

DETERMINATION REPORT CLIMATE PROTECTION BUREAU LLP COMPANY

DETERMINATION OF THE REALIZATION OF A COMPLEX OF ENERGY SAVING ACTIVITIES AT FERREXPO POLTAVA MINING

REPORT NO. UKRAINE-DET/0354/2011
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BUREAU VERITAS CERTIFICATION



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Date of first issue: 01/11/2011	Organizational unit: Bureau Veritas Certification Holding SAS
Client: Climate Protection Bureau LLP company	Viktor Khalabuzar

Bureau Veritas Certification has made the determination of the "Realization of a complex of energy saving activities at Ferrexpo Poltava Mining" project of Climate Protection Bureau LLP company located in Komsomolsk city, Poltava Region, Ukraine on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as

well as the host country criteria.

The determination scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the determination process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.

In summary, it is Bureau Veritas Certification's opinion that the project correctly Guidance on criteria for baseline setting and monitoring and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

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1 INTRODUCTION

Climate Protection Bureau LLP Company has commissioned Bureau Veritas Certification to determine its JI project "Realization of a complex of energy saving activities at Ferrexpo Poltava Mining" (hereafter called "the project") at Komsomolsk city, Poltava Region, Ukraine.

This report summarizes the findings of the determination of the project, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1 Objective

The determination serves as project design verification and is a requirement of all projects. The determination is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are determined in order to confirm that the project design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Determination is a requirement for all JI projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emissions reductions units (ERUs).

UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

1.2 Scope

The determination scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

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

1.3 Determination team

The determination team consists of the following personnel:

Kateryna Zinevych

Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Vyacheslav Yeriomin

Bureau Veritas Certification Team Member, Climate Change Verifier



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Denis Pishchalov

Bureau Veritas Certification Team Member, Financial Specialist

This determination report was reviewed by:

Ivan Sokolov

Bureau Veritas Certification, Internal Technical Reviewer

2 METHODOLOGY

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 version 01 of the Joint Implementation Determination and Verification Manual, issued by the Joint Implementation Supervisory Committee at its 19 meeting on 04/12/2009. The protocol shows, in a transparent manner, criteria (requirements), means of determination and the results from determining the identified criteria. The determination protocol serves the following purposes:

- It organizes, 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 determined and the result of the determination.

The completed determination protocol is enclosed in Appendix A to this report.

2.1 Review of Documents

The Project Design Document (PDD) submitted by Climate Protection Bureau LLP Company and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for users of the joint implementation project design document form, Approved CDM methodology and/or Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by an Accredited Independent Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, Climate Protection Bureau LLP Company revised the PDD and resubmitted it on 11/10/2011, 12/10/2011, 19/10/2011, 24/10/2011 and 01/11/2011.



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The determination findings presented in this report relate to the project as described in the PDD version(s) 02, 03, 04, 05, 06, 07.

2.2 Follow-up Interviews

On 27-29/09/2011 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Ferrexpo Poltava Mining, Climate Protection Bureau LLP Company were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Ferrexpo Poltava Mining	> Implementation schedule
	Project management organisation
	Evidence and records on reconstruction and new equipment and its operation
	Environmental Impact Assessment
	Project monitoring responsibilities
	Monitoring equipment
	Quality control and quality assurance procedures
	 Environmental impacts affected
	Local authorities and public opinion
Climate Protection	Applicability of methodology
Bureau LLP Company	Baseline and Project scenarios
	Barriers analysis
	Additionality justification
	Common practice analysis
	Monitoring plan
	Conformity of PDD to JI requirements

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the project design.

If the determination team, in assessing the PDD and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to JI project requirements, it will raise these issues and inform the project participants of these issues in the form of:

(a) Corrective action request (CAR), requesting the project participants to correct a mistake in the published PDD that is not in accordance with the

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(technical) process used for the project or relevant JI project requirement or that shows any other logical flaw;

- (b) Clarification request (CL), requesting the project participants to provide additional information for the determination team to assess compliance with the JI project requirement in question;
- (c) Forward action request (FAR), informing the project participants of an issue, relating to project implementation but not project design, that needs to be reviewed during the first verification of the project.

The determination team will make an objective assessment as to whether the actions taken by the project participants, if any, satisfactorily resolve the issues raised, if any, and should conclude its findings of the determination.

To guarantee the transparency of the verification process, the concerns raised are documented in more detail in the verification protocol in Appendix A.

3 PROJECT DESCRIPTION

The project history starts when on the technical meeting under the direction of the Pelletizing Plant chief engineer (Meeting protocol dated 10/01/2000) and on the Ferrexpo Poltava Mining scientific and technical board (Meeting protocol #8 dated 09/02/2000) the decisions on the beginning of the ore pellet and concentrate production modernization were taken. Based on the results of the measures stated above, the following actions were implemented:

- Reconstruction of the sealing of the loading part of the tube furnaces ##1-4 by establishing of the SUPERDEAL seal, which lead to the reduction of energy and natural gas consumption during the pellets production;
- Replacement of КМДТ crushers by Hydrocone H-4000 and Hydrocone H-6800 crushers, which lead to the reduction of energy consumption during the iron ore concentrate production.

The realization of activities mentioned above allowed to reduce specific consumption of electric power in the process of pellets and iron ore concentrate production, allowing to reduce its consumption from UETG and to reduce natural gas specific consumption in the process of pellets production, leading to the natural gas consumption reduction. The reduction of energy consumption allows to reduce its consumption from UETG, leading to reduction in fuel consumption for the electric power production and, correspondingly, to the decrease in greenhouse emissions by power plants of Ukraine. Reduction in volumes of natural



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gas consumption during the pellets production will lead to decrease in greenhouse gas emissions.

JI project "Realization of a complex of energy saving activities at Ferrexpo Poltava Mining" implementation was initiated in 2000, taking into account the possibility of Kyoto mechanisms funds involvement.

Without joint implementation project activity, the baseline for Ferrexpo Poltava Mining would be maintenance of the existing in the beginning of 2000 technological equipment and heavy dump trucks in a due condition, at the same time the power resources consumption for mining rock transportation and for iron ore concentrate and pellets production and, as the result, greenhouse gases emissions to the atmosphere would stay equal to consumptions and emissions in 1999.

Project activities are aimed at improvement in power efficiency of the plant by the implementation of 3 subprojects:

- 1. Reduction of diesel fuel specific consumption during mining rock transportation aimed at the reduction in diesel fuel burnt by dump trucks which transport mining rock. Diesel fuel specific consumption reduction may be achieved due to the replacement of present heavy dump trucks by new dump trucks with more efficient engines. During the project activity it is planned to replace about 150 dump trucks. Reduction in fuel consumption during transportation of mining rock will result in reduction of greenhouse gas emissions.
- 2. Modernization of iron ore concentrate production aimed at establishing of high-efficient equipment and optimization of technological processes, which will allow reducing the consumption of electric energy during the production of iron ore concentrate. Reduction in electric energy consumption will allow to reduce energy consumption from UETG, which will result in decrease in fuel consumption for energy production and, correspondingly, reduction in greenhouse gas emissions at the power plants of Ukraine.
- 3. Modernization of pellets production the aim of modernization is the establishment of high-efficient equipment and optimization of technological processes, which will allow to reduce consumption in electric power and natural gas during the pellets production. Reduction in electricity consumption will allow to reduce its consumption from UETG leading to reduction in fuel consumption for the electric power production and, correspondingly, to the decrease in greenhouse emissions by power plants of Ukraine. Reduction in volumes of natural gas consumption during the pellets production will lead to decrease in greenhouse gas emissions.



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The fulfillment of scheduled activities on decrease in energy efficiency of the production at Ferrexpo Poltava Mining will result in reduction in volumes of natural gas consumption for pellets, decrease in electric energy consumption in production of iron ore concentrate and pellets, reduction in diesel fuel consumption during mining rock transportation which will decrease green house gas emissions into the air.

4 DETERMINATION CONCLUSIONS

In the following sections, the conclusions of the determination are stated.

The findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are described in the Determination Protocol in Appendix A.

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 determination of the Project resulted in 28 Corrective Action Requests and 12 Clarification Requests.

The number between brackets at the end of each section correspond to the DVM paragraph

4.1 Project approvals by Parties involved (19-20)

A letter of approval has not been received yet, which is described in the CAR 9 in the Determination protocol below.

Justification materials for the potential joint implementation project, intending to obtain a letter of endorsement by the owner of the source, were sent to the State Environmental Investment Agency of Ukraine. The State Environmental Investment Agency of Ukraine issued for this purpose a Letter of Endorsement #1774/23/7 dated 07/07/2011.

After the procedure of project determination, the final version of documentation and the determination report will be submitted to the State Environmental Investment Agency of Ukraine in order to obtain a Letter of Approval.

4.2 Authorization of project participants by Parties involved (21)

The participation for each of the legal entities listed as project participants in the PDD will be authorized by a Party involved, which is also listed in the PDD, through a written project approval. A letter of approval has not been received yet, which is described in the CAR 9 in the Determination protocol below.

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4.3 Baseline setting (22-26)

The PDD explicitly indicates that using a methodology for baseline setting and monitoring developed in accordance with appendix B of the JI guidelines (hereinafter referred to as JI specific approach) was the selected approach for identifying the baseline.

The PDD provides a detailed theoretical description in a complete and transparent manner, as well as justification, that the baseline is established:

- (a) By listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one:
 - a. Continuation of current situation at the plant without activities improving power efficiency
 - b. Performance of project activities without joint implementation mechanisms

Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector AIE verifies that baseline and monitoring methodology is chosen on the basis of Annex I to "Guidelines for the baseline setting and monitoring" version 03 and is applicable for usage in the project activity, which is in accordance with all the applicability criteria.

4.4 Additionality (27-31)

The most recent version of the "Tool for the demonstration and assessment of additionality" approved by the CDM Executive Board was used. All explanations, descriptions and analyses are made in accordance with the selected tool or method.

The PDD provides a justification of the applicability of the approach with a clear and transparent description, as per item 4.3 above. Since the "Guidance on Criteria for Baseline Setting and Monitoring (Version 3)" allows PP to use any of the three Options (a,b,c) so in order to prove additionality Option (c) was used.

In order to demonstrate that the project is not a plausible baseline scenario without being registered as a JI project, "Tool for the demonstration and assessment of additionality" version 05.2 was used:

 Identification of alternative activities within the project that comply with Ukrainian active legislation: As mentioned in section B.1 of the PDD version 07, two more activities were determined besides the joint implementation project: 1. To continue current situation without implementation of energy-saving measures; 2. Implementation of project activities without joint implementation mechanisms.



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- Investment Analysis: Benchmark analyses application was chosen in order to prove that project scenario is additional.
- Barrier Analysis: It is demonstrated that the project faces financial and technological barriers regarding technology upgrades and personnel training difficulty.
- Common Practice Analysis: It is demonstrated that at the time of decision-making there were no similar project activities operational in Ukraine and the project activity is first of its kind.

Additionality is demonstrated appropriately as a result of the analysis using the approach chosen.

4.5 Project boundary (32-33)

The project boundary was defined for each subproject separately.

1. Reduction of diesel fuel specific consumption during mining rock transportation

These subproject boundaries within the project and baseline encompass emissions that refer to diesel fuel combustion by technological vehicles during mining rock transportation.

2. Modernization of iron ore concentrate production

These subproject boundaries within the project and baseline encompass emissions that refer to electric energy consumption from UETG.

3. Modernization of pellets production

These subproject boundaries within the project and baseline encompass:

- emissions that refer to natural gas combustion by technological equipment during pellets production;
- emissions that refer to electric energy consumption from UETG.

Geographical boundaries of the project encompass physical (geographic) location of the emissions source. Project boundaries coincide with the physical boundaries of Ferrexpo Poltava Mining and energy enterprise that generates electric energy for Ferrexpo Poltava Mining production needs. Electric energy supplier for Ferrexpo Poltava Mining is Enerhorynok State Enterprise out of Poltava Mainline Power Grid of Ukrainian Northern Electric Power System that is transported by the Poltavaoblenerho OJSC distributing electricity networks. The project boundaries concern the region where the enterprise is located.



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Technological vehicles and production equipment of Ferrexpo Poltava Mining are emission sources of this JI project, this means that all the emission sources are under the control of project participants.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD.

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began, and the starting date is 10/01/2000, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 20 years or 240 months.

The PDD states the length of the crediting period in years and months, which is 17 years or 204 months, and its starting date as 01/01/2004, which is on the date the first emission reductions or enhancements of net removals are generated by the project.

The PDD states that the extension of its crediting period beyond 2012 is subject to the host Party approval, and the estimates of emission reductions or enhancements of net removals are presented separately for those until 2012 and those after 2012 in all relevant sections of the PDD.

4.7 Monitoring plan (35-39)

The PDD, in its monitoring plan section, explicitly indicates that JI specific approach was selected.

The monitoring plan describes all relevant factors and key characteristics that will be monitored, and the period in which they will be monitored, in particular also all decisive factors for the control and reporting of project performance.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. be clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions or enhancements of net removals to be monitored such as (factor of carbon oxidation during diesel fuel combustion, emission factor for UETG, factor of carbon oxidation during natural gas combustion, amount of carbon in diesel fuel, the amount of carbon in natural gas).

The monitoring plan draws on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"



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developed by the JISC, as appropriate (NCV_{diesel}, SFC_{diesel,BC}, W_{diesel}, EF_{co2,elec}, SEC_{iron ore}, P_{iron ore}, y, NCV_{NG,BC}, SFC_{pellets,NG,BC}, P_{pellets,y}, OXID_{diesel}, OXID_{NG}, W_{NG}, SEC_{pellets,elec,BC}, FC_{diesel,PC,y}, EC_{iron ore,PC,y}, FC_{NG,PC,y}, EC_{pellets,PC,y}.)

The monitoring plan explicitly and clearly distinguishes:

- (i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination, such as (baseline specific diesel fuel consumption during the mining rock transportation, specific electric energy consumption during iron ore concentrate production, natural gas net calorific value in baseline, natural gas baseline specific consumption during pellets production, electric energy specific consumption during baseline pellets production).
- (ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination, such as (not applicable for this project).
- (iii) Data and parameters that are monitored throughout the crediting period, such as (quantity of diesel fuel combustion in mining rock transportation during the year, diesel fuel net calorific value, factor of carbon oxidation during diesel fuel combustion, the amount of carbon in diesel fuel, the amount of electric energy consumption in the process of iron ore concentrate production during the year, emission factor for UETG, quantity of natural gas combustion in the process of pellets production during the year, natural gas net calorific value in the project scenario, factor of carbon oxidation during natural gas combustion, the amount of carbon in natural gas, quantity of electric energy consumption used for pellets production during the year, vehicles freight turnover during the project scenario mining rock transportation for the year y, the amount of iron ore concentrate produced for the year y, amount of pellets produced for the year y in project scenario).

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording, such as:

- technical personnel read the monitored data which are subject to measurements from metering units of particular energy source and make relevant notes in the technological registers;
- the monitoring data are registered automatically in electric form, where the automatic means of registration available.

General data on energy resources consumption during a month is given in monthly reports according to the section D. 2 ("Report on materials consumption standard performance", "Report on electricity consumption",

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"Report on natural gas consumption", "Certificates on natural gas quality physical and chemical characteristics", "Fact sheet on finished products turnover") which are the documents of official accounting. Monthly reports are archived in electronic and paper forms at thereof monitoring group.

The monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate.

Baseline Emissions

 $BE_y = BE_{diesel,y} + BE_{iron ore,y} + BE_{pellets,y}$

where:

 BE_y – total emission levels during a year according to the baseline scenario, $t CO_{2e}$;

 $BE_{diesel,y}$ – emissions, caused by the diesel fuel consumption during mining rock transportation (subproject "Reduction of diesel fuel specific consumption during mining rock transportation"), t CO_{2e} ;

 $BE_{iron\ ore,y}$ – emissions, caused by the energy consumption in the process of iron ore concentrate production (subproject "Modernization of iron ore concentrate production"), t CO_{2e} ;

 $BE_{pellets,y}$ – emissions, caused by the natural gas consumption in the process of pellets production (subproject "Modernization of pellets production"), t CO_{2e} .

Emissions will be calculated separately for each proposed subproject.

 $BE_{diesel,v} = FC_{diesel,BC} \cdot NCV_{diesel} \cdot EF_{co2,diesel}$

where:

 $BE_{diesel,y}$ – CO_2 emissions from diesel fuel combustion in process of mining rock transportation, t CO_{2e} ;

 $FC_{diesel,BC}$ – the quantity of diesel fuel combusted in process of mining rock transportation during the year, th. t;

NCV_{diesel} – diesel fuel net calorific value, TJ/th. t;

 $\mathsf{EF}_{\mathsf{co2},\mathsf{diesel}} - \mathsf{CO}_2$ emission coefficient of diesel fuel, t $\mathsf{CO}_{2e}/\mathsf{TJ}$.

 $FC_{diesel,BC} = SFC_{diesel,BC} \cdot FT_{v}$

where:

 $SFC_{diesel,BC}$ – baseline specific diesel fuel consumption during the mining rock transportation, t/tkm;

 FT_y – vehicles freight turnover during the project scenario mining rock transportation for the year y, tkm.



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 $EF_{co2.diesel} = OXID_{diesel} \cdot W_{diesel} \cdot 44/12$,

where:

 $OXID_{diesel}$ – factor of carbon oxidation during diesel fuel combustion, mass or volume unit;

 $W_{\text{diesel}} - \text{average mass fraction of carbon in diesel fuel, } t/TJ; \\$

44/12 – stechiometric ratio between molecular weight of CO₂ and carbon.

 $BE_{iron ore,y} = EC_{iron ore,BC} \cdot EF_{co2,elec}$

where:

 $BE_{iron\ ore,y}-CO_2$ emissions from energy consumption in process of iron ore concentrate production, t CO_{2e} ;

EC_{iron ore,BC} – quantity of electricity consumed in process of iron ore concentrate production in baseline, MWh;

 $\mathsf{EF}_{\mathsf{co2},\mathsf{elec}}$ – emission factor for UETG, t $\mathsf{CO}_{\mathsf{2e}}/\mathsf{MWh}$.

 $EC_{iron ore,BC} = SEC_{iron ore} \cdot P_{iron ore, y}$

where:

 $SEC_{iron ore}$ - specific electric energy consumption during iron ore concentrate production, MWh/t;

P_{iron ore. y} – the amount of iron ore concentrate produced for the year y, t.

 $BE_{pellets,y} = BE_{pellets,NG} + BE_{pellets,elec}$

where:

 $BE_{pellets,y} - CO_2$ emissions from natural gas combustion and electricity consumption in process of pellets production, t CO_{2e} ;

 $BE_{pellets,NG}-CO_2$ emissions from natural gas combustion in process of pellets production, t $CO_{2e};$

 $BE_{pellets,elec}$ - CO_2 emissions from electricity consumption in process of pellets production, t CO_{2e} .

 $BE_{pellets,NG} = FC_{NG,BC} \cdot 4,1868 \cdot NCV_{NG,BC} \cdot EF_{co2,NG},$

where:

 $FC_{NG,BC}$ — quantity of natural gas consumed in process of pellets production during the year, mil.m³;

NCV_{NG,BC} - natural gas net calorific value in baseline, Tcal/mil.m³;

EF_{co2,NG} – emission factor from natural gas combustion, t CO_{2e}/TJ;

4,1868 – standardized coefficient for Tcal recalculation into TJ, TJ/Tcal.

 $FC_{NG,BC} = SFC_{pellets,NG,BC} \cdot P_{pellets,v}$

where:

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 $SFC_{pellets,NG,BC}$ – natural gas baseline specific consumption during pellets production, mil. m^3/t ;

P_{pellets,y} – amount of pellets produced for the year y in project scenario, t.

 $EF_{co2,NG} = OXID_{NG} \cdot W_{NG} \cdot 44/12$,

where:

 $\mathsf{OXID}_{\mathsf{NG}}$ – factor of carbon oxidation during natural gas combustion, mass or volume unit;

W_{NG} – average mass fraction of carbon in natural gas, t/TJ;

44/12 – stechiometric ratio between molecular weight of CO₂ and carbon.

 $BE_{pellets,elec} = EC_{pellets,BC} \cdot EF_{co2,elec}$

where:

 $\mathsf{EC}_{\mathsf{pellets},\mathsf{BC}}$ — quantity of electricity consumed in process of pellets production in baseline, MWh

EF_{co2.elec} – emission factor for UETG, t CO_{2e}/MWh.

 $EC_{pellets,BC} = SEC_{pellets,elec,BC} \cdot P_{pellets,v}$

where:

 $SEC_{pellets,elec,BC}$ – electric energy specific consumption during baseline pellets production, MWh/t;

P_{pellets,y} – amount of pellets produced for the year y in project scenario, t.

Project Emissions

 $PE_y = PE_{diesel,y} + PE_{iron ore,y} + PE_{pellets,y}$

where:

 PE_y – total emission levels during a year according to the project scenario, t CO_{2e} ;

PE_{diesel,y} – emissions, caused by the diesel fuel consumption during mining rock transportation (subproject "Reduction of diesel fuel specific consumption during mining rock transportation"), t CO_{2e};

 $PE_{iron\ ore,y}$ – emissions, caused by the energy consumption in the process of iron ore concentrate production (subproject "Modernization of iron ore concentrate production"), t CO_{2e} ;

 $PE_{pellets,y}$ – emissions, caused by the natural gas consumption in the process of pellets production (subproject "Modernization of pellets production"), t CO_{2e} .

 $PE_{diesel,y} = FC_{diesel,PC,y} \cdot NCV_{diesel} \cdot EF_{co2,diesel}$

where:

 $\text{PE}_{\text{diesel},y}-\text{CO}_2$ emissions from diesel fuel combustion in process of mining rock transportation, t $\text{CO}_{2e};$

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 $FC_{diesel,PC,y}$ – the quantity of diesel fuel combusted in process of mining rock transportation during the year, th. t;

NCV_{diesel} - diesel fuel net calorific value, TJ/th. t;

EF_{co2.diesel} - CO₂ emission coefficient of diesel fuel, t CO_{2e}/TJ.

 $EF_{co2,diesel} = OXID_{diesel} \cdot W_{diesel} \cdot 44/12$,

where:

OXID_{diesel} –factor of carbon oxidation during diesel fuel combustion, mass or volume unit;

W_{diesel} - average mass fraction of carbon in diesel fuel, t/TJ;

44/12 – stechiometric ratio between molecular weight of CO₂ and carbon.

The formulas provided in the "Tool to calculate baseline, project and/or leakage emissions from electricity consumption" (version 01) are used for calculation of the project emissions under the subproject "Modernization of iron ore concentrate production".

 $PE_{iron ore,y} = EC_{iron ore,PC,y} \cdot EF_{co2,elec}$

where:

 $PE_{iron\ ore,y}-CO_2$ emissions from energy consumption in process of iron ore concentrate production, t CO_{2e} ;

EC_{iron ore,PC,y} – quantity of electricity consumed in process of iron ore concentrate production per year, MWh;

EF_{co2 elec} – emission factor for UETG, t CO_{2e}/MWh.

PE_{pellets,y} = PE_{pellets,NG} + PE_{pellets,elec},

where:

 $PE_{pellets,y} - CO_2$ emissions from natural gas combustion and electricity consumption in process of pellets production, t CO_{2e} ;

 $PE_{pellets,NG} - CO_2$ emissions from natural gas combustion in process of pellets production, t CO_{2e} ;

 $PE_{pellets,elec}-CO_2$ emissions from electricity consumption in process of pellets production, t CO_{2e} .

 $PE_{pellets,NG} = FC_{NG,PC,y} \cdot 4,1868 \cdot NCV_{NG,y} \cdot EF_{co2,NG},$

where:

 $FC_{NG,PC,y}$ – quantity of natural gas consumed in process of pellets production during the year, mil.m³;

 $NCV_{NG,y}$ — natural gas net calorific value in the project scenario, $Tcal/mil.m^3;$

EF_{co2,NG} – emission factor from natural gas combustion, t CO_{2e}/TJ;

4,1868 - standardized coefficient for Tcal recalculation into TJ, TJ/Tcal.



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 $EF_{co2.NG} = OXID_{NG} \cdot W_{NG} \cdot 44/12$,

where:

 $\mathsf{OXID}_{\mathsf{NG}}$ – factor of carbon oxidation during natural gas combustion, mass or volume unit;

 W_{NG} – average mass fraction of carbon in natural gas, t/TJ; 44/12 – stechiometric ratio between molecular weight of CO_2 and carbon.

PE_{pellets,elec} = EC_{pellets,PC,v}·EF_{co2,elec},

where:

 $\mathsf{EC}_{\mathsf{pellets},\mathsf{PC},\mathsf{y}}$ – quantity of electricity consumed in process of pellets production per year, MWh;

 $\mathsf{EF}_{\mathsf{co2},\mathsf{elec}}$ – emission factor for UETG, t $\mathsf{CO}_{\mathsf{2e}}/\mathsf{MWh}$.

Emission Reductions

 $ER_v = BE_v - PE_v$

where:

 ER_y - emissions reduction during a year due to project activities, t $CO_{2 e}$; PE_y - emissions during a year according to the project scenario, t $CO_{2 e}$;

BE_y – emissions during a year according to the baseline, t CO_{2 e}.

The monitoring plan presents the quality assurance and control procedures for the monitoring process, which are explicitly described in the PDD version 07. This includes, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available on request.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities. The Chairman of the Board of the Ferrexpo Poltava Mining appoints personnel responsible for operation and maintenance of technical equipment needed for the project. Their responsibilities also include registration of all data necessary for monitoring. The head of the monitoring group will be engineer of technical department of the Ferrexpo Poltava Mining. The monitoring will be conducted in close collaboration with technical personnel and will include the monitoring itself and also analysis and archiving of all data indicated in the previous section. The responsibilities of the monitoring group will also include work coordination to estimate emissions reduction level. Under the order of the Head of the monitoring group, estimation of emission reduction shall be performed by the developer of Joint implementation project. Periodic data on energy resources consumption will be compared with relevant registered data taken from the technical personnel to approve data credibility. In case of inconsistency of these data the cause of its appearance must be found in collaboration with the



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technical personnel. If the discrepancy of monitoring data is found, monitoring system of relevant data must be corrected.

On the whole, the monitoring report reflects good monitoring practices appropriate to the project type.

The monitoring plan provides, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature etc.) but not including data that are calculated with equations

The monitoring plan indicates that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project.

4.8 Leakage (40-41)

Leakage is not foreseen in this project.

4.9 Estimation of emission reductions or enhancements of net removals (42-47)

The PDD indicates assessment of emissions or net removals in the baseline scenario and in the project scenario as the approach chosen to estimate the emission reductions or enhancement of net removals generated by the project.

The PDD provides the ex ante estimates of:

- (a) Emission reductions from the project (within the project boundary), which are 1 088 599 tons of CO2eq for 2004-2007, 2 862 914 tons of CO2eq for 2008-2012, 5 077 055 tons of CO2eq for 2013-2020;
- (b) Leakage, as applicable, which are 0 tons of CO2eq for before Kyoto, crediting and postcrediting periods;
- (c) Emission reductions adjusted by leakage (based on (a)-(b) above), which are 1 088 599 tons of CO2eq for 2004-2007, 2 862 914 tons of CO2eq for 2008-2012, 5 077 055 tons of CO2eq for 2013-2020.

The estimates referred to above are given:

- (a) On an annual basis;
- (b) From 01/01/2004 to 31/12/2020, covering the whole crediting period;



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- (c) On a source-by-source/sink-by-sink basis;
- (d) For each GHG gas, which is in this case, CO2
- (e) In tonnes of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol;

The formula used for calculating the estimates referred above, which are clearly described in the section 4.7 of this report, are consistent throughout the PDD.

For calculating the estimates referred to above, key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating the estimates referred to above are clearly identified, reliable and transparent.

Emission factors, such as (factor of carbon oxidation during diesel fuel combustion, emission factor for UETG, factor of carbon oxidation during natural gas combustion, amount of carbon in diesel fuel, the amount of carbon in natural gas), were selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

The estimation referred to above is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The estimates referred to above are consistent throughout the PDD.

The annual average of estimated emission reductions or enhancements of net removals over the crediting period is calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period, and multiplying by twelve.

4.10 Environmental impacts (48)

The PDD lists and attaches documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party, such as:

- Permit #5310200000-58 on stationary sources air pollution;
- Permit #5310200000-59 on stationary sources air pollution;
- Permit #5310200000-60 on stationary sources air pollution;
- Permit #5310200000-74 on stationary sources air pollution.



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The PDD provides conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party, if the analysis referred to above indicates that the environmental impacts are considered significant by the project participants or the host Party.

4.11 Stakeholder consultation (49)

The host Party does not require consultations with stakeholders for joint implementation projects. Stakeholders' comments were be collected during publishing of the project within the determination procedure. No comments were received.

4.12 Determination regarding small scale projects (50-57) Not applicable.

4.13 Determination regarding land use, land-use change and forestry (LULUCF) projects (58-64)

Not applicable.

4.14 Determination regarding programmes of activities (65-73) Not applicable.

5 SUMMARY AND REPORT OF HOW DUE ACCOUNT WAS TAKEN OF COMMENTS RECEIVED PURSUANT TO PARAGRAPH 32 OF THE JI GUIDELINES

No comments, pursuant to paragraph 32 of the JI Guidelines, were received.

6 DETERMINATION OPINION

Bureau Veritas Certification has performed a determination of the "Realization of a complex of energy saving activities at Ferrexpo Poltava Mining" Project in 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 participant used the latest tool for demonstration of the additionality. In line with this tool, the PDD provides barrier, investment



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and common practice analysis to determine that the project activity itself is not the 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 determination revealed two pending issues related to the current determination stage of the project: the issue of the written approval of the project and the authorization of the project participant by the host Party. If the written approval and the authorization by the host Party are awarded, it is our opinion that the project as described in the Project Design Document, Version 07 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

The review of the project design documentation (version 07) 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.

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7 REFERENCES

Category 1 Documents:

Documents provided by Climate Protection Bureau LLP that relate directly to the GHG components of the project.

- /1/ PDD «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining». Version 01, September 11th, 2011.
- /2/ PDD «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining». Version 02, September 19th, 2011.
- /3/ PDD «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining». Version 03, October 11th, 2011.
- /4/ PDD «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining». Version 04, October 12th, 2011.
- /5/ PDD «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining». Version 05, October 19th, 2011.
- /6/ PDD «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining». Version 06, October 24th, 2011.
- /7/ PDD «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining». Version 07, November 1st, 2011.
- /8/ Guidelines for Users of the Join Implementation Project Design Document Form, version 04, JISC
- /9/ Joint Implementation Project Design Document Form, version 01
- /10/ Glossary of JI terms, version 03, JISC.
- /11/ Guidance on Criteria for Baseline Setting and Monitoring, version 03, JISC.
- /12/ JISC "Clarification regarding the public availability of documents under the verification procedure under the Joint Implementation Supervisory Committee." Version 03
- /13/ Determination and Verification Manual, version 01
- /14/ Letter of Endorsement from National Environmental Investment Agency of Ukraine ##1774/23/7 dated 07.07.2011

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents.

- /1/ Passport on carriage scales type 17,120/127 "OWA" (Germany), serial #980378
- /2/ Passport on carriage scales type 17,120/127 "OWA" (Germany), serial #980379
- /3/ Passport on carriage scales type EpMaк BB-200-2-50, serial #935
- /4/ Passports on measuring equipment of gas metering unit, GMU-1
- /5/ Passport on resistance transmitter type TCM 0890, serial #395, GMU-1
- /6/ Passports on measuring equipment of gas metering unit, GMU-2
- /7/ Passport on resistance transmitter type TCM 0890, without serial #, GMU-2
- /8/ Passports on measuring equipment of gas metering unit, GMU-3



- /9/ Passport on resistance transmitter type TCM 1088, serial #026-01, GMU-3
- /10/ Passports on measuring equipment of gas metering unit, GMU-4
- /11/ Passport on resistance transmitter type TCM 1088, serial #430-38, GMU-4
- /12/ Passports on measuring equipment of gas metering unit, GMU-5
- /13/ Passport on resistance transmitter type TCM 1088, serial #086-83, GMU-5
- /14/ Passports on measuring equipment of gas metering unit, GMU-6
- /15/ Passport on resistance transmitter type TCΠ 1088, without serial #, GMU-6
- /16/ Technical description of resistance transmitters type TCM, TCΠ
- /17/ Passport on meter type ДП ППО-40-0,6 СУ, serial #01003 (fuel servicing truck #248)
- /18/ Passport on fuel servicing truck #248
- /19/ Photo meter type ДП ППО-40-0,6 СУ, serial #01003 (fuel servicing truck #248)
- /20/ Photo fuel servicing truck #248
- /21/ Passport on meter type ДП ППО-40-0,6 СУ, serial #01002 (fuel servicing truck #249)
- /22/ Passport on fuel servicing truck #249
- /23/ Photo meter type ДП ППО-40-0,6 СУ, serial #01002 (fuel servicing truck #249)
- /24/ Photo fuel servicing truck #249
- /25/ Passport on meter type ДП ППО-40-0,6 СУ, serial #01004 (fuel servicing truck #250)
- /26/ Passport on fuel servicing truck #250
- /27/ Photo meter type ДП ППО-40-0,6 СУ, serial #01004 (fuel servicing truck #250)
- /28/ Photo fuel servicing truck #250
- /29/ Calibration protocol on electricity metering unit equipment, EMU-1
- /30/ Calibration protocol on electricity metering unit equipment, EMU-2
- /31/ Calibration protocol on electricity metering unit equipment, EMU-3
- /32/ Calibration protocol on electricity metering unit equipment, EMU-4
- /33/ Calibration protocol on electricity metering unit equipment, EMU-5
- /34/ Calibration protocol on electricity metering unit equipment, EMU-6
- /35/ Calibration protocols on electricity metering unit equipment, EMU-7
- /36/ Calibration protocols on electricity metering unit equipment, EMU-8
- /37/ Calibration protocols on electricity metering unit equipment, EMU-9
- /38/ Calibration protocols on electricity metering unit equipment, EMU-10
- /39/ Calibration protocol on electricity metering unit equipment, EMU-11
- /40/ Calibration protocols on electricity metering unit equipment, EMU-14
- /41/ Calibration protocols on electricity metering unit equipment, EMU-15
- /42/ Calibration protocols on electricity metering unit equipment, EMU-15 after 07.2011
- /43/ Calibration protocols on electricity metering unit equipment, EMU-16
- /44/ Calibration protocols on electricity metering unit equipment, EMU-17
- /45/ Calibration protocols on electricity metering unit equipment, EMU-18
- /46/ Calibration protocols on electricity metering unit equipment, EMU-19
- /47/ Calibration protocols on electricity metering unit equipment, EMU-20
- /48/ Calibration protocols on electricity metering unit equipment, EMU-21



- /49/ Calibration protocols on electricity metering unit equipment, EMU-22 /50/ Calibration protocols on electricity metering unit equipment, EMU-23 /51/ Calibration protocols on electricity metering unit equipment, EMU-24
- /52/ Calibration protocols on electricity metering unit equipment, EMU-24 after 07.2011
- /53/ Calibration protocols on electricity metering unit equipment, EMU-25
- /54/ Calibration protocols on electricity metering unit equipment, EMU-25 after 07.2011
- /55/ Calibration protocols on electricity metering unit equipment, EMU-26
- /56/ Calibration protocols on electricity metering unit equipment, EMU-27
- /57/ Calibration protocols on electricity metering unit equipment, EMU-31
- /58/ Calibration protocols on electricity metering unit equipment, EMU-32
- /59/ Calibration protocols on electricity metering unit equipment, EMU-33
- /60/ Calibration protocols on electricity metering unit equipment, EMU-33 after 04.2011
- /61/ Calibration protocols on electricity metering unit equipment, EMU-34
- /62/ Calibration protocols on electricity metering unit equipment, EMU-35
- /63/ Calibration protocols on electricity metering unit equipment, EMU-36
- /64/ Calibration protocols on electricity metering unit equipment, EMU-37
- /65/ Calibration protocols on electricity metering unit equipment, EMU-38
- /66/ Calibration protocols on electricity metering unit equipment, EMU-39
- /67/ Calibration protocols on electricity metering unit equipment, EMU-40
- /68/ Calibration protocols on electricity metering unit equipment, EMU-41
- /69/ Calibration protocols on electricity metering unit equipment, EMU-42
- /70/ Calibration protocols on electricity metering unit equipment, EMU-43/71/ Calibration protocols on electricity metering unit equipment, EMU-44
- /72/ Finished product turnover note for 2004
- /73/ Finished product turnover note for 2005
- /74/ Finished product turnover note for 2006
- /75/ Finished product turnover note for 2007
- /76/ Finished product turnover note for 2008
- /77/ Finished product turnover note for 2009
- /78/ Finished product turnover note for 2010
- /79/ Finished product turnover note for 1961-2010, early data
- /80/ Certificate on state registration of HD-785-5 Komatsu dump trucks for 2003
- /81/ Technical passports on HD-785-5 Komatsu dump trucks for 2003
- /82/ Certificate on state registration of БелАЗ-75145 dump trucks for 2004
- /83/ Technical passports on БелА3-75145 dump trucks for 2004
- /84/ Certificate on state registration of HD-785-5 Komatsu dump trucks for 2005
- /85/ Technical passports on HD-785-5 Komatsu dump trucks for 2005
- /86/ Certificate on state registration of БелАЗ-75145 dump trucks for 2005
- /87/ Technical passports on БелАЗ-75145 dump trucks for 2005
- /88/ Certificate on state registration of CATERPILLAR-777D dump trucks for 2005
- /89/ Technical passports on CATERPILLAR-777D dump trucks for 2005
- /90/ Certificate on state registration of CATERPILLAR-777D dump trucks for 2006
- /91/ Technical passports on CATERPILLAR-777D dump trucks for 2006
- /92/ Certificate on state registration of HD-785-5 Komatsu dump trucks for 2006



- /93/ Technical passports on HD-785-5 Komatsu dump trucks for 2006
- /94/ Technical passports on CATERPILLAR-785C dump trucks for 2007
- /95/ Certificate on state registration of CATERPILLAR-785C dump trucks for 2007
- /96/ Technical passports on CATERPILLAR-785C dump trucks for 2008
- /97/ Certificate on state registration of CATERPILLAR-785C dump trucks for 2008
- /98/ Certificate on state registration of БелАЗ-7513 dump trucks for 2008
- /99/ Technical passports on БелАЗ-7513 dump trucks for 2008
- /100/ Technical passports on CATERPILLAR-785D dump trucks for 2011
- /101/ Certificate on state registration of CATERPILLAR-785D dump trucks for 2011
- /102/ Technical passports on Hitachi EH-3500 dump trucks for 2011
- /103/ Certificate on state registration of Hitachi EH-3500 dump trucks for 2011
- /104/ Permit on emissions #5310200000-58 dated 01/12/2008, issued by the Ministry of Environmental Protection of Ukraine, valid from 01/12/2008 till 01/12/2013
- /105/ Permit on emissions #5310200000-59 dated 18/12/2008, issued by the Ministry of Environmental Protection of Ukraine, valid from 01/12/2008 till 18/12/2013
- /106/ Permit on emissions #5310200000-60 dated 01/12/2008, issued by the Ministry of Environmental Protection of Ukraine, valid from 01/12/2008 till 01/12/2013
- /107/ Permit on emissions #5310200000-74 dated 16/06/2010, issued by the Ministry of Environmental Protection of Ukraine, valid from 16/06/2010 till 18/12/2013
- /108/ Certificate on legal right to conduct calibrations, issued to O. Brynza
- /109/ Certificate on legal right to conduct calibrations, issued to I. Krokhmaliov
- /110/ Certificate on legal right to conduct calibrations, issued to H. Maryniak
- /111/ Report on air protection for 2010 (Form 2-ΤΠ, air)
- /112/ 4-MTΠ, Report on energetic and oil processing products for January-December 2010 (4-MTΠ form)
- /113/ Instruction on concentrate amount calculation
- /114/ Order on monitoring team for 2003
- /115/ Order on monitoring team for 2011
- /116/ Monitoring procedure
- /117/ Certificate #0295KΦ on Laboratory attestation, valid from 25/01/2010 till 24/01/2013
- /118/ Energy Supply of Poltava Mining and Beneficiation Plant and Methods of Energy Resources Economy, Hornyi Zhurnal magazine
- /119/ Article in media concerning project implementation
- /120/ Protocol #29 dated 18/06/2002 on scientific and technical council meeting
- /121/ Photo CATERPILLAR-777D
- /122/ Photo HD785-5 Komatsu
- /123/ Photo CATERPILLAR-785C
- /124/ Photo Hitachi EH-3500
- /125/ Photo Белаз75145
- /126/ Technical council meeting protocol dated 15/03/2002
- /127/ Acceptance-transmitting statements on PF 12,5/20-45 vibrating feeders
- /128/ Passports on PF 12,5/20-45 vibrating feeders
- /129/ Photo PF 12.5/20-45 vibrating feeders
- /130/ Protocol #8 dated 09/02/2000 on scientific and technical council meeting
- /131/ Passport on H-4000 crusher, serial #5334
- /132/ Passport on H-4000 crusher, serial #5746



- /133/ Passport on H-4000 crusher, serial #10679
- /134/ Passport on H-6800
- /135/ Photo H-4000 crusher
- /136/ Acceptance-transmitting statements on H-4000 and H-6800 crusher
- /137/ Passport on S-4000 crusher, serial #5333
- /138/ Passport on S-4000 crusher, serial #5681
- /139/ Passport on S-4000 crusher, serial #5745
- /140/ Passport on S-4000 crusher, serial #10712
- /141/ Passport on S-4000 crusher, serial #10904
- /142/ Photo S-4000 crusher
- /143/ Acceptance-transmitting statements on S-4000 crusher
- /144/ Protocol #68 dated 01/07/2009 on scientific and technical council meeting
- /145/ Protocol #3 dated 14/01/2004 on scientific and technical council meeting
- /146/ Passport on SKH6.0*2K double-deck screens, serial #001
- /147/ Passport on SKH6.0*2K double-deck screens, serial #002
- /148/ Passport on SKH6.0*2K double-deck screens, serial #003
- /149/ Passport on SKH6.0*2K double-deck screens, serial #004
- /150/ Passport on SKH6.0*2K double-deck screens, serial #005
- /151/ Passport on SKH6.0*2K double-deck screens, serial #5
- /152/ Passport on SKH6.0*2K double-deck screens, serial #6
- /153/ Passport on SKH6.0*2K double-deck screens, serial #7
- /154/ Passport on SKH6.0*2K double-deck screens, serial #8
- /155/ Passport on SKH6.0*2K double-deck screens, serial #9
- /156/ Passport on SKH6.0*2K double-deck screens, serial #10
- /157/ Acceptance-transmitting statements on SKH6.0*2K double-deck screens
- /158/ Passport on CБaM-0,9/2,5Π separators
- /159/ Passport on CECM-1,2/2,5Π separators
- /160/ Photo CECM-1,2/2,5 Π separator
- /161/ Acceptance-transmitting statements on C5aM-0.9/2.5Π separator
- /162/ Order #352 dated 16/08/2008 at CBP
- /163/ Passport on MCЦ-3850x5500-УХЛ4 mill
- /164/ Photo МСЦ-3850x5500-УХЛ4 mill
- /165/ Passport on МШР-4430x5010-УХЛ4 mill
- /166/ Photo МШР-4430x5010-УХЛ4 mill
- /167/ Acceptance-transmitting statements on MCЦ-3850x5500-УХЛ4 and МШР-4430x5010-УХЛ4 mills
- /168/ Acceptance-transmitting statements on 28 Metso pumps
- /169/ Protocol #65 dated 21/11/2006 on scientific and technical council meeting
- /170/ Passports on 10 MR 350 FFP pumps
- /171/ Passports on 18 XR 350 FFP pumps
- /172/ Photo MR350 FFP pump (Metso company)
- /173/ Photo XR350 FFP pump (Metso company)
- /174/ Agreement #638/1123/4603 dated 10/07/2008
- /175/ Project on OHC-1 pumps working wheel
- /176/ Statement dated 02/07/2009 on conducted work
- /177/ Agreement #615/1453/4603 dated 27/07/2007
- /178/ Project on OHC-2 pumps working wheel



- /179/ Statement dated 07/04/2008 on conducted work
- /180/ Protocol #42 dated 20/09/2006 on scientific and technical council meeting
- /181/ Acceptance-transmitting statements and technical documentation, section #10
- /182/ Acceptance-transmitting statements and technical documentation, section #11
- /183/ Acceptance-transmitting statements and technical documentation, section #15
- /184/ Photo automatic control system panel, section #10
- /185/ Photo automatic control system panel, section #11
- /186/ Photo automatic control system panel before project implementation
- /187/ Protocol #10 dated 18/02/2000 on scientific and technical council meeting
- /188/ Acceptance-transmitting statements on Barmac 9000 crusher
- /189/ Photo Barmac 9000 crusher
- /190/ Passport on Barmac 9000 XHD crusher, serial #TCL 657
- /191/ Passport on Barmac 9000 XHD crusher, serial #TCL 751
- /192/ Passport on Barmac 9000 XHD crusher, without serial #
- /193/ Passport on Barmac 9000 XHD crusher, serial #TM 1035.08
- /194/ Passport on Barmac B-9100 crusher, without serial #
- /195/ Protocol #58 dated 25/06/2008 on scientific and technical council meeting
- /196/ Protocol #62 dated 20/11/2006 on scientific and technical council meeting
- /197/ Acceptance-transmitting statements on automated system for КМДТ and КСДТ crushers loading
- /198/ Photo Block of automated system for КМДТ and КСДТ crushers loading
- /199/ Technical description of automated system for КМДТ and КСДТ crushers loading
- /200/ Protocol #13 dated 12/03/2001 on scientific and technical council meeting
- /201/ Acceptance-transmitting statements on automated system for Barmac crushers loading
- /202/ Photo Block of automated system for Barmac B-9100 crushers loading
- /203/ Technical description on automated system for Barmac crushers loading
- /204/ Order #537 dated 13/08/2005 at CBP
- /205/ Acceptance-transmitting statements on FR-F740 thyristor frequency converter for 8ΓpK pumps
- /206/ Passport on FR-F740 thyristor frequency converter
- /207/ Photo FR-F740 thyristor frequency converter for 8FpK pumps
- /208/ Protocol #81 dated 05/08/2009 on scientific and technical council meeting
- /209/ Protocol #3 dated 09/01/2007 on scientific and technical council meeting
- /210/ Order #152 dated 11/10/2000 at PP
- /211/ Acceptance-transmitting statements on screens of 1st technological line
- /212/ Acceptance-transmitting statements on screens of 2nd technological line
- /213/ Acceptance-transmitting statements on screens of 3d technological line
- /214/ Acceptance-transmitting statements on screens of 4th technological line
- /215/ Passport on BP 88-72,1-4 electric vent
- /216/ Passport on BЦ 6-28 #10 electric vent, fabrication #1501-08
- /217/ Passport on BLJ 6-28 #10 electric vent, fabrication #4076
- /218/ Passport on BLI 6-28 #10 electric vent, fabrication #4077
- /219/ Passport on BЦ 6-28 #10 electric vent, fabrication #4078
- /220/ Passport on BLI 6-28 #10 electric vent, fabrication #4079
- /221/ Passport on BЦ 6-28 #10 electric vent, fabrication #4081



- /222/ Passport on BLI 6-28 #10 electric vent, fabrication #4082
- /223/ Acceptance-transmitting statements on electric vents
- /224/ Protocol dated 10/01/2000 of technical meeting at PP chief engineer's
- /225/ Photo the SUPERDEAL seal of the tube furnace #1
- /226/ Acceptance-transmitting statements on seal of the tube furnace #1
- /227/ Photo the SUPERDEAL seal of the tube furnace #2
- /228/ Acceptance-transmitting statements on seal of the tube furnace #2
- /229/ Photo the SUPERDEAL seal of the tube furnace #3
- /230/ Acceptance-transmitting statements on seal of the tube furnace #3
- /231/ Photo the SUPERDEAL seal of the tube furnace #4
- /232/ Acceptance-transmitting statements on seal of the tube furnace #4
- /233/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for 1999 (yearly data)
- /234/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for 2000 (yearly data)
- /235/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for 2001 (yearly data)
- /236/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for 2002 (yearly data) Report on materials consumption (at Mining Transport Shop) standards fulfillment for 2000 (yearly data)
- /237/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for 2003 (yearly data)
- /238/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for January 2004
- /239/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for February 2004
- /240/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for March 2004
- /241/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for April 2004
- /242/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for May 2004
- /243/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for June 2004
- /244/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for July 2004
- /245/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for August 2004
- /246/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for September 2004
- /247/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for October 2004
- /248/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for November 2004
- /249/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for December 2004
- /250/ Report on materials consumption (at Mining Transport Shop) standards



- fulfillment for January 2005
- /251/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for February 2005
- /252/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for March 2005
- /253/ Report on materials consumption (at Mining Transport Shop) standards fulfillment for April 2005
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Persons interviewed:

List persons interviewed during the determination or persons that contributed with other information that are not included in the documents listed above.

- /1/ Krasulya Oleksandr Sergiyovych Deputy Head of the Board on technical issues
- /2/ Kirnosov Oleksandr Oleksandrovych Head of the monitoring group, engineer of technical departement
- /3/ Tsymbal Volodymyr Andriyovych Chief energetic of Ferrexpo Poltava Mining
- /4/ Sennik Oleaksandr Vasylovych Chief environmental specialist
- /5/ Brynza Oleksandr Mykhaylovych Chief metrologist
- /6/ Zazymko Oleksandr Oleksandrovysh Chief engineer of technical department crushing-and-preparation workshop
- /7/ Kovalenko Kostyantyn Mykolayovysh Chief engineer of solid slurry household
- /8/ Paleha Serhiy Serhiyovych Chief technologist of pellets production workshop
- /9/ Lyashenko Mykola Ivanovych Deputy chief of mountainous transport workshop
- /10/ Lysenko Oleksandr Mykolayovych Deputy of the City Hall
- /11/ Breus Oleksandr Mykolayovych Deputy of the City Hall
- /12/ Khalabuzar Viktor Manaaging partner of Climate Protection Bureau LLP company

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DETERMINATION REPORT

BUREAU VERITAS CERTIFICATION HOLDING SAS

DETERMINATION PROTOCOL

Check list for determination, according JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
General des	cription of the project			
Title of the p	project			
-	Is the title of the project presented?	"Realization of a complex of energy saving activities at Ferrexpo Poltava Mining"	OK	OK
-	Is the sectoral scope to which the project pertains presented?	Yes, Sectoral Scope: 1 Energy industries	OK	OK
-	Is the current version number of the document presented?	Current version of the document is presented.	OK	OK
-	Is the date when the document was completed presented?	The document was completed 19 th of September 2011	OK	OK
Description	of the project			
_ `	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting date of the project; b) Baseline scenario; and c) Project scenario (expected outcome, including a technical description)?	Situation existing prior to the starting date of the project, Baseline scenario and Project scenario are properly described in the section A.2 of the PDD.	OK	OK
-	Is the history of the project (incl. its JI component) briefly summarized?	The history of the project is described in the section A.2 of the PDD. CAR 01. Please provide description of JI component.	CAR 01	OK



				VERTIAS	
DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion	
-	Are project participants and Party(ies) involved in the project listed?	Project participants and Party(ies) involved in the project are listed in the section A.3 of the PDD	OK	OK	
-	Is the data of the project participants presented in tabular format?	The data of the project participants is presented in tabular format	OK	OK	
-	Is contact information provided in Annex 1 of the PDD?	Contact information is provided in Annex 1 of the PDD	OK	OK	
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Ukraine as Party involved is also a Host Party.	OK	OK	
Technical d	escription of the project				
Location of					
-	Host Party(ies)	Ukraine is a Host Party	OK	OK	
-	Region/State/Province etc.	Poltava region	OK	OK	
-	City/Town/Community etc.	Komunarsk town	OK	OK	
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	Detail of the physical location is presented in the section A.4.1.4.	OK	ОК	
Technologic	es to be employed, or measures, operations or	actions to be implemented by the project			
-	Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule described?	Technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule are described in the section A.4.2. CAR 02. Please include to the implementation schedule the list of the trucks modernized according to the project. CL 01. Please explain what is considered under modernization of dump-trucks fleet operating in mining rock transportation. CAR 03. Please correct the starting date of the measure 2.7 "Replacement of ГИТ-51H single-deck screens by SKH6.08*2K double-deck screens". CAR 04. Please Please correct the starting date of the measure 2.8 "Replacement of DS1224-65 separators by	CAR 02, 03, 04, 05, 06, 07, CL 01, 02	ОК	



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
raragrapii		CБаМ-0,9/2,5П and CБСМ-1,2/2,5П separators". CAR 05. Please correct the starting and end date of the measure 2.12. "Modernization of Д6300/80 pumping units at OHC-1 water recycling stations by installing new pump impellers". CAR 06. Please correct the starting and end date of the measure 2.14. "Modernization of Д6300/80 pumping units at OHC-2 water recycling stations by installing new pump impellers". CAR 07. Please correct PDD according to the fact that peat is not used in the process of pellets production at Poltava Mining. CL 02. Please define what kind of gas burners are used before the replacement by new ones produced by Unitherm		Oonelasion
		before the replacement by new ones produced by chitient		
why the em	ission reductions would not occur in the abse	Cemcon company. greenhouse gases by sources are to be reduced by the prence of the proposed project, taking into account national		
	ission reductions would not occur in the absectes Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section	Cemcon company. greenhouse gases by sources are to be reduced by the prence of the proposed project, taking into account national The mechanism of anthropogenic GHG emission reductions are to be achievement is described in the section A.4.3.		
why the em	ission reductions would not occur in the absectes Is it stated how anthropogenic GHG emission	Cemcon company. greenhouse gases by sources are to be reduced by the prence of the proposed project, taking into account national The mechanism of anthropogenic GHG emission reductions	and/or sectora	l policies and
why the em	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page) Is it provided the estimation of emission	Cemcon company. greenhouse gases by sources are to be reduced by the prence of the proposed project, taking into account national The mechanism of anthropogenic GHG emission reductions are to be achievement is described in the section A.4.3. CAR 08. Please reduce the size of the section to one page. Yes, the estimation of emission reductions over the crediting	and/or sectora CAR 08	OK
why the em circumstand	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page) Is it provided the estimation of emission reductions over the crediting period? Is it provided the estimated annual reduction for the chosen credit period in tCO2e? Are the data from questions above presented in tabular format?	Cemcon company. greenhouse gases by sources are to be reduced by the prence of the proposed project, taking into account national The mechanism of anthropogenic GHG emission reductions are to be achievement is described in the section A.4.3. CAR 08. Please reduce the size of the section to one page. Yes, the estimation of emission reductions over the crediting period is provided in the section A.4.3.1. The estimated annual reduction for the chosen credit period in tCO2e is provided in the section A.4.3.1. The data from questions above is presented in tabular format.	CAR 08 OK	OK OK
why the em circumstand	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page) Is it provided the estimation of emission reductions over the crediting period? Is it provided the estimated annual reduction for the chosen credit period in tCO2e? Are the data from questions above presented in tabular format?	greenhouse gases by sources are to be reduced by the prence of the proposed project, taking into account national. The mechanism of anthropogenic GHG emission reductions are to be achievement is described in the section A.4.3. CAR 08. Please reduce the size of the section to one page. Yes, the estimation of emission reductions over the crediting period is provided in the section A.4.3.1. The estimated annual reduction for the chosen credit period in tCO2e is provided in the section A.4.3.1. The data from questions above is presented in tabular format.	CAR 08 OK OK OK	OK OK OK
why the em circumstand	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page) Is it provided the estimation of emission reductions over the crediting period? Is it provided the estimated annual reduction for the chosen credit period in tCO2e? Are the data from questions above presented in tabular format?	Cemcon company. greenhouse gases by sources are to be reduced by the prence of the proposed project, taking into account national The mechanism of anthropogenic GHG emission reductions are to be achievement is described in the section A.4.3. CAR 08. Please reduce the size of the section to one page. Yes, the estimation of emission reductions over the crediting period is provided in the section A.4.3.1. The estimated annual reduction for the chosen credit period in tCO2e is provided in the section A.4.3.1. The data from questions above is presented in tabular format.	CAR 08 OK OK	OK OK OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	average annual emission reductions in tonnes of CO2 equivalent provided?	emission reductions in tonnes of CO2 equivalent are provided in the section A.4.3.1.		
Project app	rovals by Parties			
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	CAR 09. Letters of Approval from the Parties involved are not presented.	CAR 09	Pending
19	Does the PDD identify at least the host Party as a "Party involved"?	Host Party is mentioned as Party involved in PDD.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	See CAR 09 above.	see CAR 09	Pending
20	Are all the written project approvals by Parties involved unconditional?	See CAR 09 above.	see CAR 09	Pending
Authorization	on of project participants by Parties involved			
21	Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: - A written project approval by a Party involved, explicitly indicating the name of the legal entity? or - Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	See CAR 09 above.	see CAR 09	Pending
Baseline se				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? – JI specific approach – Approved CDM methodology approach	The baseline for this project was chosen according to "Guidance on criteria for baseline setting and monitoring" (version 02)1. Correspondingly to the document, the selection of the baseline can be stated on a certain approach that is used only for a specific JI project, or on a standard approach with the use of methodologies including small-scaled that are approved by the Joint Implementation Supervisory Committee.	CAR 10	OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 10. The last version of the "Guidance on criteria for baseline setting and monitoring" is 3. Please provide PDD with appropriate changes. (Not only with the version number but with the changes of the document as well)		
	pproach only			
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	Since this project consists of several subprojects that are aimed at different key factors allowing to reduce greenhouse gas emission, the baseline was identified on the basis of certain approach. According to "Guidance on criteria for baseline setting and monitoring" (version 02) for such projects, based on the certain approach, specific methodological parts can be included into the baseline setting, that are approved by the Joint Implementation Supervisory Committee. The methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality" (version 03.0.0) 2 was chosen for the project baseline setting. Baseline setting based on identification of the most plausible among the alternative scenarios, that are able to secure output production quality, without reducing the volume of production, and meet the requirements of the acting legislation in Ukraine. After the fulfilling the three steps, only one realistic scenario was chosen, i.e. continuation of the current situation at the plant without modernization envisaged by the project and, thus, it is the baseline of the joint implementation project.	OK	OK
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one?	Yes, the baseline scenario was established by listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one. CL 03. Please provide description of the relevant national and/or sectoral policies and circumstance.	CL 03	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	 (b) Taking into account relevant national and/or sectoral policies and circumstance? Are key factors that affect a baseline taken into account? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (d) Taking into account of uncertainties and using conservative assumptions? (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure? (f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate? 	Yes, key factors that affect a baseline were taken into account.		
24	If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants in line with 23 above?	elements supplementary developed by the project participants are in line with 23 above	OK	OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	PDD uses factor of carbon oxidation during diesel fuel combustion from The National Inventory of Ukraine; Emission factor for UETG from The order #62, 63, 43, 75 date 15.04.2011 by the National Ecological Investment Agency of Ukraine; factor of carbon oxidation during natural gas combustion from The National Inventory of Ukraine. CL 04. Please state the date of the National Inventory of Ukraine issuance.	CL 04, 05, 06	OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CL 05. Please define which NCV data was chosen for the baseline scenario – average, lowest? CL 06. Please explain, why for the determination of this parameter only the data for the past 2 years were taken instead of 3 as for the others?		
Approved C	DM methodology approach only			
26 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/a	N/a	N/a
26 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	N/a	N/a	N/a
26 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/a	N/a	N/a
26 (c)	Are all explanations, descriptions and analyses pertaining to the baseline in the PDD made in accordance with the referenced approved CDM methodology?	N/a	N/a	N/a
26 (d)	Is the baseline identified appropriately as a result?	N/a	N/a	N/a
Additionalit				
	pproach only			
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that	Additionality for this particular project was demonstrated with the "Tool for the demonstration and assessment of additionality" ver.05.2. This method uses step-by-step approach to assess additionality.	OK	OK



DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a twomonth grace period) or any other method for proving additionality approved by the CDM			
29 (a)	Executive Board". Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	Yes, PDD provides a justification of the applicability of the approach with a clear and transparent description	ОК	ОК
29 (b)	Are additionality proofs provided?	CAR 11. Please provide justification of the key parameter value (IRR), which is used during the investment analyses. Presented reference to the National Bank of Ukraine does not mention credit percentage rate in the foreign currency at level of 10.5%. CAR 12. During the calculation of the future cash flow developer performs indexation of the values for 2% annually, which is why the inflation rate is accounted. Please explain in the PDD or in the financial analyses excel spreadsheet the usage of this index and provide appropriate justification. CAR 13. The data concerning the amount of investment used during calculation of future value do not match the data presented at the page "Financing schedule". Please correct. CAR 14. Please pay attention to the fact that value of capital	CAR 11, 12, 13, 14, 15, 16, 17, CL 07, 08, 09	ОК



DVM	Check Item	Initial finding	Draft	Final
Paragraph	Check item	iiiliai iiilaiig	Conclusion	Conclusion
i aragrapii		assets also includes mantling value, transport expenses etc.	301101031011	
		Besides calculation of residual value is supposed to be		
		based on the initial value of the capital assets in Euro, since		
		the usage of the initial data in hryvnya leads to the distortion		
		of the calculations due to the change of the exchange rates		
		during project implementation.		
		CAR 15. Please provide documented evidence for the		
		operational lifetime of the measures 2.1, 2.16 and 3.7.		
		CL 07. Please pay attention to the fact that usage of the high		
		exchange rate of Euro/hryvnya in 2011 (I assume that that		
		actual value for a certain date of the year is used) in		
		comparison to 2010 leads to the artificial decreasing of tariffs		
		for energy resources in Euro, which are forecasted data. In		
		order to avoid misunderstanding I suggest to fix the		
		forecasted exchange rate at the level of 2010 (10.533) or to		
		use actual prices for energy resources in 2011.		
		CL 08. Please pay attention to the fact that only additional		
		expenses, which are connected to the operation of project		
		equipment in comparison to the baseline scenario, should be		
		reflected in the financial model. It does not look probable that		
		for example measures 2.15 and 2.13 may lead to the great		
		increasing of the operational expenses, which is indicated in		
		the financial model. Please explain inclusion to the list of		
		expenses respective operational expenses for each measure		
		of the investment programme.		
		CAR 16. Data at the p.35 of PDD do not match the data of		
		IRR, NPV in the financial model. Please correct.		
		CAR 17. Please mention if the VAT is included in tariffs,		
		points of investment and operational expenses.		
		CL 09. During the conduction of financial analyses of the		
		measures related to the measure 1.1 it is necessary to		
		account for the fact that due to the rather short operational		



D)/M	Observation Management	Later of Constitution	D (4	Final
DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
3 - 1		lifetime of dump-tracks their modernization would have been need to be done even in the baseline scenario. Otherwise the enterprise would have needed to stop working. This is why it looks more appropriate to perform for this measure separate comparative analysis. Operation of old inefficient dump-tracks with their step-by-step change with the new dump-tracks of the same type (if they are available at the market) would be the baseline scenario. Project scenario would envisage described in the PDD activity. At the same time it is necessary to account for the necessity of repeated modernization of the car park in 10 years after the start of the project in order to keep the amount of cars at the same		
29 (c)	Is the additionality demonstrated appropriately as a result?	level. The additionality of the project was demonstrated with the help of "Tool for the demonstration and assessment of additionality" (version 05.2) using investment, barrier and common practice analysis. CL 10. Explain why technological barrier (personnel competence) can not be financial since it can be overcome with help of extra financing.	CL 10	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	Yes, all explanations, descriptions and analyses are made in accordance with the selected tool or method	OK	ОК
Approved C	DM methodology approach only			
31 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/a	N/a	N/a
31 (b)	Does the PDD provide a description of why and how the referenced approved CDM methodology is applicable to the project?	N/a	N/a	N/a
31 (c)	Are all explanations, descriptions and analyses	N/a	N/a	N/a



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
3.1	with regard to additionality made in accordance with the selected methodology?			
31 (d)	Are additionality proofs provided?	N/a	N/a	N/a
31 (e)	Is the additionality demonstrated appropriately as a result?	N/a	N/a	N/a
	ndary (applicable except for JI LULUCF project	s		
JI specific a	pproach only			
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	CAR 18. Please define energy enterprise that generates electric energy for Ferrexpo Poltava Mining.	CAR 18	OK
32 (b)	Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?	CAR 19. Please provide evaluation of all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	CAR 19	ОК
32 (c)	Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	PDD provides the table with relevant gases and sources.	OK	ОК
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	See CAR 19. CAR 20. Please define if the baseline scenario developer is the project participant in Annex 1.	CAR 20	ОК
	DM methodology approach only			
33	Is the project boundary defined in accordance with the approved CDM methodology?	N/a	N/a	N/a
Crediting pe				
34 (a)	Does the PDD state the starting date of the	CAR 21. During site visit it was revealed that starting date of	CAR21	OK



DVM	Check Item	Initial finding	Draft	Final
Paragraph	Oneck item	inida iniding	Conclusion	Conclusion
3.1	project as the date on which the implementation or construction or real action of the project will begin or began?	the project is the date of the first measure start – the start of "Reconstruction of the seal of the tube furnace #2 loading part by establishing the SUPERDEAL seal" – 10/01/2000. Please correct.		
34 (a)	Is the starting date after the beginning of 2000?	The starting date is after the beginning of 2000	OK	OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	See section C.2 of the PDD	OK	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	See section C.3 of the PDD CAR 22. Crediting period is 17 years and goes beyond operational lifetime of the project. Please clarify and correct.	CAR 22	OK
34 (c)	Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	Crediting period starts the day of the first emission reduction.	OK	ОК
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	The crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project.	OK	OK
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	Calculated amounts of the emission reductions are stated separately for the period before 2012 and after 2012.	OK	ОК
Monitoring	plan			
35	Does the PDD explicitly indicate which of the following approaches is used? – JI specific approach – Approved CDM methodology approach	The monitoring plan for this project was chosen according to the "Guidance on criteria for baseline setting and monitoring" (version 02). In accordance with the requirements of this document, the choice of the monitoring plan was based on the specific approach, applied only for this particular joint implementation project, as it consists of several subprojects	See CAR 10	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		aimed at different key factors allowing greenhouse emissions reduction. The monitoring plan, accepted for this joint implementation project, is aimed to ensure all data necessary for the determination of emission level according to the baseline and project scenario, and corresponding to the scope of emissions reduction due to this joint implementation project. The information about this project is set above. The following documentations were used to establish the monitoring plan and emission level according to the baseline and project scenario: - subproject "Reduction of diesel fuel specific consumption during mining rock transportation" – "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" (version 02)1; - subproject "Modernization of iron ore concentrate production" – "Tool to calculate baseline, project and/or leakage emissions from electricity consumption" (version 01)2; - subproject "Modernization of pellets production" – "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" (version 02), concerning the part on reduction of natural gas specific consumption during the pellets production, and "Tool to calculate baseline, project and/or leakage emissions from electricity consumption" (version 01), concerning the part on reduction of electric energy specific consumption during the pellets production.		
36 (a)	Does the monitoring plan describe:	Yes, the monitoring plan describes:	OK	OK
	All relevant factors and key characteristics that will be monitored?The period in which they will be monitored?	 All relevant factors and key characteristics that will be monitored (Annex 3) The period in which they will be monitored (till the end of 		



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	- All decisive factors for the control and reporting of project performance?	operational lifetime) – All decisive factors for the control and reporting of project performance (section D.3)		
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	Yes, the monitoring plan specifies the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored. CAR 23. Please correct the definition for the NCV from "measured" to "calculated". CAR 28. Please correct electricity emission factor for the Ukrainian grid for 2004-2005 since the one developed by Global Carbon is not applicable for these years.	CAR 23, 28	ОК
36 (b)	If default values are used: - Are accuracy and reasonableness carefully balanced in their selection? - Do the default values originate from recognized sources? - Are the default values supported by statistical analyses providing reasonable confidence levels? - Are the default values presented in a transparent manner?	Yes, considering default values that are used: - Accuracy and reasonableness are carefully balanced in their selection (data from National Inventory of Ukraine) - The default values originate from recognized sources (data from National Inventory of Ukraine, orders by NEIA) - The default values are supported by statistical analyses providing reasonable confidence levels - The default values presented in a transparent manner (PDD contains transparent and relevant references).	ОК	OK
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	Yes, for the values that are to be provided by the project participants the monitoring plan clearly indicates how the values are to be selected and justified. CAR 24. Please define which exact parameters are fixed in which monthly reports since site visit has reflected that each workshop has its own monthly reporting system. CAR 25. Please describe in PDD process of data flow: from the initial data to the monthly reports.	CAR 24, 25	OK
36 (b) (ii)	For other values, - Does the monitoring plan clearly indicate the	See CAR 24.	See CAR24	-



DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	precise references from which these values are			
	taken?			
	- Is the conservativeness of the values			
	provided justified?			
36 (b) (iii)	For all data sources, does the monitoring plan	CAR 26. Please provide in a monitoring plan description of	CAR 26	OK
	specify the procedures to be followed if	the procedures, which are necessary to be followed in a		
	expected data are unavailable?	case of some data failure.		
36 (b) (iv)	Are International System Unit (SI units) used?	Yes, International System Unit (SI units) is used	OK	OK
36 (b) (v)	Does the monitoring plan note any parameters,	N/a	N/a	N/a
	coefficients, variables, etc. that are used to			
	calculate baseline emissions or net removals			
00 (5) (5)	but are obtained through monitoring?	No. the constant of the consta	01/	01/
36 (b) (v)	Is the use of parameters, coefficients,	Yes, the use of parameters, coefficients, variables, etc. is	is OK	OK
	variables, etc. consistent between the baseline	consistent between the baseline and monitoring plan		
26 (a)	and monitoring plan?	Voc the manifesing plan draws on the list of standard	OK	OK
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of	Yes, the monitoring plan draws on the list of standard variables contained in appendix B of "Guidance on criteria	UK	OK
	"Guidance on criteria for baseline setting and	for baseline setting and monitoring" as: NCV _{diesel} , SFC _{diesel,BC} ,		
	monitoring"?	W _{diesel} , EF _{co2,elec} , SEC _{iron ore} , P _{iron ore} , y, NCV _{NG,BC} ,		
	monitoring :	SFC _{pellets,NG,BC} , P _{pellets,y} , OXID _{diesel} , OXID _{NG} , W _{NG} ,		
		SEC _{pellets, elec, BC} , FC _{diesel, PC, y} , EC _{iron} ore, PC, y, FC _{NG, PC, y} ,		
		EC _{pellets,PC,y} .		
36 (d)	Does the monitoring plan explicitly and clearly	Yes, the monitoring plan explicitly and clearly distinguishes:	OK	OK
()	distinguish:	(i) Data and parameters that are not monitored throughout		
	(i) Data and parameters that are not monitored	the crediting period, but are determined only once (and thus		
	throughout the crediting period, but are	remain fixed throughout the crediting period), and that are		
	determined only once (and thus remain fixed	available already at the stage of determination		
	throughout the crediting period), and that are	(ii) Data and parameters that are not monitored throughout		
	available already at the stage of determination?	the crediting period, but are determined only once (and thus		
	(ii) Data and parameters that are not monitored	remain fixed throughout the crediting period), but that are not		
	throughout the crediting period, but are	already available at the stage of determination		
	determined only once (and thus remain fixed	(iii) Data and parameters that are monitored throughout the		



DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	throughout the crediting period), but that are	crediting period		
	not already available at the stage of determination?			
	(iii) Data and parameters that are monitored			
	throughout the crediting period?			
36 (e)	Does the monitoring plan describe the methods	Yes, the monitoring plan describes the methods employed	OK	OK
	employed for data monitoring (including its	for data monitoring (including its frequency) and recording.		
	frequency) and recording?	See section B.1 and Annex 2.		
36 (f)	Does the monitoring plan elaborate all	Yes, see section D.1.1.2 and D.1.1.4.	OK	OK
	algorithms and formulae used for the			
	estimation/calculation of baseline			
	emissions/removals and project emissions/removals or direct monitoring of			
	emission reductions from the project, leakage,			
	as appropriate?			
36 (f) (i)	Is the underlying rationale for the	Yes, see section D.1.1.2 and D.1.1.4.	OK	OK
(-) (-)	algorithms/formulae explained?			
36 (f) (ii)	Are consistent variables, equation formats,	Yes, see section D.1.1.2 and D.1.1.4.	OK	OK
	subscripts etc. used?			
36 (f) (iii)	Are all equations numbered?	Yes, see section D.1.1.2 and D.1.1.4.	OK	OK
36 (f) (iv)	Are all variables, with units indicated defined?	Yes, see section D.1.1.2 and D.1.1.4.	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Yes, see section D.1.1.2 and D.1.1.4.	OK	OK
36 (f) (v)	To the extent possible, are methods to	CL 11. Please explain how methods to quantitatively account	CL 11	OK
	quantitatively account for uncertainty in key	for uncertainty in key parameters are included		
	parameters included?			
36 (f) (vi)	Is consistency between the elaboration of the	Yes, see section D.1.1.4.	OK	OK
	baseline scenario and the procedure for			
	calculating the emissions or net removals of the			
20 (f) (:::)	baseline ensured?	Veg. and postion D.1.1.2 and D.1.1.4	OK	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	Yes, see section D.1.1.2 and D.1.1.4.	UK	UK



DVM	Check Item	Initial finding	Draft	Final
Paragraph	Check tem	initial initiality	Conclusion	Conclusion
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	CL 12. Please clarify how leakage from gas-transport system of Ukraine is expected to reduce during the implementation of the project.	CL 12	OK
36 (f) (vii)	Are references provided as necessary?	Yes, PDD version 2 defines references to the relevant documentation.	OK	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	N/a	OK	OK
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	See CL 10	ОК	ОК
36 (f) (vii)	Is the uncertainty of key parameters described and, where possible, is an uncertainty range at 95% confidence level for key parameters for the calculation of emission reductions or enhancements of net removals provided?	See CL 10	ОК	ОК
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?	According to the requirements of international standards ISO 9001, OHSAS 18001, ISO 14001, the following management systems were introduced and efficiently operated: Quality Management System, Health and Safety, and Environment.	ОК	ОК
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	N/a	OK	OK
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available upon request?	See section D.2.	ОК	ОК



DVM	Check Item	Initial finding	Draft	Final
Paragraph	Check item	miliai munig	Conclusion	Conclusion
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	See section D.3.	OK	OK
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	Yes, monitoring plan on the whole, reflects good monitoring practices appropriate to the project type.	ОК	ОК
36 (I)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	Yes, monitoring plan provides, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations. See section D.1.1.1 and D.1.1.3.	ОК	ОК
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?	N/a	OK	OK
37	If selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	N/a	ОК	ОК
Approved C	DM methodology approach only			
38 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/a	N/a	N/a
38 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted	N/a	N/a	N/a



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?			
38 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/a	N/a	N/a
38 (c)	Are all explanations, descriptions and analyses pertaining to monitoring in the PDD made in accordance with the referenced approved CDM methodology?	N/a	N/a	N/a
38 (d)	Is the monitoring plan established appropriately as a result?	N/a	N/a	N/a
	to both JI specific approach and approved CDM	methodology approach		
39	If the monitoring plan indicates overlapping monitoring periods during the crediting period: (a) Is the underlying project composed of clearly identifiable components for which emission reductions or enhancements of removals can be calculated independently? (b) Can monitoring be performed independently for each of these components (i.e. the data/parameters monitored for one component are not dependent on/effect data/parameters to be monitored for another component)? (c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding monitoring are met? (d) Does the monitoring plan explicitly provide for overlapping monitoring periods of clearly	Overlapping monitoring periods are not envisaged during this project.	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	defined project components, justify its need and state how the conditions mentioned in (a)-(c) are met?			
Leakage				
	approach only			
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	N/a	N/a	N/a
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	N/a	N/a	N/a
Approved C	DM methodology approach only			•
41	Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?	N/a	N/a	N/a
Estimation	of emission reductions or enhancements of net	removals		
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	PDD indicates that assessment of emissions or net removals in the baseline scenario and in the project scenario approach was chosen.	ОК	ОК
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable? (c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	PDD provides ex ante estimates of: (a) Emissions for the project scenario (within the project boundary) (b) Emissions for the baseline scenario (within the project boundary) (c) Emission reductions adjusted by leakage	OK	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
44	If the approach (b) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emission reductions or enhancements of net removals (within the project boundary)? (b) Leakage, as applicable? (c) Emission reductions or enhancements of net removals adjusted by leakage?	N/a	N/a	N/a
45	For both approaches in 42 (a) Are the estimates in 43 or 44 given: (i) On a periodic basis? (ii) At least from the beginning until the end of the crediting period? (iii) On a source-by-source/sink-by-sink basis? (iv) For each GHG? (v) In tones of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? (b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or 44, are key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project taken into account, as appropriate? (d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent?	Calculations are provided on a periodic basis from the beginning till the end of the crediting period. Formulae used for the calculation of emission reductions are consistent throughout the document. Emission factors (including default emission factors) used for calculating the estimates in 43 or 44 are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.	OK	OK Should be checked during next verification



DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	(e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice? (f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner? (g) Are the estimates in 43 or 44 consistent throughout the PDD? (h) Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the	Estimation in 43 or 44 are based on conservative assumptions and the most plausible scenarios in a transparent manner. The annual average of estimated emission reductions are calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve.		
	crediting period by the total months of the crediting period and multiplying by twelve?			
46	If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	N/a	N/a	N/a
Approved C	DM methodology approach only			
47 (a)	Is the estimation of emission reductions or enhancements of net removals made in accordance with the approved CDM methodology?	N/a	N/a	N/a
47 (b)	Is the estimation of emission reductions or enhancements of net removals presented in the PDD: On a periodic basis? At least from the beginning until the end of the crediting period?	N/a	N/a	N/a



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	 On a source-by-source/sink-by-sink basis? For each GHG? In tones of CO₂ equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? Are the formula used for calculating the estimates consistent throughout the PDD? Are the estimates consistent throughout the PDD? Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve? 			
Environme	ntal impacts			
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party?	See Section F.1 of the PDD. CAR 27. Please provide the list of documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party in the section F.1 of the PDD.	CAR 27	ОК
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?	See Section F.2 of the PDD.	OK	OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	eholders Comments			501101001011
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	See Section G.1 of the PDD.	ОК	OK
Determinati	on regarding small-scale projects (additional el	ements for assessment)		
50	Does the PDD appropriately specify and justify the SSC project type(s) and category(ies) that fall under: (a) One of the types and thresholds of JI SSC projects as defined in .Provisions for joint implementation small-scale projects.? If the project contains more than one JI SSC project type component, does each component meet the relevant threshold criterion? (b) One of the SSC project categories defined in the most recent version of appendix B of annex II to decision 4/CMP.1, or an additional project category approved by the JISC in accordance with the relevant provision in "Provisions for joint implementation small-scale projects"?		N/a	N/a
51	Does the SSC PDD confirms and shows that the proposed JI SSC project is not a debundled component of a large project by explaining that there does not exist a JI (SSC) project with a publicly available determination in accordance	N/a	N/a	N/a



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	with paragraph 34 of the JI guidelines: (a) Which has the same project participants; and (b) Which applies the same technology/measure and pertains to the same project category; and (c) Whose determination has been made publicly available in accordance with paragraph 34 of the JI guidelines within the previous 2 years; and (d) Whose project boundary is within 1 km of the project boundary of the proposed JI SSC			
Applicable	project at the closest point? to bundled JI SSC projects only			
52 (a)	Do all projects in the bundle: (i) Have the same crediting period? (ii) Comply with the provisions for JI SSC projects defined in "Provisions for joint implementation small-scale projects", in particular the thresholds referred to in 50 (a) above? (iii) Retain their distinctive characteristics (i.e. location, technology/measure etc.)?	N/a	N/a	N/a
52 (b)	Does the composition of the bundle not change over time?	N/a	N/a	N/a
52 (c)	Has the AIE received (from the project participants): (i) Information on the bundle using the form developed by the JISC (F-JI-SSCBUNDLE)? (ii) A written statement signed by all project participants indicating that they agree that their individual projects are part of the bundle and	N/a	N/a	N/a



DVM	Check Item	Initial finding	Draft	Final
Paragraph	nominating one project participant to represent		Conclusion	Conclusion
	all project participants in communicating with			
	the JISC?			
	(iii) Indication by the Parties involved that they			
	are aware of the bundle in their project			
53	approvals referred to in 19 above?	NIA	NI/o	NI/o
53	If the project participants prepared a single SSC PDD for the bundled JI SSC projects,	N/a	N/a	N/a
	do(are) all the projects:			
	(a) Pertain to the same JI SSC project			
	category?			
	(b) Apply the same technology or measure?			
	(c) Located in the territory of the same host			
5 4	Party?	Al/-	N1/-	N1/-
54	If the project participants prepared separate SSC PDDs for the bundled JI SSC projects,	N/a	N/a	N/a
	do(are) all the projects:			
	(a) Have SSC PDDs been prepared for all JI			
	SSC projects in the bundle?			
	(b) Does each SSC PDD contain a single JI			
	SCC project in the bundle?			
55	If the projects in the bundle use the same	N/a	N/a	N/a
	baseline, does the F-JI-SSC-BUNDLE provide			
	an appropriate justification for the use of the same baseline considering the particular			
	situation of each project in the bundle?			
56	Does the PDD indicate which of the following	N/a	N/a	N/a
	approaches is used for establishing a			
	monitoring plan?			
	(a) By preparing a separate monitoring plan for			
	each of the constituent projects;			
	(b) By preparing an overall monitoring plan			



DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	including a proposal of monitoring of			
	performance of the constituent projects on a			
	sample basis, as appropriate.			
56 (b)	If the approach 57 (b) above is used,	N/a	N/a	N/a
	(i) Are all the JI SSC projects located in the			
	territory of the same host Party?			
	(ii) Do all the JI SSC projects pertain to the same project category?			
	(iii) Do all the JI SSC projects apply the same			
	technology or measure?			
	(iv) Does the overall monitoring plan reflect			
	good monitoring practice appropriate to the			
	bundled JI SSC projects and provide for			
	collection and archiving of the data needed to			
	calculate the emission reductions achieved by			
	the bundled projects?			
	to all JI SSC projects			
57	Is the leakage only within the boundaries of	N/a	N/a	N/a
	non-Annex I Parties considered?			
		restry projects (additional/alternative elements for assessm		
58	Does the PDD appropriately specify how the	N/a	N/a	N/a
	LULUCF project conforms to:			
	(a) The definitions of LULUCF activities			
	included in paragraph 1 of the annex to			
	decision 16/CMP.1, applying good practice guidance for LULUCF as decided by the CMP,			
	as appropriate?			
	(b) In the case of afforestation, reforestation			
	and/or forest management projects, the			
	definition of "forest" selected by the host Party,			
	which specifies:			
	(i) A single minimum tree crown cover value			



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(between 10 and 30 per cent)? and			
	(ii) A single minimum land area value (between			
	0.05 and 1 hectare)? and			
	(iii) A single minimum tree height value			
	(between 2 and 5 metres)?			
JI specific a	pproach only			
59	Baseline setting - in addition to 22-26 above	N/a	N/a	N/a
	Does the PDD provide an explanation how the			
	baseline chosen:			
	- Takes into account the good practice			
	guidance for LULUCF, developed by the IPCC?			
	- Ensures conformity with the definitions,			
	accounting rules, modalities and guidelines			
	under Article 3, paragraphs 3 and 4, of the			
	Kyoto Protocol?			
60	Project boundary - alternative to 32-33	N/a	N/a	N/a
	(a) Does the project boundary geographically			
	delineate the JI LULUCF project under the			
	control of the project participants?			
	(a) If the JI LULUCF project contains more			
	than one discrete area of land,			
	(i) Does each discrete area of land have a			
	unique geographical identification?			
	(ii) Is the boundary defined for each discrete			
	area?			
	(ii) Does the boundary not include the areas in			
	between these discrete areas of land?			
	(b) Does the project boundary encompass all			
	anthropogenic emissions by sources and			
	removals by sinks of GHGs which are:			
	(i) Under the control of the project participants;			
	(ii) Reasonably attributable to the project; and			



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	 (iii) Significant? (c) Does the project boundary account for all changes in the following carbon pools: Above-ground biomass; Below-ground biomass; Litter; Dead wood; and Soil organic carbon? (c) Does the PDD provide: (i) The information of which carbon pools are selected? (ii) If one or more carbon pools are not selected, transparent and verifiable information that indicates, based on conservative assumptions, that the pool is not a source? (d) Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria in (b) above? 			
61 (a)	Project boundary - alternative to 32-33 (cont.) Are the delineation of the project boundary and the gases and sources/sinks included appropriately described and justified in the PDD?	N/a	N/a	N/a
61 (b)	Project boundary - alternative to 32-33 (cont.) Are all gases and sources/sinks included explicitly stated, and the exclusions of any sources/sinks related to the baseline or the LULUCF project appropriately justified?	N/a	N/a	N/a
62	Monitoring plan - in addition to 35-39 Does the PDD provide an appropriate description of the sampling design that will be used for the calculation of the net anthropogenic removals	N/a	N/a	N/a



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	by sinks occurring within the project boundary in the project scenario and, in case the baseline is monitored, in the baseline scenario, including, inter alia, stratification, determination of number of plots and plot distribution etc.?			
63	Does the PDD take into account only the increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary?	N/a	N/a	N/a
Approved C	DM methodology approach only			
64 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/a	N/a	N/a
64 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	N/a	N/a	N/a
64 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/a	N/a	N/a
64 (c)	Are all explanations, descriptions and analyses made in accordance with the referenced approved CDM methodology?	N/a	N/a	N/a
64 (d)	Are the baseline, additionality, project boundary, monitoring plan, estimation of enhancements of net removals and leakage established appropriately as a result?		N/a	N/a
	on regarding programmes of activities (addition			
66	Does the PDD include: (a) A description of the policy or goal that the JI	N/a	N/a	N/a



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	PoA seeks to promote? (b) A geographical boundary for the JI PoA (e.g. municipality, region within a country, country or several countries) within which all JPAs included in the JI PoA will be implemented? (c) A description of the operational and management arrangements established by the coordinating entity for the implementation of the JI PoA, including: The maintenance of records for each JPA? A system/procedure to avoid double counting (e.g. to avoid including a new JPA that has already been determined)? Provisions to ensure that persons operating JPAs are aware and have agreed to their activity being added to the JI PoA? (d) A description of each type of JPAs that will be included in the JI PoA, including the technology or measures to be used? (e) The eligibility criteria for inclusion of JPAs to the JI PoA for each type of JPA in the JI PoA?			
67	Project approvals by Parties involved - additional to 19-20 Are all Parties partly or entirely within the geographical boundary for the JI PoA listed as "Parties involved" and indicated as host Parties in the PDD?	N/a	N/a	N/a
68	Authorization of project participants by Parties involved - additional to 21 Is the coordinating entity presented in the PDD authorized by all host Parties to coordinate and	N/a	N/a	N/a



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
<u> </u>	manage the JI PoA?			
69	Baseline setting - additional to 22-26 Is the baseline established for each type of JPA?	N/a	N/a	N/a
70	Additionality - additional to 27-31 Does the PDD indicate at which of the following levels that additionality is demonstrated? (a) For the JI PoA (b) For each type of JPA	N/a	N/a	N/a
71	Crediting period - additional to 34 Is the starting date of the JI PoA after the beginning of 2006 (instead of 2000)?	N/a	N/a	N/a
72	Monitoring plan - additional to 35-39 Is the monitoring plan established for each technology and/or measure under each type of JPA included in the JI PoA?	N/a	N/a	N/a
73	Does the PDD include a table listing at least one real JPA for each type of JPA?	N/a	N/a	N/a
73	For each real JPA listed, does the PDD provide the information of: (a) Name and brief summary of the JPA? (b) The type of JPA? (c) A geographical reference or other means of identification? (d) The name and contact details of the entity/individual responsible for the operation of the JPA? (e) The host Party(ies)? (f) The starting date of the JPA? (g) The length of the crediting period of the JPA? (h) Confirmation that the JPA meets all the	N/a	N/a	N/a



DETERMINATION REPORT

DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	eligibility requirements for its type, including a			
	description of how these requirements are			
	met?			
	(i) Confirmation that the JPA has not been			
	determined as a single JI project or determined			
	under a different JI PoA?			

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
CAR 01. Please provide description of JI component.	-	Appropriate changes were inserted to the section A.2 of the PDD version 03.	Issue is closed.
CAR 02. Please include to the implementation schedule the list of the trucks modernized according to the	-	Appropriate changes were inserted to the section A.4.2 of the PDD version 03.	Issue is closed.
project.		KZ: Please provide the list of already purchased and registered vehicles in a form of a table (either in the section A.4.2. or in the Annexes)	
		D: Appropriate corrections have been provided to the PDD version 04.	



CL 01. Please explain what is considered under modernization of dump-trucks fleet operating in mining rock transportation.	-	Modernization of dump-trucks fleet operating in mining rock transportation is the purchase of new dump-trucks with advanced technical characteristics ("EURO-5" and "EURO-8" standards engines) in comparison to the dump-trucks, which were used in a baseline scenario with "EURO-2" and "EURO-3" standards engines. Appropriate changes were inserted to the section A.4.2 of the PDD version 04.	Issue is closed.
CAR 03. Please correct the starting date of the measure 2.7 "Replacement of Γ/νΤ-51H single-deck screens by SKH6.08*2K double-deck screens".	-	Appropriate changes were inserted to the section A.4.2 of the PDD version 03.	Issue is closed.
CAR 04. Pleasecorrect the starting date of the measure 2.8 "Replacement of DS1224-65 separators by C5aM-0,9/2,5Π and C5CM-1,2/2,5Π separators".	-	Appropriate changes were inserted to the section A.4.2 of the PDD version 03.	Issue is closed.
CAR 05. Please correct the starting and end date of the measure 2.12. "Modernization of Д6300/80 pumping units at OHC-1 water recycling stations by installing new pump impellers".	-	Appropriate changes were inserted to the section A.4.2 of the PDD version 03.	Issue is closed.
CAR 06. Please correct the starting and end date of the measure 2.14. "Modernization of Д6300/80 pumping units at OHC-2 water recycling stations by installing new pump impellers".	-	Appropriate changes were inserted to the section A.4.2 of the PDD version 03.	Issue is closed.



CAR 07. Please correct PDD according to the fact that peat is not used in the process of pellets production at Poltava Mining.	-	Peat is used in the pellets production as a raw material during the appropriate technological stages. Peat is not being burned, which is why there are no GHG emissions foreseen from peat burning. As it is mentioned in PDD natural gas is used as a fuel in pellets production process.	Issue is closed.
		KZ: During site visit it was revealed that peat is not used in any way (neither like fuel nor like element in a technological process). Please clarify.	
		D: Appropriate changes were provided to the section A.4.2. of the PDD. It is true that nowadays peat is not used in pellets production process. Before project technology was provided in a previous explanation.	
CL 02. Please define what kind of gas burners are used before the replacement by new ones produced by Unitherm Cemcon company.	-	Nowadays burners of «Shellenbureger-Gregg» are used, which were installed on the tube furnaces during their production in 1976.	Issue is closed.
CAR 08. Please reduce the size of the section to one page.	-	Appropriate changes were provided to the section A.4.3. of the PDD version 03.	Issue is closed.
CAR 09. Letters of Approval from the Parties involved are not presented.	19	LoAs will be received after the finalizing of determination procedure.	Pending.
CAR 10. The last version of the "Guidance on criteria for baseline setting and monitoring" is 3. Please provide PDD with appropriate changes. (Not only with the version number but with the changes of the document as well)	22	Version number was corrected in the PDD version 03. The changes that were provided to "Guidance on criteria for baseline setting and monitoring" did not influence identification of the baseline and monitoring plan of this project.	Issue is closed.



CL 03. Please provide description of the relevant national and/or sectoral policies and circumstance.	23	According to the current legislation of Ukraine decreasing of GHG emissions to the atmosphere is not mandatory. National policy in Ukraine in the atmosphere pollution sphere is regulated by the Law of Ukraine "On atmospheric air protection" dated 16.10.1992 p №2707-XII. This Law does not state any requirements concerning GHG emissions in the industry. Requirements of permitted emissions are stated in the Order of Ministry of Environment Protection "On approval of boundary allowances of emissions from stationary sources pollutants" dated 27.06.2006 p. №309. **KZ:* add text to the PDD. *D:* Appropriate changes were provided to the section B.1 of the PDD version 04.	Issue is closed.
CL 04. Please state the date of the National Inventory of Ukraine issuance.	25	Date of issuance of National Inventory of Ukraine is 06.07.2011 KZ: add text to the PDD. D: Appropriate changes were provided to the section B.1 of	Issue is closed.
CL 05. Please define which NCV data was chosen for the baseline scenario – average, lowest?	25	the PDD version 04. Average value was chosen for 1998, 1999.	Issue is closed.
CL 06. Please explain, why for the determination of this parameter only the data for the past 2 years were taken instead of 3 as for the others?	25	"Certificates of physical-chemical parameters of natural gas" (further — Certificates) are the documents of operational control. They are stored for 1 year. In 2000 after decision on project implementation was made monitoring group has started their collection and archiving. At the decision making point Certificates for 1997 were destroyed. In order to define this parameter Certificates from 1998 and 1999 were used.	Issue is closed.



CAR 11. Please provide justification of the key parameter value (IRR), which is used during the investment analyses. Presented reference to the National Bank of Ukraine does not mention credit percentage rate in the foreign currency at level of 10.5%.	29 (b)	Website of the NBU contains information on percent rate on credits in the foreign currency, it is necessary to go to the link "credit value" and necessary document will be downloaded. Value of the key parameter was defined according to the mentioned table as the monthly average value at the moment of PDD development.	Isuue is closed.
		DP: Please provide following justification to the PDD:	
		Value of the key parameter was defined according to the data from NBU as monthly average value at the moment of PDD development.	
		D: Appropriate corrections were provided to the section B.2 of the PDD version 05.	
CAR 12. During the calculation of the future cash flow developer performs indexation of the values for 2% annually, which is why the inflation rate is accounted. Please explain in the PDD or in the financial analyses excel spreadsheet the usage of this index and provide appropriate justification.	29 (b)	Presented model accounts the inflation rate in the future periods. Since the model was calculated in Euro forecasted levels of inflation rate on the basis of previous data for previous years in Euro zone were used. For example, for 1998-2010 average rate of inflation was 2.0% so future energy resources prices may be updated with 2.0% a year. http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tsieb060&tableSelection=1&footnotes=yes&labeling=labels&plugin=1	Issue is closed.
		Appropriate explanation was added to the financial model.	
		DP: Please add this explanation to PDD.	
		D: Appropriate corrections were provided to the section B.2 of the PDD version 05.	



			VENTIAS
CAR 13. The data concerning the amount of investment used during calculation of future value do not match the data presented at the page "Financing schedule". Please correct.	29 (b)	Appropriate changes provided to financial model. DP: Please pay attention that investment expenses are 241.7 mln Euro (without operational expenses). Residual value is defined from 164.6 mln Euro. Please correct. Besides using the rate of 0.75 for coefficient for decreasing of residual value is not justified in the frame of this particular project. Future value may account increasing price of the capital assets due to inflation as it was performed in your previous financial model.	Issue is closed.
		D: For the definition of residual value of 164.5 mln Euro you have performed simple addition in the financial model section "Future value". But this section did not contain investment expenses for the measures like 1.1 operational lifetime of which ends before 2020 since their future value in the last year of the project will be 0. Coefficient 0.75 was used because calculation of future value makes the assumption the receiving of profit in case this equipment is sold. That is why for calculation of the future value in the last year of the project tax on profit was used. Increasing of the capital assets due to inflation will lead to increasing of amortization expenses due to inflation, which was accounted in the previous version of the financial model. But according to your review to the PDD:"I highly recommend to use inline amortization for the calculation of residual (future) value of the capital assets",-financial model was recalculated. It is not clear how this calculation should be performed. DP: Please pay attention that first of all residual value of the mentioned measures at the end of 2020 will be different from zero.	

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So only the sum that is bigger then residual value (not the selling price of the capital assets) will be the object of taxation. The difference between those two values will not be huge.

Second of all tax rate for the profit will be 16% not 25%.

Third of all usage of the calculation of such kind for the objects that do not have independent market value (as Modernization of the tube furnaces ##1-4 fuel) is not applicable since it is impossible to define their influence on the capital assets value.

So usage of the coefficient 0.75 is not applicable.

Calculation is as follows:

 $FV = V^*1,02^{(2020-2010)}$, where FV is future value with the accounting of the inflation rate, V – calculated value of residual value at the end of project period in the prices of 2010.

2020 is the year we define residual value for.

D: Answers are inserted to the financial model.

DP: Initial value of the capital assets was reduced and now does not match the data at the page "financial schedule".

Please bring back the value from the previous version.

Please pay attention to the fact that you do not use forecasted prices for the evaluation of the amount of investment expenses. This evaluation is performed only in the fixed prices of 2010 or even earlier year. Which leads to the fact that power of 1.02 should not be less then 10 (2020-2010).



CAR 14. Please pay attention to the fact that value of capital assets also	29 (b)	Appropriate changes were provided to the financial model.	Issue is closed.
includes mantling value, transport			
expenses etc. Besides calculation of			
residual value is supposed to be based			
on the initial value of the capital assets			
in Euro, since the usage of the initial			
data in hryvnya leads to the distortion			
of the calculations due to the change of			
the exchange rates during project			
implementation.			
·			



				VERITAS
CAR 15. Please provide documented evidence for the operational lifetime of the measures 2.1, 2.16 and 3.7.	29 (b)	2.1. Operational lifetime of crushers «Hydrocone» is 15 years (mentioned in the Acceptance-transmitting statements which are added) 2.16. Measur is at the stage of project documentation development. Operational lifetime will be defined after commissioning of the object. 3.7. At the current moment tender committee of "Polava Ferrexpo Mine" decided to purchase one burner of the «Unitherm Cemcon». Operational lifetime will be able to be defined after receiving of technical documentation for the burner. **DP: 2.1.** Issue is closed. 2.16. It looks appropriate to define operational lifetime with the level of at least 15 years Tool to determine the remaining lifetime of equipment. 3.7. Considering that old burners are working since 1976 provided operational lifetime (10 years) looks much lower. Please explain reduction of operational lifetimes for the rest of capital assets in comparison to the previous version and provide documentary proof of the new operational lifetimes.	Issue is closed.	
		D: 2.16 None of the equipment mentioned in the Tool to determine the remaining lifetime of equipment does not meet the measure that will be implemented in the frame of the project. Operational lifetime was defined after consultancy with previously defined equipment supplier.		
		3.7 Operational lifetime of the new gas burners will be defined after consultancy with previously defined equipment supplier.		
		Last version of the financial model contains real data on the operational lifetimes despite the previous one. Previous version contained assumption data because at that moment financial model developer did not have necessary data. All evidencing documents were provided during site visit.		



			VERTIAS
		DP: Please provide justification for the operational lifetime of the measures 2.16 and 3.7. In the documentation provided only operational lifetime for the crushers is mentioned.	
		D: Appropriate changes have been introduced to the financial model. For the points 2.16 and 3.7 maximum operational lifetime for the particular production was chosen.	
		Please address verifier for the relevant documentation.	
		DP: Operational lifetime of the item 2.5 is 10 years (stated in the documents) instead of 3 years. Operational lifetime of the item 2.4 is stated as 8 years (act 1719) instead of 6 years.	
CL 07. Please pay attention to the fact that usage of the high exchange rate of Euro/hryvnya in 2011 (I assume that that actual value for a certain date of the year is used) in comparison to 2010 leads to the artificial decreasing of tariffs for energy resources in Euro, which are forecasted data. In order to avoid misunderstanding I suggest to fix the forecasted exchange rate at the level of 2010 (10.533) or to use actual prices for energy resources in 2011.	29 (b)	Appropriate changes were provided to the financial model.	Issue is closed.



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CL 08. Please pay attention to the fact that only additional expenses, which are connected to the operation of project equipment in comparison to the baseline scenario, should be reflected in the financial model. It does not look probable that for example measures 2.15 and 2.13 may lead to the great increasing of the operational expenses, which is indicated in the financial model. Please explain inclusion to the list of expenses respective operational expenses for each measure of the investment program.

29 (b)

To the operational expenses on each point of the investment program were added annual expenses, which cover maintenance and operation of the equipment condition. According to the project modern equipment is being installed with the high level of automation. New equipment requires significantly bigger amount of operational expenses then the baseline equipment.

- **DP:** Please provide comparison of the operational expenses before and after the project on each point of investment program.
- **D:** Financial model contains the exact data after comparative analyses on each point of the investment programmed.
- **DP:** Please provide operational expenses before and after the project for each point of the investment program with the definition of the main components.
- **D:** Provision of operational expenses before and after the project for each point of the investment program with the definition of the main components is impossible since most of the measures are already implemented. Time of the storage of the relevant documentation is out and the documents were destroyed. Increasing of the operational expenses was calculated on the basis of conservative assumptions which were reflected in the financial model.
- **DP:** Please pay attention to the fact that for the majority of similar projects conservative assumption is acceptance of operational expenses of new and old equipment as same values, which is proved by practice. It is difficult to expect that new equipment will require more expenses for maintenance then the old one, which has been working for decades, as it is mentioned in the financial model.

If you want to prove your point, please provide comparison of

Issue is closed.



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	Comp			operational	expenses	before
and	after	ALL	proje	ct measures	implement	ation in

the operational expenses.

and after ALL project measures implementation in my opinion is not correct, since some measures were not implemented instead of something but for the first time. For example:

- 2.3. The change of the technological scheme of iron ore concentrate production from 3-stage crushing process into 2-stage crushing process by installation of Barmac B-9100 crushers
- 2.4. Implementation of the automatic control system of Barmac B-9100 crushers loading
- 2.6. Stabilizing of 8ΓpK pumps operation by installation of FR-F740 thyristor frequency converter
- 2.9. Implementation of automated system for КМДТ and КСДТ crushers loading
- 2.11. A complex automation of crushed iron ore grinding sections #10-15 using ACS TP on the basis of Mitsubishi company equipment
- 3.1. -3.4. Reconstruction of the seal of the tube furnace #1-4 loading part by establishing the SUPERDEAL seal

As for the measures that are being implemented (including 2.13 as well) operational expenses can be only forecasted so we included to the financial odel operational expenses at the rate of 5% from value.

The reason of the big enlargement of operational expenses according to the baseline is that equipment was installed instead (except for 2.15) is imported and according to the terms of operational warranty firm-producer Ferrexpo Poltava Mining HAS TO in order to keep up with pretty intense maintenance schedule to remove from service the equipment



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for provision of maintenance. Main causes of the operational expenses increasing are:

- currency component in the value of x частин,
- currency component of the maintanace value
- energy resources expenses during work on the nooperation mode during removal from the service and putting back to operation
- to conditional expenses can be included:
 - not received income during maintanace works (it will much higher then in the projectline scenario considering more efficiency of the equipment installed)
 - plant expenses during maintenance are bonded to production, which was produced at that time by the other equipment.

As for 2.15 mills installed during this project implementation are really produced in Ukraine but considering the fact that their work efficiency will be increased in 1.3 times in comparison to the baseline equipment maintenance works started to be performed more often since the milling elements need to be replaced. For their replacement mills are removed from service for 3-4 days once a month (in comparison to the baseline equipment once in 2 month).

Increasing of the expenses for the milling elements purchase, increasing of the expenses of the energy resources for no-operation mode, conditional expenses (see previous point), wages of the maintenance personnel are the main components of the operational expenses increasing in comparison to the baseline scenario.

As for 2.13 for the change of water supply scheme two lines of hydragogue 1,5 m in diameter total longtitude 4.7 km.



		In this case main reason for the operational expenses increasing is big enlargement of the pipes volume, which have to be replaced regards high percentage of technological water abrasiveness, which is supplied to the concentrating workshops.	
CAR 16. Data at the p.35 of PDD do not match the data of IRR, NPV in the financial model. Please correct.	29 (b)	Appropriate changes were provided to the financial model.	Issue is closed.
CAR 17. Please mention if the VAT is included in tariffs, points of investment and operational expenses.	29 (b)	PDD states: "Provided in this document prices, tariffs and investment expenses are given without VAT".	Issue is closed.



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CL 09. During the conduction of financial analyses of the measures related to the measure 1.1 it is necessary to account for the fact that due to the rather short operational lifetime of dump-tracks their modernization would have been need to be done even in the baseline scenario. Otherwise the enterprise would have needed to stop working. This is why it looks more appropriate to perform for this measure separate comparative analysis. Operation of old inefficient dump-tracks with their stepby-step change with the new dumptracks of the same type (if they are available at the market) would be the baseline scenario. Proiect scenario would envisage described in the PDD activity. At the same time it is necessary to account for the necessity of repeated modernization of the car park in 10 years after the start of the project in order to keep the amount of cars at the same level.

29 (b)

Enterprise instead of purchase new dump-trucks could have provided current repair works of the existing ones in order to keep them in a decent condition but it would not lead to the decreasing of specific expenses during broken material. 10 years is the passport operational characteristics, which were used for financial analyses. Practically with the appropriate operation of the dump-trucks and on-time technical assistance and repair their operational lifetime may be much longer.

DP: Please pay attention that PDD should consider all the alternatives that are based on the same assumptions. In this particular case if calculation is based on a passport data for the new equipment, the same assumption should be used for the old equipment. If operational experience shows that real operational lifetime of the dump-trucks is mush higher then 10 years appropriate parameter should be considered in the financial model.

D: Operational experience considers old dump-trucks. At the moment of this measure implementation old dump-trucks were able to perform all necessary functions in the case of the certain conditions provision.

According to the project new dump-trucks have much more complicated and technically higher electronic devices. Operational experience of such dump-trucks is absent at the enterprise, which is why it is difficult trucks to evaluate technical condition of the new dump- after their operational lifetime ends. Passport characteristics of the new dump-trucks were considered.

DP: Appropriate comparison of the old and new dump-trucks should be performed on the same level. If operational lifetime for the dump-trucks is 10 years it should be used for new and for old ones. If another methodology for operational lifetime

Issue is closed.

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evaluation is chosen it will be required to use it for the both scenarios.	
D: Provided explanation does not give the opportunity to perform the same evaluation for the both scenarios. As for the baseline scenario usage of the old dump trucks would continue. For the financial analyses passport data for the dump-trucks were used since it is not clear how they can be used after the end of operational lifetime.	
DP: If you insist that dump-trucks the same kind that were changed during 2002-2010 would be able to work till 2020 without any changes please provide documentary evidence of such point. Besides it should be documentary proved why new dump-trucks are not able to work more then 10 years. D: Ferrexpo Poltava Miming is not independent decision maker for the finance expense. Making the decision on project measures financing is done by Supervisory Committee (representatives of the stakeholders). In such terms it is IMPOSSIBLE to forecast purchase of new dump-trucks with progressive technical charachteristics. Important decisive factor is modernization of the dump-trucks park was perspective of the money receiving for the ERUs trade.	
Without making such decision Ferrexpo Poltava Mining would have to repair existing dump-trucks to keep them in a descent shape. Purchase of the new dump-trucks would be	

very unprobable due to their high price.



CL 10. Explain why technological barrier (personnel competence) can not be financial since it can be overcome with help of extra financing.	29 (c)	First of all this barrier is technological since it requires high level of staff qualification. **KZ:* Barrier can be overcome with the money spent on a personnel training or recruiting more qualified staff. Does not this fact turn technological barrier to financial one, does it? On our point of view mentioned barrier is technological since it consists of obstacles, which can be overcome with the financing incentive.	Issue is closed.
CAR 18. Please define energy enterprise that generates electric energy for Ferrexpo Poltava Mining.	32 (a)	Appropriate changes were inserted to the section B.3 the PDD version 03.	Issue is closed.
CAR 19. Please provide evaluation of all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	32 (b)	Appropriate changes were inserted to the section B.3 the PDD version 03.	Issue is closed.
CAR 20. Please define if the baseline scenario developer is the project participant in Annex 1.	32 (d)	Appropriate changes were inserted to the section B.4 the PDD version 03.	Issue is closed.
CAR 21. During site visit it was revealed that starting date of the project is the date of the first measure start – the start of "Reconstruction of the seal of the tube furnace #2 loading part by establishing the SUPERDEAL seal" – 10/01/2000. Please correct.	34 (a)	Appropriate changes were inserted to the section C.1 the PDD version 03.	Issue is closed.



CAR 22. Crediting period is 17 years and goes beyond operational lifetime of the project. Please clarify and correct.	34 (c)	Appropriate changes were inserted to the section C.2 the PDD version 03.	Issue is closed.
CAR 23. Please correct the definition for the NCV from "measured" to "calculated".	36 (b)	Appropriate changes were inserted to the section D.1.1 the PDD version 03.	Issue is closed.
CAR 24. Please define which exact parameters are fixed in which monthly reports since site visit has reflected that each workshop has its own monthly reporting system.	36 (b) (i)	Appropriate changes were inserted to the section D.3 the PDD version 03.	Issue is closed.
CAR 25. Please describe in PDD process of data flow: from the initial data to the monthly reports.	36 (b) (i)	Appropriate changes were inserted to the section D.3 the PDD version 03.	Issue is closed.
CAR 26. Please provide in a monitoring plan description of the procedures, which are necessary to be followed in a case of some data failure.	36 (b) (iii)	Appropriate changes were inserted to the section D.3 the PDD version 03.	Issue is closed.
CL 11. Please explain how methods to quantitatively account for uncertainty in key parameters are included	36 (f) (v)	For the definition of key parameters of the monitoring 200 of measuring devices are used at the enterprise majority of which have the uncertainty level less then 1%. Measuring devices are going through periodic calibration procedure that is why validity of the monitoring parameters is rather high.	Issue is closed.



CL 12. Please clarify how leakage from gas-transport system of Ukraine is expected to reduce during the implementation of the project.	36 (f) (vii)	According to the data of National Inventory of Ukraine leakage occurs during extraction and transport of natural gas. Subproject on modernization of pellets production is aimed among other at reduction of natural gas consumption, which is why PDD contains the assumption that reduction of natural gas consumption will reduce the leakage from gas-transport system of Ukraine.	Issue is closed.
		KZ: the project itself is not aimed at natural gas reduction at gas-transport system of Ukraine. It would be appropriate to delete this phrase or to calculate the leakage.	
		Appropriate changes were inserted to the section D.1.3 the PDD version 04.	
CAR 27. Please provide the list of documentation on the analysis of the environmental impacts of the project,	48 (a)	Appropriate changes were inserted to the section F.1 the PDD version 03.	Issue is closed.
including transboundary impacts, in accordance with procedures as		KZ: Please clarify, which licenses has the enterprise. List them.	
determined by the host Party in the section F.1 of the PDD.		Appropriate changes were inserted to the section F.1 the PDD version 04.	
CAR 28. Please correct electricity emission factor for the Ukrainian grid for 2004-2005 since the one developed by Global Carbon is not applicable for these years.	36 (b)	Appropriate changes were inserted to the section D.3 the PDD version 08.	Issue is closed.