JI DETERMINATION
PDD REPORT

CARBONTRUST LIMITED

"RECONSTRUCTION OF THE STEELMAKING PLANT AT THE IZHSTAL OAO, IZHEVSK, RUSSIA"

Report No: 8000407796 / 2012-234

Date: 2012-04-26

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Client: CARBONTRUST LIMITED	Client ref.: Jolanta Narmontaite
Summary:	☒ positive determination opinion ☐ negative determination opinion

TÜV NORD JI/CDM Certification Program (CP) was commissioned to carry out determination PDD of the project: "*Reconstruction of the steelmaking plant at the Izhstal OAO, Izhevsk, Russia* " with regard to the relevant requirements of the UNFCCC for JI project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords.

In the course of the pre-determination 7 Corrective Action Requests (CARs) and 1 Clarification Requests (CLs) were raised and successfully closed except for CAR A1. As the approval of the Host country will only be issued upon a positive determination opinion, this CAR will automatically be closed upon issuance of host country approval.

The review of the project design documentation and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The project is in line with all relevant host country criteria Russian Federation and all relevant UNFCCC requirements for JI. As the approval of the Host country will only be issued upon a positive determination opinion, this CAR will automatically be closed upon issuance of host country approval.
- The project additionality is sufficiently justified in the PDD.
- The monitoring plan is transparent and adequate.
- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of 519,251 tCO2e are most likely to be achieved in the period from 2010-10-29 to 2012-12-31."

Report No.: 8000407796	Subject Group: Climate Protection	
Report title: " Reconstruction of the steelmaking plant at the Izhstal OAO, Izhevsk, Russia "		
Work carried out bv: Mr. Evgeni Sud Mr. Anton Yarushin		
Final technical review by:	Local technical review by	
Date of this revision: 2012-04-26	Rev. No.:	Number of pages: 126

Indexing terms

Kyoto Protocol
JI Determination PDD

Abbreviations

BAU	Business as usual
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
ERU	Emission Reduction Unit
CO_2	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
CP	Certification Program
CL	Clarification Request
DFP	Designated Focal Point
FAR	Forward Action Request
EIA	Environmental Impact Assessment
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
NCV	Net Calorific Value of Fuel
PDD	Project Design Document
PP	Project participant
QC/QA	Quality control/Quality assurance
UNFCCC	United Nations Framework Convention on Climate Change

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1 OBJECTIVE / SCOPE

TÜV NORD JI/CDM Certification Program (CP) has carried out a determination PDD of the project

"Reconstruction of the steelmaking plant at the Izhstal OAO, Izhevsk, Russia "

with regard to the relevant requirements for JI project activities.

The determination is a requirement for all JI projects. The purpose is to have an independent third party assessment of the project design and in particular, the project's baseline, the monitoring plan (MP), the project's compliance with relevant UNFCCC JI Track 1 and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Determination is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emission reduction units (ERUs).

UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords.

2 GHG PROJECT DESCRIPTION

2.1 Project Characteristics

Essential data of the project is presented in the following Table 2-1.

Table 2-1: Project Characteristics

Item	Data		
Project title	*Reconstruction of the steelmaking plant at the Izhstal OAO, Izhevsk, Russia*		
Project size	☒ Large Scale ☐ Small Scale		
JI Procedure	☒ Track 1 ☐ Track 2 ☐ PoA		
Project Scope	☐	1	Energy Industries (renewable- /non-renewable sources)
	☐	2	Energy distribution
	☐	3	Energy demand
	☐	4	Manufacturing industries
	☐	5	Chemical industry
	☐	6	Construction
	☐	7	Transport
	☐	8	Mining/Mineral production
	☒	9	Metal production
	☐	10	Fugitive emissions from fuels (solid, oil and gas)
	☐	11	Fugitive emissions from production and consumption of halocarbons and hexafluoride
	☐	12	Solvents use
	☐	13	Waste handling and disposal
	☐	14	Land –use, land-use change and forestry
	☐	15	Agriculture
Applied Methodology	*JI Specific*		

Item	Data
Technical Area(s)	O (Metall production)
Crediting period	*3 years*
Start of crediting period	*2010-10-29*

2.2 Involved Parties and Project Participants

The following parties to the Kyoto Protocol and project participants are involved in this project activity (Table 2-2).

Table 2-2: Project Parties and project participants

Characteristic	Party	Project Participant
Host party	Russian Federation	Izhstal OAO
Other involved party	-	-

2.3 Project Location

The details of the project location are given in table 2-3:

Table 2-3: Project Location

No.	Project Location
Host Country	Russian Federation
Region:	Udmurt Republic
Project location address	Izhevsk
Geographical coordinates	56°50' latitude, 53°10' longitude

2.4 Technical Project Description

The project scenario includes reconstruction of the steelmaking plant and modernization of the rolling plant at Izhstal.

Reconstruction of the steelmaking plant is provided by introduction of new equipment for steel billets production in steelmaking plant #23: electric arc furnace (EAF-40), ladle furnace (LF-40), vacuum vessel and continuous casting machine (CCM). The production capacity of new manufacturing line is 400 thousand tons steel per year.

The modernization of rolling plant is implemented by construction in rolling plant #30 of new heating furnace, replacement of rolling mill stands, introduction of the process control system and a set of other activities.

The technical key data are provided in tables 2-4a and 2-4b below:

Table 2-4: Technical data of the project activity

Key parameters:	Project Activity
Equipment	rolling mill #250
Manufacturer:	STS (Italy)
Type	rolling mill #250;
Commissioning Date:	20.09.2011
Capacity	300,000.

Key parameters:	Project Activity
Equipment	Vacuum vessel
Manufacturer:	Tenova (Italy)
Type	chamber-type vacuum vessel
Commissioning Date:	04.03.2011
Capacity	Not specified by the contract

Key parameters:	Project Activity
Equipment	electric arc furnace (EAF-40)
Manufacturer:	Tenova (Italy)
Type	electric arc furnace (EAF-40)
Commissioning Date:	29.10.2010
Capacity	400,000

Key parameters:	Project Activity
Equipment	ladle-furnace (LF-40)
Manufacturer:	Tenova (Italy)
Type	ladle-furnace (LF-40)
Commissioning Date:	11.12.2010.
Capacity	400,000

Key parameters:	Project Activity
Equipment	blooms 3-strand radial-type continuous casting machine (CCM)
Manufacturer:	STS (Italy)
Type	blooms 3-strand radial-type continuous casting machine (CCM)
Commissioning Date:	14.06.2010
Capacity	300,000

3 METHODOLOGY AND DETERMINATION PDD SEQUENCE

3.1 Determination PDD Steps

The determination of the project consisted of the following steps:

- Contract review
- Appointment of team members and technical reviewers
- Publication of the project design document (PDD)
- A desk review of the PDD/PDD/ submitted by the client and additional supporting documents
- Determination planning,
- On-Site assessment,
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Draft determination reporting
- Resolution of corrective actions (if any)
- Final determination reporting
- Technical review
- Final approval of the determination.

The sequence of the determination is given in the table 3.1 below:

Table 3.1: Determination PDD sequence

Topic	Time
Assignment of determination	2012-03-12
Submission of PDD for global stakeholder commenting process	N/A[1]
On-site visit	2012-04-11
Draft reporting finalised	2012-04-13
Final reporting finalised	2012-04-26
Technical review on final reporting finalised	2012-04-25

3.2 Contract review

To assure that

- the project falls within the scopes for which accreditation is held,

[1] Not required according tot he Track 1 procedure oft he Host Country

- the necessary competences to carry out the determination PDD can be provided,
- Impartiality issues are clear and in line with the JI accreditation requirements

a contract review was carried out before the contract was signed.

3.3 Appointment of team members and technical reviewers

On the basis of a competence analysis and individual availabilities a determination team, consistent of one team leader and 1 additional team member, were appointed. Furthermore also the personnel for the technical review and the final approval were determined.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the table 3-2 below.

Table 3-2: Involved Personnel

	Name	Company	Function [1]	Qualification Status [2]	Scheme competence	Technical competence [4]	Host country Competence	Team Leading competence
☒ Mr. ☐ Ms.	Evgeni Sud	TN Cert Germany	TL	LA	☒	O	☒	☒
☒ Mr. ☐ Ms.	Anton Yarushin	Anton Yarushin	ETE	ETE	☐	-	☒	☐
☒ Mr. ☐ Ms.	Rainer Winter	TN Cert Germany	FA TR [3]	SA	☒	O	☐	☒

[1] TL: Team Leader; TM: Team Member, TR: Technical review; FA: Final approval
[2] GHG Auditor Status: A: Assessor; E: Expert; SA: Senior Assessor; T: Trainee; TE: Technical Expert
[3] No team member
[4] As per S01-MU03 or S01-VA070 A2 (such as A, B, C.....)

3.4 Consideration of Public Stakeholder Comments

Acc. to the modalities and procedures the draft PDD, as received from the project participants, has been made publicly available on the dedicated UNFCCC JI website prior to the determination activity commenced. Stakeholders have been invited to comment on the PDD within the 30 days public commenting period.

In case comments were received, they are taken into account during the determination process. The comments and the discussion of the same are documented in annex 5 of this report.

3.5 Determination PDD Protocol

In order to ensure consideration of all relevant assessment criteria, a determination protocol is used. The protocol shows, in a transparent manner, criteria and requirements, means of determination and the results of the pre-determination the identified criteria. The determination protocol reflects the generic JI requirements each JI project has to meet as well as project specific issues as applicable. The determination protocol serves the following purposes:

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

The determination protocol as described in Figure 1.

Determination Protocol Table A-1: Requirement checklist						
No.	***DVM[2] paragraph / Checklist Item*** *(incl. guidance for the determination team)*	***Initial Finding*** *(Means and results of assessment)*	***Ref.***	***Action requested to project participant*** *(CAR, CL, FAR)*	***Review of PP´s action***	***Conclusion***
Number of the checklist item	*The section gives a reference to the relevant paragraph of the DVM. The checklist items are linked to the various requirements the project should meet. The checklist is organised in various sections. Each section is then further subdivided as per the requirements of the topic and the individual project*	*The section is used to elaborate and discuss the checklist item in detail. It includes the initial assessment of the determination team and how the assessment was carried out.*	*Gives reference to the information source on which the assessment is based on.*	*Assessment based on evidence provided if the criterion is not fulfilled a CAR, CL or FAR (details of each finding are elaborated in chapter 4) is raised otherwise no action is requested. The assessment refers to the draft determination stage.*	*Assessment based on the project participant action in response to the raised CAR, CL or FAR (details of each finding are elaborated in chapter 4). The assessment refers to the final determination stage.*	*Final assessment at the final determination stage is given.*

[2] JISC 19 Annex 4

	activity.					

Figure 1: Determination protocol tables

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

3.6 Review of Documents

The published PDD (version 1) and supporting background documents related to the project design and baseline were reviewed.

Furthermore, the determination team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

3.7 Follow-up Interviews

The determination team has carried out interviews in order to assess the information included in the project documentation and to gain additional information regarding the compliance of the project with the relevant criteria applicable for JI.

The main topics of the interviews are summarized in table 3-3.

Table 3-3: Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
Project proponent 1. Projects & Operations Personnel of Izhstal OAO 2. Consultant, CJSC "National Carbon Sequestration Foundation"	- Chronological description of the project activity with documents of key steps of the implementation. - Current status of plant design - Technical details of the project realization, project feasibility, designing, operational life time, monitoring of the project - Host Country Approval - Approval procedures and status - Monitoring and measurement equipment and system. - Financial aspects - Crediting period - Project activity starting date - ERU allocation / ownership - Baseline study assumptions - Additionality - Monitoring - Analysis of local stakeholder consultation - Roles & responsibilities of the project participants w.r.t. project management, monitoring and reporting - National Legislation - Editorial issues of the PDD

A comprehensive list of all interviewed persons is part of section: 7 References.

3.8 Project comparison

The determination team has compared the proposed JI project activity with similar projects or technology that have similar or comparable characteristics and with similar projects in the host country in order to achieve additional information esp. regarding:

- Project technology
- Additionality issues
- Methodological issues
- Reasons for reviews, requests for reviews and rejections within the JI registration process.

3.9 Resolution of Clarification and Corrective Action Requests

3.9.1 Definition

A **Corrective Action Request (CAR)** will be established where:

- mistakes have been made in assumptions, application of the methodology or the project documentation which will have a direct influence on the project results,
- the requirements deemed relevant for determination PDD of the project with certain characteristics have not been met or
- there is a risk that the project would not be registered by the UNFCCC JISC or that emission reductions would not be able to be verified during determination ERU.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to project implementation should be reviewed during the first determination ERU.

3.9.2 Draft Determination PDD

After reviewing all relevant documents and taken all other relevant information into account, the determination team issues all findings in the course of a draft determination report and hands this report over to the project proponent in order to respond on the issues raised and to revise the project documentation accordingly.

3.9.3 Final Determination PDD

The final determination starts after issuance of the proposed corrective action (CA) of the CARs CLs and FARs by the project proponent. The project proponent has to reply on those and the requests are "closed out" by the determination team in case the response is assessed as sufficient. In case of raised FARs the project proponent has to respond on this, identifying the necessary actions to ensure that the topics raised in this finding are likely to be resolved at the latest during the first determination ERU. The determination team has to assess whether the proposed action is adequate or not.

In case the findings from CARs and CLs cannot be resolved by the project proponent or the proposed action related to the FARs raised cannot be assessed as adequate, no positive determination opinion can be issued by the determination team.

The CAR(s) / CL(s) / FAR(s) are documented in chapter 4.

3.10 Technical review

Before submission of the final determination report a technical review of the whole determination procedure is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the determination team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the determination opinion and the topic specific assessments as prepared by the determination team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

3.11 Final approval

After successful technical review of the final report an overall (esp. procedural) assessment of the complete determination will be carried out by a senior assessor located in the accredited premises of TÜV NORD.

Only after this step the request for the Host Country Approval and/or registration can be started (in case of a positive determination opinion).

4 DETERMINATION FINDINGS

In the following table the findings from the desk review of the published PDD, visits, interviews and supporting documents are summarised**:**

Table 4-1: Summary of CARs, CLs and FARs issued

Determination topic [1)]	No. of CAR	No. of CL	No. of FAR
General description of project activity (A) - Project boundaries - Participation requirements - Technology to be employed - Contribution to sustainable development	2	-	-
Project baseline (B) - Baseline Methodology - Baseline scenario determination - Additionality determination - Calculation of GHG emission reductions Project emissions Baseline emissions - Leakage	1	-	-
Duration of the Project / Crediting Period (C)	-	-	-
Monitoring Methodology (D) - Monitoring of Project emissions Baseline emissions Leakage Sustainable development indicators / environmental impacts Project management planning	2	1	-
Estimation of greenhouse gas emission reductions (E)	1	-	-
Environnemental impacts (F)	1	-	-
Stakeholder Comments (G)	-	-	-
SUM	**7**	**1**	**-**

[1)] The letters in brackets refer to the determination protocol

The following tables include all raised CARs, CLs and FARs. For an in depth evaluation of all determination items it should be referred to the determination protocols (see Annex 1).

Finding:	**A1**		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Approvals of all Parties involved are pending.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The written project approval will be received from the Parties involved after the project determination by accredited independent entity (AIE). According to the Regulations "On Realization of Article 6 of Kyoto Protocol to United Nations Framework Convention on Climate Change" approved by the Government Decree № 780 dated on 15.09.2011 the project shall be approved following the positive determination of the project by an AIE. The corresponding information is provided in the section A.3 and A.5 of the PDD.		
AIE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and AIE assessments (#2, #3, etc.) shall be added.*	This is correct because a positive determination opinion is prerequisite for applying Host Country Approval.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic determination ERU ☐ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The CAR / CL is closed, ☐ The CAR / CL could **not** be closed.		

Finding:	**A2**		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	A justification of the prior consideration of JI was not provided. It was not demonstrated that continuous and real actions was taken to secure JI status.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The JI component of the project is summarized in the attached Reference of implementation stages of JI Project.		

Finding:	A2
AIE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and AIE assessments (#2, #3, etc.) shall be added.*	The information on justification of the prior consideration of JI and that continuous action were taken to secure JI status is provided in the Summary table in the PDD. The appropriate revision was introduced in the revised PDD.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic determination ERU ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The CAR / CL is closed, ☐ The CAR / CL could **not** be closed.

Finding:	B1		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The conservativeness of CO_2 emission factor for steel billets production used by rolled metal manufacture in Izhstal in the baseline scenario is not justified.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Justification of CO2 emission factor for steel billets production used by rolled metal manufacture in Izhstal in the baseline scenario is provided in the section B.1 and Annex 3 of the PDD.		
AIE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and AIE assessments (#2, #3, etc.) shall be added.*	In response to the finding the PP has provide a justification of the CO_2 emission factor for steel billets production used by rolled metal manufacture in Izhstal in the baseline scenario. The applied approach was checked and found appropriate. Similar approach was used in other positively determined JI projects.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic determination ERU ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The CAR / CL is closed, ☐ The CAR / CL could **not** be closed.		

Finding:	D1		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The values of the parameters which are determined once and are taken as constants for the whole monitoring period are to be justified in respect of conservativeness and applicability for baseline, project and leakages GHG monitoring.		

Finding:	D1
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The justification of the parameters choice which are determined once and are taken as constants for the whole monitoring period is provided in the Annex 3 "Monitoring plan".
AIE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and AIE assessments (#2, #3, etc.) shall be added.*	As evident from the annex 3 of the PDD the values of the parameters which are determined once and remain fixed during the crediting period were duly justified. The most part of the values was taken directly from the IPCC guidelines, which is an internationally accepted source. For calculated values – the relevant formulae and input values were provided. Few further values were taken from third party independent and reliable data sources.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic determination ERU ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The CAR / CL is closed, ☐ The CAR / CL could **not** be closed.

Finding:	D2		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Please clarify procedures used in case of malfunction of the relevant measurement devices.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The procedures used in case of malfunction of the relevant measurement devices are clarified in the section D.3 of the PDD. If the primary sources of monitoring parameters' data (results of measurements and calculations) are not available during the current monitoring period, the monitoring parameters shall be registered according to the redundant measuring instruments installed inside or outside of the project framework (applicable for the parameters that are weighed) or shall be calculated according to the established procedure and approved methodologies for recording of energy resources consumption (Order #47 of Head power engineer of Izhstal about energy consumption recoding dated on 11.04.2012).		
AIE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and AIE assessments (#2, #3, etc.) shall be added.*	Section D.3 of the PDD describes procedures used in case of malfunction of the relevant measurement devices. The described procedures were reviewed and found appropriate.		

Finding:	D2
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic determination ERU ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The CAR / CL is closed, ☐ The CAR / CL could **not** be closed.

Finding:	D3		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Please indicate the relevant data sources of the monitoring parameters stated in the section D.1.1 of the PDD according to the reports provided during the site visit on Izhstal for review of GHG emissions calculations.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The relevant data sources are provided for the monitoring parameters stated in the section D.1.1 of the PDD.		
AIE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and AIE assessments (#2, #3, etc.) shall be added.*	In response to the finding the PP has provided the required information. The data sources as indicated in the in the section D.1.1 of the PDD were checked and found appropriate.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic determination ERU ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The CAR / CL is closed, ☐ The CAR / CL could **not** be closed.		

Finding:	E1		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The calculations of GHG emissions and GHG emissions reductions are to be corrected by using of the actual data for electrodes, oxygen and electricity consumption in Steelmaking plant #23.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The calculations of GHG emissions and GHG emissions reductions are corrected. The calculation is attached in the Excel file: 2012-04-23_GHG Estimation_Izhstal_ver.02.xlsx. The results of calculation are provided in the section E of the PDD.		
AIE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and AIE assessments (#2, #3, etc.) shall be added.*	The calculation of GHG emissions and GHG emissions reductions was duly corrected by using of the actual data. The revised calculation was checked and found appropriate.		

Finding:	E1
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic determination ERU ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The CAR / CL is closed, ☐ The CAR / CL could **not** be closed.

Finding:	F1		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The actual Limits for waste disposal are not provided in the section F.1 of the PDD.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The actual Limits are Limits for waste disposal dated on 01.04.2011 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 01.04.2011 to 01.07.2012. The corresponding information is provided in the section F.1.		
AIE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and AIE assessments (#2, #3, etc.) shall be added.*	The actual Limits for waste disposal were provided in the section F.1 of the PDD and supported by the corresponding evidence..		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic determination ERU ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The CAR / CL is closed, ☐ The CAR / CL could **not** be closed.		

5 DETERMINATION ASSESSMENT SUMMARY

5.1 General Description of the Project Activity

5.1.1 Participation

LOA

Letter of Approval (LoA) from all Parties involved are pending. As the LoA of the Host country will only be issued upon a positive determination opinion, this CAR will automatically be closed upon issuance of host country approval.

Project Participants

Party involved is Russian Federation acting as a Host Party. Project Participant of the Host Country is "Izhstal OAO.

5.1.2 PDD editorial Aspects

Project Design Document Form Version 01 – in effect as of 15 June 2006 – has been used. This is the latest version of the PDD form. Guidelines for users of the JI PDD form Version 04 have been used for completing the PDD. These Guidelines should be taken into account for all PDDs to be published from 1 January 2009.

5.1.3 Technology to be employed

The project scenario includes reconstruction of the steelmaking plant and modernization of the rolling plant at Izhstal.

Reconstruction of the steelmaking plant is provided by introduction of new equipment for steel billets production in steelmaking plant #23: electric arc furnace (EAF-40), ladle furnace (LF-40), vacuum vessel and continuous casting machine (CCM). The production capacity of new manufacturing line is 400 thousand tons steel per year.

The modernization of rolling plant is implemented by construction in rolling plant #30 of new heating furnace, replacement of rolling mill stands, introduction of the process control system and a set of other activities.

The description of the project activity is considered to be accurate, complete, presented in a detailed manner and in line with provided evidences.

The implementation of the project activity could be evidenced by various protocols and acts that traced particular stages of the project implementation and recorded milestones of the project implementation. The determination team has checked all provided evidences/CR1/ Based on this the description of the project implementation as described in the PDD could be verified.

5.1.4 Small Scale Projects

No applicable because it is a large scale project

5.2 Project Baseline, Additionality and Monitoring Plan

5.2.1 Application of the Methodology

The PDD explicitly indicates that the JI specific approach was used to identify the baseline and justify the additionality.

The PDD provide a detailed theoretical description in a complete and transparent manner. In particular it indicates that JI specific approach is based on the Guidance on criteria for baseline setting and monitoring" (Version 03) and Appendix B to Decision 9/CMP.1. The version 03 of the Guidance on criteria for baseline setting and monitoring" is the latest version that was issued within the JISC 26 meeting.

5.2.2 Project Boundary

All equipment used within the project activity has been listed in the PDD including the information about its purpose and the technical specification. The project boundary is clearly described in words and a visualisation of the physical project boundary as well as a table defining all significant GHG gases has been included in the PDD.

Within the on-site assessment the determination team was able to confirm that project was implemented as described in the PDD. The relevant equipment was installed. The technical data of the installed equipment correspond to the information provided in the PDD.

5.2.3 Baseline Identification

The procedure to arrive at the baseline scenario is in line with the applied methodology. All plausible alternatives have been identified.

Alternatives

The PDD includes an analysis of all realistic alternatives to the project scenario. The following scenarios were identified:

- **Plausible future scenario 1**: Continuation of the current situation. Operation of steelmaking and rolling plants at the Izhstal without reconstruction and modernization.
- **Plausible future scenario 2:** Project implementation without registration as a JI project. Reconstruction of the steelmaking plant and modernization of the rolling plant at the Izhstal.
- **Plausible future scenario 3:** Output of inefficient steelmaking furnaces at the Izhstal. Production of rolled products at the Izhstal by using the steel billets supplied from the outside.

Key factor analysis (Barrier analysis)

In order to identify the most plausible alternative the PP performed key factor analysis, which is similar to the barrier analysis as per the approved CDM tools/TA//CT/.

In the course of the key factor analysis the PP demonstrated that project activity faces different barriers related to the financial viability. In essence it was demonstrated that the project activity faces the investment barrier (lack of financing resources) and the financial barrier (low financial attractiveness).

All scenarios were assessed within the investment analysis. It was duly demonstrated that project activity (scenario 2) is financially not attractive, i.e. scenario 1 was the option with the best financial indicator, i.e. with the lowest levelized cost of rolled metal, rubles / tonne of this scenario.

Taking this into account it was reasonably concluded that the project activity is less attractive as compared to the other options and scenario 3 is the most attractive one.

Investment analysis

Investment comparison analysis was performed as a part of the key factor analysis shows Please refer to the comment above.

5.2.4 Additionality Determination

Consideration of JI in decision making (if project start before determination)

The starting date is in line with JI glossary of terms. Based on provided evidences it could be concluded that JI was considered at the time of the decision making. The corresponding evidences demonstrate that without benefits out of JI the project would be not financial viable. Furthermore the impact of JI has been calculated and it could be demonstrated that benefits out of JI would make the project financial attractive. The consideration of JI has been assessed as serious.

The description of actions and the corresponding assessment of the determination team for the considered project activity is presented in the table below:

Year	Description of action provided by Project participant	Assessment by the determination team
2006 (management decision)	**Action:** Decision of project implementation using the Kyoto Protocol mechanism. **Evidence:** Protocol of meeting of technical council dated on 29.09.2006; Concept of the JSC	As result of the meeting the decision to go ahead with project activity was taken by the responsible managers within this meeting. This is evident from the protocol of this meeting/PTS-06/. Within the meeting it was discussed to take into account additional

	Izhstal development in 2007-2011; Protocol of meeting by the general director of CJSC "UC Mechel" dated on 20.12.2006. **Justification of the evidence:** That was a management decision to start the project measures as a JI activity.	benefits from JI registration. It could be confirmed that project participant was aware of the JI prior to the start of implementation/PTS-06/. As explained in the section B of the PDD the project activity does not result in sufficient economic or financial benefits. Therefore the determination team agrees that the benefits from ERUs were a decisive factor in the decision to proceed with the project. The protocol clearly lists the personnel attended, the topics discussed and decision made. The protocol of the meeting is prepared in appropriate manner and the decision to go ahead with the project is signed by responsible managers. Therefore the provided evidence was assessed to be a reliable source. The provided evidence is in line with requirements of the "*Guidelines on the demonstration and assessment of prior consideration of the CDM"* as per EB 62 annex 13. As a result the determination team is of the opinion that it could be duly demonstrated that the JI was seriously considered in the decision to implement the project activity. It was concluded that justification of prior consideration is in line with the requirements of the "*Guidelines on the demonstration and assessment of prior consideration of the CDM"* as per EB 62 annex 13.
2007-2008	**Action:** Consultation with the consulting companies in area of joint implementation in Russia **Evidence**: Confirmed by the letters between PP and consulting companies in 2007-	The PP provided documented evidences like emails, requests for proposals and other communication proofs, which clearly demonstrate that in the time period between 2007 and 2008 the PP has contact JI consultants and/or Carbon buyers. As evident from the provided documents

	2008	the communication between the PP and consultants was related to PDD development as well as the purchase of the ERUs from the project activity. The information given in the letters deemed to be reliable. Therefore it was concluded that that real actions were taken to secure JI status of the project.
2009-2010	**Action:** Organization and holding of a tender for Izhstal projects elaboration under the joint implementation mechanism; **Evidence** • Agency contract between Mechel JSC and Izhstal #085/M-09-2457sn/A dated on 01.07.2009 about tender organization. **Evidence** • Letter #M/0350/MC/06 dated on 26.03.2010 about agency contract implementation	The PP provided documented evidences clearly evidence that in the time period between 2009 and 2010 the PP has selected the JI consultant. In doing so, the PP organized a tender and received several proposals from JI consultants. This is evident from various emails, requests for proposals and other communication proofs/PTS-09/. Most important are the • Agency contract between Mechel JSC and Izhstal #085/M-09-2457sn/A dated on 01.07.2009 about tender organization; • Letter #M/0350/MC/06 dated on 26.03.2010 about agency contract implementation.. These two documents clearly demonstrate that in the time period between 2009 and 2010 the PP has contacted JI consultants and/or Carbon buyers. Therefore it was concluded that that real actions were taken to secure JI status of the project.
2011	**Action:** Signing of a contract with a consulting company for the projects elaboration under the joint implementation	The contract/PTS-11/ signed with JI consulting company is a clear evidence that real action was taken to secure JI status.

	mechanism. **Evidence:** Contract #49113004 dated on 05.09.2011 about project design documentation elaboration	
2012		In 2012 TÜV Nord was requested to submit a commercial offer for determination services for this project activity.

As a result it could be concluded that project participant was able to demonstrate that continuing and real actions were taken to secure JI status for the project in parallel with its implementation in accordance with provisions of EB 62 annex 13. The explanation of each action was supported by corresponding documented evidence. All explanations and justifications given to explain each particular action were found plausible, in line with the information given in the corresponding evidence and in line with the development of JI approval process in Russia.

As per the EB 62 annex 13 "*In validating proposed CDM project activities where there is less than 2 years of a gap between the documented evidence the DOE shall conclude that continuing and real actions were taken to secure CDM status for the project activity"*. As evident from the table above, documented evidences were provided for every year after the management decision. Therefore the determination team concluded that continuing and real actions were taken to secure JI status for the project activity.

Application of methodology / methodological tools

The additionality was justified following the JI specific approach elaborated in the PDD.

Alternatives

The PDD includes an analysis of all realistic alternatives to the project scenario. The following scenarios were identified:

- **Plausible future scenario 1**: Continuation of the current situation. Operation of steelmaking and rolling plants at the Izhstal without reconstruction and modernization.
- **Plausible future scenario 2:** Project implementation without registration as a JI project. Reconstruction of the steelmaking plant and modernization of the rolling plant at the Izhstal.
- **Plausible future scenario 3:** Output of inefficient steelmaking furnaces at the Izhstal. Production of rolled products at the Izhstal by using the steel billets supplied from the outside.

Investment analysis

Investment analysis was carried out within the baseline identification as a part of the key factor analysis. The project scenario is not the most attractive alternative or economically feasible without benefits from ERU sales. The latest version of the Guidance on the Assessment of Investment Analysis was applied in the assessment issued by CDM EB. The calculation approach is correct. All parameters Are assessed to be plausible. The benchmark chosen is appropriate. Please refer to annex 3 of this report.

Barrier analysis

Please refer to the comment under baseline identification.

Common practice analysis

Finally, the PP performed common practice analysis. The geographical region (Russia) is appropriate. The technology excluding JI projects is not widely observed in the region.

Summary

In the course of the determination it could be concluded that the baseline scenario has been appropriately elaborated and additionality has been appropriately justified.

5.2.5 Monitoring Methodology

The monitoring plan is elaborated in detail in section D of the PDD. The PDD clearly states that JI specific approach was used to elaborate the monitoring plan. The applied approach is based on the requirements of the "Guidance on criteria for baseline and monitoring" version 03. This is the most recent version and hence appropriate.

The determination team has crosschecked the applied approach found it appropriate Also the fixed parameters and variables were found consistent with the IPCC data and further third party sources.

5.2.6 Monitoring Plan

The monitoring plan covers all monitoring parameters given in the elaborated JI specific monitoring methodology. The monitoring plan was already successfully implemented.

5.2.7 Project Management Planning

The project management planning is appropriate for the purpose of the projects monitoring. As already noted the monitoring plan was already successfully implemented and is duly performed by PP.

It is important to note that PP established a special metrological department, which is responsible for proper operation of all measurement devices. This division includes a laboratory, which has accreditation to perform calibration (and exchange) of the

measurement equipment. It could be confirmed that all measurement devices are under control of this metrological division. Therefore it was concluded that PP quality control measures are duly implemented at the plant.

5.2.8 Calculation of GHG Emission Reductions

The calculation done is as per elaborated algorithm. All data not to be monitored is correct. The values for the monitoring parameters are plausible. The estimated emission reductions are plausible and conservative. It should be noted that for the years 2010-2011 the actual figures were used. For the year 2012 the estimation is based on the historical figures.

5.2.9 Crediting Period

The choice of the crediting period is unambiguously given in entire PDD. The crediting period starting date 2010-10-29 is appropriate.

5.2.10 Environmental Impacts

The project documentation contains an analysis of environmental impacts. An EIA is required from host country. Therefore the EIA was carried out in accordance with the requirement of host country.

5.2.11 Comments by Local Stakeholders

All relevant local stakeholders have been invited to comment on the project. The stakeholder consultation process was assessed as appropriate and in line with the Host country regulation.

6 DETERMINATION OPINION

TÜV NORD JI/CDM Certification Program (CP) was commissioned to carry out determination PDD of the project: "*Reconstruction of the steelmaking plant at the Izhstal OAO, Izhevsk, Russia*" with regard to the relevant requirements of the UNFCCC for JI project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords.

In the course of the pre-determination 7 Corrective Action Requests (CARs) and 1 Clarification Requests (CLs) were raised and successfully closed except for CAR A1. As the approval of the Host country will only be issued upon a positive determination opinion, this CAR will automatically be closed upon issuance of host country approval.

The review of the project design documentation and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The project is in line with all relevant host country criteria Russian Federation and all relevant UNFCCC requirements for JI. As the approval of the Host country will only be issued upon a positive determination opinion, this CAR will automatically be closed upon issuance of host country approval.
- The project additionality is sufficiently justified in the PDD.
- The monitoring plan is transparent and adequate.
- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of 519,251 tCO2e are most likely to be achieved in the period from 2010-10-29 to 2012-12-31."

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the determination PDD.

Essen 2012-04-26

Evgeni Sud
TÜV NORD JI/CDM CP
Determination Team Leader

Essen 2012-04-26

Rainer Winter
TÜV NORD JI/CDM CP
Final Approval

7 REFERENCES

Table 7-1: Documents provided by the project participant

Reference	Document
AE	Plants internal reports that evidence the production and consumption data in the time period between 2006 and 2011
ATT	Accreditation certificates of the laboratory for carrying out calibration works № POCC.RU.0001.511193 dated 29.10.2009 including the authorization for performing calibration works
BFC	Estimates of the construction costs made by "Chelyabgipromez"
BL	Data provided by Chermetinformacia about raw materials, fuel and energy resources consumption for steel production at ChMK
CR	Provisional Acceptance Certificates that evidence the implementation of the project measures and the progress of the works: • Certificate of provisional acceptance dated 29.10.2010; • Order of the commissioning of the reconstructed facilities of EAF-23 (№ 779 of 26.12.2011) • Act on Acceptance of reconstructed, modernized plant and equipment • The act of the end of installation of the equipment manufactured by Siemens on 08/27/2011 • Order number 51B on the postponement of investment projects in companies of the "Mechel" group • Conclusion of federal examination 0291-09/KGE regarding the capital construction object (EAF number 23) • Conclusion of the compliance with relevant safety requirements of the mill 250 № 46
CSTR	Production expenses -the planned and actual expenses used within the investment decision

Reference	Document
EIA	Materials on the environmental impact assessment of the project are presented in the project documentation: • Reconstruction of steelmaking plant #23 Izhstal. Volume 18.1. Environmental protection. //CJSC "Kazan Giproniiaviaprom", 2008; • Modernization (technical re-equipment) of rolling mill #250 Izhstal. Volume 18. Environmental protection measures. // CJSC "Kazan Giproniiaviaprom", 2010.
EIA1	• Regulations regarding the assessment of environmental impacts (planned commercial and other activities in the Russian Federation", approved by order of the State Commission for the Protection of the Environment of the Russian Federation № 372 dated May 16, 2000
EIA3	Documents confirming the compliance with the State Expert review: • Positive conclusion of the State Expert Review #0291-09/KGE-0535/04 for project "Izhstal. Reconstruction of rolling plant #23" issued by FSI GLAVGOSEXPERTIZA OF RUSSIA dated 14.08.2009; • Conclusion of industrial safety expertise #46 PD-04259 for project documentation of technical reequipment of dangerous facility of metallurgical plant: Work design documentation "Modernization (technical re-equipment) of rolling mill #250 Izhstal" issued by CJSC "Engineering and Consulting Centre for the operation and safety of technical facilities "Alton" dated on 29.08.2011.
IF	Justification of Investments prepared by JSC "Chelyabgipromez"
Inv	Investment comparison analysis carried out in Excel calculation spreadsheet
ISO	ISO9001:2008 TUV SUD # 12 100 37118 от 2012-11-12
LMD	List of measurement devices of the plant including the calibration schedules of the applied equipment

Reference	Document
MIf	Order № 53 "department chief power engineering," About the organization of registration for emergency situations on 04/11/2012
ORD	Proposals, Explanatory Notes, the conclusion of services proved by specialists of Mechel-Company"
PDD	• Project Design Document: "Reconstruction of the steelmaking plant at the Izhstal OAO, Izhevsk, Russia", version 01 dated 12.03.2012 • Project Design Document: "Reconstruction of the steelmaking plant at the Izhstal OAO, Izhevsk, Russia", version 03.1 dated 24.04.2012
PDV	Compliance with the relevant environmental norms and regulation could be duly evidences by means of the following documents: ***Permissions for air pollutant emissions***: • Permission for air pollutant emissions #141 dated on 19.12.2007 issued by the Directorate for Technological and Ecological Supervision of the Rostekhnadzor for Udmurt Republic for the period from 01.12.2007 to 19.12.2011; • Permission for air pollutant emissions #141 dated on 17.11.2011 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 17.11.2011 to 20.10.2016. ***Permissions for discharge of pollutants into bodies of water:*** • Permission #210/1 for discharge of pollutants into the environment dated on 01.11.2006 issued by the Directorate for Technological and Ecological Supervision of the Rostekhnadzor for Udmurt Republic for the period from 01.11.2006 to 01.12.2009; • Permission #9 for discharge of pollutants into the environment dated on 01.12.2009 issued by the West-Ural Directorate for Technological, Ecological and Nuclear Supervision for the period from 01.12.2009 to 01.12.2010; • Permission #3 for discharge of pollutants into the environment dated on 13.11.2010 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 13.11.2010 to

Reference	Document
	13.11.2011; • Permission #9 for discharge of pollutants into the environment dated on 23.12.2010 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 23.12.2010 to 23.12.2011; • Permission #6 for discharge of pollutants into the environment dated on 09.12.2011 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 09.12.2011 to 09.12.2012. ***Permissions for disposal and recovery of waste materials:*** • License to carry out activities of hazardous waste collection, use, deactivation, transportation and disposal #OT-46-000828(18) dated on 03.03.2009 issued by the Directorate for Technological and Ecological Supervision of the Rostekhnadzor for Udmurt Republic for the period from 03.03.2009 to 03.03.2014; • Limits for waste disposal #100-1 dated on 01.07.2007 issued by the Directorate for Technological and Ecological Supervision of the Rostekhnadzor for Udmurt Republic for the period from 01.07.2007 to 01.04.2011; • Limits for waste disposal dated on 01.04.2011 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 01.04.2011 to 01.07.2012.
PB	The planned balance of production of used within the investment decision
PBM	The prices of basic and auxiliary materials, energy planning used within the investment decisions of individual project measures
PFG	Prices for finished goods used within the investment decision
PK	Planned and actual schedule of production used within the investment decisions

Reference	Document
REFTD	Assignment for the preparation of technical and commercial proposals delivery of the technology, equipment, technical documentation and the "know-how"
PS	First contact signing for project equipment supply • Contract #9.223-07 dated 03.08.2007 between TECHINT COMPAGNIA TECNICA INTERNAZIONALE S.p.A. and Izhstal OAO
PTS-06	• Protocol of meeting of technical council dated on 29.09.2006; Concept of the JSC Izhstal development in 2007-2011; • Protocol of meeting by the general director of CJSC "UC Mechel" dated on 20.12.2006
PTS-07	Documented evidences regarding the communication between PP and JI consulting companies in the time period 2007 2008
PTS-09	• Agency contract between Mechel JSC and Izhstal #085/M-09-2457sn/A dated on 01.07.2009 about tender organization; • Letter #M/0350/MC/06 dated on 26.03.2010 about agency contract implementation.
PTS-11	Contract #49113004 dated on 05.09.2011 about project design documentation elaboration
Reg	Laws and regulations relevant in the specific context of the project activity: • Federal law of the RF "On Protection of the Environment" as of 10.01.2002 #7-FL; • Federal law of the RF "On Ecological Examinations" as of 25.11.1995 #174-FL; • Federal law of the RF "On the Sanitary and Epidemiological Safety of the Population" as of 30.03.1999 #52-FL; • Federal law of the RF "On the Protection of Atmospheric Air" as of 04.05.1999 #96-FL; • Federal law of the RF "On Production and Consumption Wastes" as of 24.06.1998 #89-FL;

Reference	Document
	• Sanitary Regulations and Standards 2.2.1/2/1/1200-03 "Sanitary Protection Zones and Sanitary Classification of Companies, Buildings and other Facilities"; • Sanitary Regulations and Standards "Instructions on the development, coordination, approval and composition of design estimate documentation"; • Regulation on the evaluation of planned commercial and other activities on the environment in the Russian Federation approved by the order of the State Committee for Environmental Protection #372 as of 16.05.2000. • Russian metallurgy development strategy up to 2020, approved by the Ministry of Industry and Trade of the Russian Federation order #150 on March 18, 2009; • Russian Government Decree #780 dated on September 15, 2011 "On Realization of Article 6 of Kyoto Protocol to United Nations Framework Convention on Climate Change
SC	Evidences regarding the stakeholder consultation process: • Newspaper «Udmurtskaya pravda» dated on 10.10.2007 #117 (24204). • 28 Letter of Administration of Leninski district of Izhevsk #01-15-1237 dated on 24.10.2007.
VC	Expenses overview as per the internal financial reports
WGE	Plants general expenses, commercial activity related expenses used within the investment decision
XLS	Emission reduction (Excel) calculation spreadsheet

Table 7-2: Background investigation and assessment documents

Reference	Document
/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)

Reference	Document
CDM-Pr	Project in the metal sector reviewed to analyse approaches used in similar cases: • Implementation of Resource-Saving Technologies at JSC "Ural Steel", Novotroitsk, Russia • Implementation of arc-furnace steelmaking at Magnitogorsk Iron and Steel Works • Reconstruction of the steel – smelting manufacture of "Seversky pipe plant" • Reconstruction of the steelmaking at JSC "Ashinskiy Metallurgical Works", Asha, Russian Federation • Implementation of modern technologies of sinter production and blast furnaces charging at OJSC MMK • Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK • 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/	Joint Implementation determination and verification manual (Version 01), issued by the Joint Implementation Supervisory Committee
/GBM/	Guidance on Criteria for baseline setting and monitoring
/GCP/	Guidelines for users of the Joint Implementation project design document form (version 03)
/GJI/	Guidelines for the implementation of Article 6 of the Kyoto Protocol as per 9/CMP.1
/IPCC-GP/	IPCC Good Practice Guidance & Uncertainty Management in National Greenhouse Gas Inventories, 2000
/IPPC-RM/	Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual
/KP/	Kyoto Protocol (1997)
/MA/	Decision 3/CMP. 1 (Marrakesh – Accords & Annex to decision (17/CP.7))
/TA/	Tool for the demonstration and assessment of additionality (Ver. 5.2).

Table 7-3: Websites used

Reference	Link	Organisation
/**cbr**/	www.cbr.ru	Information about the Central bank discount rate
/**ipcc**/	www.ipcc-nggip.iges.or.jp	IPCC publications
/**mb**/	http ://www.metalbulletin.com /	Metalbuletin
/**ric**/	http://russia-ic.com/about_us/	Russia steel info center
/**rsa**/	http://eng.russtal.ru/	Association of Russian iron and steel producers
/**wsa**/	http://worldsteel.org/statistics/top-producers.html	World steel assocciation
/**unfccc**/	http://cdm.unfccc.int	UNFCCC

Table 7-4: List of interviewed persons

Reference	MoI[1]		Name	Organisation / Function
/**IM01**/	V	☒ Mr. ☐ Ms	Boguzkij Stepan V.	Izhstal OAO / Deputy Chief Engineer
/**IM01**/	V	☒ Mr. ☐ Ms	Sidorov Denis V.	Izhstal OAO /Head of analytical department
/**IM01**/	V	☒ Mr. ☐ Ms	Epifanov Stanislav V.	Izhstal OAO / Head of analytical department
/**IM01**/	V	☒ Mr. ☐ Ms	Pleschakov Sergey I.	Izhstal OAO / deputy head UOTPB
/**IM01**/	V	☒ Mr. ☐ Ms	Chrebtov Dmitriy V.	Izhstal OAO / manager of training centre
/**IM01**/	V	☒ Mr. ☐ Ms	Schilov Wladimir W.	Izhstal OAO / manager
/**IM01**/	V	☒ Mr. ☐ Ms	Salachov Damir	Izhstal OAO / manager
/**IM01**/	V	☒ Mr. ☐ Ms	Kazakov Roman	NCSF / JI Consultant

Reference	MoI[1]		Name	Organisation / Function
/**IM01**/	V	☒ Mr. ☐ Ms	Klimov Evgeny	NCSF / JI Consultant

[1)] Means of Interview: (**T**elephone, **E**-Mail, **V**isit)

ANNEX

A1: Determination Protocol

A2: Assessment of Baseline Identification

A3: Assessment of Financial Parameters

A4: Assessment of Barrier analysis

A5: Outcome of the GSCP

ANNEX 1: DETERMINATION PROTOCOL

Table A-1: Requirements Checklist

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
A	***Project approvals by Parties involved***					
A.1	*DVM § 19* Have the DFPs of all Parties listed as Parties involved in the PDD provided written project approvals?	*Description:* The Party involved is Russia as the Host Country. No other Party is involved at this stage. The Host Country Approval is pending. *Means of verification:* The approval of the Host Party is pending. *Conclusion:* CAR A1 was raised on this context.	/PDD/	CAR A1	CAR A1	
A.2	*DVM § 19* Does the PDD identify at least the host Party as a Party involved?	*Description:* As per the section A.3 of the PDD Russia has been identified as the Host Country. No Investor Party was identified at this stage. *Means of verification:* This is indicated in the section A.3 of the PDD. *Conclusion:* The requirement is fulfilled.	/PDD/			OK
A.3	*DVM § 19* Has the DFP of the host Party issued a written project	*Description:* No written approval has been provided so far (see A.1). *Means of verification:* N/A	/PDD/	CAR A1	CAR A1	

[3] JISC 19 Annex 4

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	approval?	*Conclusion:* See A.1.				
A.4	*DVM § 20* Are all the written project approvals by Parties involved unconditional?	*Description:* No written approval has been provided so far (see A.1). *Means of verification:* N/A *Conclusion:* See A.1.	/PDD/	CAR A1	CAR A1	
A.5	*DVM § 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?	*Description:* No written approval has been provided so far (see A.1). *Means of verification:* N/A *Conclusion:* See A.1.	/PDD/	CAR A1	CAR A1	

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
B	***Baseline Setting***					
B.1	*DVM § 22* Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? ▪ JI specific approach ▪ Approved CDM methodology approach	The PDD explicitly indicates that the JI specific approach was used to identify the baseline.	PDD	CAR B3	CAR B3	OK
	JI specific approach only					
B.2	*DVM § 23* Does the PDD provide a detailed theoretical description in a complete and transparent manner?	*Description:* The PDD explicitly indicates that the JI specific approach was used to identify the baseline and justify the additionality. The PDD provide a detailed theoretical description in a complete and transparent manner. In particular it indicates that JI specific approach is based on the Guidance on criteria for baseline setting and monitoring" (Version 03) and Appendix B to Decision 9/CMP.1. The version 03 of the Guidance on criteria for baseline setting and monitoring" is the latest version that was issued within the JISC 26 meeting.	/PDD/ /CT/ /TA/ /INV/	CAR A2	CAR A2	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Means of determination: The applied approach was accepted because it follows the step-wise concept of the "Combined tool to identify the baseline scenario and demonstrate additionality". In particular it provides a step-wise method to identify the baseline scenario. The applied approach is applicable in the specific context of the considered project because the potential alternatives to the proposed project activity are available to project participant (PP) and cannot be implemented in parallel to the proposed project activity. In other words the PP can either introduce measures or not. The applied JI specific approach is similar to the approaches suggested by the approved CDM tools/TA//CT/. The PP took into account the specific circumstances and technologies of the considered project activity. For example, the intended production volume was taken into account in the context of the identification of the baseline. In doing so some conservative assumptions were used with regards to the production output in the project and baseline scenarios. In particular, the PDD that "*all plausible future scenarios shall be provide outputs in comparable quantities and with comparable quality and properties".* One characteristic feature of the applied approach is that the investment comparison analysis (cost efficiency analysis)				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		was performed in the framework of the so called key factor analysis. The investment comparison analysis complies with relevant CDM requirements such as provisions of the *"Guidance on Assessment of Investment analysis"* EB 62 annex 5 as well as relevant provisions of the ""*Combined tool to identify the baseline scenario and demonstrate additionality*". Therefore the applied approach was assessed as appropriate. The applied approach was clearly explained in the PDD and afterwards, carried out in order to determine the baseline scenario. *Conclusion:* Therefore the elaborated approach was assessed to be applicable for the purpose of the baseline identification. The requirement is fulfilled.				
B.3	*DVM § 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?	*Description:* The PDD identifies and justifies the baseline scenario by listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one The following possible technical options were identified and considered in the PDD. The PDD includes an analysis of all realistic alternatives to the project scenario. The following scenarios were identified: ***Plausible future scenario 1****: Continuation of the current situation. Operation of steelmaking and rolling plants at the Izhstal without reconstruction and modernization.*	PDD GBM INV	CAR A2	CAR A2	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Plausible future scenario 2*: Project implementation without registration as a JI project. Reconstruction of the steelmaking plant and modernization of the rolling plant at the Izhstal.* ***Plausible future scenario 3:*** *Output of inefficient steelmaking furnaces at the Izhstal. Production of rolled products at the Izhstal by using the steel billets supplied from the outside.* *Means of determination:* The PP has duly identified the project activity itself as well as the continuation of the pre-project situation as possible and plausible options. The further option is the scenario 3 that involves Output of inefficient steelmaking furnaces at the Izhstal. Production of rolled products at the Izhstal by using the steel billets supplied from the outside. Furthermore, the PP has explained why there are no further plausible options by taking into account the specific circumstances of the considered plant. All considered scenarios were explained in a detailed manner. The determination team has checked identified scenarios and was able to conclude that no scenario was omitted. Please refer to the assessment in annex 2 of this report.				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Following the elaborated JI specific approach all identified scenarios were checked against compliance with the relevant regulation, and afterwards the so called "key factor review" was performed in order to identify the most plausible option. In the course of the key factor analysis the PP demonstrated that project activity faces different barriers related to the financial viability. In essence it was demonstrated that the project activity faces the investment barrier (lack of financing resources) and the financial barrier (low financial attractiveness). Within the cost efficiency analysis all scenarios were assessed. For this purpose the investment comparison analysis was carried out. In doing so, the levelized costs of rolled metal were selected as financial indicator. The financial indicators like IRR or NPV can be calculated only for the project scenario (scenario 2). The calculation of IRR and NPV for the scenarios 1 and 2 is not possible because these scenarios do not involve any initial investments. Therefore the selection of the levelized costs of rolled metal as financial indicator was assessed as appropriate because it is most suitable for the project type and decision-making context. This financial indicator was calculated for all alternatives. A clear comparison of the financial indicator for the proposed				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		JI activity and other identified alternatives was provided in the PDD. It was correctly demonstrated that scenario 3 has the best indicator (the lowest levelized costs). Due to this it was duly concluded that scenario 1 and scenario 2 cannot be considered as the most financially attractive and the plausible baseline options. Afterwards a sensitivity analysis was conducted. As a result it could be duly shown that the conclusion regarding the financial/economic attractiveness of the scenario 3 is robust to reasonable variations in the critical assumptions. Since the sensitivity analysis confirmed the result of the investment comparison analysis, it was duly concluded that the most economically or financially attractive alternative scenario (Scenario 3) is considered as baseline scenario. Subsequently scenario 1 and 2 were duly excluded from further consideration. The PP provided a clear, viewable and unprotected Excel spreadsheet that presents the investment calculation. The period chosen for the investment analysis does not reflect the technical lifetime of the project activity because a shorter period is chosen. Therefore the fair value of the project activity's assets at the end of the investment analysis				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		period (as a cash inflow) was included. As assessed in detail in annex 3 all the input values used in the investment analysis were valid and applicable at the time of the investment decision. Sensitivity analysis has been carried out for: 1. Initial investment 2. Operational costs All selected parameters have a significant impact of the financial viability of the proposed project activity. It should be noted that sensitivity analysis has been carried out for the total financial parameters i.e. not for specific cost components. This has been done to ensure the conservativeness of the sensitivity analysis. All assumptions have been assessed as credible, plausible and not obsolete. For this reason the variation of +/- 10% has been assessed as adequate. The sensitivity analysis has been reproduced by the validation team for scenarios and the results as indicated in the PDD could be verified. *Conclusion:* As evident from the mentioned above the particular requirements of the DVM §23 (a) are fulfilled.				
B.4	(b) Taking into account relevant	*Description:* As per the PDD the continuation of the pre-	PDD	CAR B1	CAR B1	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	national and/or sectoral policies and circumstance? – Are key factors that affect a baseline taken into account?	project situation is not prohibited by any law or regulation. Also scenario 2 and 3 complies with the relevant regulations. *Means of determination:* This could be confirmed through analysis of the relevant laws and regulation. Please refer to annex 2 of this report. In addition the PP has explained the key factors (that affect the baseline) and how these factors were taken into account. In particular, it is explained that the project activity faces low financial attractiveness as compared to the scenario 3. Furthermore the specific circumstances of the metallurgical industry in Russia and the development of the metallurgical sector were considered within the baseline identification. In particular, different official and governmental documents/REG/ with regards to the metallurgical industry like • Regulation on the evaluation of planned commercial and other activities on the environment in the Russian Federation approved by the order of the State Committee for Environmental Protection #372 as of 16.05.2000. • Russian metallurgy development strategy up to 2020, approved by the Ministry of Industry and Trade of the Russian Federation order #150 on March 18, 2009;	EIA EIA1 EIA3 PDV Reg GBM PTS-06	CAR A2 CAR A3 CAR B2	CAR A2 CAR A3 CAR B2	

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		were taken into account. Mechel company is Russia's largest enterprise. Plants experts are well-experienced and competent with regards to the issues related to the metallurgical sector and applied technologies. Plant experts' competence and experience was used within the baseline identification. Furthermore it was explained that the intended production volume corresponds to the capacity of the plants facilities after the reconstruction. This production volume is evident from all internal documents, feasibility studies, etc related to the project activity. The production volume of 400,000 t per year is evident from the protocol of meeting/PTS-06/ where the investment decision was met. Also other meetings where the project measures were discussed clearly refer to this production volume. Production volume was assumed equal for scenarios. This is consistent and therefore was assessed as correct by the determination team. *Conclusion:* As evident from the mentioned above the particular requirements of the DVM §23 (b) are fulfilled.				
B.5	(c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters,	*Description:* PDD provides justification that the baseline is established in a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors.	PDD Reg GBM			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	date sources and key factors?	*Means of determination:* The applied approach of the baseline identification involves the step-wise concept of the *"Combined tool to identify the baseline scenario and demonstrate additionality".* Within the justification all plants internal data was transparently presented in the PDD. The same could be verified within the determination. All applied data sources could be verified. Therefore it was assessed as transparent. Please also refer to the comment under B.1 *Conclusion:* The requirement is fulfilled.				
B.6	(d) Taking into account of uncertainties and using conservative assumptions?	*Description:* Uncertainties and using conservative assumptions were taken into account within the baseline identification. *Means of determination:* It was assuming that "*all plausible future scenarios shall be provide outputs in comparable quantities and with comparable quality and properties".* Within the investment comparison analysis it could be demonstrated that project activity does not provide sufficient rate of return. Afterwards a sensitivity analysis was conducted. As a result it could be duly shown that the conclusion regarding the financial/economic attractiveness of the scenario 3 is robust to reasonable variations in the critical assumptions.	PDD Reg INV			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Sensitivity analysis has been carried out for: 1. Initial investment 2. Operational costs All selected parameters have a significant impact of the financial viability of the proposed project activity. It should be noted that sensitivity analysis has been carried out for the total financial parameters i.e. not for specific cost components. This has been done to ensure the conservativeness of the sensitivity analysis. All assumptions have been assessed as credible, plausible and not obsolete. For this reason the variation of +/- 10% has been assessed as adequate. The sensitivity analysis has been reproduced by the validation team for scenarios and the results as indicated in the PDD could be verified. Since the sensitivity analysis confirmed the result of the investment comparison analysis, it was duly concluded that the most economically or financially attractive alternative scenario (Scenario 3) is considered as baseline scenario. Subsequently scenario 1 and 2 were duly excluded from further consideration. For detailed assessment please refer to annex 2. *Conclusion:* The requirement is fulfilled.				
B.7	(e) In such a way that ERUs	*Description:* The amount of ERU depends inter alia on the	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	cannot be earned for decreases in activity levels outside the project activity or due to force majeure?	operation of the plant and the corresponding production. *Means of determination:* As evident from the PDD the production was assumed to be on a certain level. The baseline emissions are determined in a manner that ERUs cannot be earned for decreases in activity levels outside the project activity or due to force majeure. Please refer to the assessment of the monitoring plan. *Conclusion:* The requirement is fulfilled.				
B.8	(f) By drawing on the list of standard variables contained in appendix B to . Guidance on criteria for baseline setting and monitoring., as appropriate	*Description:* The requirements of the appendix B to *Guidance on criteria for baseline setting and monitoring* were taken into account within the development of the monitoring plan. The standard variables were duly elaborated in line with IPCC data. *Means of determination:* Please refer to the assessment of the monitoring plan in this annex below. *Conclusion:* The requirement is fulfilled.	PDD			OK
B.9	*DVM § 24* If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or	*Description:* Not applicable because a JI specific approach was elaborated and applied. *Means of determination:* N/A *Conclusion:* N/A	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	combinations together with the elements supplementary developed by the project participants in line with 23 above?					
B.10	*DVM § 25* If a multi-project emission factor is used, does the PDD provide appropriate justification?	*Description:* N/A *Means of determination:* N/A *Conclusion:* N/A	PDD			OK
B.11	*DVM § 25* Does the PDD provide the title, reference number and version of the approved CDM methodology used?	*Description:* N/A *Means of determination:* N/A *Conclusion:* N/A	PDD			OK
	Approved CDM methodology approach only	*DVM §26 are not applicable because an approved CDM methodology was no used.*				
C	***Additionality***					

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	JI specific approach only					
C.1	*DVM § 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;	*Description:* The PDD explicitly indicates that the JI specific approach was used to justify the additionality. In doing so, the "p*rovision 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"* was used. *Means of determination:* This is evident from the PDD. *Conclusion:* The requirement is fulfilled.	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	(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.					
C.2	*DVM § 29* (a) Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	*Description:* The PDD explicitly indicates that the JI specific approach was used to identify the baseline and justify the additionality. The PDD provide a detailed theoretical description in a complete and transparent manner. In particular it indicates that JI specific approach is based on the "*Guidance on criteria for baseline setting and monitoring*" (Version 03) and Appendix B to Decision 9/CMP.1. Version 03 of the Guidance on criteria for baseline setting and monitoring" is the latest version that was issued within the JISC 26 meeting. *Means of determination:* The applied approach was accepted because it follows the step-wise concept of the "Combined tool to identify the	PDD GBM CT TA INV GBM			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		baseline scenario and demonstrate additionality". In essence the approach to justify the additionality draws upon the results of the baseline identification and requires to perform a common practice analysis. The same approach is proposed by approved CDM tools/CT//AT/. Please refer to B.2 and annex 2 of this report *Conclusion:* Therefore the elaborated approach was assessed to be applicable for the purpose of the baseline identification. The requirement is fulfilled.				
C.3	*DVM § 29* (b) Are additionality proofs provided?	*Description:* All additionality proofs referred to in the PDD and used within the addtionality justification were provided and could be verified by the determination team. *Means of determination:* **Common practice analysis** The PP makes use of the results of the baseline identification and performs the common practice analysis in order to examine the extent to which the proposed project type has already diffused in the relevant sector and region. In doing so, metallurgical industry was defined as the relevant sector and Russian Federation as the geographical area. This deemed to be appropriate. As per the PDD similar measures were observed in the following metallurgical plants	PDD INV Bench GBM CDM-Pr PDD /wsa/ /rsa/ /mb/ /ric/			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• OJSC "Severstal"; • OJSC "Nizhneserginsky Metizno-Metallurgichesky Plant"; • OJSC "Ashinskiy Metallurgical Works"; • CJSC "Chelyabinsk Tube-Rolling Plant"; • OJSC "Metallurgical Plant named after A.K. Serov"; • OJSC "Seversky Pipe Plant"." The determination team has checked this information and was able to confirm that similar measures were implemented in the above mentioned plants. The PP has correctly indicated that projects implemented in all these plants were set up as JI projects. Therefore they can be excluded from the consideration. This could be duly confirmed through the analysis of the JI project as per the information proved by the Russian registry of carbon units http://www.carbonunitsregistry.ru/reports-pso.htm. In addition the determination team reviewed information provided by the independent third party sources like • Association of Russian iron and steel producers/rsa/ • World steel association/wsa/ • Metalbuletin/mb/				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• Russia steel info centre[/ric/] The information provided by these sources supports the results of the analysis provided in the PDD. The results of the common practice analysis could be further supported by the information provided positively determined JI project[/CDM-Pr/]. As a result it could be confirmed that similar activities are observed, but essential distinctions between the project activity and similar activities can reasonably be explained. Therefore it was correctly concluded that the proposed project activity is additional. *Conclusion:* The requirement is fulfilled.				
C.4	*DVM § 29* (c) Is the additionality demonstrated appropriately as a result?	*Description:* Please refer to the comment under B.1 and B.2. *Means of determination:* PDD *Conclusion:* The requirement is fulfilled.	PDD INV Bench GBM			OK
C.5	*DVM § 30* *If the approach 28 (c) is chosen,* are all explanations, descriptions and analyses made in accordance with the selected	*Description:* Please refer to the comment under B.1 and B.2. *Means of determination:* PDD *Conclusion:* The requirement is fulfilled.	PDD INV GBM			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	tool or method?					
	Approved CDM methodology approach only	*Description:* Not applicable because approach 28 (c) was not chosen. *Means of determination:* N/A *Conclusion:* N/A	PDD			
D	***Project boundary (applicable except for JI LULUCF projects)***					
	JI specific approach only					
D.1	*DVM § 32* Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are	*Description:* The PDD describes the project boundary, including the physical delineation of the proposed JI project activity. *Means of determination:* Based on provided evidences it could be determined that the delineation of the project boundary is correct and meets the requirements of the relevant JI rules – DVM and Guidance on criteria for baseline setting and monitoring. As evident from the PDD the project boundary includes GHG emission sources attributed to the project activity. In particular, the project boundary includes all facilities of the plant related to the project activities and where GHG emissions occur. These are: • Steelmaking plant #23 of Izhstal;	PDD CR1	CAR B1	CAR B1	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• 2. Rolling plants of Izhstal; • 3. Steel billets production outside Izhstal. Parts of the plant that are not affected by the project activity were excluded from the project boundary. The PDD summarizes the emission sources and GHG types in a table format. *Conclusion:* The requirement is fulfilled.				
D.2	(i) Under the control of the project participants?	*Description:* All emissions and corresponding sources are under control of project participant (PP). *Means of determination:* It was correctly explained that the identified emission sources (steelmaking plant #23 and rolling plant) are under the control of Izhstal. Being a property of the Company the operation of the plant is under control of PP. Steel billets production outside Izhstal is under the control of project participant as steel billets is to produced according to the demand of steel at Izhstal for rolled metal manufacture. *Conclusion:* The requirement is fulfilled.	PDD			OK
D.3	(ii) Reasonably attributable to the project?	*Description:* The project boundary includes CO_2 emissions resulted from steel production. *Means of determination:* The GHG emissions result from the	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		energy and material consumption. This consumption is related to operation of the plant facilities. Therefore they are reasonably attributable to the project. *Conclusion:* The requirement is fulfilled				
D.4	(iii) Significant?	*Description:* Only those sources are taken into account emissions from which are above (1%) in the overall quantity of GHG emissions. *Means of determination:* This is in line with the requirements of the Guidance on criteria for baseline setting and monitoring version 03. *Conclusion:* The requirement is fulfilled	PDD GBM			OK
D.5	*DVM § 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?*	*Description:* The project boundary is defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above *Means of determination:* Please refer to the assessments under D.1 – D.4 above. *Conclusion:* The requirement is fulfilled	PDD			OK
D.6	*DVM § 32* (c) Are the delineation of the project boundary and the gases and sources included	*Description:* The PDD describes the project boundary by using a figure that shows the physical delineation of the proposed JI project activity. *Means of determination:* Based on provided evidences it could be determined that the delineation of the project	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	boundary is correct and meets the requirements of the relevant JI rules – DVM and Guidance on criteria for baseline setting and monitoring. *Conclusion:* The requirement is fulfilled.				
D.7	*DVM § 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?	*Description:* All gases and sources included are explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified. *Means of determination:* The CO_2 emissions are the main emission source. The PDD provides a detailed explanation of the emission and the corresponding emissions sources. This explanation was checked and found correct and in line with the real situation. *Conclusion: The requirement is fulfilled*	PDD GBM			OK
	Approved CDM methodology approach only	DVM §33 is not applicable because JI specific approach was used.				
E	***Crediting period***					
E.1	*DVM § 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	*Description:* The project starting date is 03.08.2007– this is the date when real implementation of the scheduled measures began. *Means of determination:* The starting date of the project is determined as date of first contact signing for project equipment. The contract has been provided and the date	PDD PS			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	begin or began? - Is the starting date after the beginning of 2000?	could be verified. To apply the date of the contract with equipment supplier is applicable to determine the project starting date. *Conclusion:* The requirement is fulfilled.				
E.2	*DVM § 34* (b) Does the PDD state the expected operational lifetime of the project in years and months?	*Description:* As per the PDD the expected operational lifetime is 15 years. *Means of determination:* The expected operational lifetime of the project is determined as lifetime of the main projects equipment in accordance with Russian regulations. The PP referred to Russian Government Decree #1 dated on 01/01/2002 about fixed assets included in depreciation groups (edit. By Decrees of Russian Government # 415 on 09/07/2003, #476 on 08/08/2003, # 697 on 18/11/2006, #676 on 12/09/2008). The PP explained how the technical lifetime was elaborated based on the information provided in the above mentioned decree. The decree was checked and and the explanation was found reasonable Therefore the assumed lifetime was accepted. The assumed lifetime is plausible as compared to other positively determined JI projects/CD-Pr/. *Conclusion:* The requirement is fulfilled.	PDD			OK
E.3	*DVM § 34* (c) Does the PDD state the	*Description:* Please refer to section C.3 of the PDD. As per the PDD the length of the first crediting period is 5 years, i.e.	PDD CR			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	length of the crediting period in years and months?	60 months. In addition the PDD states that in case the second commitment period will be established under Kyoto Protocol, and further to recent Russian government recognition, emission reductions for the subsequent period will be applied. *Means of determination:* The choice of the crediting period between 29.10.2010 – 31.12.2012 is appropriate because the project was operational in 2010. This was duly supported by Certificate of provisional acceptance dated 29.10.2010 In addition the PDD states that in case the second commitment period will be established under Kyoto Protocol, and further to recent Russian government recognition, emission reductions for the subsequent period will be applied. The crediting period will not exceed the project operational lifetime. This is in line with Glossary of Joint Implementation Terms (Version 2).				
E.4	*DVM § 34* (c) Is the starting date of the crediting period on or after the date of the first emission	The starting date of the crediting period will be on or after the date the first emission reductions. This is in line with §34 DVM.	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	reductions or enhancements of net removals generated by the project?					
E.5	*DVM § 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?	Please refer to E.3.	PDD			OK
E.6	*DVM § 34* (d) *If the crediting period extends beyond 2012,* does the PDD state that the extension is subject to the host Party approval?	Yes, the PDD states that the extension is subject to the host Party approval. Please refer to E.3.	PDD			OK
E.7	Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012	*Description:* The PDD provides estimates of emission reductions presented separately for those until 2012 and those after 2012.	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	and those after 2012?	*Means of determination:* This is evident from the separate tables in PDD section A.4.3.1 and section E. *Conclusion:* The requirement is fulfilled				
F	***Monitoring plan***					
F.1	*DVM § 35* Does the PDD explicitly indicate which of the following approaches is used? – JI specific approach – Approved CDM methodology approach	*Description:* The PDD explicitly indicates that a JI specific approach was used. *Means of determination:* This is evident from the PDD section D.1. As per the PDD the applied approach is based on the requirements of the "Guidance on criteria for baseline and monitoring" version 03. This is the most recent version and hence appropriate. *Conclusion:* The requirement is fulfilled	PDD GBM	CAR D1 CAR D3 CLD5	CAR D1 CAR D3 CLD5	OK
	JI specific approach only					
F.2	*DVM § 36* (a) Does the monitoring plan describe	*Description:* The monitoring plan is elaborated in detail in section D of the PDD. *Means of determination:* As per the PDD the applied approach is based on the requirements of the "Guidance on criteria for baseline and monitoring" version 03. This is the most recent version and hence appropriate.	PDD GBM IPCC CDM-Pr	CAR D1 CAR D3 CLD5	CAR D1 CAR D3 CLD5	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		The chosen JI specific approach is based on paragraph 30 of Guidance on criteria for baseline setting and monitoring (Version 03). The approach chosen was reviewed and it could be confirmed that it includes the following procedures: • The collection and archiving of all relevant data necessary for estimating or measuring anthropogenic emissions by sources of GHGs occurring within the project boundary during the crediting period; • The collection and archiving of all relevant data necessary for determining the baseline of anthropogenic emissions by sources of GHGs within the project boundary during the crediting period; • The identification of all potential sources of, and the collection and archiving of data on increased anthropogenic emissions by sources of GHGs outside the • project boundary that are significant and reasonably attributable to the project during the crediting period; • The collection and archiving of information on environmental impacts, in accordance with procedures as required by the host Party; • Quality assurance and control procedures for the monitoring process;				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• Procedures for the periodic calculation of the reductions of anthropogenic emissions by sources by the proposed JI project, and for leakage effects. The basic concept of the elaborated approach is similar to the approaches used in similar projects/CDD-Pr/. *Conclusion:* The requirement is fulfilled				
F.2.1	– *All relevant factors and key characteristics that will be monitored?*	*Description:* The monitoring plan describes all relevant factors and key characteristics that will be monitored. *Means of determination:* **Relevant factors** As per the PDD the relevant factors related to the project scenario are the carbon oxidation of raw materials, graphite electrodes and natural gas in steel furnace, aggregates of secondary steel treatment and casting. This is correct because this is the way how the project measures affect the CO_2 emissions. GHG emissions from fuel combustion in rolling plants in the project scenario are not included in the calculation of the emission reductions. This is conservative and was assessed as appropriate.	PDD IPCC AE			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		The relevant factors related to the baseline scenario are the GHG emissions due to steel billets production outside the Izhstal boundaries as result of carbon raw materials oxidation and fuel combustion for steel and energy resources production. This is correct **Key characteristics** The PDD explain the approach for calculation of GHG emissions. The key characteristics as provided in the PDD were assessed as follows: 1. As per the PDD "*Calculation of CO2 emissions in the project scenario from steelmaking plant #23 is provided based on calculation of carbon oxidation of raw materials and fuel determined as carbon balance between the material flows (scrap steel, pig iron, carbon raw materials, natural gas, electrodes) and product flows (steel). It is assumed that all carbon not fixed in the finished products is oxidized to CO2".* This approach is corresponds to the provisions of the IPCC Guidelines. The similar concept was applied in similar projects/CDM-Pr/. 2. As per the PDD *"Calculation of CO2 emissions in the baseline scenario is provided based on data of steel billets*				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		production for rolled metal manufacture at Izhstal and emission factor of steel billets production outside the Izhstal boundaries." This approach is corresponds to the provisions of the IPCC Guidelines. The similar concept was applied in similar projects[CDM-Pr/]. 3. As per the PDD "*Calculation of CO2 leakages from lime and electricity production is provided based on consumption data in the project scenario and emission factors from their production outside the project boundaries."* This was accepted because it represents an approach commonly used in CDM projects. **Monitoring parameters** Based on the provided explanations and taking into account the measures and technologies used within the project activity it could be concluded that all relevant monitoring parameters were included in the monitoring plan. The parameters which are continuously monitored according to the requirements of the monitoring plan are summarized below : • scrap steel consumption in EAF-40; • pig iron consumption in EAF-40; • carbon raw materials consumption in EAF-40 and				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		LF-40; • electrodes consumption in EAF-40; • electrodes consumption in LF-40; • natural gas consumption in EAF-40 and LF-40; • natural gas consumption in CCM; • production of continuous casted billets in EAF-40; • production of steel ingots in EAF-40; • net calorific value of natural gas; • lime consumption in EAF-40 and LF-40; • electricity consumption in EAF-40; • electricity consumption in LF-40; • electricity consumption in CCM; • oxygen consumption in EAF-40; • oxygen consumption in CCM; • electricity consumption for oxygen production; • oxygen distribution . *Conclusion:* The requirement is fulfilled.				
F.2.2	– *The period in which they will*	*Description:* The monitoring period depends on the	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	be monitored?	monitoring parameter and is either constantly, monthly or default values. *Means of determination:* The period in which the parameters will be monitored was assessed as appropriate. *Conclusion:* The requirement is fulfilled	IPCC CDM-Pr			
F.2.3	– *All decisive factors for the control and reporting of project performance?*	*Description:* The monitoring plan describes the monitoring procedures including all decisive factors for the control and reporting of the project performance. *Means of determination:* It could be verified that all parameters are monitored by the plant according to its internal reporting procedures. *Conclusion:* The requirement is fulfilled.	PDD			OK
F.3	*DVM § 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?	*Description:* The monitoring plan specifies the indicators, constants and variables. *Means of determination:* The use of IPCC data was assessed as appropriate because it is an internationally accepted source. Also the monitoring plan for similar projects, which were positively determined, refers to the IPCC data. *Conclusion:* The requirement is fulfilled.	PDD IPCC CDM-Pr			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.4	*DVM § 36* (b) *If default values are used*	*Description:* The monitoring plan specifies the following default values: Parameters which are determined once and are taken as constants for the whole monitoring period. They are available at the stage of determination: • carbon content in steel scrap taken as 0.01 tC/t; • carbon content in steel taken as 0.01 tC/t; • carbon content in pig iron taken as 0.04 tC/t; • carbon content in electrodes taken as 0.82 tC/t; • carbon content in carbon raw materials 0.83 tC/t • default carbon content in natural gas taken as 15.30 tC/Tj; • conversion factor of calorie into joule taken as 4,1862 J/cal is in line with provided data source; These values were taken from the IPCC Guidelines. The values indicated in the PDD were crosschecked against IPCC guidelines and found consistent. • CO2 emission factor for electricity generation in the grid for the years 2010-2012 is in line with the provided data	PDD IPCC CDM-Pr			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		source; • CO2 emission factor for lime production taken as 1.481 tCO2/t is in line with the applied data source - Best Available Techniques in the Cement, Lime and Magnesium Oxide Manufacturing Industries, European Commission, May 2010. The applied data source is well-accepted data source and deemed to be appropriate; • specific ingots consumption for billets production in the baseline scenario; taken as 1.174 t/t was duly calculated based on the Initial data are taken from internal reports/AE/. • CO_2 emission factor for steel billets production used by rolled manufacture in Izhstal in the baseline scenario taken as 1.537 tCO_2/t was correctly determined based on transparent data of Chermetinformacia about raw materials, fuel and energy resources consumption for steel production at ChMK (which is the most probable supplier of steel billets). The calculation is based on the data provided by the independent, reliable third party source. Therefore the applied value was assessed as appropriate. It was correctly indicated that similar approach was used for determination of CO2 emission factor in the baseline scenario in the approved JI project "Construction and implementation of the Casting and Rolling Complex for				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		the production of hot rolled flat products in the Vyksa District, the Nizhny Novgorod Region, the Russian Federation".; All above mentioned parameters are elaborated in the PDD in clear and detailed manner. *Means of determination:* The applied values are in line with the IPCC values and are used in relevant approved CDM methodologies. Therefore the default values were accepted. *Conclusion:* The requirement is fulfilled.				
F.4.1	- *Are accuracy and reasonableness carefully balanced in their selection?*	The accuracy and reasonableness is carefully balanced in the selection of the default values. Please refer to the comment under F.4.	PDD IPCC AE			OK
F.4.2	– *Do the default values originate from recognized sources?*	The default values are in line with the referred data sources. Please refer to the comment under F.4.	PDD IPCC AE			OK
F.4.3	– *Are the default values supported by statistical analyses providing reasonable confidence levels?*	The default values are reasonable because they were sources from well-reputed internationally accepted independent sources.. Please refer to the comment under F.4.	PDD IPCC AE			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.4.4	– *Are the default values presented in a transparent manner?*	Yes, Annex 3 lists the values, the data source or the way how the default value was determined.	PDD			OK
F.5	*DVM § 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?	*Description:* The monitoring plan clearly indicates how monitoring parameters will be selected and justified. *Means of determination:* The parameters which are continuously monitored according to the requirements of the monitoring plan are summarized below : • scrap steel consumption in EAF-40; • pig iron consumption in EAF-40; • carbon raw materials consumption in EAF-40 and LF-40; • electrodes consumption in EAF-40; • electrodes consumption in LF-40; • natural gas consumption in EAF-40 and LF-40; • natural gas consumption in CCM; • production of continuous casted billets in EAF-40;	PDD ATT	CAR D3	CAR D3	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• production of steel ingots in EAF-40; • net calorific value of natural gas; • lime consumption in EAF-40 and LF-40; • electricity consumption in EAF-40; • electricity consumption in LF-40; • electricity consumption in CCM; • oxygen consumption in EAF-40; • oxygen consumption in CCM; • electricity consumption for oxygen production; • oxygen distribution For all monitoring parameters the PDD provides a clear and well elaborated information about • The name of variable • The data source, which should be applied • Data unit • Information whether the particular parameter is measured, calculated or estimated				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• The information about the recording frequency • Proportion of data to be monitored is always 100%. This is appropriate. • Archiving provisions • Responsibility for data collection and recording • Measurement devices and the responsibility for timely calibration *Conclusion:* The requirement is fulfilled.				
F.6	*DVM § 36* (b) (ii) For other values,	Not applicable because the monitoring plan either defines default values or specifies provisions for parameters that should be monitored	PDD			OK
F.6.1	– *Does the monitoring plan clearly indicate the precise references from which these values are taken?*	N/A please refer to the comment above	PDD			OK
F.6.2	– *Is the conservativeness of the values provided justified?*	N/A please refer to the comment above	PDD			OK
F.7	*DVM § 36*	CL D2 was raised in this context.	PDD	CL D2	CL D2	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	(b) (iii) For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?					
F.8	*DVM § 36* (b) (iv) Are International System Unit (SI units) used?	*Description:* Within the measurements the international system units are used. *Means of determination:* The PDD was crosschecked against the Guidance on criteria for baseline setting and monitoring and it could be confirmed that international system units are used. *Conclusion:* The requirement is fulfilled.	PDD			OK
F.9	*DVM § 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?	*Please refer to comments under F.1.-F.8.*	PDD			OK
F.10	*DVM § 36*	The monitoring plan was checked and it could be confirmed	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	(b) (v) Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	that parameters, coefficients, variables, etc. Are consistent between the baseline and monitoring plan.	XLS			
F.11	*DVM § 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.?	Please refer to the comments above.	PDD			OK
F.12	*DVM § 36* (d) Does the monitoring plan explicitly and clearly distinguish:					
F.12.1	*(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*	*Description:* The monitoring plan explicitly and clearly distinguish between: (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.	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	determination?	*Means of determination:* This is evident from the section D of the PDD *Conclusion:* The requirement is fulfilled.				
F.12.2	*(ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination?*	As per the PDD there are no data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination	PDD			OK
F.12.3	*(iii) Data and parameters that are monitored throughout the crediting period?*	*Description:* Data and parameters that are monitored throughout the crediting period are clearly listed and elaborated in the PDD *Means of determination:* Evident from section D of the PDD *Conclusion: The requirement is fulfilled.*	PDD			OK
F.13	*DVM § 36* (e) Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	*Description:* The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording. *Means of determination:* The monitoring plan as described in section D specifies the methods like Russian Norms (that	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		should be applied within the monitoring. Also provisions related to monitoring frequency and recording (e.g. monthly, constantly, etc.) is specified in section D. *Conclusion:* The requirement is fulfilled.				
F.14	*DVM § 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?	Please refer to F.2.	PDD IPCC			OK
F.15	*DVM § 36* (f) (i) Is the underlying rationale for the algorithms/formulae explained?	Please refer to F.2.	PDD			OK
F.16	*DVM § 36* (f) (ii) Are consistent variables,	The determination team has checked the monitoring plan and was able to confirm that variables, equation formats, subscripts were consistently used.	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	equation formats, subscripts etc. used?					
F.17	*DVM § 36* (f) (iii) Are all equations numbered?	As evident from the PDD all equations numbered.	PDD			OK
F.18	*DVM § 36* (f) (iv) Are all variables, with units indicated defined?	As evident from the PDD all variables are clearly defined. The units are specified for all variables.	PDD			OK
F.19	*DVM § 36* (f) (v) Is the conservativeness of the algorithms/procedures justified?	Please refer to the comment under F 14	PDD			OK
F.20	*DVM § 36* (f) (v) To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	Please refer to the comment under F 14	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.21	*DVM § 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?	*Description:* Yes, the consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions of the baseline is ensured. *Means of determination:* The procedure for calculating the emissions from the baseline scenario reflects the baseline scenario elaborated in the section B of the PDD *Conclusion:* The requirement is fulfilled.	PDD IPCC AE			OK
F.22	*DVM § 36* (f) (vii) Are any parts of the algorithms or formulae that are not self-evident explained?	All formulae are explained. Further explanation can be found in the IPCC guidelines.	PDD			OK
F.23	*DVM § 36* Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	As already noted the formulae and algorithm are based on the internationally accepted IPCC guidelines.	PDD			OK
F.24	*DVM § 36*	As evident from the PDD all references are provided.	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	(f) (vii) Are references provided as necessary?					
F.25	*DVM § 36* (f) (vii) Are implicit and explicit key assumptions explained in a transparent manner?	All key assumptions are explained in a transparent manner and are in line with IPCC guidelines.	PDD			OK
F.26	*DVM § 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?	Please refer to the comments above.	PDD			OK
F.27	*DVM § 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	*N/A*	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	calculation of emission reductions or enhancements of net removals provided?					
F.28	*DVM § 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?	As already noted the monitoring of particular parameters will take into account the relevant national monitoring norms.	PDD Reg			OK
F.29	*Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?*	The names of the relevant Russian norms are clearly provided in the PDD.	PDD Reg			OK
F.30	*DVM § 36* (h) Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	N/A	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.31	*DVM § 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?	*Description:* The section D of the PDD defines the quality assurance and control procedures for all monitoring parameters. Also the monitoring process is described in the PDD. *Means of determination:* The determination team has checked the procedures for quality assurance and control for all monitoring parameters and found them appropriate. It is important to note that PP established a special metrological department/division, which is responsible for proper operation of all measurement devices of the plant. This division includes a laboratory, which has accreditation to perform calibration (and exchange) of almost all measurement equipment. In cases where the calibration cannot be performed by the plants laboratory and independent and certified laboratory will carry out the calibration. It could be confirmed that all measurement devices are under control of this metrological division. Therefore it was concluded that PP quality control measures are duly implemented at the plant. *Conclusion:* The requirement is fulfilled.	PDD ATT LND			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.32	*DVM § 36* (j) Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	*Description:* The monitoring plan clearly specifies the responsibilities for the monitoring activities. *Means of determination:* The operation and management structure is described in the section D.3 of the PDD. The described structure could be confirmed in the course of the determination based on the interviews with responsible personnel. The correctness of the described structure could be further verified by the names of departments and responsible personnel evident from the internal reports/approvals. It is important to note that project monitoring is a part of the plant's entire monitoring system, i.e. almost all parameters are monitored by the plant due to relevant laws or other obligations. Therefore the project monitoring does not require measurements of new/additional parameters. It is important to note that PP established a special metrological department/division, which is responsible for proper operation of all measurement devices. Therefore it was concluded that PP quality control measures are duly implemented at the plant. *Conclusion:* The requirement is fulfilled.	PDD IM01 ATT LMD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.33	*DVM § 36* (k) Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type?	Yes, the monitoring plan, on the whole, reflects good monitoring practices appropriate to the project type because the monitoring methods are based on the official norms of the Host country.	PDD			OK
F.34	*If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?*	*N/A*				
F.35	*DVM § 36* (l) Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	*Description:* The monitoring plan provides in tabular form, a complete compilation of the data that has to be collected and measured. *Means of determination:* This is evident from the PDD. The table has been checked against the elaborated formulae and monitoring concept. It could be concluded that all required information is summarized in the relevant tables. *Conclusion:* The requirement is fulfilled.	PDD LMD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.36	*DVM § 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?*	As per the PDD "The data on the emission reductions achieved, and the original data will be available for project participants 2 years after the last transfer of ERUs". Therefore this requirement is fulfilled. See CAR D3.	PDD			OK
F.37	*DVM § 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*				
	Approved CDM methodology approach only	DVM § 38 is not applicable because a JI specific approach was used.				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	Applicable to both JI specific approach and approved CDM methodology approach					
F.43	*DVM § 39* *If the monitoring plan indicates overlapping monitoring periods during the crediting period,*	*N/A because an overlapping of monitoring periods is not indicated.*				
G	***Leakage***					
	JI specific approach only					
G.1	*DVM § 40* (a) Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	*Description:* The PDD appropriately describes an assessment of the potential leakage of the project and appropriately explains which sources of leakage are to be calculated and which can be neglected. *Means of determination:* Main sources of significant leakage as a result of the project implementation include emissions associated with the following processes that occur outside of the project boundaries: • Limestone production; • Electricity generation. These sources of leakage were duly included in the monitoring plan (Section D) and estimated in the PDD	PDD GMB CR			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		(Section E). In addition the PDD explains what the other potential sources of leakages are and explains why these leakage sources are negligible. In particular as per the PDD "*emissions that occur at the stage of production, processing and transportation of fuel and raw materials used in the manufacture of steel are excluded from consideration because the project implementation leads to a decrease in consumption of raw materials, fuel and energy as compared to the baseline scenario".* This is accepted because this approach is commonly used in many CDM methodologies and was applied in comparable cases. Furthermore the PDD states that "*emissions that occur at the stage of production, processing and transportation of fuel to generate energy resources are excluded from consideration because they are negligible, as confirmed by the analysis of methodologies for projects aimed at electricity generation*". This is accepted because this approach is commonly used in many CDM methodologies and was applied in comparable cases. Therefore it could be concluded that leakage emissions were duly identified and taken into account within the monitoring plan. The assessment of leakage emissions deemed to be in line with the Guidance on criteria for				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		baseline setting and monitoring (Version 03) Conclusion: The requirement is fulfilled.				
G.2	*DVM § 40* (b) Does the PDD provide a procedure for an ex ante estimate of leakage?	Leakage emissions were duly estimated in the section E of the PDD.	PDD XLS			OK
	Approved CDM methodology approach only					
G.3	*DVM § 41* Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?	*N/A*				
H	***Estimation of emission reductions or enhancements of net removals***					
H.1	*DVM § 42* Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or	*Description:* The PDD indicates that estimates are based on the assessment of emissions or net removals in the baseline scenario and in the project scenario *Means of determination:* This is evident from the PDD *Conclusion:* The requirement is fulfilled.	PDD XLS			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions					
H.2	*DVM § 43* *If the approach (a) in 42 is chosen,* does the PDD provide ex ante estimates of:					
H.2.1	(a) Emissions or net removals for the project scenario (within the project boundary)?	*Description:* PDD provide ex ante estimates of emissions for the project scenario (within the project boundary). *Means of determination:* The estimation of the project emissions is based on the formulae specified in the monitoring plan. This could be verified by reproducing the calculation of the estimated emission reductions. The monitoring parameters are listed below: • scrap steel consumption in EAF-40; • pig iron consumption in EAF-40; • carbon raw materials consumption in EAF-40 and LF-40;	PDD AE XLS IPCC	CAR E1	CAR E1	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• electrodes consumption in EAF-40; • electrodes consumption in LF-40; • natural gas consumption in EAF-40 and LF-40; • natural gas consumption in CCM; • production of continuous casted billets in EAF-40; • production of steel ingots in EAF-40; • net calorific value of natural gas; • lime consumption in EAF-40 and LF-40; • electricity consumption in EAF-40; • electricity consumption in LF-40; • electricity consumption in CCM; • oxygen consumption in EAF-40; • oxygen consumption in CCM; • electricity consumption for oxygen production; • oxygen distribution The estimation of the monitoring parameters is based on the actual figures for the years 2010-2011. The values for the				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		year 2012 are based on the historical values. Bearing in mind that the final version of the PDD was developed in 2012 the use of actual figures was accepted. The determination team has crosschecked the actual figures for the years 2010-2011 as indicated in various internal reports and recordings/ against the values in the (Excel) calculation spreadsheet and found them consistent. The default values as determined in the monitoring plan were consistently applied in the (Excel) calculation spreadsheet. These values were assessed as follows: • carbon content in steel scrap taken as 0.01 tC/t; • carbon content in steel taken as 0.01 tC/t; • carbon content in pig iron taken as 0.04 tC/t; • carbon content in electrodes taken as 0.82 tC/t; • carbon content in carbon raw materials 0.83 tC/t • default carbon content in natural gas taken as 15.30 tC/Tj; • conversion factor of calorie into joule taken as 4,1862 J/cal is in line with provided data source; These values were taken from the IPCC Guidelines. The				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		values indicated in the PDD were crosschecked against IPCC guidelines and found consistent. • CO2 emission factor for electricity generation in the grid for the years 2010-2012 is in line with the provided data source; • CO2 emission factor for lime production taken as 1.481 tCO2/t is in line with the applied data source - Best Available Techniques in the Cement, Lime and Magnesium Oxide Manufacturing Industries, European Commission, May 2010. The applied data source is well-accepted data source and deemed to be appropriate; • specific ingots consumption for billets production in the baseline scenario; taken as 1.174 t/t was duly calculated based on the Initial data are taken from internal reports/AE/. • CO_2 emission factor for steel billets production used by rolled manufacture in Izhstal in the baseline scenario taken as 1.537 tCO_2/t was correctly determined based on transparent data of Chermetinformacia about raw materials, fuel and energy resources consumption for steel production at ChMK (which is the most probable supplier of steel billets). The calculation is based on the data provided by the independent, reliable third party source. Therefore the				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		applied value was assessed as appropriate. It was correctly indicated that similar approach was used for determination of CO2 emission factor in the baseline scenario in the approved 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 team has checked the calculation as given in the Excel spreadsheet and found it correct. *Conclusion:* The requirement is fulfilled				
H.2.2	(b) Leakage, as applicable?	Leakage emissions were duly estimated based on the formulae as specified in the monitoring plan. The estimation was checked and found correct.	PDD XLS			OK
H.2.3	(c) Emissions or net removals for the baseline scenario (within the project boundary)?	*Description:* PDD provide ex ante estimates of emissions for the baseline scenario (within the project boundary). *Means of determination:* The estimation of the baseline emissions is based on the formulae specified in the monitoring plan. This could be verified by reproducing the calculation of the estimated emission reductions. The estimation of the monitoring parameters is based on the	PDD AE XLS IPCC BL			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		actual figures for the years 2010-2011. The values for the year 2012 are based on the historical values. Bearing in mind that the final version of the PDD was developed in 2012 the use of actual figures was accepted. The determination team has crosschecked the actual figures for the years 2010-2011 as indicated in various internal reports and recordings[AE/] against the values in the (Excel) calculation spreadsheet and found them consistent. The default values as determined in the monitoring plan were consistently applied in the (Excel) calculation spreadsheet. The determination team has checked the calculation as given in the Excel spreadsheet and found it correct. *Conclusion:* The requirement is fulfilled				
H.2.4	(d) Emission reductions or enhancements of net removals adjusted by leakage?	*n/a:*				
H.3	*DVM § 44* *If the approach (b) in §42 is*	*n/a:*				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	chosen, does the PDD provide ex ante estimates of:					
H.3.1	(a) Emission reductions or enhancements of net removals (within the project boundary)?	*n/a:*				
H.3.2	(b) Leakage, as applicable?	*n/a:*				
H.3.3	(c) Emission reductions or enhancements of net removals adjusted by leakage?	*n/a:*				
H.4	*DVM § 45* *For both approaches in 42* (a) Are the estimates in 43 or 44 given:					
H.4.1	(i) On a periodic basis?	As evident from the PDD the estimates are presented on	PDD			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		annual basis. This is appropriate.	XLS			
H.4.2	(ii) At least from the beginning until the end of the crediting period?	As evident from the PDD the estimates are from 2010 until 2012 - from the beginning until the end of the crediting period. This is correct.	PDD XLS			OK
H.4.3	(iii) On a source-by-source/sink-by-sink basis?	Yes, for each source.	PDD XLS			OK
H.4.4	(iv) For each GHG?	As evident from the PDD the estimates are for each GHG. .	PDD XLS			OK
H.4.5	(v) In tons of CO_2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol?	Yes, the final emission reductions are presented in tonnes of CO_2 equivalent.	PDD XLS			OK
H.4.6	(b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD?	The determination team has checked the estimates by reproducing the calculation and was able to confirm that formula used for calculating the estimates in 43 or 44 are consistent throughout the PDD.	PDD XLS			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
H.4.7	(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?	Yes, please refer to H.2.1 and H.2.3.	PDD XLS IPCC AE BL			OK
H.4.8	(d) Are data sources used for calculating the estimates in 43 or 44 clearly identified,reliable and transparent?	Yes, please refer to H.2.1 and H.2.3.	PDD XLS IPCC			OK
H.4.9	(e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy	Yes, please refer to H.2.1 and H.2.3.	PDD XLS IPCC AE			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	and reasonableness, and appropriately justified of the choice?					
H.4.10	(f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner?	Yes, please refer to H.2.1 and H.2.3.	PDD			OK
H.4.11	(g) Are the estimates in 43 or 44 consistent throughout the PDD?	Yes, please refer to H.2.1 and H.2.3.	PDD			OK
H.4.12	(h) Is the annual average of estimated emission re-ductions or enhancements of net removals calculated by dividing the total estimated emission re-ductions or enhancements of net removals over the crediting period by the total months of the crediting	ok	PDD EIA			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	period and multiplying by twelve?					
H.5	*DVM § 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?	The estimation of the baseline emissions is based on the actual figures for the years 2010-2011 and estimates for the year 2012.	PDD			OK
	Approved CDM methodology approach only	Not applicable because a JI specific approach is used.				
I	***Environmental impacts***					
I.1	*DVM § 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?	*Description:* As per the PDD an Environment Impact Assessment (EIA) is required by the Host Party. *Means of determination:* The conducting of the EIA was duly evidenced by following documents: • Reconstruction of steelmaking plant #23 Izhstal.	PDD PDV EIA EIA1 EIA3	CAR F1	CAR F1	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Volume 18.1. Environmental protection. //CJSC "Kazan Giproniiaviaprom", 2008; • Modernization (technical re-equipment) of rolling mill #250 Izhstal. Volume 18. Environmental protection measures. // CJSC "Kazan Giproniiaviaprom", 2010 In addition the PP provided documents confirming the compliance with the State Expert review. These documents/EIA3/ are: • Positive conclusion of the State Expert Review #0291-09/KGE-0535/04 for project "Izhstal. Reconstruction of rolling plant #23" issued by FSI GLAVGOSEXPERTIZA OF RUSSIA dated 14.08.2009; • Conclusion of industrial safety expertise #46 PD-04259 for project documentation of technical reequipment of dangerous facility of metallurgical plant: Work design documentation "Modernization (technical re-equipment) of rolling mill #250 Izhstal" issued by CJSC "Engineering and Consulting Centre for the operation and safety of technical facilities "Alton" dated on 29.08.2011. Finally the PP evidenced that the plant complies with all relevant environmental regulations of the Host Country. Compliance with the relevant environmental norms and				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		regulation could be duly evidences by means of the following documents: ***Permissions for air pollutant emissions*:** • Permission for air pollutant emissions #141 dated on 19.12.2007 issued by the Directorate for Technological and Ecological Supervision of the Rostekhnadzor for Udmurt Republic for the period from 01.12.2007 to 19.12.2011; • Permission for air pollutant emissions #141 dated on 17.11.2011 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 17.11.2011 to 20.10.2016. ***Permissions for discharge of pollutants into bodies of water:*** • Permission #210/1 for discharge of pollutants into the environment dated on 01.11.2006 issued by the Directorate for Technological and Ecological Supervision of the Rostekhnadzor for Udmurt Republic for the period from 01.11.2006 to 01.12.2009; • Permission #9 for discharge of pollutants into the environment dated on 01.12.2009 issued by the West-Ural Directorate for Technological, Ecological				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		and Nuclear Supervision for the period from 01.12.2009 to 01.12.2010; • Permission #3 for discharge of pollutants into the environment dated on 13.11.2010 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 13.11.2010 to 13.11.2011; • Permission #9 for discharge of pollutants into the environment dated on 23.12.2010 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 23.12.2010 to 23.12.2011; • Permission #6 for discharge of pollutants into the environment dated on 09.12.2011 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 09.12.2011 to 09.12.2012. ***Permissions for disposal and recovery of waste materials:*** • License to carry out activities of hazardous waste collection, use, deactivation, transportation and				

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		disposal #OT-46-000828(18) dated on 03.03.2009 issued by the Directorate for Technological and Ecological Supervision of the Rostekhnadzor for Udmurt Republic for the period from 03.03.2009 to 03.03.2014; • Limits for waste disposal #100-1 dated on 01.07.2007 issued by the Directorate for Technological and Ecological Supervision of the Rostekhnadzor for Udmurt Republic for the period from 01.07.2007 to 01.04.2011; • Limits for waste disposal dated on 01.04.2011 issued by the Directorate of Federal Service for Supervision of Natural Resources (Rosprirodnadzor) in Udmurt Republic for the period from 01.04.2011 to 01.07.2012. *Conclusion:* The requirement is fulfilled.				
I.2	(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	The PP has duly evidenced that all required assessments of the environmental impacts were carried out and approved by the relevant authorities. Finally the PP has evidenced the compliance of the plant with the relevant environmental norms and regulation.	PDD PDV EIA EIA1 EIA3	CAR F1	CAR F1	OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	assessment undertaken in accordance with the procedures as required by the host Party?					
J	***Stakeholder consultations***					
J.1	*DVM § 49* *If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party,* does the PDD provide:	*Description:* As explained in the PDD consultations with stakeholders on the project activity were carried. *Means of determination:* The stakeholder consultation process could be duly evidenced by the following documents: • Newspaper «Udmurtskaya pravda» dated on 10.10.2007 #117 (24204). • 28 Letter of Administration of Leninski district of Izhevsk #01-15-1237 dated on 24.10.2007 Bearing in mind the project activity received all required approvals it could be confirmed that the implementation of the project activity is in line with the Host Country regulation. *Conclusion:* The requirement is fulfilled.	PDD SC			OK
J.1.1	(a) A list of stakeholders from whom comments on the projects have been	*Please refer to comment under J.1.*	PDD SC			OK

No.	DVM[3] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	received, if any?					
J.1.2	(b) The nature of the comments?	*Please refer to comment under J.1.*	PDD SC			OK
J.1.3	(c) A description on whether and how the comments have been addressed?	*Please refer to comment under J.1.*	PDD SC			OK
K	***Determination regarding small-scale projects (additional elements for assessment)*** ☐ **Applicable** ☒ **Not applicable**					
L	***Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)*** ☐ **Applicable** ☒ **Not applicable**					
M	***Determination regarding programmes of activities (additional/alternative elements for assessment)*** ☐ **Applicable** ☒ **Not applicable**					

ANNEX 2: ASSESSMENT OF BASELINE IDENTIFICATION

Table A-2: Assessment of Baseline Identification

☐	Baseline is not identified
☒	Assessment of baseline see below

Baseline Alternatives identified	In line with the Methodology?	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evi-dence used	AIE Assessment	
					Appro-priateness of elimination	Assessment of determination team (results and means of assessment)
Scenario 1: Continuation of the current situation. Operation of steelmaking and rolling plants at the Izhstal without reconstruction and modernization	☒	☒	Within the Step1 this alternative has been identified as a **plausible** scenario because it represents the current practice in the Host Country and is not prohibited by any national laws and/or regulation.	PDD Reg PDV EIA	☒	**Step 1 Identification of alternatives to the project activity consistent with current laws and regulations** Within the Step 1 this alternative has been appropriately identified as a plausible scenario because it represents the current practice in the Host Country. It is important to note that the same technology was used in the pre-project situation. **Sub-step 1b) Compliance with current laws and regulations** As per the PDD "*there are no laws that restrict greenhouse gases emissions at metallurgical companies in Russia*". The PDD provides a list of the relevant regulations. The determination team has checked the relevant regulations and confirms that continuation of the

			Step 2 key factor review Key factor analysis shows that the continuation of the pre-project situation is not affected by the identified key factors. **Step 2 key factor review** In the context of the key factor analysis the PP demonstrated that this alternative faces investment and financial barriers. Most important is the insufficient financial attractiveness of this alternative as compared to scenario 3.			pre-project practice was not prohibited or restricted by any law or regulation. The laws and regulation reviewed in this context are summarized below: • Federal law of the RF "On Protection of the Environment" as of 10.01.2002 #7-FL; • Federal law of the RF "On Ecological Examinations" as of 25.11.1995 #174-FL; • Federal law of the RF "On the Sanitary and Epidemiological Safety of the Population" as of 30.03.1999 #52-FL; • Federal law of the RF "On the Protection of Atmospheric Air" as of 04.05.1999 #96-FL; • Federal law of the RF "On Production and Consumption Wastes" as of 24.06.1998 #89-FL; • Sanitary Regulations and Standards 2.2.1/2/1/1200-03 "Sanitary Protection Zones and Sanitary Classification of Companies, Buildings and other Facilities"; • Sanitary Regulations and Standards "Instructions on the development, coordination, approval and composition of design estimate documentation"; • Regulation on the evaluation of planned commercial and other activities on the environment in the Russian Federation approved by the order of the State Committee for Environmental Protection #372 as of 16.05.2000. • Russian metallurgy development strategy up to 2020, approved by the Ministry of Industry and Trade of the Russian Federation order #150 on March 18, 2009;

						• Russian Government Decree #780 dated on September 15, 2011 "On Realization of Article 6 of Kyoto Protocol to United Nations Framework Convention on Climate Change It was correctly concluded that the relevant laws and regulations envisage the reduction of GHG emissions in the industry through the introduction of energy efficient technologies or energy saving. However they do not define any binding requirements that enforce metallurgical plants to reduce GHG emissions. Therefore it was correctly concluded that there are no binding requirements that forbid the continuation of the pre-project situation. As already noted the baseline scenario represents the technology used by PP since many years. Energy efficiency measures in the Russian metallurgical plants are not widely observed. The same is supported by the results of the common practice analysis. In this context the PP also provided different documented evidences that the pre-project practice complied with all relevant environmental norms and regulations. **Step 2 (Key factor analysis) Barrier analysis** ***Investment barrier*** In the context of this barrier it was demonstrated that the implementation of large investments was prevented by company's lack of own and debt capita/ lack of access to capital. The continuation of the current practice does not require any additional expenses as compared to the introduction of a new technology within the project scenario (see

						below). Therefore this alternative does not face investment barrier (lack of own and debt capita/ lack of access to capital). As per the barrier analysis this practice is the most commonly used in Russia and was also applied in other metallurgical plants. Therefore there are no significant barriers, which would prevent this alternative. The same was explained within the interviews with responsible personnel. ***Financial barrier (Cost efficiency)*** In the course of the cost efficiency analysis all scenarios were assessed within the investment comparison analysis. In doing so, the levelized costs of rolled metal were selected as financial indicator. This financial indicator was calculated for all alternatives. A clear comparison of the financial indicator for the proposed JI activity and other identified alternatives was provided in the PDD. It was correctly demonstrated that one of the other alternatives (scenario 3) has the best indicator (the lowest levelized costs). Due to this it was duly concluded that scenario 1 and scenario 2 cannot be considered as the most financially attractive. Afterwards a sensitivity analysis was conducted. As a result it could be duly shown that the conclusion regarding the financial/economic attractiveness of the scenario 3 is robust to reasonable variations in the critical assumptions.

						Since the sensitivity analysis confirmed the result of the investment comparison analysis, it was duly concluded that the most economically or financially attractive alternative scenario (Scenario 3) is considered as baseline scenario. Therefore scenario 1 was duly excluded from further consideration.
Scenario 2: Project implementation without registration as a JI project. Reconstruction of the steelmaking plant and modernization of the rolling plant at the Izhstal (**project activity**)	☒	☒	Within the Step 1 this alternative was identified as a **plausible** scenario because it is the project activity and is not prohibited by any national laws and/or regulation. **Step 2 key factor review** In the context of the key factor analysis the PP demonstrated that this alternative faces investment and financial barriers. Most important is the insufficient financial attractiveness of this alternative as	PDD Bench INV CDM-Pr CT AT	☒	**Step 1 Identification of alternatives to the project activity consistent with current laws and regulations** Within the Step1 this alternative has been appropriately identified as a **plausible** scenario because it represents the project activity itself. It could be verified that this alternative is not prohibited by any national laws and regulations. **Sub-step 1b) Compliance with current laws and regulations** The project activity is in line with the relevant laws and regulation. Please refer to the explanation provided for scenario 1 above. **Step 2 Key factor analysis** In particular, as per the PDD there are two barriers that prevent the implementation of the project activity. These barriers are (a) the investment barrier and (b) the financial barrier (cost efficiency).

			compared to scenario 3.			***Investment barrier*** In the context of this barrier it was demonstrated that the implementation of large investments was prevented by company's lack of own and debt capita/ lack of access to capital. The investment barrier claims the lack of financial resources that prevented the realization of this scenario. According to the PDD the implementation of this alternative would result in additional expenses as compared to the continuation of the pre-project situation. Though this barrier was found reasonable and duly explained provided documented evidences could not fully justify the existence of this barrier in accordance with the provisions of EB 59 annex 13. ***Financial barrier (Cost efficiency)*** In the course of the cost efficiency analysis all scenarios were assessed within the investment comparison analysis. In doing so, the levelized costs of rolled metal were selected as financial indicator. This financial indicator was calculated for all alternatives. A clear comparison of the financial indicator for the proposed JI activity and other identified alternatives was provided in the PDD. It was correctly demonstrated that one of the other alternatives (scenario 3) has the best indicator (the lowest levelized costs). Due to this it was duly concluded that scenario 1 and scenario 2 cannot be considered as the most financially attractive. Afterwards a sensitivity analysis was conducted. As a

						result it could be duly shown that the conclusion regarding the financial/economic attractiveness of the scenario 3 is robust to reasonable variations in the critical assumptions. Since the sensitivity analysis confirmed the result of the investment comparison analysis, it was duly concluded that the most economically or financially attractive alternative scenario (Scenario 3) is considered as baseline scenario. Therefore scenario 2 was duly excluded from further consideration.
Scenario 3 Output of inefficient steelmaking furnaces at the Izhstal. Production of rolled products at the Izhstal by using the steel billets supplied from the outside at the Izhstal (**baseline scenario**)	☒	☒	Within the Step 1 this alternative was identified as a **plausible** scenario because it is the project activity and is not prohibited by any national laws and/or regulation. **Step 2 key factor review** In the context of the key factor analysis the PP demonstrated that this alternative faces investment and financial barriers. Most important is the	PDD INV CDM-Pr CT AT	☒	**Step 1 Identification of alternatives to the project activity consistent with current laws and regulations** Within the Step1 this alternative has been appropriately identified as a **plausible** scenario because it is available to the project participant. In this context the PP explained that using the steel billets supplied from the outside is a plausible option because the most probable steel billet supplier Chelyabinsk Metallurgical Plant (ChMK) and the project plant (Ithstal OAO) belong to the same company/group in Mechel Company. It was explained that the most probable supplied (ChMK) is specialized in producing high quality and special steels and has the necessary capacity for steel production. Furthermore the identification was assessed as appropriate because this alternative provides outputs and/or services with comparable quality and cannot be implemented in parallel to the proposed project activity. **Sub-step 1b) Compliance with current laws and**

			insufficient financial attractiveness of this alternative as compared to scenario 3.			**regulations** The project activity is in line with the relevant laws and regulation. Please refer to the explanation provided for scenario 1 above. **Step 2 Key factor analysis** In particular, as per the PDD there are two barriers that prevent the implementation of the project activity. These barriers are (a) the investment barrier and (b) the financial barrier (cost efficiency). ***Investment barrier*** Within analysis of this barrier it was explained that the implementation of large investments was prevented by company's lack of own and debt capita/ lack of access to capital. However this alternative does not require any additional expenses as compared to the introduction of a new technology within the project scenario (see below). Therefore this alternative does not face investment barrier (lack of own and debt capita/ lack of access to capital). This conclusion was assessed as correct. ***Financial barrier (Cost efficiency)*** In the course of the cost efficiency analysis all scenarios were assessed within the investment comparison analysis. In doing so, the levelized costs of rolled metal were selected as financial indicator. This financial indicator was calculated for all alternatives. A clear comparison of the financial indicator for the proposed JI activity and other identified alternatives was provided in the PDD. It was correctly demonstrated that one of the other

						alternatives (scenario 3) has the best indicator (the lowest levelized costs). Due to this it was duly concluded that scenario 1 and scenario 2 cannot be considered as the most financially attractive. Afterwards a sensitivity analysis was conducted. As a result it could be duly shown that the conclusion regarding the financial/economic attractiveness of the scenario 3 is robust to reasonable variations in the critical assumptions. Since the sensitivity analysis confirmed the result of the investment comparison analysis, it was duly concluded that the most economically or financially attractive alternative scenario (Scenario 3) is considered as baseline scenario. Subsequently scenario 1 and 2 were duly excluded from further consideration.

ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS

Table A-3: Assessment of Financial Parameters

☐	No financial parameters are used for additionality justification
☒	Assessment of all financial parameters see below

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	AIE ASSESSMENT	
					Correctness of value applied	Comment
Investment cost scenario 2	3,627.7	Mio Rub.	Justification of Investments prepared by JSC "Chelyabgipromez" Proposals, Explanatory Notes, the conclusion of services proved by specialists of Mechel-Company "	/XLS/ /ORD/ /BFC/	☒	The investment costs were duly elaborated based on the different cost components related to the design works, construction and installation works, purchase of equipment. The main documents applied in this context are summarized below: • Justification of Investments prepared by JSC "Chelyabgipromez" • Proposals, Explanatory Notes, the conclusion of services proved by specialists of Mechel-Company All documented evidences applied in this context were reviewed by the determination team. It was observed that provided documents clearly indicate the how the particular cost components were estimates. As a result it could be confirmed that the total investment costs were duly calculated. The documented evidences were provided either by internal

						financial experts of the company or sourced from independent third parties. They were checked by the determination team and found as authentic and reliable. In order to gain further confidence about the reliability of the evidences provided by the internal sources the determination team has interviewed the responsible personnel. The relevant documents were provided mainly by analytical and accounting department of the plant. The personnel of the relevant department were interviewed and the applied assumption could be reasonably explained. The forecasts elaborated by the analytical and accounting department was reviewed by different experts and finally used by the plant management within the investment decision. Therefore provided data source was assessed as reliable and suitable in the specific context of the project activity. The financial assumptions elaborated within the estimates are in line with the values applied in the investment analysis.
Production Volume for all scenarios	400	Th. t.	Protocol of meeting of technical council dated on 29.09.2006; Concept of the JSC Izhstal development in 2007-2011; Protocol of meeting by the general director of CJSC "UC Mechel" dated on 20.12.2006	/XLS/ /PTS-06/	☒	The production volume corresponds to the capacity of the plants facilities after the reconstruction. This production volume is evident from all internal documents, feasibility studies, etc related to the project activity. The production volume of 400,000 t per year is evident from the protocol of meeting/PTS-06/ where the investment decision was met. Also other meetings where the project measures were discussed clearly refer to this production volume. Production volume was assumed equal for scenarios. This is consistent and therefore was assessed as correct by the determination team.
Operational costs for			The prices of basic and auxiliary	/XLS/	☒	Information about the costs of production is prepared and provided by the analytical and accounting department of the plant.

Scenario 1 Scenario 2 Scenario 3	7,231.4 6,773.7 6,895.6	Mio Rub / year	materials, energy planning used within the investment decision Plants general expenses, commercial activity related expenses used within the investment decision Production expenses -the planned and actual expenses used within the investment decision Expenses overview as per the internal financial reports	/PBM/ /WGE/ /CSTR/ /VC/		Cost of goods sold includes all costs related to all steps of the production process. The assumed values take into account possible changes in cost structure and cost of new materials. In particular the operational costs of scenario 3 take into account expenses for purchased steel billets from other sources. The relevant documents used within the calculation of this value were provided by the analytical and accounting department. The personnel of the relevant department were interviewed and the applied assumption as well as the calculation method could be reasonably explained. The forecasts were elaborated also by the analytical and accounting department in a detailed manner by taking into account various production data. The applied assumptions were reviewed by different experts of the plant and finally used by the plant management within the investment decision. Therefore provided data source was assessed as reliable and suitable in the specific context of the project activity. The figures elaborated within the estimates are in line with the values applied in the investment analysis.
Costs of production Scenario 1 Scenario 2 Scenario 3	 18,044 18,161 17,206	 Rub / t Rub / t Rub / t	The prices of basic and auxiliary materials, energy planning used within the investment decision Plants general expenses,	/XLS/ /PBM/ /WGE/ /CSTR/ /VC/	☒	Information about the costs of production is prepared and provided by the analytical and accounting department of the plant. Cost of goods sold includes all costs related to all steps of the production process. The assumed value takes into account possible changes in cost structure and cost of new materials. The relevant documents used within the calculation of this value were provided by the analytical and accounting department. The personnel of the relevant department were interviewed and the applied assumption as well as the calculation method could be

			commercial activity related expenses used within the investment decision Production expenses -the planned and actual expenses used within the investment decision Expenses overview as per the internal financial reports			reasonably explained. The forecasts were elaborated also by the analytical and accounting department in a detailed manner by taking into account various production data. The applied assumptions were reviewed by different experts of the plant and finally used by the plant management within the investment decision. Therefore provided data source was assessed as reliable and suitable in the specific context of the project activity. The figures elaborated within the estimates are in line with the values applied in the investment analysis.

ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS

Table A-4: Assessment of Barrier Analysis

☒	No barrier parameters are used for additionality justification
☐	Assessment of barriers see below

Kind of Barrier (invest, tech, other)	Description of Barrier	Evidence used	Assessment of determination team	
			Appropriateness of information source	Explanation of final result
			☐	

ANNEX 5: OUTCOME OF THE GSCP

Table A-5: Outcome of the Global Stakeholder Consultation Process

☒	No comments were received during the global stakeholder consultation period
☐	Comments were received during the global stakeholder consultation period. The comments (in unedited form) and the consideration/response of the determination team are presented below:

Comment No.:	Comment by:	Inserted on:	Subject	Comment *)	Response determination team *)	Conclusion (incl. CARs CLs or FARs)

*) In case clarifications have been requested by the determination team corresponding rows shall be added