Bureau Veritas Certification Holding SAS





DETERMINATION REPORT OJSC OMK-STEEL

DETERMINATION OF THE

"CONSTRUCTION AND IMPLEMENTATION OF THE CASTING AND ROLLING COMPLEX FOR THE PRODUCTION OF HOT ROLLED FLAT PRODUCTS IN THE VYKSA DISTRICT, THE NIZHNY NOVGOROD REGION, THE RUSSIAN FEDERATION"

REPORT NO. RUSSIA-DET/0154/2011

BUREAU VERITAS CERTIFICATION



DETERMINATION REPORT ON JI PROJECT

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Client: OJSC OMK-Steel		Client ref.: Mr. Nikola	ai Zaitsev	
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Andrey Rodionov – Le	ead verifier		Limited distribution	
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Work approved by: Leonid Yaskin – Oper	ational Manaç	ger		
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"Construction and implementation of the Casting and Rolling Complex for the Production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation"

Abbreviations

AIE Accredited Independent Entity
BVC Bureau Veritas Certification
CAR Corrective Action Request

CL Clarification Request

CO2 Carbon Dioxide

DDR Draft Determination Report

DR Document Review

EIA Environmental Impact Assessment

EIAR Environmental Impact Assessment Report

ERU Emission Reduction Unit GHG Greenhouse House Gas(es)

IE Independent Entity

IPCC Intergovernmental Panel on Climate Change

JI Joint Implementation

JISC Joint Implementation Supervisory Committee

NGO Non Governmental Organization

NSCF CJSC "National Carbon Sequestration Foundation"

OMK OJSC OMK-Steel

PDD Project Design Document

PP Project Participant
RF Russian Federation
tCO2e Tonnes CO2 equivalent

UMK-Steel Casting and Rolling Complex part of the United Metallurgical Company

UNFCCC United Nations Framework Convention for Climate Change



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1 INTRODUCTION

OJSC OMK-Steel (hereafter called "OMK") has commissioned Bureau Veritas Certification to determine its JI project "Construction and implementation of the Casting and Rolling Complex for the production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation" (hereafter called "the project") located in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation.

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:



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Andrey Rodionov Bureau Veritas Certification, Lead Verifier

This verification report was reviewed by: Vera Skitina 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 CJSC National Carbon Sequestration Foundation (hereafter called NSCF) 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 to be Checked by an Accredited Independent Entity were reviewed.

The first deliverable of the document review was the Determination Protocol dated 01/08/2011 which contained 21 CARs, 1 FAR and 1CL.

To address Bureau Veritas Certification corrective action and clarification requests, NSCF revised the PDD v. 01.2 dated 20/06/11 and resubmitted final PDD version 04.1 on 23/08/2011.



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The determination findings presented in this report relate to the project as described in the final PDD version 04.1 dated 23/08/2011 /1/.

2.2 Follow-up Interviews

On 11/08/2011 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 Casting and Rolling Complex part of the United Metallurgical Company (hereafter called UMK-Steel) and NSCF were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed	Interview topics
organization UMK-Steel	LIMIC Stool Investment Dragramme
OWK-Steel	> UMK-Steel Investment Programme
	Reasoning for project implementation
	Project management organization
	Project history and Implementation schedule
	Baseline scenario
	Barriers and uncommon practice
	Project scenario
	Recourse consumption saving effects
	Emission calculation
	Investment issues
	Commissioning and proven trials
	Capacity replacement issues
	QC & QA Procedures
	Training of personnel
	Environmental permissions
	Environmental Impact Assessment
	Public hearings
CONSULTANT	> Ditto
NSCF	
Stakeholders	> N/A

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.



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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 (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 (excerpts from PDD)

The project to construct and implement the Casting and Rolling Complex in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation, is being carried out by the OJSC OMK-Steel.1 The project is aimed at establishing a modern metallurgical works which produces high-quality hot rolled flat products using state-of-the art technologies to ensure high energy production efficiency and low emissions of pollutants.

The OJSC OMK-Steel is a part of United Metallurgical Company (OMK) that is one of Russia's largest producers of pipes, railroad wheels, and other metal products for energy, transport, and industrial companies. The OMK Pipe-Rolling Division includes Vyksa Steel Works (Nizhny Novgorod region), the Almetyevsk Pipe Plant (Republic of Tatarstan) and the Trubodetal plant (Chelyabinsk region), and the OMK Metallurgical Division includes the Casting and Rolling complex (Nizhny Novgorod region).



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In 2010 OMK accounted for 24% of the production of pipes by Russian companies, including 42% of large-diameter pipes and 64% of railroad wheels. Among the main consumers of OMK products are leading Russian and foreign companies. OMK's products are exported to 20 countries. OMK's companies have more than 25,000 employees.

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 21 Corrective Action Requests, 1 Forward action request and 1 Clarification Request.

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

4.1 Project approvals by Parties involved (19-20)

The project has no approval by the Host Party, therefore CAR 05 remains pending.

A written project approval by Party B should be provided to the AIE and made available to the secretariat by the AIE when submitting the first verification report for publication in accordance with paragraph 38 of the JI guidelines. It has not been provided to AIE at the determination stage.

Outstanding issues related to Project approvals by Parties involved (19-20), PP's response and the AIE conclusion are summarized in Appendix A Table 2 (refer to CAR 05).

4.2 Authorization of project participants by Parties involved (21)

The participation for OJSC OMK-Steel listed as project participant in the PDD is not authorized by the Host Party because the project approval by the Host Party was not received. Party B is not defined yet.

The authorization is deemed to be carried out through the issuance of the project approvals.



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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.

JI specific approach

The PDD provides a detailed theoretical description /1-14/ 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 being Scenario 2:
 - Scenario 1: Project implementation without registration as a JI project. The construction of the Casting and Rolling Complex for the production of hot rolled flat products);
 - Scenario 2: Continuation of the current situation. Production of hot rolled flat products at metallurgical works not incorporated into OMK;
- (b) 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. In this context, the following key factors that affect a baseline are taken into account:
 - a. Sectoral reform policies and legislation in steel industry.
 - The PDD refers to the main development goal of the metallurgical industry, approved by the Ministry of Industry and Trade of the Russian Federation (order #150 on March 18, 2009) is to satisfy the Russian market steel demand in terms of the product range, quality and quantity.
 - The PDD refers to the main documents that regulate greenhouse gas emissions in the Russian metallurgical industry;
 - The PDD states that plausible future Scenarios 1 and 2 are in compliance with the current legislation in metallurgical industry and regulations in the field of environmental protection;
 - b. Economic situation in Russian steel industry and predicted
 - The PDD states that the total output and quality of goods of the project activity and baseline scenario meet the market requirement and predicted demand;
 - c. Availability of capital to OMK (including investment barrier).



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PDD shows that the capital is available but with unfavorable lending terms: the high cost of the loan and the high exchange rate risks (investment barriers). The PDD states that this investment barrier affects to the project activity (Scenario 1) and does not affect the implementation of the plausible future Scenario 2 (detailed information is given in the PDD, Section B.1):

- d. Local availability of technology/techniques and equipment. The PDD reads that the Scenario 1 (the construction of the Casting and Rolling Complex) can be defined as the "first of its kind" and so the lack of human skills for project implementation leads to additional technological risk. Continuation of the current situation (Scenario 2) does not undergo of this risk (detailed information is given in the PDD, Section B.1);
- e. Price and availability of fuel and materials.

 PDD states that the project implementation (Scenario 1) demands the significant organizational difficulties and financial expenses for the scrap collection, development of scrap transport logistic and scrap processing. Scenario 2 continuation of the current situation does not require additional expenditure for supplying of raw material and fuel. Also Scenario 2 does not require the scrap processing (detailed information is given in the PDD, Section B.1).
- f. Financial barrier (cost efficiency)
 PDD shows that the payback period of Scenario 1 (project activity) is unacceptable for OMK as it exceeds the benchmark
 not more 7 years which was determined by the OMK. The calculation of payback period for Scenario 1 and sensitivity analysis are available for verifier and positively justified (detailed information is given in the PDD, Section B.1).

After screening the first Scenario, Scenario 2 is left as the most plausible baseline scenario, namely:

Continuation of the current situation. Production of hot rolled flat products at metallurgical works not incorporated into OMK.

Scenario 2 was identified as the most plausible scenario for the following reasons:

- (a) It is in line with the main development goal of the metallurgical industry;
- (b)It is more attractive in terms of human skill in technology and techniques;
- (c) It is the most economically attractive.



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All explanations, descriptions and analyses pertaining to the baseline in the PDD are made in accordance with the referenced JI specific approach and the baseline is identified appropriately.

Outstanding issues related to Baseline setting (22-26), PP's response and the AIE conclusion are summarized in Appendix A Table 2 (refer to CARs 07-14).

The issued CARs concern: the detailed theoretical description of the baseline (CAR 07 and CAR 14), appropriateness of scenarios 2, 3 and 4 (CARs 08 and 09), proof of investment barrier (CAR 10), proof of technological barrier (CAR 11), accounting key factors (CAR 12) and accounting uncertainties and the used assumptions (CAR 13).

4.4 Additionality (27-31)

JI specific approach

A JI-specific approach is chosen for justification of additionality. For this purpose the option a) is chosen defined in paragraph 2 of the Annex I to the Guidance on criteria for baseline setting and monitoring (Version 02). It envisages provision of traceable and transparent information showing that the baseline was identified on the basis of conservative assumptions (refer to PDD Section B.1), that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions.

The following step-wise approach was applied:

Step 1. Indication and description of the approach applied: this is a JI-specific approach, based on the proofs that the project activity would not otherwise occur due to existence of the investment barrier, technological barriers, financial barrier (result of financial and sensitivity analysis) and that it is not a common practice.

Step 2. Application of the approach chosen including provision of additionality proofs:

- PDD developer described and scrutinized plausible alternative scenarios which have been provided in Section B.1;
- Investment barrier is justified through the investment risk analysis (refer to PDD, Section B.1), its results are summarized in Section B.2, Table B.2-1. PDD shows that the investment is available but with unfavorable lending terms.
- Technological barriers are justified through the lack of infrastructure, absence of prevailing practice and absence of trained labour;



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- Financial barrier is justified through the financial analysis and includes the evaluation of the project's payback period. PDD shows that the payback period of project activity is unacceptable for OMK as it exceeds the benchmark - 7 years;
- The sensitivity analysis of variations of key parameters confirms the conclusion of the basic investment analysis.
- The common practice analysis has reasonably shown that the proposed JI project does not represent a widely observed practice in the geographical area concerned.

Step 3. The spreadsheets with the investment and sensitivity analyses were made available for the verifier /1-a/.

The AIE determined that additionality is demonstrated appropriately as a result of the analysis using the approach chosen /1, 1-a, 10, 15/.

Outstanding issues related to Additionality (29), PP's response and the AIE conclusion are summarized in Appendix A Table 2 (refer to CAR 15).

The issued CAR concerns the appropriateness of financial analysis (CAR 15).

4.5 Project boundary (32-33) JI specific approach

The project boundary defined in the PDD, Section B.3, Table B.3-1 for project and baseline scenario accordingly, encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are: (i) under the control of the project participants, (ii) reasonably attributable to the project, (iii) significant.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD, Section B.3.

Based on the above assessment, the AIE hereby confirms that the identified boundary and the selected sources and gases are justified for the project activity.

Outstanding issues related to Project boundary (32), PP's response and the AIE conclusion are summarized in Appendix A Table 2 (refer to CARs 16 and 17).



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The issued CARs concern: identification of electricity system (CAR 16) and exclusion of scrap, limestone and natural gas during leakage assessment (CAR 17).

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the real action of the project began, and the starting date is 27/06/2005, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 15 years or 180 months.

The PDD states the length of the crediting period in years and months, which is 4 years or 48 months, and its starting date as 01/01/2009, which is on the date the first emission reductions are generated by the project.

4.7 Monitoring plan (35-39)

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

JI specific approach

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 (refer to PDD, Sections B.1, D. 1.1.1, D.1.1.3 and D.1.3.1).

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 to be monitored (refer to PDD, Sections B.1, D. 1.1.1, D.1.1.3 and D.1.3.1).

The monitoring plan is developed subject to the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring" developed by the JISC.

All categories of data to be collected in order to monitor GHG emissions from the project and determine the baseline of GHG emissions (Option 1) are described in required details.

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



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throughout the crediting period), and that are available already at the stage of determination (refer to PDD, Sections B.1, Annex 2 and Annex 3);

- (ii) This issue is not applicable for the project;
- (iii) Data and parameters that are monitored throughout the crediting period, such as electrical energy consumption, output of steel, emission factor and consumption of natural gas (refer to PDD, Sections D.1.1.1 and D.1.1.3).

Step-by-step application of the used approach for monitoring is described in PDD Section D and Annex 3 including monitoring procedures, formulae, parameters and data sources. The monitoring plan elaborates all algorithms and formulae used for the estimation of baseline emissions, project emissions and leakage refer to PDD, Sections D.1.1.2, D.1.1.4 and D.1.3.2. The internal quality system at UMK-Steel is functioning in accordance with the national standards and regulations in force. The evidences of existing internal quality system were provided during on-site visit to UMK-Steel.

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording, the data are archived in technical report (refer to PDD, Sections D.1.1.1, D.1.1.3 and D.1.3.1).

The monitoring plan presents the quality assurance and control procedures for the monitoring process (refer to PDD, Sections B.1, D.1.5, D.2, D.3, Annex 2 and Annex 3). This includes information on calibration and on how records on data and method validity and accuracy are kept and made available on request. Evidence of existing of requirement procedures for monitoring plan implementation was provided during onsite visit /17-25/.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities. Initial data for GHG emissions monitoring according to the tables (D.1.1.1, D.1.1.3, D.1.3.1) are prepared monthly in UMK-Steel by Head power engineer department, Meltshop and Hot strip mill. These data are summarized to the Department of labor, industrial, environmental and civil safety and transferred to CJSC "National Carbon Sequestration Foundation" for preparing reports on GHG emission reduction (refer to PDD, Section D.3.

Collection of data required for estimation of GHG emission reductions is planned to be performed to high industry standard in both electronic and paper way.



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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 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.

Outstanding issues related to Monitoring plan (36), PP's response and the AIE conclusion are summarized in Appendix A Table 2 (refer to CARs 18-21, FAR 01 and CL 01).

The issued CARs concern: conservativeness of fixed parameters (CAR 18), accounting of electric losses (CAR 19), archiving of data (CAR 20), list of stakeholders (CAR 21) and specification of procedures for unavailable data (FAR 1).

4.8 Leakage (40-41)

JI specific approach

The PDD appropriately describes an assessment of the potential leakage of the project which is associated with carbonaceous raw materials consumption in UMK-Steel (refer to PDD, Section D.1.3.2).

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

JI specific approach

The PDD indicates assessment of emissions in the baseline and project scenario as the approach chosen to estimate the emission reductions of the project.

The PDD provides the ex ante estimates of:

- (a) Emissions for the project scenario (within the project boundary), which are 2,628,798 tons of CO2eq;
- (b) Emissions for the Leakage which are 1,281,258 tons of CO2eq;
- (c) Emissions for the baseline scenario (within the project boundary), which are 8,256,725 tons of CO2eq;

Emission reductions (based on (c)-(a)-(b) above), which are

(d) 4,346,669 tons of CO2eq.

Reporting period: From 01/01/2009 to 31/12/2012.



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The formulae used for calculating the estimates are referred in the PDD, Sections E.1-E.6 and Section D.1.4.

For calculating the estimates referred to above, key factors defined in the monitoring plain influencing the project and baseline emissions were taken into account, as appropriate.

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

The estimates referred to above are consistent throughout the PDD.

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

The PDD Section E includes an illustrative ex ante emissions calculation /1/.

4.10 Environmental impacts (48)

The PDD lists 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 the following Federal Laws: "On Protection of the Environment"; "On Ecological Examinations"; "On the Sanitary and Epidemiological Safety of the Population" and etc.

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, namely the following permits regarding the project's impact on the environment /26-29/.

4.11 Stakeholder consultation (49)

In accordance with current legislation public hearings have been organized by Head of District. During the public consultations were reviewed the technical, environmental and economic issues of the project. The Casting and Rolling Complex construction (project activity) has received positive approval from the parties involved. There are not negative comments of the stakeholders /30/.



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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 "Construction and implementation of the Casting and Rolling Complex for the production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation" project in Russia. 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) onsite 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 JI specific approach for demonstration of the additionality. In line with this approach, the PDD provides investment analysis 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 review of the project design documentation and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria.



DETERMINATION REPORT ON JI PROJECT

"Construction and implementation of the Casting and Rolling Complex for the Production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation"

The determination revealed one pending issue related to the current determination stage of the project: the issue of the written approval of the Parties involved. 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 04.1 dated 23/08/11 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

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



DETERMINATION REPORT ON JI PROJECT

"CONSTRUCTION AND IMPLEMENTATION OF THE CASTING AND ROLLING COMPLEX FOR THE PRODUCTION OF HOT ROLLED FLAT PRODUCTS IN THE VYKSA DISTRICT, THE NIZHNY NOVGOROD REGION. THE RUSSIAN FEDERATION"

7 REFERENCES

Category 1 Documents:

Documents provided by Type the name of the company that relate directly to the GHG components of the project.

PDD "Construction and implementation of the Casting and Rolling Complex for the production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation", Version 01.2, dated 20/06/11.

PDD PDD "Construction and implementation of the Casting and Rolling Complex for the production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation", Version 04.1 dated 23/08/11

Supporting documentation:

- a. 2011-06-20_OMK_Investement analysis
- b. !2011-08-23_Calculation_baseline_emission_factor;
- c. !!2011-08-23 OMK GHG Estimation ver.04.1;
- d. !2011-08-18_OMK_Calculation of CO2 emission factor for natural gas
- /2/ Guidelines for Users of the Joint Implementation Project Design Document Form/Version 04, JISC.
- /3/ Guidance on criteria for baseline setting and monitoring (Version 02).
- /4/ "Strategy of metal industry development in Russia till 2020" http://www.minprom.gov.ru/activity/metal/strateg/2.

Category 2 Documents:

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

- /5/ Technical report about the Casting and Rolling Complex work for 2010
- /6/ Technical report of Chermetinformatzia for 2006-2010
- /7/ Technical report, December 2009
- /8/ Protocol with JI history, 2004
- /9/ Memorandum about main suppliers of hot rolling products for 2007-2010
- /10/ Feasibility study of project, 2003
- /11/ Memorandum about carbon content in carbon-bearing materials in the Casting and Rolling Complex, 2011
- /12/ Memorandum about carbon content in hot rolling products in the Casting and Rolling Complex, 2011
- /13/ Report of research of baseline emission factor calculation, 2011
- /14/ Report "Review of market of limestone and lime in Russia", Informain, 2010
- /15/ Oreder #2-2 dated 01/01/2005, about approval of investment project
- /16/ Declaration about purpose to project implementation, 2003



DETERMINATION REPORT ON JI PROJECT

"Construction and implementation of the Casting and Rolling Complex for the Production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation"

- /17/ Passport of electronic scales VSDP 50.25.25, #8435 and its verification, 2010
- /18/ Passport of electricity meters ##01137265, 01137264, 01137263 and its verification, 2010
- /19/ Agreement OJSC "VMZ" for rendering of metrological service #126/10, 2010
- /20/ Certificate of accreditation of OJSC "VMZ" for calibration of measuring equipment until 2015
- /21/ Certificate of accreditation of OJSC "VMZ" for metrological work activity until 2015
- /22/ Certificate of accreditation of analytic laboratory of OJSC "VMZ" until 2015
- /23/ Study contract #211-12/07, 2007
- /24/ Protocol of board of experts #957-10, #11-VP, 2008
- /25/ Project of procedure for monitoring plan, 2011
- /26/ EIAR for project implementation, 2005
- /27/ State ecological assessment of project implementation, 2004
- /28/ Permission for project implementation # ru 52517306-47/kc-08, 2008
- /29/ Permission for pollutant emission #443, 2010
- /30/ Protocol of stakeholder consultation, the Vyksa district, 2004

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/ O. Mayorov UMK-Steel, acting. Chief engineer
- /2/ O. Belov UMK-Steel, Technical management / Metrologist of the complex
- /3/ A. Tanasevsky UMK-Steel, electric arc furnace shop / Technologist for continuous steel casting
- /4/ V. Yerygin UMK-Steel, Rolling shop / Deputy chief of the shop according to the technology
- /5/ E. Eroshenko UMK-Steel, Department of automation and instrumentation / Leading engineer on automation
- /6/ D. Makashin UMK-Steel, Production department / Head of production department
- /7/ V. Baikov UMK-Steel, Department of electric power supply / Head of department - deputy chief engineer of electric parts
- /8/ E. Uglova UMK-Steel, Department of electric power supply / Engineer for energy accounting
- /9/ A. Vasin UMK-Steel, the Office for labour protection, industrial safety and ecology / Head
- /10/ N. Novikova— UMK-Steel, the Office for labour protection, industrial safety and ecology of the / Manager on ecology
- /11/ R. Kazakov NSCF, Principal specialist



DETERMINATION REPORT ON JI PROJECT

"Construction and implementation of the Casting and Rolling Complex for the production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation"

Appendix A: company PROJECT Determination Protocol

Table 1
Check list for determination, according JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
General descr	iption of the project			
Title of the pro	pject			
-	Is the title of the project presented?	The title of the project is: "Construction and implementation of the Casting and Rolling Complex for the production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation".		OK
-	Is the sectoral scope to which the project pertains presented?	The sectoral scope of the project is presented in PDD.		OK
-	Is the current version number of the document presented?	The PDD version 1.1 was originally presented to Bureau Veritas Certification Russia and reviewed as a part of determination.		OK
		The final version of PDD is 04.1.		
-	Is the date when the document was completed presented?	PDD version 01.2 is dated 20/06/2011.		OK
	presented:	PDD version 04.1 is dated 23/08/2011.		
Description of	the project			
<u>-</u>	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;	PDD, Section A.2 reads that "the project is aimed at establishing a modern metallurgical works which produces high-quality hot rolled flat products using state-of-the art technologies to ensure high energy production efficiency and low emissions of pollutants".	CAR 01	OK



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	b) Baseline scenario; and c) Project scenario (expected outcome, including a technical description).	The project envisages the construction of a Casting and Rolling Complex for the production of hot rolled flat products with a capacity up to 1.2 million tonnes per year with the possibility for expansion up to 3 million tonnes per year". The situation existed prior the project start along with brief description of project and baseline scenario is represented in section A.2.		
		According to the PDD, the management of OMK considered this project implementation as JI in order to attract additional investment. No references are provided.		
		CAR 01. Please provide evidence confirming the low energy intensity of the project in comparison with the industry: "Total energy consumption for rolled metal production in Casting and Rolling Complex is about 7 GJ/t while the industry average power consumption of rolled steel is about 22 GJ/t."		
		There is justified that total energy consumption for rolled metal production in Casting and Rolling Complex is 10 GJ/t.		
-	Is the history of the project (incl. its JI component) briefly summarized?	CAR 02. Please provide reference to any event confirming the history of the JI component.	CAR 02	OK
		Project history is demonstrated by Protocol dated 2004.		



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
A.3	Are project participants and Party(ies) involved in the project listed?	Host Party is the Russian Federation (Party A) with project participant OMK-Steel OJSC. Party B is not determined.		OK
	Is contact information provided in Annex 1 of the PDD?	The contact information is provided in PDD Annex 1.		
-	Are project participants and Party(ies) involved in the project listed?	Host Party is the Russian Federation (Party A) with project participant OMK-Steel OJSC. Party B is not determined.		OK
-	Is the data of the project participants presented in tabular format?	Yes.		OK
-	Is contact information provided in Annex 1 of the PDD?	The contact information is provided in PDD Annex 1.		OK
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Host Party is the Russian Federation.		OK
	cription of the project			
Location of the				
-	Host Party(ies)	The Russian Federation.		OK
-	Region/State/Province etc.	Nizhny Novgorod Region		OK
-	City/Town/Community etc.	Vyksa District		OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	Section A 4.1.4 provides consistent information of the physical location and information of the unique identification of the project location.	CAR 03	OK
		Geographical coordinates of the project are as follows: 55°23' northern latitude, 42°10' east longitude.		



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		CAR 03. Please provide reference to source confirming the geographical coordinates of the project.		
Technologies	to be employed, or measures, operations or action			
-	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?	Section A.4.2 outlines main technologies to be employed including all relevant technical data and the implementation schedule.		OK
	eductions would not occur in the absence of the p	ouse gases by sources are to be reduced by the proposed JI projectoronsed project, taking into account national and/or sectoral police.		ing why
-	Is it explained briefly how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page.)	It is briefly explained in PDD that the implementation of the project leads to anthropogenic GHG emission reduction due to the decreasing of feeds, fuels and energy resources consumption in comparison to other metallurgical works producing similar products.	CAR 04	ОК
		CAR 04. Footer 8 does not give exact reference to Excel file with initial data and calculation.		
Estimated am	ount of emission reductions over the crediting per	riod		
-	Is the length of the crediting period Indicated?	The length of the crediting period is indicated to be 48 months.		OK
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	Total as well as annual and average annual emission reductions in tonnes of CO2 equivalent are provided.		OK
Project approv	val by the Parties involved			
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project	CAR 05. The project has no approval by Parties involved.	CAR 05	Pending



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	approvals?	The project approval by the Host Party will be provided after the determination statement is issued by the AIE.		
19	Does the PDD identify at least the host Party as a "Party involved"?	It is indicated that the Russian Federation is the host Party.		OK
19	Has the DFP of the host Party issued a written project approval?	No, pending a response to CAR 05.	Pending	Pending
20	Are all the written project approvals by Parties involved unconditional?	Yes, the written project approvals by Parties involved are unconditional.		OK
Authorization	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?	Legal entity for Party A is OMK-Steel Open Joint-Stock Company. CAR 06. The status of the project approval by a Party involved other than the host Party is not explained. Additionally pending a response to CAR 05.	CAR 06	ОК
Baseline settir	ig .			
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? – JI specific approach	PDD explicitly indicates that the JI specific approach is used for identifying the baseline.		OK
	Approved CDM methodology approach			
JI specific app				
23	Does the PDD provide a detailed theoretical description in a complete and transparent	CAR 07. Section B.1 does not provide a detailed theoretical description of the baseline in complete and transparent manner as	CAR 07	OK



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	manner?	required by Guidelines for users of JI PDD Form Version 04.		
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? (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?	The baseline is established: (a) By listing and describing future scenarios available for the project owner and selecting the most plausible scenario. Four alternative scenarios were listed and assessed as follows: 1. Project implementation without registration as a JI project. The construction of the Casting and Rolling Complex for the production of hot rolled flat products; 2. Continuation of the current situation. Production of hot rolled flat products at metallurgical works not incorporated into OMK; 3. Production of hot rolled flat products at the OMK metallurgical works without any reconstruction; 4. Construction of a rolling mill or a steel-melting furnace for the production of hot rolled flat products at the OMK metallurgical plants. Scenario 2 was selected as the most plausible scenario thus representing the baseline. (b) By taking into account the key factors that affect a baseline such as the Strategy of the Russian metallurgical industry development until 2020 in baseline as well as project specific factors: 1) Investment barrier. 2) Technological barriers: 2.1) Lack of infrastructure for the project implementation; 2.2) Absence of prevailing practice («first of its kind»); 2.3) Absence of skilled and/or properly trained labour. 3) Financial barrier (demonstrated by investment analysis and determination of discount payback period in comparison with the	CAR 08 CAR 09 CAR 10 CAR 11 CAR 12 CAR 13 CAR 14	ОК ОК ОК ОК ОК



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		company benchmark (7 years)).		
		(c) Basically in a transparent manner with regard to the choice of approaches, methodologies, parameters, data sources and key factors. Assumptions are not identified.		
		(d) Taking account of uncertainties and using conservative assumptions is not evident.		
		(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 of the list of standard variables contained in appendix B to Guidance on criteria for baseline and monitoring.		
		The key information and data used to establish the baseline are provided in the required tabular forms.		
		CAR 08 . Please provide evidence that metallurgical works which are not incorporated into OMK (scenario 2) can offer the same level of quality of hot rolled flat products with the project scenario.		
		CAR 09. Scenarios 3 and 4 do not make sense and are not plausible since, according to the PDD, no hot rolled flat products can be produced at OMK industrial facilities at the required quality and quantity.		
		CAR 10 . The investment barrier lacks a due rationale the more so the investments for the project were attracted. There is no clarity as to how difficult it was to attract these investments. Lending terms relate to financial rather than investment barrier. Reference to the facts which occurred after investment decision-making cannot serve evidence of the investment barrier. Please rework the subject		



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		or delete it.		
		CAR 11. Please justify how the JI status of the project would alleviate the impact of the technological barrier related to availability of scrap. CAR 12. Availability of electric energy and natural gas shall be taken into account as other key factors affecting the baseline. CAR 13. Please provide transparency as to accounting		
		uncertainties and the used assumptions, including conservative ones.		
		CAR 14 . There is a lack of transparency as to the theoretical description of the baseline emission factor which should be based on concrete industry data.		
		The revised PDD includes two plausible future scenarios and appropriate justification of baseline setting.		
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?	N/A		OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	This is the average GHG emission factor for relevant Russian industrial enterprises.	Pending	OK
		Conclusion is pending a response to CAR 14.		



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
JI specific app	roach 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 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 two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".	PDD explicitly indicates that JI specific approach is used for demonstration of additionality of the project in accordance with the paragraph 2(a) of the Annex 1 to the "Guidance on criteria for baseline setting and monitoring" (Version 02).		ОК
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	PDD provides a justification of the applicability of JI specific approach. A clear and transparent description of the steps is provided.		OK
		The same alternatives to the JI project activity as in Section B.1 are defined. They are consistent with mandatory laws and regulations.		



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
29 (b)	Are additionality proofs provided?	Step-by-step application of the used approach to proof additionality described in PDD Section B.2 including indication and description of the approach applied, application of the approach chosen and provision of additionality proofs.	CAR 15	OK
		The following alternative to the proposed project were identified (scenarios 3 and 4 were neglected in Section B.1): "Continuation of the current situation. Production of hot rolled flat products at metallurgical works not incorporated into OMK".		
		PDD provides additionality proof as a result of the key factors analysis which demonstrates that the project scenario is not part of the identified baseline (refer to PDD, Section B.1).		
		The common practice analysis has shown that the project activity is not the common practice in Russian metal industry. This conclusion is determined by AIE through Internet search.		
		CAR 15. Financial barrier analysis is incomplete without taking into account uncertainties and conservative assumptions through sensitivity analysis.		
29 (c)	Is the additionality demonstrated appropriately as a result?	With CARs 07-15 the additionality is not demonstrated.	Pending	OK
		The revised PDD demonstrates appropriate additionality proof.		
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method? Methodology approach only_Paragraphs 31(a)	N/A.		OK



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	ary (applicable except for JI LULUCF projects			
JI specific app 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?	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. This is emission from processing of Casting and Rolling Complex. CAR 16. Please indicate what name of "electricity system" of the Russian electricity grid included in the project boundary.	CAR 16	ОК
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?	Project boundary is defined on the basis of case-by-case analysis (not always quantitative) of emission sources.		OK
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?	CAR 17. Please justify the exclusion of steel scrap, limestone and fuel (natural gas) from consideration as sources of greenhouse gas emissions during leakage assessment.	CAR 17	OK
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?	All gases and sources included are explicitly stated. The exclusions of sources related leakage are not appropriately justified in Section B.3. Conclusion is pending a response to CAR 17.	Pending	OK
	methodology approach only_ Paragraph 33_Not	applicable		
Crediting period 34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin	The starting date is defined as May 27, 2005 when the project financing began.		OK



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	or began?			
34 (a)	Is the starting date after the beginning of 2000?	Yes, it is.		OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	Operational life time is defined as 15 years or 180 months.		OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	The length of crediting period is defined as 5 years or 60 months.		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?	Starting day is 01/01/2008 which is the date of the first emission reductions generated by the project.		OK
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 is defined as from 01/01/2009 till 31/12/2012.		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?	N/A		OK
Monitoring pla	n			
35 JI specific app	Does the PDD explicitly indicate which of the following approaches is used? – JI specific approach; – Approved CDM methodology approach.	The PDD explicitly indicates that the JI specific approach is used.		OK



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DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
36 (a)	Does the monitoring plan describe: - All relevant factors and key characteristics that will be monitored? - The period in which they will be monitored? - All decisive factors for the control and reporting of project performance?	The monitoring plan describes: - data to be monitored (refer to Section D.1.1.1 of PDD for project activity); - the period in which they will be monitored monthly; - all decisive factors (refer to PDD Sections D.1.1.1, D.1.1.3, Annex 2 and Annex 3) for the control and reporting of project performance: quality control (QC) and quality assurance (QA) procedures; the operational and management structure that will be applied in implementing the monitoring plan (refer to PDD Sections B.1, D.2, D.3, D.4, Annex 2 and Annex 3). CAR 18. Please justify conservativeness of values for parameters which are determined as constants for the whole monitoring period such as: - CO2 emission factor from natural gas combustion; - carbon content in steel scrap; - carbon content in finished hot rolled products; - carbon content in hot briquetted iron; - carbon content in electrodes; - carbon content in other carbonaceous materials; - carbon content in limestone; - CO2 emission factor for hot rolled products production at Russian metallurgical plants; Identification of values for these parameters can be undertaken based on actual data. CAR 19. Electric losses from transportation of electric energy are not taken into account.	CAR 18 CAR 19 CL 01	OK OK



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DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		CL 01. Please clarify if coke, coke breeze and lime dust are used during hot rolled production in Casting and Rolling Complex.		
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?	The monitoring plan specifies the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions to be monitored (refer to PDD Sections B.1, D, Annex 2 and Annex 3). For constants please refer to the next paragraph.		OK
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?	Default values are used on the basis of 2006 IPCC (refer to PDD Sections D.1, D.1.1.1, Annex 2 and Annex 3): Default emission factor for electricity production is selected based on Final Report // European Bank for Reconstruction and Development, 2010. – Table 5.2, p. 5-3. Electricity System "Volga" (refer to PDD Annex 2).		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?	PDD clearly indicates how the values are to be selected (refer to PDD Sections D.1.5). Conclusion is pending a response to CAR 18.	Pending	OK
36 (b) (ii)	For other values, - Does the monitoring plan clearly indicate the precise references from which these values are taken? - Is the conservativeness of the values provided justified?	The monitoring plan clearly indicates the references from which these values are taken. Conclusion is pending a response to CAR 14.	Pending	OK



DETERMINATION REPORT ON JI PROJECT

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	N/A for default data. FAR 01. Please specify in the monitoring plan the procedures to be followed if expected data are unavailable.	Pending	OK
		FAR will be closed after inspection of evidences in stage of verification.		
36 (b) (iv)	Are International System Unit (SI units) used?	International System Units (SI units) are used.		OK
36 (b) (v)	Does the monitoring plan note any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring?	PDD in Sections B.1, D.1.1.3 and Annex 2 notes parameters, coefficients and variables to calculate baseline emissions. Conclusion is pending a response to CAR 14.	Pending	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	There is consistency between parameters, coefficients, variables, etc. used in baseline and monitoring plan.		OK
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"?	The monitoring plan is constructed based on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring".		OK
36 (d)	Does the monitoring plan explicitly and clearly distinguish:	Description of the monitoring plan in Section D.1 explicitly and clearly distinguishes:		OK
	(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? (ii) Data and parameters that are not monitored	(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 regarding the PDD (refer to PDD, Sections D.1, D.1.1.1, D.1.1.3, D.1.3.1 and Annex 3).		
	throughout the crediting period, but are	(ii) Data and parameters that are not monitored throughout the		



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DVM Paragraph	Check Item	Initial finding		Final Concl.
	determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored	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. There are no such parameters in the monitoring plan.		
	throughout the crediting period?	(iii) Data and parameters that are to be monitored throughout the crediting period (refer to PDD, Sections D.1, D.1.1.1, D.1.1.3, D.1.3.1).		
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	Yes, the methods used and data collection frequency and recording are clearly defined in the monitoring plan.		OK
36 (f)	Does the monitoring plan elaborate 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?	The monitoring plan elaborated on all algorithms and formulae used for the estimation of baseline and project emissions. Conclusion is pending a response to CARs 14, 17, 18 and 19.	Pending	OK
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	The underlying rationale for the formulae is explained as appropriate.		OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Consistent variables, equation formats, subscripts are used.		OK
36 (f) (iii)	Are all equations numbered?	All formulae are numbered.		OK
36 (f) (iv)	Are all variables, with units indicated defined?	Yes.		OK



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DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Conclusion is pending a response to CARs 14, 17, 18 and 19.	Pending	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	N/A		N/A
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	Conclusion is pending a response to CAR 14.	Pending	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	There are no parts of the algorithms or formulae that are not self- evident in PDD.		OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Yes, the monitoring is in line with current operational routines.		OK
36 (f) (vii)	Are references provided as necessary?	Yes, all references are provided.		OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	Conclusion is pending a response to CARs 14, 18.		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?	Conclusion is pending a response to CAR 18.		OK
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?	Uncertainty level of data is defined in Section D.2 as low.		OK



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DVM Paragraph	Check Item	Initial finding		Final Concl.
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?	rd relevant Russian Federation environmental regulations. of as		OK
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?			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?	te, on		OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?			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?	the OMK.		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	These data are provided in the PDD, Sections D.1.1.1, D.1.1.3.		OK



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DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	from other sources but not including data that are calculated with equations?			
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?	CAR 20. This requirement is incorrectly reproduced in the PDD Section D.3.		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		OK
	/I methodology approach only_Paragraphs 38(a) –			
	ooth JI specific approach and approved CDM meth	odology approach_Paragraph 39_Not applicable		
Leakage JI specific app	reach only			
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of	PDD describes an assessment of the potential leakage of the project.	Pending	OK
	leakage are to be calculated and which can be neglected?	Conclusion is pending a response to CARs 17 and 19.		
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	Yes.		OK
	// methodology approach only_Paragraph 41_Not a			
	emission reductions or enhancements of net remo	vals		
42	Does the PDD indicate which of the following approaches it chooses?	Assessment of emissions in the baseline scenario and in the project scenario is chosen.		OK



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DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	(a) Assessment of emissions or net removals in the baseline scenario and in the project scenario(b) Direct assessment of emission reductions			
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 (Section E.1); (b) Leakage (Section E.2); (c) Emissions for the baseline scenario (Section E.4); (d) Emission reductions adjusted by leakage (Section E.6).		ОК
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?			OK
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?	(a) N/Estimates in 43 are given: (i) Estimates in 43 are given on the periodic basis, from the beginning until the end of the crediting period, in tones of CO2 equivalent; (ii) Yes; (iii) On a source-by-source basis; (iv) For the only GHG CO2; (v) In tCO2e;	Pending	ОК



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DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	 (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? (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 	(b) The formulae used for calculating the estimates in 43 are consistent throughout the PDD, refer to CAR 07; (c) For calculating estimates in 43, key factors influencing the baseline emissions and the activity level of the project and the emissions associated with the project are taken into account, as appropriate; refer to CAR 07; (d) Data sources used for calculating the estimates in 43 are not clearly identified, reliable and transparent; refer to CAR 14; (e) Yes as regards natural gas emission factor and grid emission factor. (f) refer to CARs 14, 17, 18 and 19; (g) The estimates in 43 are consistent throughout the PDD; (h) Compliant.		



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DVM Paragraph	Check Item	Initial finding		Final Concl.
	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?			
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?	Yes.		OK
	// methodology approach only_Paragraphs 47(a) –	47(b)_Not applicable		
Environmenta	-			
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?	PDD Section E.1 lists documentation on the analysis of the environmental impacts of the project.		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?	the PDD reads that the Casting and Rolling Complex has all the necessary permits regarding the project's impact on the environment: - Permit for the release of hazardous pollutants into the atmospheric air No. 3608 as of 01/07/2010 from 01/07/2010 to		OK



DETERMINATION REPORT ON JI PROJECT

"Construction and implementation of the Casting and Rolling Complex for the production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation"

DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		 Conclusion of the state ecological expert commission as of 30/03/2004, approved by the order of the Chief of the Main Department of Natural Resources and Environmental Protection of the Nizhny Novgorod region No. 472-9 as of 30/03/2004. 		
		The project does not have any significant negative impacts on the environment. Furthermore, the project leads to a decrease of energy consumption and to a reduction of GHG emissions.		
		The project does not have any transboundary environmental impacts.		
Environmenta	l impacts			
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide:	PDD states that the Casting and Rolling Complex construction project has passed public consultations and received approval from the parties involved.	CAR 21	OK
	(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?	CAR 21. Please include in PDD a list of stakeholders from whom comments on the projects have been received including positive ones. Please describe the nature of the comments. Please describe whether and how the comments were addressed if need be.		

Determination regarding small-scale projects (additional elements for assessment)_Paragraphs 50 - 57_Not applicable Determination regarding land use, land-use change and forestry projects _Paragraphs 58 – 64(d)_Not applicable Determination regarding programmes of activities_Paragraphs 66 – 73_Not applicable



DETERMINATION REPORT ON JI PROJECT

 Table 2
 Resolution of Corrective Action and Clarification Requests

CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
CAR 01. Please provide evidence confirming the low energy intensity of the project in comparison with the industry: "Total energy consumption for rolled metal production in Casting and Rolling Complex is about 7 GJ/t while the industry average power consumption of rolled steel is about 22 GJ/t."		Response 1 The references to the used data for energy consumption for rolled metal production are provided in the section A of the PDD. Response 2 The Declaration OMK dated on 24/12/2003 is attached to the PDD. The total energy consumption for rolled metal production in Casting and Rolling Complex is reviewed taking into account consumption of energy for production of raw materials.	OMK dated on 24/12/2003 about construction of
CAR 02. Please provide reference to any event confirming the history of the JI component.	-	Response 1 The history of the project is detailed described in the section A.2, A.4.2 of the PDD and confirmed by relevant references.	Conclusion on Response 1 CAR 02 is closed based on due amendments made to the revised PDD and provided protocol of OMK meeting dated on 02/09/2011 confirming the history of the JI component.



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
CAR 03. Please provide reference to source confirming the geographical coordinates of the project.	-	Response 1 The reference confirmed the geographical coordinates of the project is provided in the section A.4.1.4 of the PDD.	Conclusion on Response 1 CAR 03 is closed based on due amendments made to the revised PDD.
CAR 04. Footer 8 does not give exact reference to	-	Response 1 The references to the Excel files is	Conclusion on Response 1
Excel file with initial data and calculation.		specified in the section A.4.3 and section E of the PDD.	CAR 04 is closed based on due amendments made to the revised PDD.
CAR 05. The project has no approval by Parties involved.	-	Response 1 The written project approval will be received from the Parties involved after the project determination by accredited independent entity (AIE). The corresponding information is provided in the section A.3 and A.5 of the PDD.	Pending
CAR 06. The status of the project approval by a Party	21	Response 1	Conclusion on Response 1
involved other than the host Party is not explained.		The Project is not currently approved by a Party involved other than the host Party. The corresponding information is provided in the section A.3 and A.5 of the PDD.	CAR 06 is closed based on due amendments made to the revised PDD.
CAR 07. Section B.1 does not provide a detailed theoretical description of the baseline in complete and	23	Response 1 The detailed theoretical description	Conclusion on Response 1



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
transparent manner as required by Guidelines for users of JI PDD Form Version 04.		of the baseline is provided in the section B.1 of the PDD.	CAR 07 is closed based on due amendments made to the revised PDD.
CAR 08. Please provide evidence that metallurgical works which are not incorporated into OMK (scenario 2) can offer the same level of quality of hot rolled flat products with the project scenario.	23	Response 1 All plausible future scenarios provide outputs with comparable quality. This issue is clarified in the section B.1 of the PDD and confirmed by some references. Response 2 The list of metallurgical works and their shares in the delivery of hot rolling products in plausible future scenario 2 is provided in the section B.1. and justified by relevant documents.	Conclusion on Response 1 Please provide and justify exact list of metallurgical plants for scenario 2 and their accepted shares in the delivery of hot rolling products for Vyksa Steel Works, Almetyevsk Pipe Plant and Trubodetal Works. Conclusion on Response 2 CAR 08 is closed based on due amendments based to the revised PDD.
CAR 09. Scenarios 3 and 4 do not make sense and are not plausible since, according to the PDD, no hot rolled flat products can be produced at OMK industrial facilities at the required quality and quantity.	23	Response 1 Scenarios 3 and 4 are excluded from the detailed consideration in section B.1 of the PDD as they don't provide to the hot rolled flat products production at the required quality and quantity in comparison to other plausible future scenarios.	Conclusion on Response 1 CAR 09 is closed based on due amendments made to the revised PDD.
CAR 10. The investment barrier lacks a due rationale	23	Response 1	Conclusion on Response 1



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
the more so the investments for the project were attracted. There is no clarity as to how difficult it was to attract these investments. Lending terms relate to financial rather than investment barrier. Reference to the facts which occurred after investment decision-making cannot serve evidence of the investment barrier. Please rework the subject or delete it.		The investment barrier is reworked in area of investment risk specification and exclusion from consideration the investment change during the project implementation.	CAR 10 is closed based on due amendments made to the revised PDD.
CAR 11 . Please justify how the JI status of the project would alleviate the impact of the technological barrier related to availability of scrap.		Response 1 The clarification of how the JI status of the project would alleviate the impact of the technological barrier related to availability of scrap is presented in the section B.2 of the PDD.	Conclusion on Response 1 It is not clear because in accordance with Section A.4.2 the project activity does not include scrap collection. Please rework the subject or delete it.
		Response 2 The section A.4.2 is completed with description of energy resources and raw materials supply to the Casting and Rolling Complex.	Conclusion on Response 2 CAR 11 is closed based on due amendments based to the revised PDD.
CAR 12. Availability of electric energy and natural gas shall be taken into account as other key factors affecting the baseline.	23	Response 1 The availability of electric energy and natural gas is considered in the section B.1 by analysis of technological barriers.	Conclusion on Response 1 CAR 12 is closed based on due amendments made to the revised PDD.



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
CAR 13. Please provide transparency as to accounting uncertainties and the used assumptions, including conservative ones.	23	Response 1 The baseline is established taking into account of uncertainties and using conservative assumptions as provided in the section B.1 of the PDD. Response 2 1. The value of emission factor for electricity consumption in baseline scenario is reviewed taking into account the geographical location of metallurgical works in the baseline scenario. 2. Carbon content of coke is determined for dry coke taking into account the average net calorific value of coke in Russia (table 3.5 of National inventory report, 2011). The value 0.847 tC/t is conservative that is confirmed by relevant studies. 3. The emission factor for the baseline scenario is reviewed and justified by IPCC data and other relevant sectoral studies.	 Conclusion on Response 1 Emission factor for electricity consumption in baseline scenario is 0.682 tCO2/MWh. Please justify conservativeness of this value taking into account list of metallurgical plant (refer to Conclusion on Response 1 for CAR 08). Carbon content for coke is 0.847 tC/t (initial data for baseline emission calculation). Please justify conservativeness of this value taking into account that comparable IPCC default value is 0.83 tC/t. Emission factor for hot rolling flat products in baseline scenario is 2.144 tCO2/t. Please justify conservativeness of this value taking into account that comparable IPCC default values for steel production (V3, Ch4_Metal_Industry, Table 4.1) are far lower. Conclusion on Response 2 Carbon content for coke is 0.861 tC/t (instead 0.847 tC/t) for emission factor calculation of pig iron and sinter production for "MMK" 2006. Please correct. Emission factor for lime production in



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
		Response 3 1. Carbon content for coke is corrected to 0.847 tC/t for MMK in 2006. 2. Emission factor for lime production is detailed described and justified based on independent review. 3. The shares of hot rolled metal production by metallurgical works are included in the baseline emission factor calculations. 4. The EAF steel production is included in the baseline emission factor calculations.	baseline scenario is 1.034 tCO2/t. Please justify conservativeness of this value taking into account that comparable IPCC default value is 0.75 (V3_2_Mineral_Industry, Table 2.4). 3. Please take into account list of metallurgical plants for scenario 2 and their shares in the delivery of hot rolling products for assessment of baseline emission factor calculation. 4. Please take into account for baseline emission factor calculation that in the beginning of 2006 OJSC MMK and OJSC Severstal major portion of EAF steel had being poured in continuous casting machine for slab production. These slabs are used for hot rolling of sheet products. Conclusion on Response 3 CAR 13 is closed based on due amendments made to the revised PDD.
CAR 14. There is a lack of transparency as to the theoretical description of the baseline emission factor which should be based on concrete industry data.	23	Response 1 The baseline emission factor is detailed described and justified in the attached review "Construction and implementation of the Casting and Rolling Complex for the	Conclusion on Response 1 Please provide evidence of used initial data and transparent calculation including intermediate results for estimation of baseline emission factor.



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
		production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation". The corresponding information is provided in the PDD. Response 2	Conclusion on Response 2 CAR 14 is closed based on provided evidences of used initial data and transparent calculations.
		Initial data and calculations of baseline emission factor are attached to the PDD in Excel files.	
CAR 15. Financial barrier analysis is incomplete without taking into account uncertainties and conservative assumptions through sensitivity analysis.	29(b)	Response 1 The sensitivity analysis is undertaken and presented in the section B.1 of the PDD.	Conclusion on Response 1 Please provide evidence of initial data used financial barrier analysis.
		Response 2 The initial data for financial barrier analysis are stated in the business plan of the project. The business plan is attached to the PDD.	Conclusion on Response 2 CAR 15 is closed based on provided evidences of initial data used for financial barrier analysis.
CAR 16. Please indicate what name of "electricity system" of the Russian electricity grid included in the project boundary.	32(a)	Response 1 The project is connected to the Electricity system IPS Volga. The necessary clarifications are provided in the section D.1.1.1 and	Conclusion on Response 1 CAR 16 is closed based on due amendments made to the revised PDD.



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
CAR 17. Please justify the exclusion of steel scrap, limestone and fuel (natural gas) from consideration as sources of greenhouse gas emissions during leakage assessment.	32(c)	in the Annex 3 of the PDD. Response 1 The leakage of steel scrap, limestone and fuel (natural gas) can be considered as negligible as stated in the section B.3.	Conclusion on Response 1 CAR 17 is closed based on due amendments made to the revised PDD.
CAR 18. Please justify conservativeness of values for parameters which are determined as constants for the whole monitoring period such as: - CO2 emission factor from natural gas combustion; - carbon content in steel scrap; - carbon content in finished hot rolled products; - carbon content in pig iron; - carbon content in hot briquetted iron; - carbon content in electrodes; - carbon content in other carbonaceous materials; - carbon content in limestone; - CO2 emission factor for hot rolled products production at Russian metallurgical plants; Identification of values for these parameters can be undertaken based on actual data.	36(a)	Response 1 The conservativeness of values for parameters which are determined as constants for the whole monitoring period is demonstrated based on actual and reference data in the Annex 3 of the PDD. Response 2 1. The monitoring fixed parameters stated in the Annex 3 of the PDD are reviewed based on actual data of Casting and Rolling Complex. 2. The justification of the carbon content in the hot rolled metal is provided in the Annex 3 of the PDD. 3. The recording frequency of parameters that are determined as constants is corrected in the section D.1.1.1, D.1.1.3, D.1.3.1.	 Conclusion on Response 1 Casting and Rolling Complex has incoming control of all delivered materials and has appropriate data of carbon contents. Please justify conservativeness of following values for parameters which are determined as constants: Carbonaceous materials- 0.950; Hot briquetted iron- 0.012; Steel scrap- 0.0025. Please include to Annex 3 and justify the carbon content for hot rolling products. It is not correct that values for parameters which are determined as constants shall be estimated monthly in the monitoring plan. Please correct. Emission factor of pig iron and hot briquetted iron productions for project activity are taken as IPCC default values. Please justify conservativeness of these values taking into



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
		4. The emission factors for pig iron production are reviewed taking into account that comparable values in baseline scenario. The emission factor for hot briquetted iron production is justified by attached calculations. 5. The value of CO2 emission factor for the project scenario is excluded from the fixed monitoring parameters provided in the Annex 3. This parameter is to be monitoring period as stated in the section D.1.1.1, D.1.1.2. The CO2 emission factor from natural gas combustion is determined taking into account the average net calorific value of natural gas in Russia (table 3.5 of National inventory report, 2011). Therefore the emissions calculated using the emission factor for baseline corresponds to the emissions determined in the Russian GHG inventory report.	account that comparable values in baseline scenario are based on methodology end-to-end assessment of GHG emissions. 5. CO2 emission factor from natural gas combustion for baseline scenario are higher (refer to report "Construction and implementation of the Casting and Rolling Complex for the production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian") than for project activity. Please justify it. Please provide to AIE technical report (electronic version) for 2010. Conclusion on Response 2 Limestone consumption in accordance with data of technical report (electronic version for 2010) differs from comparable in Excel file "!!2011-08-18_OMK_GHG Estimation_ver.03.1". Result of limestone consumption for 2010: Technical report - 175,737.236 t; Excel file - 158,795.182 t.



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
CAR 19. Electric losses from transportation of electric energy are not taken into account.	36(a)	The technical reports for 2010 are attached to the PDD. Response 3 Initial data for GHG emission calculations include data of limestone consumption in lime calcining furnace and in steel smelting furnace and doesn't include the separated limestone. The formula for limestone consumption determination is specified in the monitoring plan. Response 1 Electric losses from transportation of electric energy are taken into account by using of emission factor for the grid determined for Demand-Side. The detailed reference is stated in the Annex 3 of the PDD.	Please check initial data for GHG emission calculation. Conclusion on Response 3 CAR 18 is closed based on provided evidences of used initial data. Conclusion on Response 1 CAR 19 is closed based on due amendments made to the revised PDD.
CAR 20. This requirement is incorrectly reproduced in the PDD Section D.3.	36(m)	Response 1 The initial data to calculate the reduction of the GHG emissions and the results of the calculations will be archived at Direction of	Conclusion on Response 1 CAR 20 is closed based on due amendments made to the revised PDD.



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
		labor, industrial, environmental and civil safety during the crediting period and two years after the last transfer of ERUs for the project. This procedure is included in the elaborated monitoring plan.	
CAR 21. Please include in PDD a list of stakeholders from whom comments on the projects have been received including positive ones. Please describe the nature of the comments. Please describe whether and how the comments were addressed if need be.	49	Response 1 The information on stakeholders' comments on the project provided in the PDD is completed with stakeholders list and comments description.	Conclusion on Response 1 CAR 21 is closed based on due amendments made to the revised PDD.
CL 01. Please clarify if coke, coke breeze and lime dust are used during hot rolled production in Casting and Rolling Complex.	36(a)	Response 1 Coke and lime dust is used in Casting and Rolling Complex and included in the GHG calculation in the project scenario. The clarification is provided in the section D.1 of the PDD.	Conclusion on Response 1 CL 01 is closed based on due clarifications which are given during site-visit.
FAR 01. Please specify in the monitoring plan the procedures to be followed if expected data are unavailable.	36 (b) (iii)	Response 1 The monitoring plan (section D.3 of the PDD) is completed with procedures of data achieving if they are not available from the specified data sources. Response 2	Conclusion on Response 1 Please specify procedures to be followed if expected data are unavailable as result of failure of computer-aided information systems. Conclusion on Response 2



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CAR/CL	Ref. to checklist question in Table 1	Summary of project owner response	Determination team conclusion
		The procedures to be followed if expected data are unavailable are specified in the section D.3 of the PDD).	FAR will be closed after inspection of evidences in stage of verification.