts.		
F.1.5. Have identified environmental impacts been addressed in the project design?	2, 3, 22	DR I	Yes.	☑	☑
F.1.6. Does the project comply with environmental legislation in the host country?	2, 3, 16, 22	DR I	Yes.	☑	☑
G. Stakeholders' comments					
G.1.1. Have relevant stakeholders been consulted?	1, 2, 3, 18	DR I	Yes, public consultation procedure has been undertaken during detailed planning. The public meeting was held in Silute Municipality at 19.12.2006.	☑	☑
G.1.2. Have appropriate media been used to invite comments by local stakeholders?	1, 2, 3, 18	DR I	Yes. Information about the start of the detailed planning process has been announced in the local press (newspaper Pamarys) on the 07-11-2006. All information on the proposed solutions of the detailed plan has been made public during the period 28-11-2006 to 18-12-2006. Also date and venue of the stakeholders meeting has been announced in the local newspaper (newspaper Pamarys) on 28-11-2006.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
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, 2, 3, 18	DR I	Yes.	☑	☑
G.1.4. Is a summary of the stakeholder comments received provided?	2, 3, 18	DR I	Yes. No comments were received.	☑	☑
G.1.5. Has due account been taken of any stake-holder comments received?	1, 2, 3, 18	DR I	Yes. No comments were received.	☑	☑

Table 2: Resolution of Corrective Action and Corrective Action Requests

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
CLARIFICATION REQUESTS			
CR#1 Clarifiy if some training is foreseen to be provided to the operating staff by Enercon. Present documental evidence of such an agreement.	A.2.5.	Initial training is not needed as service and maintenance is included in scope of supply (see file W-04226_Enercon-Iverneta_2008-08-26_18,8MEur_Scope.pdf). Enercon will take care of the operation and technical maintenance of the wind farm at minimum during the first two years of operation. Thereafter 4energia may take over the technical service and maintenance under a management agreement with UAB Iverneta. 4energia already possesses the required know-how from operation of other similar plants in the Baltics as well as due to fact that one of the Lithuanian employees formerly worked for Enercon.	It is explained that Enercon has contractual obligation of operation. Therefore there is no need of training of PP-s staff. The issue is resolved.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
CR#2 Clarify how exactly are the CO_2 emissions calculated in Table 11.	B.1.3.	See revised PDD and a separate Excel file for the baseline calculation.	The methodology based on actual historical data is used now to calculate the baseline emissions. This methodology is quite straight forward. The issue is resolved now.
CR#3 Clarify what is the content of Financial Costs (cell H13) in the underlying excel worksheet. The Guidance no:9 to financial analysis (Methodological Tool "Tool for the demonstration and assessment of additionality" (Version 05.2), Annex: Guidance on the Assessment of Investment Analysis) does not allow inclusion of financial expenditures into IRR calculation.	B.3.2.	Following the named guidance, loan repayments and interest have not been included as part of financial costs in cell H13, thus there is no double counting of these costs. IRR is calculated on EBIDTA.	Calculation of project IRR, interest and principle payments are correct. The issue is resolved now.
CR#4 Clarify why the most recent data is not used for baseline setting.	B.5.6.	The revised baseline calculation uses most recent data.	The methodology based on actual historical data (2005, 2006 and 2007) is used now to calculate the baseline emissions. The issue is resolved now.
CR#5.			

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
In PDD sub-step 2d it is stated '' Power production of the wind farm and ERU price has been altered to see the effect on projects' profitability''. Below the ERUs are deleted. Clarify if it is finally used or not. Elaborate in PDD why it is not likely that power generation will increase above +10% or even more.		Sensitivity to change in ERU price has been deleted and sensivity to change in investment cost has been added to PDD to keep consistency with other PDDs of Lithuanian wind power plants. The elaboration why it is not likely that power generation will increase above 10% has been included in PDD.	The sensitivity analysis is acceptable now. The issue is resolved now.
CR#6. How is the total estimated amount of investment justified? Provide in pdf the FSR, contracts for wind turbines and other significant costs.		A contract with Enercon has been provided to validator as justification.	However the cost breakdown in Financial Projection worksheet does not correspond the provided Enercon contract.
CR#6 Second round of clarification Correct the Investment breakdown in Financial Projection worksheet according to the signed contracts.		Enercon is not only supplying wind turbines (cost item at cell H9 in financial projection) but also taking care of part of the electrical works related to grid connection (cell H10). See also scope of supply on page 32 of the provided contract with Enercon.	The investment costs are justified. The issue is resolved.
CR#7. In the financial analysis principal repayment (line 68) and capital		The lines have been renamed to use the	The issue is resolved now.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
repayment (line 62) are the same thing but named differently. Why? If there is no difference please name the same way.		same name	
CR#8. In the financial analysis Cell D58: Why is the loan amount 15.716 Mio € and not 12.348 Mio €?		The correct loan amount is 19,083 and the analysis has been respectively corrected.	The amount of loan from the bank has been changed in comparison to the previews financial calculation. From 12.348 Mio € it has been changed to 19.083 Mio €.
CR#8 Second round of clarifications Provide the copy of the loan contract between the bank and the project owner where the final granted amount can be verified.		Respective leasing contracts have been provided to validator.	The issue is resolved now.
CR#9. In the financial analysis are running costs and S&M costs the same? If yes, please use the same name. Why increase 3% yearly of running costs? Please add the units of S&M costs. Is it €, th €?		Running costs and S&M costs are the same and name in analysis has been changed.	The issue is resolved now.
CR#10.			

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
In PDD p.8 Revise the ER in table 4.4.1. from 24,424 to 21,710.		PDD has been respectively corrected.	The issue is resolved now.
CORRECTIVE ACTION REQUESTS			
CAR#1 Pls revise PDD, p.5 since there will be finally a transformer	A.1.2	PDD has been revised.	The PDD is revised correctly. The issue is resolved now.
CAR#2 Provide more detail time schedule in PDD, describing also the project history (early JI decision, project start activities, LoA, design etc).	A.4.2.2.	PDD has been revised	The PDD is revised. The issue is resolved now.
CAR#3 It shall be described in more detail the ownership-, operational- and any other aspects in the PDD, showing, that this Wind Park and neighboring Wind Parks are not the debundled component of a larger project.	A.4.5.1	As stated in PDD, the Mockiai wind power JI Project with a combined capacity of 12.0 MW(e) is not a debundled component of a larger project due to the following reasons: - The project boundaries of the nearest operating wind farms and wind power development projects are located at a minimum distance of 3 km from the project boundary of the proposed JI Project (at the closest point).	The issue is resolved now.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
		- The project participants of the closest wind power development projects are different.	
CAR#4 Specify the most recent version of BASREC Regional Handbook on Procedures for Joint Implementation in the Baltic Sea Region.	B.1.1.	PDD has been updated.	The following text is added to the PDD "There are not conflicts in the methodological approach for baseline approach with the updated version…", which is a sufficient reference. The issue is resolved now.
CAR#5 For all the calculations and tables in section B in PDD the underlying worksheet (calculation tables) shall be presented separately to the audit team.	B.1.3.	Excel sheet with the calculations has been provided	The issue is resolved now.
CAR#6 Discuss the relevant national and/or sectoral policies, macro-economic trends and political aspirations in relation to baseline setting in PDD.	B.2.4.	See revised PDD.	This discussion is not included into PDD.
CAR#6 Second round of clarification Explain where (which paragraph) is the above mentioned discussion		National and sectoral policies are described in chapter A2. Macro economic trends are discussed 2c of	The discussion is present now. The issue is resolved now.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
provided.		chapter B2 (fuel price changes).	
CAR#7 Discuss the major risks to the baseline in PDD.	B.2.8.	See revised PDD.	This discussion is not included into PDD.
CAR#7 Second round of clarification Explain where (which paragraph) is the above mentioned discussion provided.		Paragraph “Risks during project implementation and operation” in the chapter A.4.3.	The discussion is present now. The issue is resolved now.
CAR#8 The calculations for sensitivity analysis shall be presented in detail in the worksheet. And provide the discussion of the results of sensitivity analysis in PDD.	B.3.2.	The figures in sensitivity analysis have been alterned manually to derive numbers for the sensitivity analysis.	However the discussion of the results of sensitivity analysis is not provided in PDD.
CAR#8 Second round of clarification Explain where (which paragraph) is the above mentioned discussion of the results of sensitivity analysis provided.		Sensitivity analysis has been provided in sub-step 2d of investment analysis chapter. Also a sensitivity analysis of change of investment cost has been added.	The discussion is present now. The issue is resolved now.
CAR #9: Pls revise PDD p.15. Finally Option III	B.3.2.	Benchmark analysis (option III) is not applicable as no investment benchmarks for	It is acceptable that financial analysis (option II) is used.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
Benchmark analysis must be applied since the alternative to project activity is electricity from the grid, something that is not an investment. Benchmark has to be relevant to the project, this means form energy sector.		power sector exist in Lithuania.	The issue is resolved now.
CAR #10 It shall be explained in sub-step 1b that alternative scenarios are in compliance with mandatory legislation and regulations.	B.3.5.	The existing legal and regulatory requirements in Lithuania is in favour of alternative B and is not in favour of alternative A.	It is stated that both alternatives are in compliance with Lithuanian legislation. The issue is resolved now.
CAR#11 Use the most recent version of the Tool for the Demonstration and Assessment of Additionality.	B.3.6.	Additionality of the project is proven using version 05.2 of the CDM Tool for the Demonstration and Assessment of Additionality as approved by the CDM Executive Board.	The issue is resolved now.
CAR#12 Reference for IRR of new cogeneration plants shall be given in PDD.	B.3.7.	The separate Excel file "Examplary_CHP_cash-flow_2009_updated_prices.xls" was provided to the audit team showing IRR 20% without subsidy.	However the origin of this document is not clear.
CAR#12 Second round of clarification Include the full reference of this			The reference is given.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
document (title, author and date) into PDD.		Referencre has been added to chapter B.2	The issue is resolved now.
CAR#13 Show the reference for the statement "increasing civil construction price in Lithuania" (sub-step 3a).	B.3.7.	The statement has been deleted as (compared to the first verison of PDD) it is not relevant any more due to the change of the environment for civil construction in Lithuania	The issue is resolved now.
CAR#14 There shall be established and described in Monitoring Plan a standard routine for conservative estimation of GHG emissions in case of failure of measurement equipment.	D.1.7.	See provided Monitoring Plan.	In case measuring meters at the GCP are not functioning the electricity production data as indicated with the meter at 20 kV (minus estimated grid losses) will be used to calculate achieved emission reductions. In case also the 20 kV meter should fail, the values from SCADA will be used. The issue is considered to be resolved now.
CAR#15 The location of the metering equipment in D.3. is wrong – there will not be any 110 kV transformer.	D.4.3.	See revised PD D.	The issue is resolved now.
CAR#16 The separate monitoring worksheet	D.6.9.	See provided Monitoring Plan for the JI project.	The calculation tables are provided. The issue is resolved now.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
shall be introduced to Monitoring Plan allowing recording of the energy supplied to the grid and the energy used from the grid. And also the calculation of the monitored data variable - EG_y (Net electricity supplied to the grid).			
CAR#17 Identify the procedures for internal audits. By internal is meant if the audited company has a Monitoring manual where regular meetings between the responsible people for measuring are hold, if these meetings are soundly recorded and archived etc.	D.6.10.	See separate Monitoring Plan for the JI project.	The issue is resolved now.
CAR#18 Discuss transboundary environmental impacts.	F.1.4.	PDD has been updated.	Approx. distance of wind farm from land border of closest neighboring countries: ~20km to Russian Federation, ~68km to Latvia, ~128km to Poland, 220km to Belorussia. The wind farm will have no transboundary impacts. The issue is resolved now.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
CAR#19. Provide proof for the following: • of non-existence of funding for Wind farms (e.g. loan refusal letters from banks); • The source of information that proves that ''No financial support for renewable electricity generation is foreseen under the EU…'' and mention it in PDD. • The evidence that proves that prices of Wind Turbines increase and name it in PDD. • of requirement for down-payment and mention it in PDD • of 15% tax rate on income • the contract of bank loan of 12.348 Mio € where it is also stated that reason for granting the loan are the ERUs.		Text of sub-step 3a has been specified. Non-existence of funding without expectation for carbon revenue is proven through a decision of project equity investors (provided to validator). Loan financing from bank has been asked assuming carbon revenue, thus no letter stating a refusal can be provided. The cost of wind turbines for Mockiai project is ca. 25% higher than for the Sudenai-Lendimai wind power JI project that was contracted with the same wind turbine supplier some years earlier.- As the detailed data for other projects is not available to prove the overall statement, it has been removed from the text. Evidence of requirement of down-payment has been provided to validator (grid connection agreement).	The proofs are sufficient, though not all of them can be documented. The issue is resolved now.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
		15% tax rate was valid until the end of 2008. From 2009 the tax rate is 20% which has been applied to the revised financial projection.	
CAR#20. The comment of lack of know-how in Lithuania regarding wind parks is quite weak, especially since below there are stated several wind power projects. Better if this barrier is taken out.		The related statement has been deleted in 3a in chapter B.2.	The issue is resolved now.
CAR#21. Add in PDD a table where the basic data of the two investments that are being compared.		Respective table has been added to PDD.	The table is provided. The issue is resolved now.
CAR#22. The tables that show what is Lietuvos Elektrine power generation are not needed. Actually, baseline scenario is the production of power from the grid equal to the estimated power from the		The baseline is represented by emissions of LE, not “power from the grid”. It shows how the baseline will be influenced by the Mockiai project. Therefore we consider to provide information on power production of LE and thus to keep tables 16 and 17 included in	The issue is resolved now.

Draft report clarifications and corrective action requests	Ref. to checklist question in table 1 and table 2	Summary of project owner response	Determination conclusion
wind park. The whole LE production does not lead to any conclusion. Please remove the tables and leave only a calculation of baseline emissions.		PDD.	
CAR#23. In Financial Projection it is estimated to have an efficiency (average usage of capacity) of 35% while many other wind parks are operating about 23-30% maximum. Use more realistic value of 30-28 %.		PDD and financial projection have been altered by using now a more conservative (20-years, P90) production estimate of an independent research company.	The more conservative approach is acceptable. The issue is resolved now.

Industrie Service

Annex 2: Information Reference List

1 REF. NO.	Document or Type of Information
1.	Interview and on-site visit at Mockiai Wind Power Park Joint Implementation Project Conducted 09-10.03.2009 Determination auditors on-site: Madis Maddison — Lead Auditor, accredited from TÜV SÜD OÜ Projektkeskus, Tallinn, Estonia Georgios Agrafiotis — Trainee, TÜV SÜD Interviewed persons: Tadas Navickas — UAB Iverneta, project developer Julius Mikalauskas — 4Energia, project manager Hannu Lamp — Consultant Virgilius Pozingis — Silute Municipality, Mayor
2.	PDD, published version 1.0, issued 05 February 2009
3.	PDD, last version 1.7, issued 26 May 2011
4.	Letter of Endorsement (LoE) by Ministry of Environment of the Republic of Lithuania, issued on 08.05.2007 No.(10-5)-D8-3944
5.	Production forecast (micrositing), EMD International A/S, 19.05.2008
6.	Detail plan
7.	Supply contract # W-04226 with Enercon GmbH from 26.08.2008;
8.	Leasing contracts LT081986, LT081987 and LT081988 from 27.05.2009
9.	Grid connection approval by VST from 30.07.2008 no: NV-08-25-0108
10.	Building Permit # 08(1)1-101 (28.08.2008)
11.	Time schedule for construction works

1 REF. NO.	Document or Type of Information
12.	Electrical diagrams
13.	About tariffs for Wind Power Parks, Lithuanian State Commission of control of tariffs and energetic, from 21.02.2008, no: O3-27
14.	Financial projections worksheet (IRR calculations) "Mockiai financial projection.xls"
15.	PDD calculation worksheet "Mockiai calculations for PDD June 18"
16.	Environmental Screening, Klaipeda University, Insitute of research and planning for Baltic Sea Coast, Klaipeda 2007
17.	Conclusions that Environment Impact Assessment is not required by Klaipeda Regional Environment Protection Department of Ministry of Environment; #(9.14.5.)-V4-4298, 17.08.2006
18.	Report from newspaper on local stakeholder meeting
19.	Extract from the Board decision, Freenergy, no 12 from 05.03.08
20.	EU ETS GHG emission report (Historical data on Lietuvos Electrine), "citl_data_2005_2007.xls" accessed from http://ec.europa.eu/environment/climat/emission/pdf/citl_data_2005_2007.xls
21.	Photos of the project activity
22.	Technical designs (*reviewed on-site)*
23.	Detailed plan on wind park and substation location
24.	Example_CHP_cash-flow_March_2008.xls, prepared by UAB COWI Baltic
25.	Official energy yearbook of Lithuania for 2007: ''Lietuvos Energetika-Energy in Lithuania''
26.	Tool to demonstrate the additionality, version 05.2
27.	Loan contracts with Swedbank
28.	Letter from Swedbank
29.	Joint Implementation Determination and Verification Manual, JISC 19, Annex 4
30.	Confirmation by email of EF 0,654,tCO2/MWh from Lithuanian DFP
31.	Law on financial instruments for climate change management http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=353938&p_query=renewable%20energy&p_tr2=2
32.	Law on electricity of the republic of Lithuania http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=347154&p_query=electricity%20market%20&p_tr2=2

1 REF. NO.	Document or Type of Information
33.	RE support system in Lithuania is regulated by Regulation from Lithuanian Government http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=342973
34.	LoA Lithuania
35.	LoA Spain
36.	Commissioning letter of the Wind park
37.	LoA Netherlands
38.	Explanation of March 2008 forecasts