

TÜV Rheinland Group

## **DETERMINATION REPORT**

### DETERMINATION OF THE JOINT IMPLEMENTATION PROJECT "DISMANTLING OF WASTE HEAP AT FORMER MINE "ROZSYPNYANSKA-1""

<u>Report No. 01 998 9105069089 - DR</u> <u>Revision No. 02</u>

**Customer: SIA "Vidzeme Eko"** 



#### DETERMINATION REPORT

Date of first issue:	Project No:
06/04/2012	01 998 9105069089
Executor: TÜV Rheinland Group	Organizational unit: Ltd. TÜV Rheinland Ukraine
Customer: SIA "VidzemeEko"	Client ref.: Gennadiy Ivanenko

#### Summary:

TÜV Rheinland Group/TÜV Rheinland Ukraine has performed a determination of the project "Dismantling of waste heap at former mine "ROZSYPNYANSKA-1"" in Ukraine. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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The determination serves as project design objective and complete assessment, and is a requirement of all projects. It consists of the following three phases: i) a desk review of the project design documents including analysis of the baseline justification and monitoring plan; ii) follow-up interviews with project stakeholders including on site visit; iii) the resolution of outstanding issues and the issuance of the final determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using TÜV Rheinland Group/TÜV Rheinland Ukraine internal procedures.

To address TÜV Rheinland Group/TÜV Rheinland Ukraine corrective action and clarification requests SIA "VidzemeEko" revised the PDD and resubmitted it on 05/04/2012 as version 2.0.

The determination findings presented in this report relate to the project as described in the PDD version 2.0 dated 05/04/2012.

In summary, it is TÜV Rheinland's Group/TÜV Rheinland's Ukraine opinion that the project complies with the criteria for baseline setting and monitoring methodology according to developed specific approach, and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

Report No.: 01 998 9105069089		pject Group:		
Project title: "Dismantling of waste	heap at former n	nine "ROZSYPNYANSKA-1""		
Work carried out by: Mr. Dmitry Rakovich – Ms. Ganna Zadniprian	Climate Change		X	No distribution without permission from the Client or responsible organizational unit
Work verified by: Ms. Iryna Nikolaieva -	Internal technica Climate Change		0	Limited distribution
Determination Report approved by: Prof., dr. Valery Yakubovsky – Technical Competence		0	Unrestricted distribution	
Date of this revision: 06/04/2012	Revision No.: 02	Number of pageminton and 80		



#### Abbreviations

AIE	Accredited Independent Entity
BE	Baseline Emission
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
CO $_2$	Carbon Dioxide
DR	Document Review
EIA	Environmental Impact Assessment
ERU	Emission Reduction Unit
FAR	Forward Action Request
GHG	Greenhouse Gas
I	Interview
ICC	Industrial Commercial Company
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
LOA	Letter of Approval
LOE	Letter of Endorsement
MoV	Means of Verification
MP	Monitoring Plan
OSV	On Site Visit
PDD	Project Design Document
PE	Private enterprise
STHS	Stakeholder Survey
t	Tonne
tCO $_2$ e	Tonnes of CO <sub>2</sub> equivalent
tCO <sub>2</sub> e	Tonnes of CO <sub>2</sub> equivalent
UNFCCC	United Nations Framework Convention on Climate Change



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ANNEX A: JI PROJECT DETERMINATION PROTOCOL



#### 1 DETERMINATION OPINION

The determination team of TÜV Rheinland Group/TÜV Rheinland Ukraine has performed a determination of the JI project "DISMANTLING OF WASTE HEAP AT FORMER MINE "ROZSYPNYANSKA-1"" in Ukraine. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The determination consisted of the following three phases:

i) a desk review of the project design document (PDD) including analysis of the baseline justification and monitoring plan;

ii) follow-up interviews with project stakeholders including on site visit;

iii) the resolution of outstanding issues and the issuance of the final determination report and opinion.

The project participants of the JI project "DISMANTLING OF WASTE HEAP AT FORMER MINE "ROZSYPNYANSKA-1" selected the <u>JI specific</u> <u>approach</u> for identifying the baseline, defined in paragraph 22 (a) of the "Determination and Verification Manual" (DVM).

A baseline for the project was set in accordance with criteria stated in Appendix B to decision 9/CMP.1 (JI guidelines). The JI specific approach is provided in paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", version 03.

The PDD version 2.0 dated 05/04/2012 provides a description of the chosen baseline in a clear and transparent manner according to "Guidelines for users of the joint implementation project design document form", version 04, as well as a justification per the "Guidance on Criteria for Baseline Setting and Monitoring" (paragraphs 23 - 29), version 03.

Project participants used the following approach defined in paragraph 28 (c) of the DVM: Application of the "Tool for the demonstration and assessment of additionality" version 06.0.0 (the most recent version of the Tool at the time of PDD development) for demonstration of the additionality. In line with this tool, the PDD version 2.0 dated 05/04/2012 provides investment analysis and common practice analysis to determine that the project activity itself is not the baseline scenario.

The JI project is likely to result in reductions of GHG emissions in accordance with the project description. An analysis of the investment and prevailing practice demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.



The review of the project design documentation (2.0 dated 05/04/2012) and the subsequent interviews have provided TÜV Rheinland Group/TÜV Rheinland Ukraine with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for JI projects and the relevant host country criteria.

The determination is based on the information made available to the determination team of TÜV Rheinland Group/TÜV Rheinland Ukraine and the engagement conditions detailed in this report.



#### 2 INTRODUCTION

SIA "Vidzeme Eko" has commissioned TÜV Rheinland Group/TÜV Rheinland Ukraine to determinate its JI project "DISMANTLING OF WASTE HEAP AT FORMER MINE "ROZSYPNYANSKA-1"" (hereinafter called "project") at Donetsk region, Ukraine.

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

#### 2.1 Objective

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

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

#### 2.2 Scope

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

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

#### 2.3 JI Project Description

The brief information regarding the project is provided in table 1.

#### Table 1 - JI project brief information

Project Parties involved:	1.Ukraine (host Party);
	2. Republic of Latvia.



Title of the project:	"DISMANTLING OF WASTE HEAP AT FORMER MINE "ROZSYPNYANSKA-1""	
Type of JI activity:	Large-scale	
Baseline and monitoring methodology:	JI specific approach	
Project entity participant:	PE ICC "Tefida"	
Other project participants:	SIA "Vidzeme Eko"	
Location of the project:	Urban village Rozsypne, Donetsk region, Torez district, Ukraine	
Starting date of the project:	17/07/2008	
1st part of crediting period:	From 01/10/2008 to 31/12/2012	
2nd part of crediting period:	From 01/01/2013 to 31/12/2015	

Proposed project provides a complete dismantling of the dump at former mine "Rozsypnyanska-1", followed by reclamation of land by restoring the fertile layer. During dismantling of dump the rock mass of dump will be fully utilized, and the received coal will replace coal, which must be produced by mine way. As the result of project, the opportunity of selfignition of heap will be eliminated.

The project provides the assembling and installation of sorting rock mass complex of former mine"Rozsypnyanska-1" consisting of:

- Point of loading rock mass on Conveyor SP-202MS;

- Point of sorting rock mass in classes 0-30 mm and 30 mm (vibrating inertial sifter GIL-43A);

- Point of storage class 0-30 mm (shed).

The proposed project is aimed at reducing anthropogenic emissions created by:

- Eliminate sources of greenhouse gases associated with burning waste heaps, by extracting coal from the rock dumps;

- Reduce uncontrolled emissions of methane due to replacement of coal that would have been extract mine way;

- Reduce electricity consumption at waste heap dismantling in comparison with electricity consumption at coal mine.



#### 3 METHODOLOGY

The determination consists of the following three phases:

I) a desk review of the project design documents including analysis of the baseline justification and monitoring plan;

II) follow-up interviews with project stakeholders including on site visit;

III) the resolution of outstanding issues and the issuance of the final determination report and opinion.

The following sections outline each step in more detail.

#### 3.1 Desk Review of the Project Design Documentation

The Project Design Document (PDD) submitted by SIA "Vidzeme Eko" and additional background documents related to the project design to be checked by an Accredited Independent Entity were reviewed. The list of submitted documentation is provided below.

To address TÜV Rheinland Group/TÜV Rheinland Ukraine corrective action and clarification requests SIA "Vidzeme Eko" revised the PDD and resubmitted it on 05/04/2012 as version 2.0.

The determination findings presented in this report relate to the project as described in the PDD 2.0 dated 05/04/2012.

The following tables outline the documentation reviewed during the determination. Documents provided by SIA "Vidzeme Eko" that relate directly to the components of the project are indicated in table 2. Background documents related to the design and/or methodologies employed in the design or other reference documents are provided in table 3.

No.	Title of the document		
/1/	PDD "DISMANTLING OF WASTE HEAP AT FORMER MINE		
	"ROZSYPNYANSKA-1"", version 1.0 dated 05/03/2012.		
/2/	PDD "DISMANTLING OF WASTE HEAP AT FORMER MINE		
	"ROZSYPNYANSKA-1"", version 1.1 dated 05/03/2012.		
/3/	PDD "DISMANTLING OF WASTE HEAP AT FORMER MINE		
	"ROZSYPNYANSKA-1"", version 2.0 dated 05/04/2012.		
/4/	GHG emission reduction calculation spreadsheet in Excel format		
	(Calculation).		
/5/	GHG emission reduction calculation spreadsheet in Excel format		
	(Calculation2).		
/6/	Excel files of investment analysis.		
/7/	"Guidelines for users of the Joint implementation project design		
	document form", version 04.		
/8/	"Guidance on Criteria for Baseline Setting and Monitoring", version		
	03, JISC.		

#### Table 2 - Category 1 Documents



No.	Title of the document
/9/	"Tool for the demonstration and assessment of additionality", version 06.0.0.
/10/	Kyoto Protocol to the United Nations Framework Convention On Climate Change.
/11/	Marrakech Accords, JI Modalities.
/12/	JI guidelines. Annex II to decision 9/CMP.1.
/13/	"Joint implementation determination and verification manual", version 01, JISC.
/14/	"Glossary of JI terms", version 03, JISC.
/15/	Letter of Endorsement for the project "DISMANTLING OF WASTE HEAP AT FORMER MINE "ROZSYPNYANSKA-1"" # 864/23/7 dated 03/04/2012.

### Table 3 - Category 2 Documents:

N⁰	Name of document
/1/	Contract of industrial product supply # 07/01-11 from 02/01/2011
	(in Russian).
/2/	Agreement of subcontract # 1/01 from 02/01/2011 between "Niva-
	2012" Ltd. (Performer) τα PE ICC "Altair-2007" (Contractor) on the
/3/	work of dismantling the dump of the mine "Rozsypnyanska".
/3/	Agreement of subcontract # 02/01/11 from 02/01/2011 between PE 'Industrial commercial company "Tefida" (Customer) and "Niva-
	2012" Ltd. (Performer) on the work of dismantling the dump of the
	mine "Rozsypnyanska".
/4/	Contract of industrial product supply # 01-07 from 01/07/2009 (in
	Russian).
/5/	Agreement of subcontract # 48/07 from 01/07/2009 between PE
	"Industrial commercial company "Technoprominvest" (Contractor)
	and PE ICC "Altair-2007" (Performer) on the work of dismantling
	the dump of the mine "Rozsypnyanska".
/6/	Agreement of subcontract # 01/07/09 from 01/07/2009 between PE
	"Industrial commercial company "Tefida" (Customer) and PE
	"Industrial commercial company "Technoprominvest" (Contractor)
	on the work of dismantling the dump of the mine "Rozsypnyanska-
(= )	
/7/	Contract of industrial product supply # 17/07 from 17/07/2008 (in Russian)
/8/	Russian). Agreement of subcontract # 32/08 from 17/07/2008 between
/0/	"Trading Company "Antares" (Performer) and PE ICC "Altair-2007"
	(Contractor) on the work of dismantling the dump of the mine
	"Rozsypnyanska".
/9/	Agreement of subcontract # 17/07/08 from 17/08/2008 between PE
	"Industrial commercial company "Tefida" (Customer) and "Trading
	Company "Antares" (Performer) on the work of dismantling the



N⁰	Name of document		
IN≌	dump of the mine "Rozsypnyanska"		
/10/	Registration certificate MB.2.844.000 IIC on Hygrometer		
/10/			
/11/	psychrometric issued JSK «Steclopribor» (in Russian). Order Derjspojivstandart Ukraine "Donetskstandartmetrolohiya" SC		
/ 1 1/	# 283 of 15/04/2011, the appointing committee to check the		
	conditions for certification of Coal Laboratory.		
/12/	Certificate # 66 dated 29/01/2009, the verification of the working		
/12/	measuring equipment - laboratory scale A-6000, the pl. # 759 (in		
	Russian).		
/13/	Certificate # 67 dated 29/01/2009, the verification of the working		
/13/	measuring equipment - electronic scale laboratory XAS 100/C, pl.		
	Number 214 295 (in Russian).		
/1//	Certificate # 447 dated 01/02/2008 on the verification work of the		
/ 1 4/	measuring instrument - the scale E A 6000, pl. # 759.		
/15/	Certificate # 1373 from 13/05/2008, the verification work of the		
, 10/	measuring instrument - electronic weight XAS 100/C, Number		
	209807.		
/16/	Certificate # 479 of 18/02/2008, the verification work of the		
,	measuring instrument - electronic weight XAS 100/C, pl. # 214295.		
/17/	Certificate attestation of Coal Chemical Laboratory PE "Industrial -		
	Commercial Firm" UKRHYMVUHLEKACHESTVO" # VL-089/2011		
	issued 4/22/2011 was in force prior to 22/04/2014.		
/18/	Certificate number 361 and the protocol number 361 of		
	28/05/2008, the screening laboratory certification number 347 for		
	grain size and purity sifter loose types of materials to form a		
	square cell that belongs to JSC "Rodnik".		
/19/	Certificate # 00732 and the protocol # 00732 from 15/08/2010, the		
	certification of sieves with mesh metal square cells, type SL-200,		
	pl. # 26047.		
/20/	Certificate # 362 and the protocol # 362 from 28/05/2008, the		
	screening laboratory certification # 348 for grain size and purity		
(0.4.)	sifter loose kinds of materials with a round shape cell.		
/21/	Certificate # 334 and the protocol # 334 from 01/10/2008		
(22)	certification of electric laboratory SNOL 7,2/1100 pl. # 06174.		
1221	Certificate # 72 dated 05/05/2011, at Electric laboratory SNOL		
/22/	67/350, pl. # 11928. Certificate # 71 dated 05/05/2011, at Electric SNOL 7,2/1100 pl. #		
/23/	05793.		
/21/	Certificate # 10 and protocol # 10 dated 25/01/2011, the		
/24/	certification # 347 sieve control type SLM, pl. # 26047 to determine		
	the grain size and purity sifter loose types of materials to form a		
	square cell.		
/25/	Certificate # 9 and protocol # 9 dated 25/01/2011, the certification		
, 20,	# 347 sieve control type SLM, pl. # 347 to determine the grain size		
	and purity sifter loose types of materials to form a square cell.		
/26/	Certificate # 8 and protocol # 8 dated 25/01/2011, the screening		
	laboratory certification # 347, pl. # 348 to determine the grain size		
	, , , , , , , , , , , , , , , , , , , ,		



N⁰	Name of document		
	and purity sifter loose kinds of materials with a round shape cell.		
/27/	Certificate # 7 dated 20/01/2011, ateElectric laboratory furnace		
, ,	SNOL 7,2/1100 pl. # 103426.		
/28/	Certificate # 330 and the protocol # 330 dated 23/09/2008, the		
, _ 0,	certification of the drying box SNOL 67/350, pl. # 12357.		
/29/	Act dated 04/20/2011, on the execution of the		
,20,	"Donetskstandartmetrolohiya" SC , coal laboratory tests on PE		
	"VFK" UKRHYMUHLEKACHESTVO "certification criteria.		
/30/	Act # 26/70190 of the state weights laboratory calibration of		
, 00,	general purpose and standard of all types, certified screens of all		
	types, metrological certification muffle furnaces, electric resistance		
	furnaces.		
/31/	Guarantee tickets to the electronic scales A 6000, # 759,		
, • • • •	electronic scales XAS 100/C # 479, # 759, furnace SNOL 67/350,		
	pl. # 12 357 , laboratory electric furnace SNOL 7.2/1100 № 06174		
	(in Russian).		
/32/	Expert opinion dated 31/03/2011, with the results of examination of		
	documents submitted Coal Laboratory PE "TCF"		
	UKRHYMUHLEKACHESTVO "which examined on measurements in		
	the state metrological supervision.		
/33/	Journal of weighing equipment and technology for coal laboratories		
	firm "Ukrhimuglekachestvo" (in Russian).		
/34/	Passport # 9. Electric Laboratory, pl. # 05793, inv. # 9, the type -		
	SNOL 7.2/1100 (in Russian).		
/35/	Passport # 7. Electric Laboratory furnace, pl. # 11928, inv. # 7, the		
	type - SNOL 67/350 (in Russian).		
	Passport # 6. Sieve Laboratory, pl. # 347, inv. # 6 (in Russian).		
	Passport # 5. Sieve Laboratory, pl # 348, inv. # 5 (in Russian).		
/38/	Passport # 4. Stopwatch pl. # 7095, inv. # 4, type SOPpr 2a-2-010		
	(in Russian).		
/39/	Passport # 3. Electronic Scales, pl. # 209 807, inv. # 3, the type of		
	XAS 100/1 (in Russian).		
/40/	Passport # 2. Electronic Scales, pl. # 214295, inv. # 2, the type of		
	XAS 100/1 (in Russian).		
	Passport # 1. Scales pl. # 759, inv. # 1, type A-6000 ((in Russian).		
	Plan for coal laboratory firm "Ukrhimuglekachestvo" (in Russian).		
/43/	Guide of maintenance. Electric water distiller pharmacy, DE-4-02		
1	"EMO" OKP 94 5243, model 737 (in Russian).		
/44/	Certificate of verification of the working measuring instrument # 63		
	of 01/26/2012, the - weight electronic laboratory XAS 100/C, pl. #		
115/	214295. Cortificate of verification of the working measuring instrument # 64		
/43/	Certificate of verification of the working measuring instrument # 64 of 01/26/2012, the - weight electronic laboratory XAS 100/C, pl. #		
	209807.		
1461	Certificate of verification of the working measuring instrument # 65		
/40/	dated 26/01/2012 - electronic laboratory scales A 600, pl. # 759.		
//7/	Certificate of verification of the working measuring instrument from		
/ + / /	Continuate of vermeation of the working measuring instrument from		



TÜV Rheinland Group/ TÜV Rheinland Ukraine

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N⁰	Nome of decument
IN≌	Name of document
	15/03/2012 # 02/08-245 - mechanical stopwatch JOP pr-2a-2-000
(40)	pl. # 7095.
/48/	Passport. Mechanical Stopwatch SOppr-2a-2-010 (in Russian).
/49/	Quality Certificate # 005 dated 25/04/2008, the chopper vibrating 75T - DRM, pl. # 1087 (in Russian).
	Passport-75T DrM.000PS. Chopper vibrating 75T-DRM (in Russian).
	Terms of Reference. Automobile balance electronic Strain BTA - 60, 2008 (in Russian).
/52/	Certificate of metrological certification # 188 dated 04/04/2008, the scales automobile electronic tenzometric VTA-60 # 070900951.
	Working drawings RP-07. Scales automobile electronic tenzometric series BTA-60, certificated on 03/04/2008, the weights (in Russian).
/54/	License series AB, # 513073 from 22/12/2009 of the Ministry of Regional Development and Construction of Ukraine on economic activity associated with the creation of objects of architecture issued by the joint venture as a limited liability company "UKRESTMARKINVEST."
/55/	Permission for continued performance of high hazard # 0088.08.14-29.24.1 joint venture in the form of "Ukrestmarkinvest" LLC from 06/02/2008.
/56/	Passport. Scales automobile electronic tenzometric BTA-60, 2008 (in Russian).
	Contract dated 17/07/2008 between Nabiyev Oleg Shakrovych (Customer) and PE "Industrial and Commercial Firm" TEFIDA "(Contractor) to perform work on mining reclamation of dump in the mine "Rozsypnyanska-1".
/58/	Impact Assessment (EIA) # 17/13-4.

#### 3.2 Interviews with project stakeholders

TÜV Rheinland Group/TÜV Rheinland Ukraine performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of SIA "Vidzeme Eko", PE ICC "Tefida", PE "TCF Ukrhymuhlekachestvo" were interviewed are summarized in Table 4. The main topics of the interviews are summarized in Table 5.

No.	Name	Position	Organization
/1/	Gennadiy V.	Project developer	SIA "Vidzeme Eko"
	Ivanenko		
/2/	Sergiy P. Tymofiiv	Consultant	SIA "Vidzeme Eko"
/3/	Yuriy M. Stach	Consultant	SIA "Vidzeme Eko"

#### Table 4 - Persons interviewed



TÜV Rheinland Group/ TÜV Rheinland Ukraine

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No.	Name	Position	Organization
/4/	Iryna I. Berestova	Head of Laboratory	PE "TCF Ukrhymuhlekachestvo"
/5/	Yuriy A. Sharayko	Master boot	PE ICC "Tefida"

#### Table 5 - Interview topics

No.	Date	Interviewed organization	Interview topics
/1/	03/04/2012	PE ICC "Tefida"	<ul> <li>Project related legal issues</li> </ul>
			Technical equipment
			Monitoring plan
			Training history
			Management system
			Environmental impacts
			Stakeholder comments
/2/	03/04/2012	PE "ICC	Technical equipment
		Ukrhymuhlekachestv	Monitoring plan
		0"	Environmental impacts
/3/	03/04/2012	SIA "Vidzeme Eko"	Project design
			<ul> <li>Project related legal issues</li> </ul>
			Additionality
			Crediting period
			Monitoring plan
			Stakeholder comments

#### 3.3 Resolution of Clarification and Corrective Action Requests

The overall determination, from Contract signing to Determination Report and Opinion, was conducted using TÜV Rheinland Group/TÜV Rheinland Ukraine internal procedures. The objective of this phase of the determination is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for TÜV Rheinland Group/TÜV Rheinland Ukraine positive conclusion on the project design.

In order to ensure transparency, a determination protocol (Annex A to the Determination report) was customized for the project, in accordance with the Annex to "Joint Implementation Determination and Verification Manual", version 01. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from determining the



identified criteria. The determination protocol serves the following purposes:

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

The determination protocol consists of three tables. The different columns in these tables are described in Figure 1 below.

To guarantee the transparency of the determination process, the concerns raised are documented in more detail in the determination protocol (Annex A to the Determination report).

The PDD, final version 2.0 dated 05/04/2012, was submitted to the determination team for final determination. The final version of the PDD (version 2.0 dated 05/04/2012) was revised based on the determination protocol (Annex A to the Determination report) with the issued corrective action requests and clarification requests. The major changes include: starting date of project activity and crediting period; monitoring plan; estimate of GHG emission reductions.

Determination Protocol Table 1: Mandatory Requirement for Joint Implementation (JI) Project Activities						
Requirement	Reference	Conclusion	Cross reference			
The requirements the project must meet.	Gives reference to the legislation or agreement where the requirement is found.	acceptable based on	relevant protocol questions in Tables 2, to show how the specific requirement is determined. This is to ensure a transparent			

igure i Determination protocol tables							
Determination	Determination Protocol Table 2: Requirements checklist						
Checklist Question	Reference	Means of verification (MoV)	Comments	Draft and/or Final Conclusion			
The various requirements in Table 1 are linked to checklist questions the project should meet. The checklist is organized in several sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.	the	Explains how conformanc e with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformanc e to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) due to non-compliance with the checklist question. (See below). Clarification Request (CL) is used when the determination team has identified a need for further clarification. Forward action request (FAR) informs the project participants of an issue that needs to be reviewed during the verification.			

#### Figure 1 Determination protocol tables

Determination Protocol Table 3: Resolution of Corrective Action and
Clarification Requests

Report clarifications and corrective action requests	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
If the conclusions from the Determination are a Corrective Action Request, a Clarification Request or a Forward action request, these should be listed in this section.	Reference to the checklist question number in Tables 2 where the Corrective Action Request, Clarification Request or a Forward action request is explained.	The responses given by the Client or other project participants during the communications with the determination team should be summarized in this section.	This section should summarize the determination team's responses and final conclusions. The conclusions should also be included in Tables 2, under "Final Conclusion".



#### 3.4 Internal Technical Review

The determination report including the determination findings underwent a technical review before requesting registration of the project activity. The technical review was performed by an internal technical reviewer qualified in accordance with TÜV Rheinland Group/TÜV Rheinland Ukraine qualification scheme for JI project determination and verification.

#### 3.5 Determination team

The determination team consists of the following personnel indicated in Table 6 below:

TÜV Rheinland Group/TÜV Rheinland Ukraine				
Mr. Dmitry Rakovich	Team Leader, Climate Change Verifier			
Ms. Ganna Zadnipriana Climate Change Verifier				
Ms. Iryna Nikolaieva	Internal technical reviewer, Climate Change Verifier			
Prof., dr. Valery Yakubovsky	Technical Competence Centre Director			

#### Table 6 - Determination team



#### 4 DETERMINATION FINDINGS

In the following subsections the determination findings are stated as follows:

- the findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found in the Determination Protocol (Annex A to the Determination report);
- 2) in case TÜV Rheinland Group/TÜV Rheinland Ukraine had identified issues that needed clarification or that represented a risk to the fulfillment of the project objectives, a Clarification or Corrective Action Request, respectively, have been issued. The Clarification and Corrective Action Requests are stated, where applicable, in the following subsections and are further documented in the Determination Protocol (Annex A to the Determination report). The determination of the Project resulted in 27 Corrective Action Requests (CARs) and 2 Clarification Requests (CLs);
- 3) the conclusions for determination subject are presented in each subsection.

The considerations, findings and means of verification for areas of determination are provided below in accordance with the Determination and Verification Manual (DVM). All information indicated in the following subsections relates to the PDD version 2.0 dated 05/04/2012 (hereinafter called "PDD").

#### 4.1 **Project approval by Parties Involved**

In accordance with paragraphs 19 - 20 of the DVM the assessment of this area focuses on whether the designated focal points (DFPs) of all Parties listed as "Parties involved" in the PDD have provided written project approvals. It also should be assessed whether the written project approvals referred to above are unconditional.

The project has no written project approvals by Parties involved. "Glossary of joint implementation terms", version 03 defines the following: a) At least the written project approval(s) by the host Party(ies) should be provided to the AIE and made available to the secretariat by the AIE when submitting the determination report regarding the PDD for publication in accordance with paragraph 34 of the JI guidelines;

b) At least one written project approval by a Party involved in the JI project, other than the host Party(ies), should be provided to the AIE and made available to the secretariat by the AIE when submitting the first verification report for publication in accordance with paragraph 38 of the JI guidelines, at the latest.

To obtain a written project approval by the host Party (Ukraine) a final Determination Report should be submitted to the State Environmental



Investment Agency of Ukraine. Written project approval by Republic of Latvia (Party involved in the project, other than the host Party) will be obtained before submission of the first verification report for publication in accordance with paragraph 38 of the JI guidelines.

The FAR 01 was raised. It will be closed after issuing written project approvals by Parties involved.

Identified problem areas for project approval, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland Ukraine are described in Annex A to the Determination Report (refer to FAR 01).

#### 4.2 Authorization of project participants by Parties involved

In accordance with paragraph 21 of the DVM the assessment of this area focuses on whether each of the legal entities listed as project participants in the PDD is authorized by a Party involved, which is also listed in the PDD, through: a written project approval by a Party involved, explicitly stating the name of the legal entity; or any other form of project participant authorization in writing, explicitly stating the name of the legal entity.

The following legal entities were listed as project participants in the PDD:

- PE ICC "Tefida";I
- SIA "Vidzeme Eko".

The detailed information on project participants was indicated in section A.3. of the PDD. The contact information on project participants, explicitly stating the name of the legal entities, was provided in Annex 1 to the PDD.

Identified problem areas for authorization of project participants by Parties involved, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland Ukraine are described in Annex A to the Determination Report (refer to FAR 01).

#### 4.3 Baseline Setting

In accordance with paragraphs 22 - 26 of the DVM the assessment of this area focuses on various aspects of the baseline setting by project participants.

The paragraph 22 of the DVM defines two following approaches selected for identifying the baseline:

(a) By using a methodology for baseline setting and monitoring developed in accordance with Appendix B of the JI guidelines (hereinafter referred to as JI specific approach);



(b) By using a baseline and monitoring methodology approved by the CDM Executive Board in its totality (hereinafter referred to as approved CDM methodology approach).

The project participants of the project "DISMANTLING OF WASTE HEAP AT FORMER MINE "ROZSYPNYANSKA-1"" selected the <u>JI specific</u> <u>approach</u> for identifying the baseline.

A baseline for the project was set in accordance with criteria stated in Appendix B to decision 9/CMP.1 (JI guidelines). The JI specific approach is provided in paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", version 03.

The PDD provides a description of the chosen baseline in a clear and transparent manner according to "Guidelines for users of the joint implementation project design document form", version 04, as well as a justification per the "Guidance on criteria for baseline setting and monitoring", version 03 (paragraphs 23 - 29).

The desk review of the PDD and follow-up interviews provided enough reasons for TÜV Rheinland Group/TÜV Rheinland Ukraine to assess that the baseline for this JI project is established:

## a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one.

Plausible future scenarios are listed below:

- Scenario 1. Continuation of existing situation.
- Scenario 2. Direct energy production from the heat energy of burning waste heap.
- Scenario 3. Production of construction materials from rock dumps.
- Scenario 4. Coal extraction from waste heaps without JI incentives.
- Scenario 5. Systematic monitoring of waste heaps condition and regular fire prevention and extinguishing measures.

All scenarios, except Scenario 1 - Continuation of the existing situation, face prohibitive barriers. Therefore, continuation of the existing situation is the most plausible future scenario and is the baseline scenario for the project.

#### b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector.

In this context, the TÜV Rheinland Group/TÜV Rheinland Ukraine assessed whether the key factors that affect a baseline were taken into account. The project participants established the baseline taking into account the following key factors:

sectoral reform initiatives;



- local fuel availability;
- power sector expansion plans;
- economic situation in the project sector.

## c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors.

The project participants applied the selected approach with transparency. Necessary information on approaches, assumptions, parameters, data sources and key factors is available in the PDD.

### d) Taking into account of uncertainties and using conservativeness assumptions.

Project participants used default values to the extent possible in order to reduce uncertainty and provide conservative data for emission calculations.

#### e) In such a way that emission reduction units (ERUs) cannot be earned for decreases in activity levels outside the project activity or due to force majeure.

According to the proposed approach emission reductions will be earned only within the project activity, so no emission reductions can be earned due to any changes outside the project activity or due to force majeure.

# f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate.

The PDD draws on the list of standard variables contained in Appendix B to "Guidance on criteria for baseline setting and monitoring", version 03 as appropriate.

As the result of this analysis TÜV Rheinland Group/TÜV Rheinland Ukraine can confirm that the baseline for this project is established in accordance with criteria stated in the Appendix B of the JI guidelines and justified in accordance with paragraphs 23 - 29 of the "Guidance on criteria for baseline setting and monitoring", version 03.

Identified problem areas for baseline and additionality proofs, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland Ukraine are described in Annex A to the Determination report (refer to CARs 01, 02 - 12 and CL 01).

#### 4.4 Additionality

In accordance with paragraphs 27 - 31 of the DVM the assessment of this area focuses on whether a project provides "a reduction in emissions by sources, or an enhancement of net removals by sinks, that is additional to

any that would otherwise occur" in accordance with Article 6 of the Kyoto Protocol.

The paragraph 28 of the DVM defines three approaches used to demonstrate additionality – items (a), (b), (c) for JI specific approach.

Project participants used the "Tool for the demonstration and assessment of additionality" version 06.0.0 (hereinafter "Tool") for demonstration additionality (approach indicated in item (c) of paragraph 28 of the DVM). The "Guidance on criteria for baseline setting and monitoring" (paragraph 44 (c) of the Annex 1), version 03 defines the application of the most recent version of the "Tool" approved by the CDM Executive Board for demonstrating that the project provides reductions in emissions by sources that are additional to any that would otherwise occur. At the time of the PDD development, the version 06.0.0 was the most recent version of the "Tool".

Assessment of additionality was presented in section B.2. of the PDD.

The following steps are taken as per "Tool for the demonstration and assessment of additionality" version 06.0.0:

Step 1. Identification of alternatives to the project activity consistent with current laws and regulations;

Step 2. Investment Analysis;

Step 3. Barrier analysis (not applicable, it is optional);

Step 4. Common practice analysis.

The sufficient additionality proofs were provided to the AIE in the PDD and supporting documents. Additionality of the project was demonstrated appropriately as a result of the analysis using the Tool.

The desk review of submitted documentation and follow-up interviews enabled TÜV Rheinland Group/TÜV Rheinland Ukraine to assess that all explanations, descriptions and analyses in the demonstration of additionality were made in accordance with the selected version of the "Tool". The proposed JI activity provides the reductions in emissions by sources that are additional to any that would otherwise occur.

Identified problem areas for additionality of the project, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland Ukraine are described in Annex A to the Determination report (refer to CAR 13).

#### 4.5 **Project boundary**

In accordance with paragraphs 32 - 33 of the DVM the assessment of this area focuses on correct and complete delineation of the project boundary,



inclusion and exclusion of any sources of greenhouse gases (GHGs) related to the baseline or the project.

It was assessed through the desk review of submitted documentation and follow-up interviews that project participants used the JI specific approach towards baseline setting in this project and establishing the project boundary.

The details on the project boundary were provided in section B.3. of the PDD. The desk review of submitted documentation enabled TÜV Rheinland Group/TÜV Rheinland Ukraine to assess that the project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are:

- under the control of the project participants;
- reasonably attributable to the project; and
- significant.

The baseline emission sources of GHGs that are included in the project boundaries are listed below.

1) Emissions of carbon dioxide due to:

- waste heap burning;
- consumption of coal for energy production (excluded).

The project emission sources of GHGs that were included in the project boundaries are listed below.

- 1) Emissions of carbon dioxide due to:
  - consumption of electricity due to extracting coal from dump;
  - consumption of fossil fuel (diesel fuel) due to extracting coal from dump;
  - consumption of coal for energy production (excluded).

All gases and sources included in the project boundary were explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD by using figures 6 - 7 and the details were provided by table 10 in section B.3. of the PDD.

Identified problem areas for project boundary, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland Ukraine are described in Annex A to the Determination report (refer to CAR 14).



#### 4.6 Crediting period

In accordance with paragraph 34 of the DVM the assessment of this area focuses on correct and complete provision of information on the projects starting date, expected operational lifetime and the length of the crediting period.

It was assessed through the desk review of submitted documentation and follow-up interviews that the project participants had correctly stated in the PDD:

- the starting date of the project that is 17/07/2008. The starting date of the project is after the beginning of 2000.
- the expected operational lifetime of the project in years and months that is 7 years and 6 months or 90 months.
- the length of the crediting period (01/10/2008 31/12/2012) in years and months is 4 years and 3 months or 51 months.

The starting date of the crediting period is after the date the first emission reductions are generated by the project.

Project participants stated 2 parts of crediting period in years and months in the PDD for this project that are:

#### 1st part of crediting period 01/10/2008 - 31/12/2012

Length of the part of crediting period within the first commitment period of the Kyoto Protocol is 4 years and 3 months or 51 months.

#### 2nd part of crediting period 01/01/2013 - 31/12/2015

Length of the part of crediting period after the first commitment period of the Kyoto Protocol is 3 years and 0 months or 36 months.

The desk review of submitted documentation and follow-up interviews enabled TÜV Rheinland Group/TÜV Rheinland Ukraine to assess that all information on the projects starting date, expected operational lifetime and the length of the crediting period is correct and complete.

Identified problem areas for crediting period, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland Ukraine are described in Annex A to the Determination report (refer to CAR 15).

#### 4.7 Monitoring plan

In accordance with paragraphs 35 - 39 of the DVM the assessment of this area focuses on assessing the completeness and correctness of the established monitoring plan and whether it meets the necessary requirements.



The paragraph 35 of the DVM defines two following approaches selected for establishment of the monitoring plan:

- (a) JI specific approach;
- (b) Approved CDM methodology approach.

The project participants of the project "DISMANTLING OF WASTE HEAP AT FORMER MINE "ROZSYPNYANSKA-1" selected the <u>JI specific</u> <u>approach</u> for establishment of the monitoring plan.

The monitoring plan was established in accordance with criteria stated in Appendix B to decision 9/CMP.1 (JI guidelines). JI specific approach is defined in paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", version 03.

The information indicated below, that refers to the components of monitoring plan, was assessed by TÜV Rheinland Group/TÜV Rheinland Ukraine through the desk review of the submitted documentation and follow-up interviews.

- I. The chosen monitoring plan includes all procedures necessary for accurate and conservative calculation of emission reductions, describes all relevant factors and key characteristics that will be monitored, and the period in which they will be monitored, in particular also all decisive factors for the control and reporting of project performance.
- II. The established monitoring plan specifies the indicators, constants and variables that are reliable and provide consistent and accurate values; are valid and clearly connected with the effect to be measured, and that provide a transparent picture of the emission reductions to be monitored. The default values which were used in the monitoring plan were selected by carefully balancing accuracy and reasonableness. These values originate from recognized sources, are supported by statistical analyses providing reasonable confidence levels and are presented in a transparent manner in the PDD.
- III. For those values that are to be provided by the project participants it is clearly indicated, how the values are to be selected and justified by explanation of what types of sources are to be used and the vintage of data to be used. For all values the precise references from which these values are taken are clearly indicated in section D of the PDD and the conservativeness of the values is justified. The sources from which the data are obtained do not foresee the situations where the expected data are not available.
- IV. The International System Units (SI units) are used for values provided by the project participants.
- V. Any parameters, coefficients, variables that are used to calculate baseline emissions but are obtained through monitoring are noted. The



desk review of the documentation showed that the consistency between the baseline and monitoring plan is ensured.

- VI. The project activity will include monitoring of GHG emissions in the baseline and project scenarios. Variables to be monitored in the baseline and project scenarios include the parameters listed in section D of the PDD.
- VII. The monitoring plan draws on the list of standard variables contained in Appendix B to "Guidance on criteria for baseline setting and monitoring", version 03, as appropriate.
- VIII. The established monitoring plan described the methods employed for data monitoring (including its frequency) and recording. This information is provided in the tabular format in section D.2. of the PDD. The monitoring plan also elaborates all algorithms and formulae used for the calculation of baseline emissions and project emissions. The underlying rationale for the algorithms and formulae is sounded and explained as necessary. The project participants used consistent variables, equation formats, subscripts etc.; numbered all equations throughout the PDD; defined and indicated all variables and constants with units.
- IX. The conservativeness of the algorithms and procedures is justified and methods to quantitatively account for uncertainty in key parameters are included, to the extent possible. References for all parameters are provided as necessary. It is clearly stated in the PDD which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed. The desk review of the documentation showed that the consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions of the baseline is ensured.
- X. The national and international monitoring standards are not applied to monitor certain aspects of the project.
- XI. A clear management structure will be identified to establish the division of responsibilities for gathering monitoring data. PE ICC "Tefida" is responsible for performance of monitoring, data collection, registration, visualization, storage and reporting of data that were monitored, and periodic inspection of measuring instruments.
- XII. The monitoring plan, on the whole, reflects good monitoring practices: the structure of data collection is clearly defined; all data concerning the greenhouse gas emissions within the project boundaries is monitored and used in calculations appropriately.

Identified problem areas for monitoring plan, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland



Ukraine are described in Annex A to the Determination report (refer to CARs 16 – 24 and CL 02).

#### 4.8 Leakage

In accordance with paragraphs 40 - 41 of the DVM this area focuses on checking of the assessment of the potential leakage in the project.

The project "DISMANTLING OF WASTE HEAP AT FORMER MINE "ROZSYPNYANSKA-1"" used the JI specific approach for baseline setting.

The result of this project is the net change (reduction) uncontrolled methane emissions due to of mining activity. As in the baseline scenario the supplying of coal is solely from mine, it leads to uncontrolled methane emissions. These emissions are calculated by applying the default emission factor for the country to the amount of coal extracted from the rock dumps in the project scenario (which is the same amount of coal extracted from mines in the baseline scenario). Carbon dioxide emissions due to electricity consumption in the coal mine way in an amount equivalent to the project amount of coal - a leakage that can be taken into account at the base of State Statistics Committee data on specific consumption of electricity at coal mines in Ukraine in the relevant year. These leakages are significant and will be included in the monitoring plan and calculating emission reductions for the project.

Leakages:

- 1) fugitive emissions of methane in the mining activities;
- 2) consumption of electricity from a grid at coal mine.

Identified problem areas for leakage, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland Ukraine are described in Annex A to the Determination report (refer to CAR 14).

#### 4.9 Estimation of emission reductions

In accordance with paragraphs 42 - 47 of the DVM the assessment of this area focuses on checking the completeness and correctness of the provided methods and results of emission reduction estimates in the JI project.

The paragraph 42 of the DVM defines two following approaches to estimate the emission reductions or enhancement of net removals generated by the project selected the JI specific approach:

(a) Assessment of emissions or net removals in the baseline scenario and in the project scenario; or

(b) Direct assessment of emission reductions.



As per JI specific approach project participants chose the following approach to estimate the emission reductions generated by the project: assessment of emissions in the baseline scenario and in the project scenario. According to this approach emission reductions were calculated as follows:

 $ER_y = BE_y - PE_y - LE_y$ Where:  $ER_y - GHG$  emission reductions in year y [tCO<sub>2</sub>e];  $BE_y - Sum$  of GHG emissions in baseline scenario in year y [tCO<sub>2</sub>e];  $PE_y - Sum$  of GHG emissions in project scenario in year y [tCO<sub>2</sub>e];  $LE_y - Leakages$  of GHG emissions due to Project activity in year y [tCO<sub>2</sub>e].

Ex ante estimates of emissions for the project scenario (within the project boundary), emissions for the baseline scenario (within the project boundary) and emission reductions are provided in section E of the PDD. These estimates in the PDD are given on a periodic basis, from the beginning until the end of the crediting period, in tonnes of  $CO_2$  equivalent, using appropriate emission factors. The formula used for calculating these estimates are consistent throughout the PDD.

The baseline emissions of the project are calculated under the formula:

 $BE_y = BE_{WHBP,y}$ where:  $BE_y - baseline emissions in the year y (tCO_2e)$ ,  $BE_{WHB,y}$  - baseline emissions due to burning of the waste heaps in the year y (tCO\_2e).

The detailed algorithms and formulae for estimating emissions in the baseline scenario of the project are described under sections B.1 and D.1. of the PDD. The details of the calculation are provided in the GHG emission reductions calculation spreadsheet in Excel format.

The project emissions of the project are calculated under the formula:

 $PE_y = PE_{EL,y} + PE_{Diesel,y}$ 

where:

 $PE_y$  - project emissions due to project activity in the year y (tCO<sub>2</sub>e),

 $PE_{EL,y}$  - project emissions due to consumption of electricity from the grid by the project activity in the year y (tCO<sub>2</sub>e);

 $PE_{Diesel,,y}$  - project emissions due to consumption of diesel fuel by the project activity in the year y (tCO<sub>2</sub>e).

Leakages are calculated under the formula:

 $LEy = LE_{CH4,y} + LE_{EL,y}$ where:  $LE_y$  - leakages in year y, (tCO<sub>2</sub>e);



 $LE_{CH4,y}$  – leakages due to fugitive emissions of methane in the mining activities in the year y, (tCO<sub>2</sub>e);  $LE_{EL,y}$  - leakages due to consumption of electricity in the mining activities in the year y, (tCO<sub>2</sub>e).

Leakages due to fugitive emissions of methane in the mining activities in the year y calculated as follows:

 $\label{eq:less_coal_y} \begin{array}{l} \mathsf{LE}_{\mathsf{CH4},y} = \mathsf{-} \ \mathsf{FC}_{\mathsf{BE},\mathsf{Coal},y} \cdot \mathsf{EF}_{\mathsf{CH4}} \cdot \rho_{\mathsf{CH4}} \cdot \mathsf{GWP}_{\mathsf{CH4}} \\ \text{where;} \end{array}$ 

 $FC_{BE,Coal,y}$  - amount of coal that has been mined in the baseline scenario and combusted for energy use, equivalent to the amount of coal extracted from the waste heaps because of the project activity in the year y (t);

 $EF_{CH4}$  – emission factor for fugitive methane emissions from coal mining  $(m^3/t)$ ;

 $\rho_{CH4}$  - methane density (standard, at room temperature 20°C and 1 atm)  $(t/m^3);$ 

 $GWP_{CH4}$  – global warming potential for methane (tCO<sub>2</sub>/ tCH<sub>4</sub>).

Leakages due to consumption of electricity in the mining activities in the year y calculated as follows:

 $LE_{EL,y} = -FC_{BE,Coal,y} \cdot N^{E}_{Coal,y} \cdot EF_{CO2,EL,y}$ where:

 $FC_{BE,Coal,y}$  – amount of coal that has been mined in the baseline scenario and combusted for energy use, equivalent to the amount of coal extracted from the waste heaps because of the project activity in the year y (t);

N<sup>E</sup><sub>Coal,y</sub> - average electricity consumption per tonne of coal, produced in Ukraine in the year y (MWh/t);

 $EF_{CO2,EL,y}$  - specific indirect carbon dioxide emissions in power consumption by consumers of electricity (tCO<sub>2</sub>/MWh).

The detailed algorithms and formulae for estimating emissions in the project scenario are described under section D.1. of the PDD. The details of the calculation are provided in the GHG emission reductions calculation spreadsheet in Excel format.

It was assessed by the desk review of submitted documentation, especially GHG emission reductions calculation spreadsheet in Excel format that key factors influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account. Data sources used for calculating the estimates referred above are clearly identified, reliable and transparent. Emission factors used for calculating the estimates referred to above, were selected by carefully balancing accuracy and reasonableness, and the choice is appropriately justified. The estimation referred to above is based on conservative assumptions and the most plausible scenarios in a transparent manner. The estimates of emission reductions are consistent throughout the PDD version 2.0 dated 05/04/2012. The annual average of



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

According to the PDD and GHG emission reductions calculation spreadsheet in Excel format the emissions for the project scenario, emissions for the baseline scenario and emission reductions are provided in tables 9 and 10 below.

Table 9 – Estimated	emission	reductions	generated	by	the	project
over the crediting per	iod		-	-		

Period:	01/10/2008 - 31/12/2012
Emissions for the project scenario:	9 428 tCO <sub>2</sub> e
Emissions for the baseline scenario:	995 577 tCO <sub>2</sub> e
Leakages	- 294 412 tCO <sub>2</sub> e
Emission reductions:	1 280 561 tCO <sub>2</sub> e
Annual average of estimated	301 308 tCO <sub>2</sub> e
emission reductions:	

### Table 10 - Estimated emission reductions generated by the project after the crediting period

Period:	01/01/2013 - 31/12/2015
Emissions for the project scenario:	1 957 tCO <sub>2</sub> e
Emissions for the baseline scenario:	157 344 tCO <sub>2</sub> e
Leakages	- 46 653 tCO <sub>2</sub> e
Emission reductions:	202 040 tCO <sub>2</sub> e
Annual average of estimated emission reductions:	67 347 tCO <sub>2</sub> e

Identified problem areas for calculation of GHG emission reductions, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland Ukraine are described in Annex A to the Determination report (refer to CARs 25 - 26).

#### 4.10 Environmental impacts

In accordance with paragraph 48 of the DVM the assessment of this area focuses on checking the completeness and correctness of the provided information on the assessment of the environmental impacts of the JI project.

The host Party for the project is Ukraine. The conclusions and all references to supporting documentation of environmental impacts are provided in section F of the PDD.

Identified problem areas for environmental impacts, project participants' responses and conclusions of TÜV Rheinland Group/TÜV Rheinland



Ukraine are described in Annex A to the Determination report (refer to CAR 27).

#### 4.11 Stakeholder consultation

In accordance with paragraph 49 of the DVM the assessment of this area focuses on checking if stakeholder consultation was undertaken in accordance with procedures as required by the host Party.

The host Party for the project is Ukraine. The project meets the applicable standards and requirements, set forth in Ukraine. The Host Party does not put forward the requirement to consult with stakeholders to JI projects.

#### 4.12 Other areas

In accordance with paragraphs 50 - 73 of the DVM the assessment of the areas such as additional elements for assessment in determination regarding small-scale projects, determination regarding land use, land-use change and forestry projects, determination regarding programmes of activities is not applicable to this JI project.



#### 5 SUMMARY OF COMMENTS RECEIVED PURSUANT TO PARAGRAPH 32 OF THE JI GUIDELINES

According to paragraph 32 of the JI Guidelines, the AIE shall make the project design document publicly available through the secretariat, subject to confidentiality provisions set out in paragraph 40 of the JI Guidelines, and receive comments from Parties, stakeholders and UNFCCC accredited observers on the project design document and any supporting information for 30 days from the date the project design document is made publicly available.

TÜV Rheinland Group/TÜV Rheinland Ukraine published the project design document (version 1.1 dated 05/03/2012) on the website TÜV Rheinland Ukraine (<u>http://www.tuv.com.ua</u>) on 05/03/2012 and invited comments within 05/04/2012 by Parties, stakeholders and non-governmental organizations.

There were no comments from Parties, stakeholders and UNFCCC accredited observers received.

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#### DETERMINATION REPORT

#### ANNEX A: JI PROJECT DETERMINATION PROTOCOL

#### Table 1 Mandatory Requirements for Joint Implementation (JI) Project Activities

REQUIRE	REQUIREMENT			Cross Reference/Comment
1. The project shall have t involved.	he approval of the Parties	Kyoto Protocol Article 6.1 (a)	Unresolved issue FAR 01	Table 2, section A.5. The project has been officially presented for endorsement to the State Environmental Investment Agency of Ukraine. According to the legislation of Republic of Latvia, no LoE is needed. After AIE completes the determination report, the PDD and the Determination Report will be presented to the State Environmental Investment Agency of Ukraine to obtain a Letter of Approval from Ukraine. LoA from other side will be obtained not later than the first verification. The project does not have an approval of the host Party and an investor country. Verifiers note: JISC Glossary of joint implementation terms, version 03 defines the following: a) At least the written project approval(s) by the host Party(ies) should be provided to the AIE and made available to the secretariat by the AIE when submitting the determination report regarding the PDD for publication in accordance with paragraph 34 of the JI guidelines; b) At least one written project approval



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	REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference/Comment
				by a Party involved in the JI project, other than the host Party(ies), should be provided to the AIE and made available to the secretariat by the AIE when submitting the first verification report for publication in accordance with paragraph 38 of the JI guidelines, at the latest. <b>FAR 01.</b> The Project hasn't obtained Letters of Approval from the parties involved.
2.	Emission reductions, or an enhancement of removal by sinks, shall be additional to any that would otherwise occur.	Kyoto Protocol Article 6.1 (b)	ОК	Please refer to Table 2, section B.2.
3.	The sponsor Party shall not acquire emission reduction units if it is not in compliance with its obligations under Articles 5 & 7.	Kyoto Protocol Article 6.1 (c)	ОК	Article 5 requires: "Each Party included in Annex I shall have in place, no later than one year prior to the start of the first commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases". According to the Article 7: "Annex I Parties to submit annual greenhouse gas inventories, as well as national communications, at regular intervals, both including supplementary information to demonstrate compliance with the Protocol".
4.	The acquisition of emission reduction units shall be supplemental to domestic actions for the purpose of meeting commitments under Article 3.	Kyoto Protocol Article 6.1 (d)	ОК	Please refer to Table 2, section B.2.



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#### DETERMINATION REPORT

REQUIREMENT		REFERENCE	CONCLUSION	Cross Reference/Comment
5.	Parties participating in JI shall designate national focal points for approving JI projects and have in place national guidelines and procedures for the approval of JI projects.	Marrakech Accords, JI Modalities, §20	OK	Ukraine has designated its Focal Point. National guidelines and procedures for approving JI projects have been published. Contact data in Ukraine: State Environmental Investment Agency of Ukraine 35 Urytskogo St, Kyiv, P.O. 03035 Phone: +380 44 594 91 11 Fax: +380 44 594 91 11 Fax: +380 44 594 91 11 Ukrainian national guidelines and procedures for the approval of JI projects are available on the web-site <u>www.neia.gov.ua</u> . On February 22, 2006 the Cabinet of Ministers of Ukraine adopted the Regulation № 206, which established assessment and implementation procedures for JI projects within the Kyoto Protocol.
6.	The host Party shall be a Party to the Kyoto Protocol.	Marrakech Accords, JI Modalities, §21(a)/24	ОК	The Ukraine is a Party (Annex I Party) to the Kyoto Protocol and has ratified the Kyoto Protocol on February 4th, 2004.
7.	The host Party's assigned amount shall have been calculated and recorded in accordance with the modalities for the accounting of assigned amounts.	Marrakech Accords, JI Modalities, §21(b)/24	ОК	The assigned amount of emissions for Ukraine is 100% of its emissions in 1990. In the Initial Report (Ukraine's Initial Report Under Article 7, Paragraph 4, Of The Kyoto Protocol) submitted by Ukraine to the UNFCCC Secretariat, on



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#### DETERMINATION REPORT

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference/Comment
			26 May 2006 the AAUs are quantified as follows: 925 362 174.39 (x 5) = 4 626 810 872 tCO <sub>2</sub> e <u>http://unfccc.int/files/national_reports/initi</u> <u>al_reports_under_the_kyoto_protocol/ap</u> <u>plication/pdf/ukraine_aa_report.pdf</u> Currently Ukraine has submitted its fifth national_communication_on_climate change under the Kyoto Protocol to the UNFCCC.
<ol> <li>The host Party shall have in place a national registry in accordance with Article 7, paragraph 4.</li> </ol>	Marrakech Accords, JI Modalities, §21(d)/24	ОК	The designed system of the national registry has been described in the Initial Report: <u>http://unfccc.int/files/national_reports/initial_reports_under_the_kyoto_protocol/ap_plication/pdf/ukraine_aa_report.pdf</u>
<ol> <li>Project participants shall submit to the independent entity a project design document that contains all information needed for the determination.</li> </ol>	Marrakech Accords, JI Modalities, §31	ОК	Project participant SIA "Vidzeme Eko" has submitted to the Accredited Independent Entity TÜV Rheinland Group/TÜV Rheinland Ukraine project's PDD that contains all information needed for the determination.
10. The project design document shall be made publicly available and Parties, stakeholders and UNFCCC accredited observers shall be invited to, within 30 days, provide comments.	Marrakech Accords, JI Modalities, §32	ОК	The PDD has been made publicly available through <u>http://www.tuv.com.ua</u> website from 5 <sup>th</sup> of March till 5 <sup>th</sup> April, 2012 for receiving comments and remarks to the JI project.
11. Documentation on the analysis of the environmental	Marrakech	ОК	Please refer to Table 2, section F.



REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference/Comment
impacts of the project activity, including transboundary impacts, in accordance with procedures as determined by the host Party shall be submitted, and, if those impacts are considered significant by the project participants or the host Party, an environmental impact assessment in accordance with procedures as required by the host Party shall be carried out.			
12. The baseline for a JI project shall be the scenario that reasonably represents the GHG emissions or removal by sources that would occur in absence of the proposed project.	Marrakech Accords, JI Modalities, Appendix B	ОК	Please refer to Table 2, section B.
13. A baseline shall be established on a project-specific basis, in a transparent manner and taking into account relevant national and/or sectoral policies and circumstances.	Marrakech Accords, JI Modalities, Appendix B	ОК	Please refer to Table 2, section B.
14. The baseline methodology shall exclude to earn ERUs for decreases in activity levels outside the project activity or due to force majeure.	Marrakech Accords, JI Modalities, Appendix B	ОК	Please refer to Table 2, section B.
15. The project shall have an appropriate monitoring plan.	Marrakech Accords, JI Modalities, §33(c)	ОК	Please refer to Table 2, section D.
16. A project participant is a legal entity authorized by a Party involved to participate in the JI project.	"Glossary of Joint Implementation Terms", Version 03.	FAR 01	Please refer to Table 2, section A. The Ukrainian project participant will be authorized by the Host Party through the issuance of the approval for the project.



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
General description of the project					
A.1. Title of the project					
1.1. Is the title of the project activity presented?	PDD	DR	Dismantling of waste heap at former mine "ROZSYPNYANSKA-1"	ОК	ОК
1.2. Is(are) the sectoral scope(s) to which the project pertains presented?	PDD	DR	Sectoral scope: 8 - Mining/mineral production	ОК	ОК
1.3. Are the version number and date of the document presented?	PDD	DR	Yes, the version number of the document and the date are presented as: PDD version: 1.0 Date of the PDD: 5 <sup>th</sup> of March 2012.	ОК	ОК
			The re-submitted final version of the PDD is provided as: PDD version: 2.0 Date of the PDD: 5 <sup>th</sup> of April 2012.		
A.2. Description of the project					
2.1. Is the purpose of the project indicated (with the concise, summarizing explanation of the situation existing prior to the starting date of the project, baseline scenario and project scenario)?	PDD	DR	Emission reductions due to the implementation of this project will come from three major sources: - Removing the source of green- house gas emissions from the combustion of waste heaps by the extraction of coal fraction from the waste-heaps;	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
2.2 Is the history of the Project including its JI component summarized?	PDD	DR	<ul> <li>Reducing fugitive emissions of methane due to the replacement of coal that would have been mined, by the project;</li> <li>Reducing electricity consumption for coal production from the mines by replacing its waste heaps coal.</li> <li>The purpose of this project is extraction of coal component from waste heap, for further blending with steam coal and burning with aim of heat and electricity production.</li> <li>Yes, the history of the project including its JI component is</li> </ul>	ОК	ОК
component summanzed?			summarized in section A.2. of the PDD.		
2.1.1. Is it clarified how the proposed project activity reduces emissions GHG that would occur in the baseline scenario?	PDD	DR	The proposed project is aimed at the extraction of coal from the waste heaps for subsequent combustion in power plants or boiler houses and and maintenance of +30 fraction, which has no carbon. Also one of the stages of the project is to restore the fertile soil layer on the territory where the waste heap situated is located. <b>CAR 02.</b> Please specify a number	CAR 02	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			of GOST according to requirements of it's quality the fraction of class 0-30 mm is blending with steam coal before combustion.		
A.3. Project participants					
3.1 Are project participants and Party(ies) involved in the project listed?	PDD	DR	Section A.3 Table 1 of the PDD names two project participants: - PE ICC "Tefida", and - SIA "Vidzeme Eko"	ОК	ОК
3.2 Is contact information provided in Annex 1 of the PDD that is indicated in section A.3?	PDD	DR	The contact information of project participants is provided in Annex 1 of the PDD.	ОК	ОК
3.3. Is it indicated, if the Party involved is a Host Party?	PDD	DR	Ukraine is indicated as a Host Party.	ОК	ОК
3.4. Is it indicated, if it is the case, if the Party involved wishes to be considered as a project participant?	PDD	DR	Parties involved don't wish to be considered project participants.	ОК	ОК
A.4. Technical description of the project					
A.4.1. Location of the project					
4.1.1. Host Party(ies)	PDD	DR	Ukraine	ОК	ОК
4.1.2. Region/State/Province etc.	PDD	DR	Project's waste heaps processing facilities are located in Torez district of Donetsk region, East Ukraine. See section A 4.1.4 of the PDD.	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
4.1.3. City/Town/Community etc.	PDD	DR	Urban village Rozsypne.	ОК	ОК
			See section A 4.1.4 of the PDD.		
4.1.4. Detail of the physical location, including	informat	ion allov	ving the unique identification of th	e project (maxi	mum one page)
4.1.4.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s) (this section should not exceed one page)?	PDD	DR	Project equipment includes: a rock waste heap sorting complex, located on the industrial site of the former mine "Rozsypnyanska-1", on the southeast end of urban village Rozsypne.	OK	ОК
A.4.2. Technology(ies) to be employed, or measure	es, oper	ations or	r actions to be implemented by the	project	
4.2.1. Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project described?	PDD	DR	The project includes the implementation of the following steps and activities that will allow utilize waste heap: installation of the sorting complex, transports and auxiliaries. Detailed description of technology and measures used in this project are described in the PDD. Please see section A.4.2 of the PDD.	ОК	ОК
4.2.1.1. Does the project design engineering reflect current good practices?	PDD	DR	Engineering project development represents the fastest and the easiest way to work with rock waste heap. Due to the fact that waste heap has a large content of coal (40%), it is divided into two classes (0-30 and +30) and then 0-30 fraction is passing on the for	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion				
			blending with steam coal without additional measures. Description of project development is presented in Section A.4.2. of the PDD.						
4.2.1.2. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	PDD	DR	Complex for sorting rocks is a common technology. The introduction of more modern technology and equipment is not financially attractive for this project.	ОК	ОК				
4.2.1.3. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	PDD	DR	Since the project ends in 2015, and heap dismantle is in its final stages, the introduction of new equipment for the waste heap sorting is unlikely.	ОК	ОК				
4.2.2. Are all relevant technical data and the implementation schedule indicated?	PDD	DR	Technical data partly reflected in the section A.4.2. of the PDD. <b>CAR 03.</b> Please pass in section A.4.2 the technical specifications of main electrical equipment.	CAR 03	ОК				
A.4.3. Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances									
		DIX		CL 01	ÖK				



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			pollutants. The proposed project aims to extract coal from waste heap created during underground coal mines activities and burning of the entire volume of coal for electricity or heat production. It also will partially help to avoid methane emissions from coal mines, because the coal from waste heap will replace the coal of mines. <b>CAR 04</b> . Provide evidence that the coal mined from waste heap burned to get electricity or heat energy. <b>CL 01.</b> Please explain where exactly is using the product of +30 class.		
A.4.3.1. Estimated amount of emission reduction	ons ove	r the cre	diting period		
4.3.1.1. Is it provided the estimated annual reduction for the chosen credit period in tCO2e?	PDD	DR	Yes. Section A.4.3.1. of the PDD provides the tables indicating estimated annual reduction for the chosen credit period in $tCO_2e$ . Annual average of estimated emission reductions over the crediting period from 01/10/2008 till 31/12/2012 is 301 308 tones of $CO_2$ equivalent. <b>CAR 05</b> . Please describe in Section A.4.3. what caused a	CAR 05 CAR 06	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			slow down the temps of waste heaps dismantling in 2013-2015. <b>CAR 06</b> . Please provide the assessment (evaluation) of the estimated total emission reductions in tons CO <sub>2</sub> -equivalent in the section A.4.3 of the PDD, as defined in section E.		
A.5. Project approval by the Parties involved	-	-			
5.1. Are written project approvals by the Parties involved attached? Are they unconditional?	PDD	DR	As indicated in Section A.5 of the PDD, the project received a the Letter of Endorsement from NEIA of Ukraine. Project approval by the Host Country where the project is implemented and Investor Country are obtained after the end of Determination process. <b>CAR 01</b> . In section A.5 of the PDD it should be explained when the LoAs will be obtained.	CAR 01 FAR 01	ОК
B. Baseline					
B.1 Description and justification of the baseline chose	en				
<ul> <li>1.1. Is it indicated in PDD:</li> <li>- a detailed theoretical description of the baseline in a complete and transparent manner, as well as a justification of chosen baseline using the step-wise</li> </ul>	PDD	DR	The baseline for this JI project was established in accordance with Appendix B, Guidelines for Implementation and paragraphs 23 - 29 " Guidance on Criteria For	CAR 07	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
approach; - a justification of baseline setting; - references on regulations according to baseline setting.			Baseline Setting And Monitoring " Version 03. Detailed theoretical description of the baseline is presented in Section B.1. of the PDD. For baseline selection, project participants have used JI specific approach. <b>CAR 07.</b> At p. 15 of the PDD version 1.0 indicates that 78% of waste heaps in the Donetsk region have been burned or burning now. This assertion is contrary to the value specified in the study made by the institute "Respirator". Please correct the discrepancy.		
1.2. Is it indicated in the PDD that baseline was established:					
1.2.1. by listing and describing plausible (alternative) future scenarios on the basis of conservative assumptions and selecting the most plausible one?	PDD	DR, I	Plausible future scenarios are listed and described on the basis of conservative assumptions and selecting the most plausible one in the context of this project. All scenarios, except - continuation of existing situation, face prohibitive barriers. Therefore, continuation of existing situation is the most plausible future scenario and is the	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			baseline scenario. Analysis of the barriers is given in section 4.2		
1.2.2. on a project-specific basis and/or using a multi-project emission factor?	PDD	DR	Yes. The explanation and references of carbon emission factor is indicated in Section D.1 of the PDD. Emission sources in the project scenario: - Carbon dioxide emissions from the use of fuel to run part of the project equipment (motor cars), - Carbon dioxide emissions associated with the electricity consumption by the project equipment.	ОК	ОК
1.2.3. in a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors?	PDD	DR	JI specific approach is used for baseline setting. The baseline was identified by listing and analysing plausible future scenarios on the basis of conservative assumptions are clearly traced and clearly related to the project. <b>CAR 08</b> . Please correct description for the emission factor of power consumption from the network. <b>CAR 09</b> . Provide clarification in the description: the average ash	CAR 08 CAR 09 CAR 10	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			content of coal is taken for calculation. <b>CAR 10.</b> Provide justification that the Net Calorific Value of coal listed on the average ash content and moisture in Ukraine for the Net Calorific Value of coal that is burned in the energy sector of Ukraine according to National greenhouse gas emissions Cadaster.		
1.2.4. taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector?	PDD	DR	Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector. It is demonstrated by the above analysis that the baseline chosen clearly represents the most probable future scenario given the circumstances of modern day Donbas coal sector.	OK	ОК
1.2.5. in such a way that emission reduction units (ERUs) cannot be earned for decreases in activity levels outside the project activity or due to force majeure?	PDD	DR	Development of the Project in Section B.1. of the PDD provides that ERUs are refering only to the amount of coal extracted from the waste heap (fraction of class 0-30 mm), considering its power	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			characteristics. If decreases in activity levels outside the project activity or due to force majeure, will decreasing the volume of coal extraction from waste heap. Application of this approach to calculating the ERU ensure that they are obtained by reducing the activity of the project or due to force majeure.		
1.2.6. taking account of uncertainties and using conservative assumptions.	PDD	DR	<ul> <li>Baseline was established taking into account uncertainties and using conservative assumptions. But some parameters (data) has a large level of uncertainty. This information located in section B.1. of the PDD.</li> <li>CAR 11. Due to the high level of uncertainty with the project off waste heap created as a result of current coal production from mines.</li> <li>CAR 12. In the Section B. 1 as part of the analysis of the baseline should be given a brief description of the relevant rules relating to waste heaps in so far as affecting the choice of baseline (here - uncontrolled and complete combustion of waste heaps). If</li> </ul>	CAR 11 CAR 12	OK



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			these legal standards are not met regularly, especially abandoned waste heaps, it should be stated in the PDD.		
1.3. Does the PDD explicitly indicate the approach used for identifying the baseline with references on regulations?	PDD	DR	In Section B.1. of the PDD states that project participants have chosen a specific approach to identify the JI baseline in accordance with paragraph 9 of the latest version of "Guidelines on criteria for baseline setting and monitoring" (Version 03, adopted JISK 26 <sup>th</sup> m eeting in September 2011).		ОК
1.4. Are number, name and version of the methodology clearly indicated in the context of the project?	PDD	DR	Project participants have applied the JI specific approach to identify the basiline.	ОК	ОК
1.5. Is the applied version of the CDM methodology the most recent one and/or is this version still applicable?	PDD	DR	Project participants have applied the JI specific approach to identify the basiline.	ОК	ОК
1.6. Is it described how the chosen approach is applied in the context of the project?	PDD	DR	JI specific approach applied in the context of the project is completely and clearly described in section B.1. of the PDD	ОК	ОК
1.7. Are the key information and data used to establish the baseline (variables, parameters, data sources etc.) indicated in tabular form?	PDD	DR	Yes, the necessary information in tabular form is provided in section B.1. of the PDD.	ОК	ОК
1.8. Are all regulations and sources clearly referenced?	PDD	DR	Yes. All regulations and sources clearly referenced	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion					
B.2. Description of how the anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the JI project										
2.1. Is the step-wise approach used for the demonstration of project additionality indicated and described?	PDD	DR	In order demonstrate additionally of the project, project participants used stepwise approach in accordance with the latest version of the "Tool for demonstration and assessment of additionally". This approach is described in Section B.2. of the PDD.	ОК	ОК					
2.2. Does the PDD provide a justification of the applicability of the approach with a clear and transparent description with relevant reference on regulations?	PDD	DR	The latest version of "Tool for demonstration and assessment of additionality"(Version 06.0.0) was used for demonstration of additionality of the project. Approach (c) was enacted in accordance with paragraph 44 of Annex 1 "Guidance on criteria for baseline setting and monitoring" version 03.	ОК	ОК					
2.3. Is it described how the chosen approach is applied in the context of the project?	PDD	DR	Yes, section B.2. of the PDD provided the description how the chosen approach is applied in the context of the project.	ОК	ОК					
2.4. Are additionality proofs provided?										
2.4.1. If the application of the most recent version of the "Tool for the demonstration and assessment of additionality" is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	PDD	DR	Yes, section B.2. of the PDD includes all explanations, descriptions and analyzes. Explanations, descriptions and analyzes carried out in accordance with the "Tool for	ОК	ОК					



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			demonstration and assessment of additionally" (Version 06.0.0)		
2.4.2. Is an analysis showing why the emissions in the baseline scenario would likely exceed the emissions in the project scenario included?	PDD	DR	Detailed analysis provided in sections A.4.3., B.1. and B.2. of the PDD demonstrates that emissions in the baseline scenario would likely exceed the emissions in the project scenario by the implementation of project activities. Comparative analysis of investment used in accordance with "Tool for demonstration and assessment of additionality" (Version 06.0.0) and included in the PDD, in Section B.2. and supporting Excel file. <b>CAR 13.</b> For the selected baseline scenario is a complete combustion of waste heaps. Please provide relevant evidence that the absence of the project (a) coal, which contains in waste heaps will burned completely (100%) (b) coal burned within the time frame, compared to the period of the project. At p. 2 of the PDD stated that the waste heaps burn for 5-7 years, and the source of this information is not specified.	CAR 13	OK
2.4.3. Is it demonstrated that the project activity	PDD	DR	Yes, it is clearly demonstrated	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
itself is not a likely baseline scenario?			scenario in sections A.2., B.1. and B.2. of the PDD that the project activity itself is not a likely baseline		
2.5. Are national policies and circumstances relevant to the baseline of the proposed project activity summarized?	PDD	DR	Baseline is set by taking into account relevant national policies and circumstances (please refer to sections B.1. and B.2. of the PDD). None of listed in section B.1. alternatives does not contradict Ukrainian legislation. The selected alternative is the most realistic future scenario without implementation of the project.	ОК	ОК
<ul> <li>B.3. Description of how the definition of the project booms of the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are:</li> <li>under the control of the project participants;</li> <li>reasonably attributable to the project;</li> <li>significant?</li> </ul>	PDD	DR	All sources of emissions identified in the PDD and not under the control of all project participants and outside the project. Please see section B.3. of the PDD. <b>CAR 14.</b> Please move the uncontrolled emissions of methane during coal mining and emissions related to the consumption of electric energy from coal mines to the Section Leakages.	CAR 14	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
3.2. Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 3.1. above?	PDD	DR	Project boundaries are determined based on assessment of each case. The limits include a baseline set of sorting and transport. However, methane emissions and electricity consumption by mine were also included in the project. See CAR 14.	ОК	ОК
3.3. Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	PDD	DR	Project boundaries and emission sources of relevant gases are indicated in section B.3. of the PDD as figure 6 and 7.	ОК	ОК
3.4. Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	PDD	DR	All gases and sources within the project are listed in Table 4 and presented in Section B.3. of the PDD.	ОК	ОК
8.4. Further baseline information, including the date of b	aseline s	setting a	nd the name(s) of the person(s)/en	tity(ies) setting	the baseline
4.1 .Is the date of the baseline setting presented (in DD/MM/YYYY)?			Date of completion of the baseline study: 03/03/2012	ОК	ОК
4.2 .Is the contact information of persons setting the baseline provided?			Ivanenko Gennadiy from SIA "Vidzeme Eko" the person who established the baseline. Contact information is provided in SectionB.4. and Annex 1 of the PDD.	ОК	ОК
4.3 .ls the person/entity also a project participant	PDD	DR		ОК	



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusior
listed in Annex 1 of PDD?			project participant in Annex 1.		
Duration of the project/crediting period					
C.1. Starting date of the project					
1.1. Is the project's starting date clearly defined?	PDD	DR	The project's starting date is clearly defined in section C.1. of the PDD - 01/10/2008.	ОК	ОК
1.2. Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	PDD	DR	Yes. The starting date of the project starts from the date of signing of the contract. On this same date starts equipment installation. <b>CAR 15.</b> The specified start date of the crediting period - July 17, 2008 that the contract for installation of facilities for waste heap dismantling was signed . However, the start date of the crediting period should reflect the beginning of the first greenhouse gas emission reductions from the project implementation. Please provide documentary evidence of this date.	CAR 15	ОК
1.3. Is the starting date after the beginning of 2000?	PDD	DR	Yes. The starting date is after the beginning of 2000.	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
2.1. Is the project's operational lifetime clearly defined in years and months?	PDD	DR	The implemented measures provided proper maintenance can be operational at least till the end 2015.	ОК	ОК
C.3. Length of the crediting period					
3.1. Is the length of the crediting period specified in years and months?	PDD	DR	The first crediting period: from 01/10/2008 until 31/12/2012; Second crediting period from 01/01/2013 till 31/12/2015	ОК	ОК
3.2. 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?	PDD	DR	Yes, please refer to section C.3. of the PDD.	ОК	ОК
3.3. If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	PDD	DR	Yes, it is indicated in section C.3. of the PDD that the extension of the crediting period is with the consent of host Party. Estimates of emission reductions for the period before 2012 and after 2012 are presented separately in section A.4.3.1. of the PDD.	ОК	ОК
D. Monitoring Plan D.1. Description of monitoring plan chosen					
<ul> <li>1.1. Is it indicated in PDD a detailed theoretical description in a complete and transparent manner,</li> </ul>	PDD	DR	The justification of chosen monitoring plan is sufficient,	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
as well as a justification of chosen monitoring plan using the step-wise approach?			theoretical description is indicated in section D.1. of the PDD.		
1.2. Does the PDD explicitly indicate the chosen approach used for monitoring with references on regulations?	PDD	DR	The project participant has chosen the JI specific approaches regarding monitoring according to "Guidance on criteria for baseline setting and monitoring", version 03. Step-wise approach is used to describe the monitoring plan.	ОК	ОК
1.3. Is the applied methodology considered being the most appropriate one?	PDD	DR	In this project any of CDM methodology is applied. To establish a monitoring plan uses a JI specific approach.	ОК	ОК
1.4. If national or international monitoring standart has to be applied to monitor certain aspects of the project, is this standart identified and is the reference as to where a detailed description of the standart can be found provided?	PDD	DR	Yes, all the references to national and international standards for monitoring are listed in Section D of the PDD.	ОК	ОК
1.5. Are the description of the assumptions, formulas, parameters, data sources and key factors indicated?	PDD	DR	Assumptions, formulas, parameters, data sources and key factors are described in Section D of the PDD.	CAR 16 CAR 17	ОК
			<b>CAR 16</b> Please indicate more detail the monitoring process of the coal production quality.		
			<b>CAR 17.</b> Please justify how electricity is taken into account, which was consumed in the formation of waste heap that		



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			dismantling in the project.		
1.5.1. Is it stated how uncertainties are taken into account and conservativeness is safeguarded?	PDD	DR	In Section D of the PDD describes how uncertainty taking into account and how was provided conservative.	ОК	ОК
1.6. Is it described how the chosen approach is applied in the context of the project?	PDD	DR	In Section D of the PDD describes how JI approach was used in the project. Monitoring for the projects will be assessed using option (a) of Annex 2 of Guidance on criteria for baseline setting and monitoring", version 03.	ОК	ОК
<ul> <li>1.7. Does the monitoring plan explicitly and clearly distinguish:</li> <li>1) data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination regarding the PDD;</li> <li>2) 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 are determined 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 regarding the PDD;</li> <li>3) data and parameters that are monitored throughout the crediting period?</li> </ul>	PDD	DR	The monitoring plan clearly and accurately separates: 1) Data and parameters that are not checking during the crediting period, (and, therefore, set only once and remain constant over the crediting period) and are available at the stage of determination of the PDD; 2) Data and parameters that are not checked during the crediting period (and therefore remain constant throughout the crediting period), but are not available at the stage of determination of the	OK	ОК



CHECKLIST QUESTION		Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
				PDD; 3) Data and parameters that will be checking during the crediting period.		
1.8. Are alternative tables used instead of t provided in sections D.1.1.1., D.1.1.3., D.1.3.1. and D.2. in line with the approach monitoring chosen for all data/parameters?	D.1.2.1., regarding	PDD	DR	Not applicable.	ОК	ОК
1.8.1. Are all the required data / pa according to the used methodology indicat				Not applicable.	ОК	ОК
1.8.2. Fill in the required amount of sub che on the number of data parameters).	cklists for	fixed dat	a and co	mment any line answered with "No" (	items may be a	dded depending
1.10.1. Parameter Title		PDD	DR	Not applicable.	ОК	ОК
Data Che k ist	Yes/No					
Is the title in line with methodology?						
Are data unit correctly expressed?						
Is the appropriate description of parameter indicated?						
Is the time of monitoring clearly indicated?						
Is the source clearly referenced?						
Is the correct value provided?						
Has this value been verified?						
Is the choice of data correctly justified or is the measurement method correctly described?						
Are quality control and quality assurance procedures						



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
indicated?					
D.1.1. Option 1 – Monitoring of the emissions in the p	roject so	enario a	nd the baseline scenario		
1.1.1. Is the option 1 used for monitoring of the emissions in the project scenario and the baseline scenario?	PDD	DR	Monitoring using Option 1 is applied for project scenario and the baseline scenario in accordance with Section B of the PDD.	ОК	ОК
D.1.1.1. Data to be collected in order to monitor emiss	ions fro	m the pr	oject, and how these data will be a	rchived	
1.1.1.1. Are the data to be collected in order to monitor emissions from the project described?	PDD	DR	Section D.1.1.1. of the PDD indicates data to be collected in order to monitor emissions from the project. However, not all measuring devices are described in the PDD. CAR 18. Indicate all measuring equipment engaged from the beginning of the project's implementation. CL 02. Explain how coal from	CAR 18 CL 02	ОК
1.1.1.2. Is it indicated how the data will be archived?	PDD	DR	other sources is excluded from monitoring. In accordance Section D.1.1.1. of the PDD all data will be archived	ОК	ОК
1.1.1.3. Is it indicated that data monitored are to be	PDD	DR	on electronic and hard copy. Documents and other data monitored and required for	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
kept for two years after the last transfer of ERUs for the project?			determination and verification, as well as any other data that are relevant to the operation of the project will be kept for at least two years after the last transfer of ERUs.		
D.1.1.2. Description of formulae used to estimate proj	ect emis	sions (fo	or each gas, source etc.; emissions	s in units of CC	0₂equivalent)
1.1.2.1. Are the formulae clearly and consistently indicated throughout the PDD?	PDD	DR	The formulae are clearly and consistently indicated in section D.1.1.2. of the PDD and throughout the PDD.	CAR 19 CAR 20	ОК
			<b>CAR 19.</b> Please do recalculation of project greenhouse gases emissions as a result of electricity consumption from electric network using meters' actual data.		
			<b>CAR 20.</b> Please correct the meaning of Net Calorific Value of diesel fuel (NCV <sub>Diesel</sub> ) according to the Table P2.38. of Cadaster.		
D.1.1.3. Relevant data necessary for determining the the project boundary, and how such data will be collected			opogenic emissions of greenhous	e gases by sou	rces within the
1.1.3.1. Are the data necessary for determining the baseline of anthropogenic emissions of greenhouse gases by sources within the project boundary described?	PDD	DR	The table D.1.1.3. of the PDD indicates data to be collected in order to monitor emissions from the project.	CAR 21	ОК
			<b>CAR 21</b> . During the site-visit, it was found that the laboratory that		



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			is in the waste heap's territory certified from 22/04/2011. Please specify that the laboratory determined the monitoring data (ash and moisture) from the beginning of waste heap dismantling. Provide documentary evidence.		
1.1.3.2. Is it indicated how data will be archived?	PDD	DR	In accordance Section D.1.1.3. of the PDD all data will be archived on electronic and hard copy.	ОК	ОК
D.1.1.4. Description of formulae used to estimate base	line emi	ssions (f	or each gas, source etc.; emissior	ns in units of C	O₂ equivalent)
1.1.4.1. Are the formulae clearly and consistently indicated throughout the PDD?	PDD	DR	The formulae are clearly and consistently indicated in section D.1.1.4. of the PDD and throughout the PDD.	ОК	ОК
D.1.2. Option 2 Direct monitoring of emission reductio	ns from	the proj	ect (values should be consistent w	ith those in se	ction E.)
1.2.1. Is the option 2 used for monitoring of the emissions in the project scenario and the baseline scenario?	PDD	DR	N/A	ОК	ОК
D.1.2.1. Data to be collected in order to monitor emiss	sion redu	uctions f	rom the project, and how these da	ta will be archiv	ved
1.2.1.1. Are the data to be collected in order to monitor emissions from the project described?	PDD	DR	N/A	ОК	ОК
1.2.1.2. Is it indicated how the data will be archived?	PDD	DR	N/A	ОК	ОК
1.2.1.3. Is it indicated that data monitored are to be kept for two years after the last transfer of ERUs for	PDD	DR	N/A	OK	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
the project?					
D.1.2.2. Description of formulae used to calculate emis reductions in units of CO2 equivalent):	sion red	ductions	from the project (for each gas, sou	urce etc.; emiss	sions/emissior
1.2.2.1. Are the formulae clearly and consistently indicated throughout the PDD?	PDD	DR	The formulae are clearly and consistently indicated in the PDD.	OK	ОК
D.1.3. Treatment of leakage in the monitoring plan		•	·		
1.3.1. Are data and information that will be collected in order to monitor leakage effects of the project described, if applicable?	PDD	DR	Participants state that project activity does not lead to leaks. See CAR 14.	ОК	ОК
1.3.2. Are formulae used to estimate leakage (for each gas, source etc.; emissions in units of CO2 equivalent) described?	PDD	DR	Participants state that project activity does not lead to leaks. See CAR 14.	ОК	ОК
D.1.4. Description of formulae used to estimate emissi reductions in units of CO <sub>2</sub> equivalent)	on redu	ctions fo	or the project (for each gas, source	etc.; emissions	s/emission
1.4.1. Are the formulae clearly and consistently indicated throughout the PDD?	PDD	DR	The description of formulae is clearly and consistently indicated in section D.1.4. of the PDD.	ОК	ОК
D.1.4. Where applicable, in accordance with procedure information on the environmental impacts of the proje		quired by	y the host Party, information on the	e collection and	d archiving of
1.4.1. Is information on the collection and archiving of information on the environmental impacts of the project?	PDD	DR	Collection and archiving of the information on the environmental impacts of the project will be done based on the approved EIA in accordance with the Host Party legislation.	ОК	ОК
1.4.2. Is reference to the relevant host Party	PDD	DR	All references presented in	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
regulation(s) provided?			section F.1		
1.4.3. If not applicable is it stated so?	PDD	DR	-	ОК	ОК
D.2. Quality control (QC) and quality assurance (QA) p	rocedur	es unde	rtaken for data monitored		
2.1. Are the quality assurance and control procedures for the monitoring process established? This includes, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available on request?	PDD	DR	Quality control and quality assurance procedures undertaken for data monitored are indicated in tabular format in section D.2. of the PDD. <b>CAR 22</b> . According to Section D.2 of the PDD, meters calibrated in accordance with procedures of the Host Party. Please indicate which procedures or standards are applied. <b>CAR 23.</b> Please correct the level of uncertainty for the parameter: the probability of fire waste heap, with low to medium.	CAR 22 CAR 23	ОК
2.2. Are data corresponded with those in section D.1?	PDD	DR	Yes. Data corresponded with those in section D.1 of the PDD.	ОК	ОК
D.3. Please describe the operational and management plan	structu	e that th	ne project operator will apply in imp	plementing the	monitoring
3.1 Is it described briefly the operational and management structure that the project participants(s) will implement in order to monitor emission reduction and any leakage effects generated by the project?	PDD	DR	The project owner – PE ICC "Tefida" made all needed action implement provisions of this monitoring plan into its organizational and quality management structure.	CAR 24	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			The operational and management structure are presented in section D.3. of the PDD in figure 8. <b>CAR 24.</b> Please correct management structure according to the actually existing on-site implementation of the project.		
3.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	PDD	DR	In Section D.3. PDD clearly represented commitment and organizational arrangements for data collection and storage. General control of the monitoring system is carried out by company management Private Firm "Tefida" within the existing system of monitoring and reporting. See CAR 24.	ОК	ОК
3.3. Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type?	PDD	DR	Monitoring plan, on the whole, reflects good monitoring practices appropriate to the project type.	ОК	ОК
D.4. Name of person(s)/entity(ies) establishing the mo	nitoring	plan			
4.1. Is the contact information of person(s)/entity(ies) establishing the monitoring plan provided?	PDD	DR	Gennadiy Ivanenko, Project manager at SIA Vidzeme EKO The reference to Annex 1 of the PDD is provided.	ОК	ОК
4.2. Is the person/entity also a project participant listed in Annex 1 of PDD?	PDD	DR	SIA Vidzeme EKO is a project participants. The required	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			information is provided in section D.4. of the PDD.		
E. Estimation of greenhouse gases emission	reduc	<u>tions</u>			
E.1. Estimated project emissions					
1.1. Are described the formulae used to estimate anthropogenic emissions by source of GHGs due to the project (for each gas, source etc.; emissions in units of CO <sub>2</sub> equivalent)?	PDD	DR	The formulas used to estimate anthropogenic emissions by sources of GHG within the project (for each gas, source etc.; emissions are presented in units of $CO_2$ -equivalent) are described in Section D.1.1.2 of the PDD.	ОК	ОК
1.1.1. Is there a description of calculation of GHG project emissions in accordance with the formula? (supporting documentation)	PDD	DR	The description of calculation of GHG project emissions is provided in section B 1.1.2 EXCEL electronic files as supporting documentation.	ОК	ОК
1.1.2. Have conservative assumptions been used to calculate project GHG emissions?	PDD	DR	Assumptions which were used to calculate project GHG emissions are conservative.	ОК	ОК
E.2. Estimated leakage				·	
2.1. Are described the formulae used to estimate leakage due to the project activity where required (for each gas, source etc.; emissions in units of CO <sub>2</sub> equivalent)?	PDD	DR	Participants state that project activity does not lead to leaks. See CAR 14.	ОК	ОК
2.1.1. Is there a description of calculation of leakage in accordance with the formula?	PDD	DR	Participants state that project activity does not lead to leaks.	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
(supporting documentation)			See CAR 14.		
2.2. Have conservative assumptions been used to calculate leakage?	PDD	DR	Participants state that project activity does not lead to leaks. See <b>CAR 14.</b>	ОК	ОК
2.3. If not applicable, is it stated in the PDD?	PDD	DR	-	ОК	ОК
E.3. Sum of E.1 and E.2.					
3.1. Does the sum of E.1. and E.2. represent the project activity emissions?	PDD	DR	Yes. The sum of E.1. and E.2. represent the project activity emissions.	ОК	ОК
E.4. Estimated baseline emissions					
4.1. Are the formulae used to estimate the anthropogenic emissions by source of GHGs in the baseline using the baseline methodology for the applicable project category described (for each gas, source etc.; emissions in units of CO <sub>2</sub> equivalent)?	PDD	DR	The formulas used to estimate anthropogenic emissions by sources of GHGs in the baseline scenario, using the basic methodology for the appropriate category of projects described (for each gas, source etc.; emissions are presented in units of $CO_2$ - equivalent) in Section D.1.1.4 of the PDD.	ОК	ОК
4.1.1. Is there a description of calculation of GHG baseline emissions in accordance with the formula? (supporting documentation)	PDD	DR	Explanation of calculation of project emissions conducted in accordance with the formulas provided in Section D.1.1.4 of the PDD and electronic files, Excel, as auxiliary information. However, it should be explained the basis for assessment of calculations.	ОК	ОК



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	CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
4.2.	Have conservative assumptions been used to calculate baseline emissions?	PDD	DR	Conservative assumptions were used to calculate baseline emissions.	ОК	ОК
E.5	5. Difference between E.4. and E.3. representing the	emissio	n reduct	ions of the project		
5.1.	Does the difference between E.4. and E.3. represent the emission reductions due to the project during a given period?	PDD	DR	Difference between E.4. and E.3. representing emission reductions under the project in this period. <b>CAR 25.</b> To simplify the calculation of greenhouse gas off at the baseline and project scenario emissions generated as a result of burning coal for energy production.	CAR 25	ОК
E.6	6. Table providing values obtained when applying fo	rmulae a	above			
6.1.	Is the data provided under this section in consistency with data as presented by other chapters E of the PDD?	PDD	DR	The data provided under section E.6. is in consistency with data as presented by other chapters of the PDD.	CAR 26	ОК
				CAR 26. Please correct Section E according to CARs 11, 14, 25.		
6.2.	Is there a table providing the total value of emission reductions?	PDD	DR	Yes. A table which providing the total value of emission reductions located in section E.	ОК	ОК

procedures as determined by the host Party



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
1.1. Has an analysis of the possible environmental impacts of the project been sufficiently described?	PDD	DR	In Section F of the PDD, project participants have provided description of the possible environment impacts. According to this analysis, the negative environment impact in the project scenario is much lower than in the baseline scenario. To determine the completeness of the analysis requires some explanation.	ОК	ОК
1.2. Are there any host Party requirements for an Environmental Impact Assessment (EIA)?	PDD	DR	The Host Party for this project is Ukraine. Environmental Impact Assessment (EIA) is the part of the Ukrainian project planning and permitting procedures. Implementation regulations for EIA are included in the Ukrainian State Construction Standard DBN A.2.21-2003. <b>CAR 27.</b> Please indicate a	CAR 27	ОК
1.3. Are transboundary environmental impacts considered in the analysis?	PDD	DR	number of EIA in Section F.1. Transboundary impacts are not observed. There are no impacts that manifest within the area of any other country and that are caused by a proposed project activity which wholly physically originates within the area of Ukraine.	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
1.4. Are all regulations and sources clearly referenced?	PDD	DR	Yes. All regulations and sources clearly referenced.		ОК
F.2. If environmental impacts are considered significa references to supporting documentation of an environ required by the host Party					
2.1. Is viewpoint regarding significant environmental impacts of the project participants or the host Party indicated?	PDD	DR	In general, the project is environmentally beneficial because it causes less pollution than in the case of the baseline scenario.	ОК	ОК
2.2. Have conclusions and all references to the supporting documentation on the analysis of the environmental impacts been indicated?	PDD	DR	Yes. All references and conclusions to the supporting documentation on the analysis of the environmental impacts have been indicated.	ОК	ОК
G. Stakeholders' comments G.1. Information on stakeholders' comments on the p	project, a	as appro	priate		
1.1. Have relevant stakeholders been consulted and how?	PDD	DR	According to the modalities for the Determination of JI projects, the independent entity shall make publicly available the project design document and receive, within 30 days, comments from Parties, stakeholders and UNFCCC accredited non-	ОК	ОК



CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
			governmental organizations and make them publicly available. TÜV Rheinland Group/TÜV Rheinland Ukraine published the project design documents on the website TÜV Rheinland Ukraine (http://www.tuv.com.ua) on 05/03/2012 and invited comments till 05/04/2012 and invited comments within by Parties, stakeholders and non- governmental organizations.		
1.1.1. Have appropriate media been used to invite comments by local stakeholders?	PDD	DR	N/A	ОК	ОК
1.2. Is there a list of stakeholders from whom comments on the project have been received?	PDD	DR	N/A	ОК	ОК
1.3. Is the nature of comments provided?	PDD	DR	N/A	ОК	ОК
1.4. Has due account been taken of any stakeholder comments received?	PDD	DR	N/A	ОК	ОК
Annexes Annex 1. Contact information on project participants					
1.1. Is the information provided in consistency with the one given under section A.3?	PDD	DR	The information provided in Annex 1 is in a consistency with the one given under section A.3.	ОК	ОК
1.2. Are the mandatory fields for each	PDD	DR	Yes. The mandatory fields for each organization listed in section	ОК	ОК



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CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Conclusion	Final Conclusion
organisation listed in section A.3. of the PDD filled notably organisation, name of contact person, street, city, postal code, country, telephone number(s) and fax number or e-mail address?			A.3. of the PDD.		
Annex 2. Baseline information					
2.1. Is a table containing the key elements of the baseline (including variables, parameters and data sources) provided?	PDD	DR	Baseline information is in section B of this PDD.	ОК	ОК
2.2. If additional background information on baseline data is provided: is this information in consistency with data presented by other sections of the PDD?	PDD	DR	Baseline information provided in Annex 2, consistent with other sections of the PDD.	ОК	ОК
Annex 3. Monitoring plan					
3.1. Is the detail description of all key elements of monitoring plan provided?	PDD	DR	All necessary information is presented in Annex 3 of the PDD.	ОК	ОК
3.2. Is the provided information on monitoring plan in consistency with data presented in section D of the PDD?	PDD	DR	The information on monitoring plan is in a consistency with the one given under section D of the PDD.	ОК	ОК

**Ref.\*** - gives reference to Category 1 and Category 2 documents (see section 3.1. of the Determination Report) where the answer to the checklist question or item is found.

MoV\*\* - Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I).



# DETERMINATION REPORT

#### Table 3 - Resolution of Corrective Actions and Clarification Requests

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables	Summary of project owner response	Determination team conclusion
FAR 01. The Project hasn't obtained Letters of Approval from the parties involved.	<b>1, 2</b> Table 1, checklist question 1	To obtain the written approval of the project (the letter of approval) should be submitted the Final Determination Report to the State Environmental Investment Agency of Ukraine. Written approval of the project from the Party involved, member of JI project, other than the host country (Republic of Latvia) will be returned no later than the first verification.	<b>FAR 01</b> will be closed when the Parties involved will provide the Letters of Approval.
<b>CAR 01</b> . In section A.5 of the PDD it should be explained when the LoAs will be obtained.	Table 1, question A.1, Table 2, checklist question A.5	Explained, on April 2012	<b>Issue is closed</b> based on corrections introduced in the PDD ver 2.0.
<b>CAR 02</b> . Please specify a number of GOST according to requirements of its quality the fraction of class 0-30 mm is blending with steam coal before combustion.	Table 2, checklist question A.2.1.1	Specified, DSTU 4083-2002 energetic coal.	Issue is closed.
<b>CAR 03</b> . Please pass in section A.4.2 the technical specifications of main electrical equipment.	Table 2, checklist question A.4.2.2	Specified, the links to web pages that provided technical specifications of this equipment are provided.	Issue is closed.
<b>CAR 04</b> . Provide evidence that the coal mined from waste heap burned to get electricity or heat energy.	Table 2, checklist question A.4.3.1	Contracts of Supply # 17/07, p.2 "Terms of delivery" - "Volnovahske" SC of "Oblpalyvo" LLC. # 07-01/11 - "Dobropolske" SC of "Oplpalyvo" LLC, # 01-07, "Enakievo" SC of "Oblpalyvo" LLC.	Issue is closed.



Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
<b>CAR 05</b> . Please describe in Section A.4.3. what caused a slow down the temps of waste heaps dismantling in 2013-2015.	Table 2, checklist question A.4.3.1.1	Described - the maximum loading in the credit period.	Issue is closed.
<b>CAR 06</b> . Please provide the assessment (evaluation) of the estimated total emission reductions in tons $CO_2$ -equivalent in the section A.4.3 of the PDD, as defined in section E.	Table 2, checklist question A.4.3.1.1	Provided those differences arose due to rounding. These are all Sections brought into compliance.	Issue is closed.
<b>CAR 07</b> . At p. 15 of the PDD version 1.0 indicates that 78% of waste heaps in the Donetsk region have been burned or burning now. This assertion is contrary to the value specified in the study made by the institute "Respirator". Please correct the discrepancy.	Table 2, checklist question B.1.1	Corrected, this number belonged to previous report of the Institute Respirator and was left in the PDD by mistake.	Issue is closed.
<b>CAR 08</b> . Please correct description for the emission factor of power consumption from the network.	Table 2, checklist question B.1.2.3	Corrected.	Issue is closed.
<b>CAR 09</b> . Provide clarification in the description: the average ash content of coal is taken for calculation.	Table 2, checklist question B.1.2.3	Provided. Average thermal coal values of Donetsk region by Repertory of quality parameters of Coal Ministry of Ukraine.	Issue is closed.
<b>CAR 10</b> . Provide justification that the Net Calorific Value of coal listed on the	Table 2, checklist question B.1.2.3	In this project, carried out continuous control of the chemical composition of	Issue is closed.



Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
average ash content and moisture in Ukraine for the Net Calorific Value of coal that is burned in the energy sector of Ukraine according to National greenhouse gas emissions Cadastre.		products sold by two parameters - ash content and moisture. To correctly determine the magnitude of GHG emissions by conversion of Carbonaceous fractions (0-30mm) in the equivalent amount of coal produced in mines of Ukraine, since it is based on this basic scenario of the project. For the calculation used the data of the guide of quality, volume of coal production and enrichment products in 2008-2010 of Ministry of Coal Industry of Ukraine, the State consumer standard of Ukraine of ash content and moisture content for steam coal produced in mines in Donetsk region*. The formula of emissions' calculating from burning used refused (see section B.1. Formula (3)) value is the lower heat of combustion NCV <sub>Coal</sub> = 21500 kJ/kg. by national inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990 - 2009, p. 393. This value does not exceed the Net Calorific Value of steam coal, taken in the project as a model, what can be seen under the following simple calculation: According to [40], Higher Calorific Value of	



Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
		steam coal, used in the project HCV is 8280 kcal / kg (34,693 kJ/kg). Higher Calorific Value is transferred to Net Calorific Value by the formula:	
		NCV = HCV – 24,42*(9*H + W) , kJ/kg	
		There are no data on the content of hydrogen in the directory of Coal Industry [40], however, according to [42], the maximum hydrogen content in coal does not exceed 5%. Substituting the values of NCV [41], and the value of HCV and W [40], we obtain the H (hydrogen content), in which the value of HCV = 34693 kJ/kg corresponds to the value NCV = 21500 kJ/kg:	
		H = ((34693-21500)/24,42-6,9)/9 = 59,26%	
		We have deliberately inflated number of hydrogen content in coal, based on the assumption that the Net Calorific Value of coal is 21,500 kJ/kg (21.5 MJ/kg). Thus, the Net Calorific Value of steam coal produced in mines of the Donetsk region	



Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
		above the value specified in [2], so when calculating the emission reductions we can take (following the principle of conservatism) this value.	
<b>CAR 11.</b> Due to the high level of uncertainty with the project off waste heap created as a result of current coal production from mines.	Table 2, checklist question B.1.2.6	Excluded, although the report of the Institute Respirator available data on which you can make those calculations, but the level of uncertainty really great, so on this occasion, and for reasons of conservatism, emissions due to a new waste heap at work the mines removed from the project.	Issue is closed.
<b>CAR 12</b> . In the Section B. 1 as part of the analysis of the baseline should be given a brief description of the relevant rules relating to waste heaps in so far as affecting the choice of baseline (here - uncontrolled and complete combustion of waste heaps). If these legal standards are not met regularly, especially abandoned waste heaps, it should be stated in the PDD.	Table 2, checklist question B.1.2.6	Described in Section B.1. page 12, Sub- step 2в "Compliance with laws and normative acts"	Issue is closed.
<b>CAR 13</b> . For the selected baseline scenario is a complete combustion of waste heaps. Please provide relevant evidence that the absence of the project	Table 2, checklist question B.2.4.2	The source indicated. This source is the JI project "Waste heaps dismantling with the aim of decreasing the greenhouse gases emissions into the atmosphere" Anthracite Ltd, which held the Determination and	Issue is closed.



Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
<ul> <li>(a) coal, which contains in waste heaps will burned completely (100%)</li> <li>(b) coal burned within the time frame, compared to the period of the project. At p. 2 of the PDD stated that the waste heaps burn for 5-7 years, and the source of this information is not specified.</li> </ul>		Verification of first monitoring report.	
<b>CAR 14</b> . Please move the uncontrolled emissions of methane during coal mining and emissions related to the consumption of electric energy from coal mines to the Section Leakages.	Table 2, checklist question B.3.1	Moved, considering the present circumstances change all the formulas and calculations are transferred to the appropriate sections. Also made changes to Section E.	Issue is closed.
<b>CAR 15</b> . The specified start date of the crediting period - July 17, 2008 that the contract for installation of facilities for waste heap dismantling was signed . However, the start date of the crediting period should reflect the beginning of the first greenhouse gas emission reductions from the project implementation. Please provide documentary evidence of this date.	Table 2, checklist question C.1.2	The date is corrected into the date of introduction of equipment into operation.	Issue is closed.
<b>CAR 16.</b> Please indicate more detail the monitoring process of the coal production quality.	Table 2, checklist question D.1.5	Itemized in Section D1 paragraph 3	Issue is closed.
CAR 17. Please justify how electricity is	Table 2, checklist	The high level of uncertainty in respect of	Issue is closed.



Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
taken into account, which was consumed in the formation of waste heap that dismantling in the project.	question D.1.5	which the new waste heap is excluded from consideration in the baseline are primarily concerned with the fact that the new mining technologies, coal is generally without forming waste heaps (back-filling). It takes much more energy than the formation of waste heap. Exceptions to the baseline of the new waste heap, while the inclusion of the cost of electricity it is illogical.	
<b>CAR 18</b> . Indicate all measuring equipment engaged from the beginning of the project's implementation.	Table 2, checklist question D.1.1.1.1	Indicated. More detailed information will be provided in the Monitoring Report.	Issue is closed.
<b>CAR 19.</b> Please do recalculation of project greenhouse gases emissions as a result of electricity consumption from electric network using meters' actual data.	Table 2, checklist question D.1.1.2.1	This will be done in Monitoring Report and be given the differences that have arisen in this regard. In the PDD was made the calculation of electricity consumption at the maximum load of electrical equipment. These calculations are cross-checking electricity exhibited on the basis of meters' evidences.	Issue is closed.
<b>CAR 20</b> . Please correct the meaning of Net Calorific Value of diesel fuel $(NCV_{Diesel})$ according to the Table $\Pi 2.38$ . of Cadastre.	Table 2, checklist question D.1.1.2.1	With conservative reasons chosen the most important value of NCV <sub>Diesel</sub> - 42,5 MJ/kg according to the Cadastre, page 393	Issue is closed.



Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
<b>CAR 21</b> . During the site-visit, it was found that the laboratory that is in the waste heap's territory certified from 22/04/2011. Please specify that the laboratory determined the monitoring data (ash and moisture) from the beginning of waste heap dismantling. Provide documentary evidence.	Table 2, checklist question D.1.1.3.1	More detailed information will be provided in the Monitoring Report.	Issue is closed.
<b>CAR 22.</b> According to Section D.2 of the PDD, meters calibrated in accordance with procedures of the Host Party. Please indicate which procedures or standards are applied.	Table 2, checklist question D.2.1	Timing calibration of the instruments listed in Section D.1 of the PDD. Procedures will be described in the Monitoring Report more detailed.	Issue is closed.
<b>CAR 23.</b> Please correct the level of uncertainty for the parameter: the probability of fire waste heap, with low to medium.	Table 2, checklist question D.2.1	Corrected. The level of uncertainty for the parameter: the probability of fire waste heap has been corrected from low to medium.	Issue is closed.
<b>CAR 24</b> . Please correct management structure according to the actually existing on-site implementation of the project.	Table 2, checklist question D.3.1	Corrected according to actual. This includes combining some functions of the chief of production, responsible for supply of energy sources and shipment of products.	Issue is closed.
<b>CAR 25.</b> To simplify the calculation of greenhouse gas off at the baseline and project scenario emissions generated as a result of burning coal for energy production.	Table 2, checklist question E.5.1	Excluded, explained that although these emissions are the largest in the project, they are the same as emissions from combustion of coal in the baseline scenario, so to simplify the calculations can be mutually reduced.	Issue is closed.



Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
CAR 26. Please correct Section E according to CARs 11, 14, 25.	Table 2, checklist question E.6.1	Corrected, all tables brought into conformity to the corrected baseline and project line.	Issue is closed.
<b>CAR 27</b> . Please indicate a number of EIA in Section F.1.	Table 2, checklist question F.1.2	Indicated.	Issue is closed.
<b>CL 01.</b> Please explain where exactly is using the product of +30 class.	Table 2, checklist question A.4.3.1	Indicated in Section A.4.3	Issue is closed.
<b>CL 02</b> . Explain how coal from other sources is excluded from monitoring.	Table 2, checklist question D.1.1.1.1	Mine "Rozsypnyanska-1" was closed about 30 years ago. In connection with these other sources of coal near the waste heap, which is considered in the project, no.	Issue is closed.