

JI DETERMINATION REPORT FORM (F-JI-DRep) - Version 01

(By submitting this form, an accredited independent entity requests the publication of a determination pursuant to paragraph 33 of the JI guidelines in accordance with paragraph 34 of the JI guidelines.)

Name of accredited independent entity (AIE)	Bureau Veritas Certification Holding SAS
Proposed	JI Project
Title and reference number of project	Improvement of the Energy efficiency at Energomashspetsstal (EMSS), Kramatorsk, Ukraine - 0104
Host Party(ies)	Ukraine
Parties involved in the project	Netherlands
(Authorised) project participants	Open Joint Stock Company "Energomashspetsstal" (EMSS); Global Carbon BV
Small-scale project (yes/no)	No
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Brief description of project

The project activity consists of the improvement of the energy efficiency at the premise of EMSS by the implementation of four subprojects:

Subproject 1. Reconstruction of thermal and heating furnaces - there are 35 thermal and heating furnaces in operation in different shops at the premises of EMSS. The main goal of this subproject is the reduction of the natural gas (NG) consumption on 26 of these furnaces by commissioning of new automated NG burners (this enables to maintain the required temperature inside of the furnace) and by implementation of new thermal insulation for the walls, front doors and roofs of the furnaces.

Subproject 2. Installation of a new vacuum system - Installation of a new vacuum system for the vacuumed steel production.

Subproject 3. Installation of an arc ladle furnace - New arc ladle furnace will be installed for the steel production.

Subproject 4. Modernization of press equipment - Replacing the old pump system, serving the 15,000 ton press, with a new one, more effective pump system.

Determination report

General information on determination

(Please describe:

- > The scope of the determination process, including all documentation that has been reviewed and the names of persons interviewed during the determination process, as applicable;
- > The AIE's determination team, including a list of all persons involved in the determination process and a description of the functions assumed.)

The Project Design Document (PDD) submitted by Global Carbon BV and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for Completing the Project Design Document (JI-PDD), methodology, Kyoto Protocol, Clarifications on Determination. Requirements to be Checked by an Independent Entity were reviewed.

The documentation that has been reviewed is listed below:

- PDD version 1.2, dated: 28.08.07
- PDD version 2.2, dated: 12.12.07
- PDD version 3.2, dated: 17.01.08
- PDD version 3.3, dated: 12.06.08
- PDD version 3.6, dated: 13.04.09
- PDD version 3.7, dated: 01.06.09
- PDD version 3.8, dated: 04.06.09 PDD version 3.9, dated: 31.08.09

furnace" No 556/2, 22,05,2007

- Letter from Kramatorskteploenergo, LLC 23.05.07 according to heat energy supplying to EMS
- Appendix 5 to the Contract No 22/125-05 "Conditions of personnel training on EMSS"
- Electricity consumption by EAF shop 1986-2006
- Vacuumator statement Expertise. Act of working commission for readiness of finished building for presenting to the state entrance commission.
- Complex Expertise Conclusion on project Reconstruction of vacuumed steel workshop No 1490/2, 21.09.2007.

 LF statement Expertise. Complex Expertise Conclusion on project Reconstruction of RH-plant to the complex of out-of-furnace steel treatment "arc ladle
- EIA TC.194-OVOS.PZ on thermal box furnaces No 1, 2 with roll-out bottom
- Expertise Conclusion No 14-01-6675.05 on project Reconstruction of TC.187 thermal furnaces No 9, 10. Complex Expertise Conclusion No 1111/2,
- 16.10.2007 on project Reconstruction of TC.187 thermal furnaces No 9, 10. EIA TC.187-OVOS.PZ on thermal vertical furnaces No 9, 10
- Order No 33, 14.02.2007 for registration commission in 2007
- Expertise Conclusion No 14-01-4285.07 on project Reconstruction of TC.197 heating furnace No 8, 9, 10. EIA TC.197-OVOS.PZ on heating furnace No 8. 9. 10 with roll-out bottom
- Expertise Conclusion No 07 B 07 0022 00.00 1156P, 29.08.2007 on project Modernization of press shop
- EIA 92202-ZA.PZ on arc-ladle furnace
- EIA 92202-ZA.PZ on vacuumed steel workshop. EIA press shop.
- The Ukrainian Ministry of Finance Tests the Loan Market . Source: Economic News 18.09.06
- Methodological Recommendation on Evaluation of Investment Projects Efficiency, Approved by Ministry of Economy of the RF, Ministry of Finance of the RF, State Committee of the RF on Construction, Architecture and Housing Policy of the RF 21.06.1999 N BK 477
- Expertise Conclusion No 14-01-4285.07 on project Reconstruction of TC.197 heating furnace No 8, 9, 10. EIA TC.197-OVOS.PZ on heating furnace No 8, 9, 10 with roll-out bottom
- Expertise Conclusion No 07 B 07 0022 00.00 1156P, 29.08.2007 on project Modernization of press shop
- EIA 92202-ZA.PZ on arc-ladle furnace
- EIA 92202-ZA.PZ on vacuumed steel workshop. EIA press shop.
- The Ukrainian Ministry of Finance Tests the Loan Market .Source: Economic News 18.09.06
- Methodological Recommendation on Evaluation of Investment Projects Efficiency. Approved by Ministry of Economy of the RF, Ministry of Finance of the RF, State Committee of the RF on Construction, Architecture and Housing Policy of the RF 21.06.1999 N BK 477
- Development of suggestions on the improvement of fuel usage in chipping and thermal workshops. By Scientific-engineer centre in field.
- Reference on rate of heat and electricity usage, and also time of press working yc. 15000 T.C. from General Director of Energomashspetsstal,
- Emission Reductions Calculations and Cash Flow Analysis
- Letter of endorsement of the JI project "Improvement of the energy efficiency at Energomashspetsstal, Kramatorsk" issued by the Ministry of Environment Protection of Ukraine # 4593/10/3-10 dated 23/04/2007
- Letter of Approval of JI Project "Improvement of the energy efficiency at Energomashspetsstal (EMSS), Kramatorsk, Ukraine" Ref # 4998
- Approval of Voluntary Participation in a Joint Implementation Project Ref 2009JI01

To address Bureau Veritas Certification corrective action and clarification requests, Global Carbon BV revised the PDD and resubmitted it on 12/06/08. Global Carbon BV revised the PDD on 04/06/09 in respect of use of emission reductions generated after the crediting period, and Monitoring Plan refinement, and on 31/08/09 in respect of the letter of approval issuance.

On 22/11/2008 Bureau Veritas Certification performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Global Carbon BV and EMSS were interviewed as informed below:

- Yefimov Maxim Victorovich, General Director of EMSS JSC
- Smirnov Sergey Vladimirovich, Head of metrology unit of EMSS JSC
- Masyuk Aleksander Grigoryevich, Deputy Chief Engineer on labour safety and Environment of EMSS SC
- Suprun Aleksander Vasilyevich, Head of energy saving service of EMSS JSC
- Chubar Oleg Grigoryevich, Head of environmental protection unit of EMSS JSC
- Valentiy Andrey Dmitriyevich, Head of forge and press shop of EMSS JSC Stankov Vitaliy Yuryevich, Head of thermal shop of EMSS JSC
- Dobronos Aleksander Vladimirovich, Head of mechanical and snagging shop of EMSS JSC
- Panchenko Yevgeniy Vladimirovich, Head of arc-furnace shop of EMSS JSC
- Milokhod Vladimir Aleksandrovich, Head of energy shop of EMSS JSC
- Gorkusha Aleksander Petrovich, Deputy Head of arc-furnace shop of EMSS JSC
- Udichenko Aleksander Nikolayevich, Head of pattern shop of EMSS JSC
- Yesirkenov Yevgeniy, Senior Consultant at Global Carbon

The determination team consists of the following personnel:

- Flavio Gomes Team Leader, Climate Change Verifier
- Ivan Sokolov Climate Change Verifier
- Denis Pishchalov Specialist in economics
- Ashok Mammen Internal reviewer

Description of determination process

(Please refer to:

- > The review of the JI PDD and additional documentation attached to it;
- > The assessment against JI requirements, e.g. by using a determination protocol;
- The report of findings by the AIE, including the use of different types of findings (e.g. corrective action requests, clarifications or observations etc.).

Statements or assessments should be included in section "Conclusions, final comments and determination opinion" below.)

The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a determination protocol was customized for the project, according to the Determination and Verification Manual (IETA/PCF). The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validating the identified criteria. The determination protocol serves the following purposes:

- It organizes, details and clarifies the requirements JI project is expected to meet;
- It ensures a transparent determination process where the determinator will document how a particular requirement has been validated and the result of the determination.

The determination protocol consists of five tables.

The completed Determination Protocol is enclosed in Appendix A to the Determination Report.

The determination findings for each determination subject are presented as follows:

- 1) The findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found in the Determination Protocol in Appendix A.
- 2) Where Bureau Veritas Certification had identified issues that needed clarification or that represented a risk to the fulfillment of the project objectives, a Clarification or Corrective Action Request, respectively, have been issued. The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Determination Protocol in Appendix A.
- The conclusions for determination subject are presented.

Comments received from Parties, stakeholders and UNFCCC accredited observers (Please:

- Summarise the comments received pursuant to paragraph 32 of the JI guidelines; and
- Provide a report of how due account was taken of these.)

There are no comments from stakeholders.

Conclusions, final comments and determination opinion

(The requirements of Article 6 of the Kyoto Protocol and the JI guidelines and further relevant requirements defined by the COP/MOP or the JISC with regard to determinations pursuant to paragraph 33 of the JI guidelines have to be met.

Please provide:

- Conclusions on each of these requirements, describing how these requirements, in particular those referred to in paragraph 33 of the JI guidelines, have been met, including assessments and findings (e.g. corrective action requests, clarifications or observations) related to each requirement and statements on whether all issues raised have been addressed to the AIE's satisfaction;
- > Final comments and a determination opinion.)

Bureau Veritas Certification has performed a determination of the Improvement of the energy efficiency at Energomasspetstal, Kramatorsk – Ukraine. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The determination consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final determination report and opinion.

Project participants used the latest tool for demonstration of the additionality. In line with this tool, the PDD provides sufficient evidences to demonstrate that the project is additional.

By implementing subprojects, the project is likely to result in reductions of GHG emissions partially. An analysis of the

investment and technological barriers 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 and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The review of the project design documentation and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

The determination is based on the information made available to us and the engagement conditions detailed in this report.

All requirements of Article 6 of the Kyoto Protocol and the JI guidelines and further relevant requirements defined by the COP/MOP or the JISC with regard to determinations pursuant to paragraph 33 of the JI guidelines are met:

∀ Yes

□ No

List of documents attached to the determination report

(Please attach:

- ✓ The JI PDD of the project;
- ✓ Written approvals by all Parties involved in an alphabetical order; and
- ✓ Other relevant documents, e.g. any determination protocol used in the determination process, a list of persons interviewed by the AIE's determination team during the determination process; and

check mark below accordingly.)

₫ JI PDD of the project

Written approvals by the Parties involved

Other documents:

de Any other documents (please list): Emission Reductions Calculations and Cash Flow Analysis

The AIE herewith declares that undertaking the determination for the proposed JI project referred to above does not constitute a conflict of interest which is incompatible with the role of an AIE under JI.

Name of authorized officer signing for the AIE

Ivan Sokolov

Date and signature

September 10th, 2009