



# VERIFICATION REPORT VEMA S.A.

## VERIFICATION OF THE JI PROJECT

### REDUCTION OF GREENHOUSE GASES EMISSIONS BY GASIFICATION OF MARIUPOL CITY

Second periodic

for the period 01/01/2008 – 31/12/2011

REPORT No. UKRAINE-VER/0531/2012

REVISION No. 02

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT

Date of first issue: 26/07/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: VEMA S.A.	Client ref.: Fabian Knodel

**Summary:**  
Bureau Veritas Certification has made the second periodic verification for the period from January 1, 2008 to December 31, 2011 of the "Reduction of greenhouse gases emissions by gasification of Mariupol city" project of VEMA S.A., located in Mariupol city and the territories of Donetsk region adjacent to the city, Ukraine, and applying JI specific approach, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria (but for the crediting period) refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

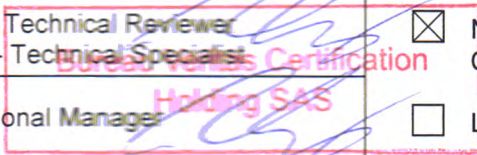
The verification scope is defined as a periodic independent review and ex post determination by the Accredited Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the monitoring report against project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the verification process is a list of Clarification, Corrective Actions Requests, Forward Actions Requests (CR, CAR and FAR), presented in Appendix A.

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. Installed equipment that is essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The GHG emission reduction is calculated without material errors and the ERUs issued totalize 269 074 tonnes of CO<sub>2</sub> equivalent for the monitoring period from 01/01/2008 to 31/12/2011.

Our opinion relates to the project's GHG emissions and resulting GHG emission reductions reported and related to the approved project baseline and monitoring plan, and its associated documents.

Report No.: UKRAINE-ver/0531/2012	Subject Group: JI
Project title: Reduction of greenhouse gases emissions by gasification of Mariupol city	
Work carried out by: Oleg Skoblyk – Team Leader, Climate Change Lead Verifier Volodimir Kulish - Team Member, Climate Change Verifier	
Work reviewed by: Ivan Sokolov - Internal Technical Reviewer Oleksandr Kuzmenko - Technical Specialist	
Work approved by: Ivan Sokolov – Operational Manager	
Date of this revision: 22/08/2012	Rev. No.: 02
Number of pages: 34	



- No distribution without permission from the Client or responsible organizational unit
- Limited distribution
- Unrestricted distribution



<b>Table of Contents</b>		<b>Page</b>
1	INTRODUCTION .....	4
1.1	Objective	4
1.2	Scope	4
1.3	Verification team	4
2	METHODOLOGY .....	5
2.1	Review of documents	5
2.2	Follow-up Interviews	6
2.3	Resolution of Clarification, Corrective and Forward Action Requests	6
3	VERIFICATION CONCLUSIONS .....	7
3.1	Remaining issues and FARs from previous verifications	7
3.2	Project approval by Parties involved (90-91)	8
3.3	Project implementation (92-93)	8
3.4	Compliance of the monitoring plan with the monitoring methodology (94-98)	10
3.5	Revision of monitoring plan (99-100)	11
3.6	Data management (101)	11
3.7	Verification regarding programmes of activities (102-110)	14
4	VERIFICATION OPINION .....	14
5	REFERENCES .....	17
	APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL .....	22



## 1 INTRODUCTION

VEMA S.A. has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project “Reduction of greenhouse gases emissions by gasification of Mariupol city” (hereafter called “the project”) located in Mariupol city and the territories of Donetsk region adjacent to the city, Ukraine.

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

The verification covers the period from January 1, 2008 to December 31, 2011.

### 1.1 Objective

Verification is the periodic independent review and ex post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions during defined verification period.

The objective of verification can be divided in Initial Verification and Periodic Verification.

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

### 1.2 Scope

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

The verification is not meant to provide any consulting towards the Client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the project monitoring towards reductions in the GHG emissions.

### 1.3 Verification Team

The verification team consists of the following personnel:

Oleg Skoblyk





Bureau Veritas Certification, Team Leader, Climate Change Lead Verifier

Volodimir Kulish  
Team Member, Climate Change Verifier

This verification report was reviewed by:

Ivan Sokolov  
Bureau Veritas Certification, Internal Technical Reviewer

Oleksandr Kuzmenko  
Bureau Veritas Certification, Technical Specialist

## **2 METHODOLOGY**

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

In order to ensure transparency, a verification protocol was customized for the project, according to the version 01 of the Joint Implementation Determination and Verification Manual, issued by the Joint Implementation Supervisory Committee at its 19 meeting on 04/12/2009. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from verifying the identified criteria. The verification protocol serves the following purposes:

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

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

### **2.1 Review of Documents**

The Monitoring Report (MR) submitted by VEMA S.A. and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), Approved CDM methodology, Determination Report of the project issued by Bureau Veritas Certification Holding SAS No. UKRAINE-det/0443/2012 version 01 as of 14/05/2012, Guidance on criteria for baseline setting and monitoring, Host party criteria, the Kyoto Protocol, Clarifications on Verification Requirements to be Checked by an Accredited Independent Entity were reviewed.



The verification findings presented in this report relate to the Monitoring Report for the period from 01/01/2008 to 31/12/2011 version 01 of June 27, 2012, version 02 of July 20 and version 03 of August 21 2012 and the project as described in the determined PDD.

## 2.2 Follow-up Interviews

On 23/07/2012 Bureau Veritas Certification verification team conducted a visit to the project site (PJSC “Mariupolgaz”) and performed (on-site) interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of VEMA S.A. and PJSC “Mariupolgaz” were interviewed (see References). The main topics of the interviews are summarized in Table 1.

**Table 1 Interview topics**

Interviewed organization	Interview topics
PJSC “Mariupolgaz”	<ul style="list-style-type: none"> <li>➤ Organizational structure</li> <li>➤ Responsibilities and authorities</li> <li>➤ Roles and responsibilities relating to data collection and processing</li> <li>➤ Equipment installation</li> <li>➤ Data logging archiving and reporting</li> <li>➤ Metering equipment control</li> <li>➤ Metering record keeping system, database</li> <li>➤ IT management</li> <li>➤ Personnel training</li> <li>➤ Quality control procedures and technology</li> <li>➤ Internal audit and inspections</li> </ul>
Consultant: VEMA S.A.	<ul style="list-style-type: none"> <li>➤ Baseline methodology</li> <li>➤ Monitoring plan</li> <li>➤ Monitoring report</li> <li>➤ Deviations from the PDD</li> </ul>

## 2.3 Resolution of Clarification, Corrective and Forward Action Requests

The objective of this phase of the verification is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the GHG emission reduction calculation.

If the Verification Team, in assessing the monitoring report and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to the monitoring requirements, it should raise these issues and inform the project participants of these issues in the form of:



- (a) Corrective action request (CAR), requesting the project participants to correct a mistake that is not in accordance with the monitoring plan;
- (b) Clarification request (CL), requesting the project participants to provide additional information for the Verification Team to assess compliance with the monitoring plan
- (c) Forward action request (FAR), informing the project participants of an issue, relating to the monitoring that needs to be reviewed during the next verification period.

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

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

### **3 VERIFICATION CONCLUSIONS**

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

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

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 8 Corrective Action Requests and 4 Clarification Requests.

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

#### **3.1 Remaining issues and FARs from previous verifications**

There aren't any remaining CLs, CARs and FARs from previous verifications.



### 3.2 Project approval by Parties involved (90-91)

The project was approved by the host Party (Ukraine) - the Letter of Approval No. 1598/23/7 dated 25/06/2012 issued by State Environmental Investment Agency of Ukraine. The project was also approved by the party – buyer of the emission reduction units (Switzerland) - Letter of Approval No.J294-0485 dated 30/05/2012 issued by the Federal Office for the Environment FOEN of Switzerland.

The abovementioned written approvals are unconditional.

### 3.3 Project implementation (92-93)

The main purpose of the project is reduction of greenhouse gas emissions by changing the structure of fuel consumption in industrial, utility, administrative and private sectors of Mariupol city by replacing solid and liquid fuels with natural gas.

The project provides for the construction and expansion of the gas distribution systems (GDS) of Mariupol city, which will also improve the energy efficiency of thermal power generation due to the transition of existing heat-generating systems to natural gas. The project initiated by PJSC “Mariupolgaz” will result in the reduction of greenhouse gas (GHG) emissions into the atmosphere and improve the environmental situation in the region.

The project activities include:

- Ensuring of the supply of natural gas (gasification) to end users by means of the construction and reconstruction of gas distribution networks;
- Replacement of solid and liquid fuels with natural gas;
- Increase in heat energy efficiency;
- Reduction of greenhouse gases under the Joint Implementation (JI) Mechanism.

Implementation of project activities started in late 2003, as stated in the determined PDD version 03. However, emission reductions achieved in 2003 are conservatively excluded from the calculation.

Project implementation status in the reporting period of 01/01/2008 – 31/12/2011 is provided in Table 2 below.

**Table 2 Project implementation status during the reporting monitoring period from 01/01/2008 to 31/12/2011**

Measures	Year of
----------	---------





Construction of gas distribution networks (GDNs)				implementation
Underground laying	High-pressure, km	Medium-pressure, km	Low-pressure, km	
	1.26000	7.62730	9.26850	2008
	0.00000	2.94900	3.22730	2009
	0.00000	0.13800	0.13800	2010
Above-ground laying	0.00000	0.00000	0.00000	2011
	0.04000	3.04356	3.84766	2008
	0.00000	1.69050	1.73750	2009
	0.00000	0.00200	0.00200	2010
Total	0.00000	0.00000	0.00000	2011
	1.3	15.45	18.22	2008-2011

Status of the project activity implementation complies with the project plan included in the determined PDD version 03.

Details of measures that were implemented, and the number of equipment units installed in the period from January 1, 2008 to December 31, 2011 by departments and offices are provided in Annex 2 to the Monitoring Report.

The starting date of the crediting period has not changed and remains the date when the first emission reduction units are expected to be generated, namely: January 1, 2008.

The monitoring system is in place.

Monitoring equipment, such as natural gas meters, meets industry standards of Ukraine. All monitoring equipment is included in the detailed verification (calibration) plan and tested at intervals prescribed by the manufacturers of such equipment.

The impact of the project "Reduction of greenhouse gases emissions by gasification of Mariupol city" on the environment during the construction work can be assessed as tolerable. Project facilities are not included in the list of activities and facilities of environmental hazard. Completed analysis of the impact of facilities on the environment, which considers all factors, showed that in the normal technical operational mode they will neither cause any negative processes in the environment of the region, nor lead to any negative social and economic consequences and the risk of accidents and their possible impact is minimized.

As part of procedures undertaken at the request of relevant state services, the company reports on environmental performance on a periodical basis. Environmental department of PJSC "Mariupolgaz"



develops quarterly reports in accordance with the Form No.2-TP (air) that is provided to local government statistics.

The project scenario provides for expansion of the territorial gas supply system, which includes construction and reconstruction of the gas distribution networks (GDN) and related equipment. The project provides for modernization of the fuel consumption system of Mariupol city by means of transition of heat-generating systems to natural gas and transferring the consumers from centralized to individual heating and hot water supply systems, which, in turn, leads to the use of more efficient and environmentally friendly fossil fuel (natural gas), improvement of the quality of heating and hot water supply services, reduction of thermal energy consumption due to increased efficiency of individual systems in comparison with the centralized ones.

The identified areas of concern as to the project implementation, project participants responses and Bureau Veritas Certification's conclusions are described in Appendix A to this report (refer to CAR 01, CAR 02, CAR 03, CL 01).

### **3.4 Compliance of the monitoring plan with the monitoring methodology (94-98)**

The monitoring occurred in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website.

For calculating the emission reductions, key factors, such as volume of natural gas to be supplied to the consumers, existing tariffs for natural gas transportation, public policy in the field of gas supply, experience in implementing activities provided by the project, current practice that exists in this field in Ukraine, financial costs and background, sectoral reform policy in the field of gas supply and legislation, 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, as appropriate.

Data sources used for calculating emission reductions such as appropriately calibrated measuring devices, survey of carbon dioxide emission factors are clearly identified, reliable and transparent.

Carbon dioxide emission factor for natural gas combustion, carbon dioxide emission factor for fossil fuel combustion, default emission factor for methane at technological gas equipment at end consumer's place, default emission factor for methane in the process of natural gas transportation and distribution, reduced GHG emission factor for natural gas



transportation to end consumers are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

The calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The monitoring periods per component of the project are clearly specified in the monitoring report and do not overlap with those for which verifications were already deemed final in the past.

The identified areas of concern as to the compliance of the monitoring plan with the monitoring methodology, project participants responses and Bureau Veritas Certification's conclusions are described in Appendix A to this report (refer to CAR 04, CAR 05, CAR 06, CAR 07, CL 02, CL 03).

### **3.5 Revision of monitoring plan (99-100)**

Not applicable.

### **3.6 Data management (101)**

The data and their sources, provided in monitoring report, are clearly identified, reliable and transparent.

The implementation of data collection procedures is in accordance with the monitoring plan provided in the PDD, including the quality control and quality assurance procedures.

The function of the monitoring equipment, including its calibration status, is in order.

According to the current Law "On metrology and metrological activity", all metering equipment in Ukraine shall meet the specified requirements of relevant standards and is subject to periodic calibration. Intercalibration periods are stated in Section B.1. of the MR and Annex 4 "Supporting Document 4: Types of metering equipment". The project complies with the legislative requirements relating to calibration and verification.

The evidence and records used for the monitoring are maintained in a traceable manner.

Data collection and management system is in accordance with the monitoring plan provided in the PDD.

The most objective and cumulative indicator that provides a clear picture of whether emission reduction took place is natural gas consumption. The substitution of fuel oil and coal with natural gas leads to GHG emission reductions. In addition, systems of energy carrier transportation, preparation and combustion show higher efficiency if a switch to natural gas occurs and this happens irrelevant of external factors.



The monitoring procedure provides for the following measures:

1. Collection of information on greenhouse gas emissions within the project boundary during the crediting period.
2. Assessment of the project implementation schedule.
3. Collection of the information on measurement equipment, its calibration.
4. Collection and archiving of information on the impact of project activities on the environment.
5. Data archiving.
6. Organization of personnel training.

Data and parameters subject to periodic monitoring, according to the monitoring plan provided in the PDD version 03, as well as the list of constant values used to calculate emission reductions, are provided in Section B.2.1. of the Monitoring Report, as well as in Annexes 3.1-3.3. – Excel files.

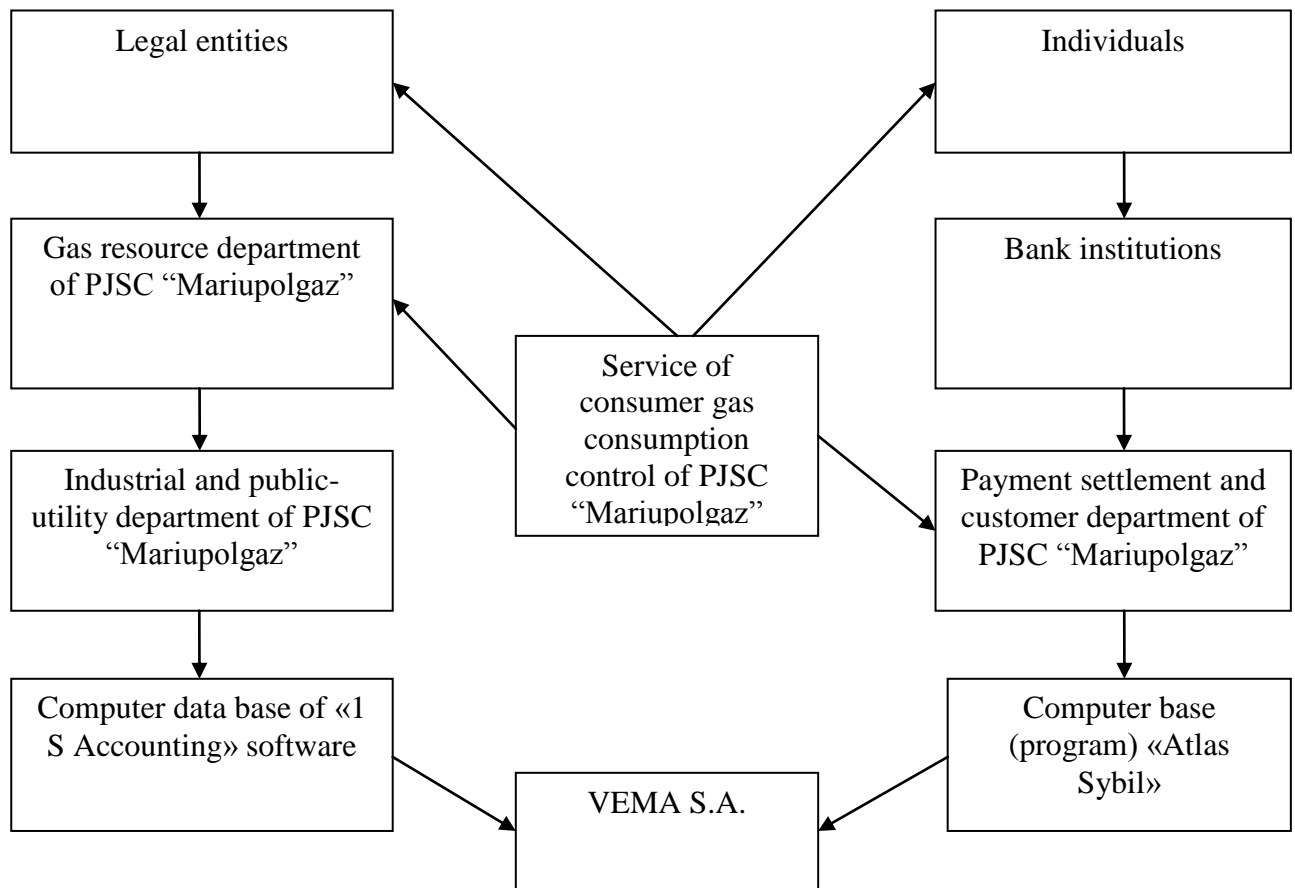
Collection of data on natural gas consumption by consumers (but for the population):

1. All consumers (industrial enterprises, public utilities, budget entities, religious institutions, etc.) have individual commercial natural gas flow meters installed at each facility.
2. Persons in charge report live data on natural gas consumption by phone to an operator of the Service of Consumer Gas Consumption Control of PJSC “Mariupolgaz” every day. Twice per month, including at the end of each month, duly certified hard copies printed from electronic data media, or copies of gas consumption logs with gas meter readings are submitted. These data are archived and used for consumer billing in Gasolina software.

Collection of data on natural gas consumption by individuals:

1. Gas facility controllers of consumer division of the Service of Consumer Gas Consumption Control collect readings of gas meters installed at each consumer’s place, in accordance with the register at the end of each month.
2. The logs of meter readings are submitted to PJSC “Mariupolgaz” accounting centre of the Service of Consumer Gas Consumption Control for further processing (input into Gasolina electronic consumer database) to be used for consumer billing.

Structure of data collection as a part of the project monitoring is shown in Figure 1.



**Figure 1 Structure of monitoring data collection**

All necessary data concerning GHG emission reduction monitoring is archived in paper and/or electronic form and kept till the end of the crediting period and for two years after the latest transaction with emission reduction units.

The Monitoring Report version 03 provides sufficient information on duties assigned, responsibility and authorities concerning implementation and undertaking of monitoring procedures, including data management. The verification team confirms the efficiency of the existing management and operational systems and considers them appropriate for reliable project monitoring.

The identified areas of concern as to the data management, project participants responses and Bureau Veritas Certification's conclusions are described in Appendix A to this report (refer to CAR 08, CAR 09, CAR 10, CL 04).





### 3.7 Verification regarding programmes of activities (102-110)

Not applicable.

## 4 VERIFICATION OPINION

Bureau Veritas Certification has performed the second periodic verification for the period from January 1, 2008 to December 31, 2011 of the “Reduction of greenhouse gases emissions by gasification of Mariupol city” project in Ukraine, which applies JI specific approach. The verification 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 verification consisted of the following three phases: i) desk review of the monitoring report against the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

The management of VEMA S.A. is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring Plan indicated in the final PDD version 03. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report version 03 for the reporting period from 01/01/2008 to 31/12/2011 as indicated below. Bureau Veritas Certification confirms that the project is implemented as per approved PDD version. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions.

Emission reductions achieved by the project for the period from 01/01/2008 to 31/12/2011 do not differ significantly from the amount predicted for the same period in the determined PDD. Emission reductions predicted in the determined PDD version 03 and actual emission reductions stated in the MR version 03 are provided in Table 3 of this report.

**Table 3 Emission reductions predicted in the determined PDD version 03 and actual emission reductions stated in the MR version 03**

Period	Estimated GHG emission reductions stated in the determined PDD in tonnes of CO <sub>2</sub> eq	GHG emission stated in the PDD in tonnes of CO <sub>2</sub> eq	Ex-post GHG emission reductions stated in the Monitoring report in tonnes of CO <sub>2</sub> eq	GHG emission stated in the Monitoring report in tonnes of CO <sub>2</sub> eq



## VERIFICATION REPORT

2008	60 084	59 816
2009	54 735	54 298
2010	78 024	77 979
2011	78 024	76 981
<b>Total</b>	<b>270 867</b>	<b>269 074</b>

This difference in the emission reductions under the project “Reduction of greenhouse gases emissions by gasification of Mariupol city” in the period 2008-2011 in the determined PDD and the MR is explained by the fact that accurate conservative values were available during MR development but at the PDD development stage assumptions were made.

Bureau Veritas Certification can confirm that the GHG emission reduction is calculated without material misstatements. Our opinion relates to the project’s GHG emissions and resulting GHG emissions reductions reported and related to the approved project baseline and monitoring, and its associated documents. Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period: From 01/01/2008 to 31/12/2011

In the period from 01/01/2008 to 31/12/2008

Baseline emissions : 148 219 tonnes of CO<sub>2</sub> equivalent.  
 Project emissions : 78 463 tonnes of CO<sub>2</sub> equivalent.  
 Leakage : 9 940 tonnes of CO<sub>2</sub> equivalent.  
 Emission Reductions : 59 816 tonnes of CO<sub>2</sub> equivalent.

In the period from 01/01/2009 to 31/12/2009

Baseline emissions : 134 364 tonnes of CO<sub>2</sub> equivalent.  
 Project emissions : 71 270 tonnes of CO<sub>2</sub> equivalent.  
 Leakage : 8 796 tonnes of CO<sub>2</sub> equivalent.  
 Emission Reductions : 54 298 tonnes of CO<sub>2</sub> equivalent.

In the period from 01/01/2010 to 31/12/2010

Baseline emissions : 188 488 tonnes of CO<sub>2</sub> equivalent.  
 Project emissions : 99 781 tonnes of CO<sub>2</sub> equivalent.  
 Leakage : 10 728 tonnes of CO<sub>2</sub> equivalent.  
 Emission Reductions : 77 979 tonnes of CO<sub>2</sub> equivalent.

In the period from 01/01/2011 to 31/12/2011

Baseline emissions : 185 836 tonnes of CO<sub>2</sub> equivalent.  
 Project emissions : 98 377 tonnes of CO<sub>2</sub> equivalent.  
 Leakage : 10 478 tonnes of CO<sub>2</sub> equivalent.  
 Emission Reductions : 76 981 tonnes of CO<sub>2</sub> equivalent.



Total in the period from 01/01/2008 to 31/12/2011

Baseline emissions	:	656 907	tonnes of CO <sub>2</sub> equivalent.
Project emissions	:	347 891	tonnes of CO <sub>2</sub> equivalent.
Leakage	:	39 942	tonnes of CO <sub>2</sub> equivalent.
Emission Reductions	:	269 074	tonnes of CO <sub>2</sub> equivalent.



## 5 REFERENCES

### Category 1 Documents:

Documents provided by the project participants that relate directly to the GHG components of the project.

/1/	Monitoring Report of the JI project "Reduction of greenhouse gases emissions by gasification of Mariupol city" for the period from 01/01/2008 to 31/12/2011 version 01 dated 27/06/2012
/2/	Monitoring Report of the JI project "Reduction of greenhouse gases emissions by gasification of Mariupol city" for the period from 01/01/2008 to 31/12/2011 version 02 dated 20/07/2012
/3/	Monitoring Report of the JI project "Reduction of greenhouse gases emissions by gasification of Mariupol city" for the period from 01/01/2008 to 31/12/2011 version 03 dated 21/08/2012
/4/	Annex 1. Monitoring Parameters for the period of 01/01/2008 - 31/12/2011
/5/	Annex 2. Supporting Document 2: Technical registry of gas networks
/6/	Annex 3.1. Supporting Document 3.1: Calculation of GHG emission reductions under the project "Reduction of greenhouse gases emissions by gasification of Mariupol city"
/7/	Annex 3.2. Supporting Document 3.2: Calculation of GHG emission reductions under the project "Reduction of greenhouse gases emissions by gasification of Mariupol city"
/8/	Annex 3.3. Supporting Document 3.3: Calculation of GHG emission reductions under the project "Reduction of greenhouse gases emissions by gasification of Mariupol city"
/9/	Annex 4. Supporting Document 4: Types of metering equipment
/10/	Project Design Document of the project "Reduction of greenhouse gases emissions by gasification of Mariupol city", version 03 dated 26/04/2012
/11/	Determination Report of the project "Reduction of greenhouse gases emissions by gasification of Mariupol city" No. UKRAINE-det/0443/2012 version 02 as of 14/05/2012 issued by Bureau Veritas Certification
/12/	Letter of Approval of the Joint Implementation project "Reduction of greenhouse gases emissions by gasification of Mariupol city" #1598/23/7 of 25/06/2012 issued by State Environmental Investment Agency of Ukraine
/13/	Letter of Approval of the JI project "Reduction of greenhouse gases emissions by gasification of Mariupol city" # J294-0485 issued by the Federal Office for the Environment of Switzerland dated 30/05/2012



## Category 2 Documents:

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

/1/	Order № 576 of the annual inventory of state property, that is used by the national joint stock company "Naftogaz of Ukraine» dated 29/12/2010
/2/	Order № 229 of approval of results of inventory of the annual inventory of state property, that is used by the national joint stock company "Naftogaz of Ukraine»dated 15/06/2010
/3/	Annex 2 to Order № 576 issued by the Ministry of Energy dated 29/12/2010
/4/	Decision № U/17-150 on a free transfer of the pipeline of Sedovo-Vasylivka village in Novoazovsk District "High pressure gas pipeline" on balance sheet of OJSC "Mariupolgaz" dated 25/12/2008
/5/	Decision of Mariupol City Council on the acceptance of the completed construction facility into municipal communal property № 5/25.4528 dated 04/11/2008
/6/	Decision of Kosyanivska village council on a free transfer of gas facilities on balance sheet of OJSC "Mariupolgaz" № U/32-306 dated 25/11/2008
/7/	Decision of Khomutovskf Village Council on a free transfer of gas pipeline in Sedovo-Vasylivka village in Novoazovsk district to the balance of OJSC "Mariupolgaz" № V \ 17-150 dated 25/12/2008
/8/	Decision of Bezimenska Village Council on the free acceptance of gas pipelines and equipment from OJSC "Ilyich MMK" on balance, followed by free transfer on the balance of OJSC "Mariupolgaz» № U/19-354 dated 04/07/2008
/9/	Decision of Prymorsk Village Council on the free acceptance of gas pipelines and equipment from OJSC "Ilyich MMK" on balance, followed by free transfer on the balance of OJSC" Mariupolgaz» № U/20-201 dated 09/10/2008
/10/	Decision of Mariupol City Council on the acceptance of the completed construction facility into city communal property № 5/23-4154 dated 29/07/2008
/11/	Decision of Manhushska Village Council on the transfer of gas pipelines to balance of OJSC "Mariupolgaz» operational enterprise specialized in gas supply and gasification № 5/24-1 dated 18/07/2008
/12/	Decision of Bezimenska Village Council on the free acceptance of gas pipelines and facilities from OJSC "Ilyich MMK" on balance, followed by free transfer to the balance of OJSC "Mariupolgaz» № V/24-409 dated 24/12/2008
/13/	The list of pipelines and structures that are on the balance of OJSC "Ilyich MMK" and those to be accepted to the city communal ownership followed by transfer to the balance of OJSC "Mariupolgaz» № 5/24-4313 dated 30/09/2008
/14/	Decision of Nalchytska City Council on free acceptance and transmission of pipelines in Kalchyk village Volodarskyi district № V/50-373 dated 29/10/2009
/15/	Decision of Illichivsk city council on free transfer of gas pipeline in Illichivsk





	village to the balance of OJSC "Mariupolgaz" № 5/25-1127 dated 17/07/2009
/16/	Decision Of Mariupol city council on acceptance of completed construction facilities into city communal ownership № 5/31 – 5197 dated 14/04/2009
/17/	Decision Of Mariupol city council on acceptance of completed construction facilities into city communal ownership № 5/34-5493 dated 07/07/2009
/18/	Decision Of Mariupol city council on acceptance of completed construction facilities into city communal ownership № 5/34-5511 dated 07/07/2009
/19/	Decision Urzuf village council on acceptance of gas pipeline on the balance № 5/61-681 dated 26/08/2010
/20/	Decision Of Mariupol city council on acceptance of completed construction facilities into city communal ownership № 5/41-6294 dated 23/02/2010
/21/	Decision Of Mariupol city council on acceptance of completed construction facilities into city communal ownership № 5/41-6295 dated 23/02/2010
/22/	Decision № U/19/354 on free acceptance of gas pipelines and facilities from OJSC "Ilyich MMK" on the balance, followed by their transfer on the balance of OJSC «Mariupolgaz» followed by the transfer to the state property as the facility that is not subject to privatization dated 04/07/2008
/23/	Decision № U/20-201 on free acceptance of gas pipelines and equipment dated JSC "Ilyich MMK" on the balance, followed by their transfer on the balance of OJSC «Mariupolgaz» followed by the transfer to the state property as the facility that is not subject to privatization dated 09/09/2008
/24/	Decision № 5/23-4154 on acceptance of completed construction facilities into city communal ownership dated 29/07/2008
/25/	Decision № 5/24-1 Про прийняття газопроводів на баланс спеціалізованого експлуатаційного підприємства по газопостачанні та газифікації ВАТ «Маріупольгаз» dated 18/07/2008 Decision № 5/24-1 On taking gas pipelines to balance of OJSC «Mariupolgaz», specialized operating company for gas supply and gasification dated 18/07/2008
/26/	Decision № U/24-409 on free acceptance of gas pipelines and facilities dated JSC "Ilyich MMK" on the balance, followed by their transfer on the balance of OJSC «Mariupolgaz» followed by the transfer to the state property as the facility that is not subject to privatization dated 24/12/2008
/27/	Decision № 5/25-1127 on a free transfer on balance of OJSC "Mariupolgaz" of the pipeline at Ilyichevske village, 111a Vidradna Str., Pershotravnevnyi district; low pressure gas pipeline dated 17/07/2009
/28/	Decision № 5/31-5197 On acceptance of completed construction facilities into city communal ownership dated 14/04/2009
/29/	Decision № 5/34-5493 On acceptance of completed construction facilities into city communal ownership dated 07/07/2009
/30/	Decision № U/36-268 on free acceptance and transfer of medium pressure gas pipeline in Kalchyk village of Volodarskyi District dated 19/01/2009
/31/	Decision № 5/36-5942 on free acceptance to city communal ownership of low pressure gas pipeline at Sverdlov street from 94 Pavlova street which is owned by cooperative "Hazlob» dated 27/10/2009



## VERIFICATION REPORT

/32/	Decision № 5/36-5949 On acceptance of completed construction facilities into city communal ownership dated 27/10/2009
/33/	Decision № 5/41-6294 On acceptance of completed construction facilities into city communal ownership dated 23/02/2010
/34/	Decision № 5/61-681 On acceptance of a gas pipeline on the balance of Urzuf village council dated 26/08/2010
/35/	Decision № 28/5-220 On gas pipeline transfer at Kalinina str. in Sartana village dated 25/11/2008
/36/	Certificate of completed construction gas supply system facility, December 2008
/37/	Certificate of completed construction gas supply system facility dated 23/07/2008
/38/	Certificate of completed construction gas supply system facility dated 17/01/2008
/39/	Certificate № 257 on commissioning of gas pipeline dated 30/11/2009
/40/	Certificate of completed construction gas supply system facility dated 01/07/2009
/41/	Acceptance certificate of gas supply system dated 15/12/2009
/42/	Certificate of completed construction gas supply system facility dated 05/05/2009
/43/	Certificate of completed construction gas supply system facility dated 17/06/2009
/44/	Certificate of completed construction gas supply system facility dated 30/05/2008
/45/	Acceptance certificate of gas supply system dated 08/06/2010
/46/	Certificate of completed construction gas supply system facility dated 11/01/2008
/47/	Certificate of completed construction gas supply system facility dated 01/07/2009
/48/	Passport on domestic gas meter and calibration G 4 № 6590 dated 23/09/2011
/49/	Passport on domestic gas meter and calibration G 6 № 397 dated 19/01/2011
/50/	Passport on domestic gas meter and calibration G 6 № 535 dated 25/01/2011
/51/	Passport on domestic gas meter and calibration G 65 № 1113 dated 17/03/2009
/52/	Passport on domestic gas meter and calibration GMS-16 № 818 dated 09/11/2009
/53/	Registry of meter readings
/54/	Domestic gas meter calibration protocol dated 29/12/2010
/55/	Domestic gas meter calibration protocol dated 08/08/2010
/56/	Domestic gas meter calibration protocol dated 20/07/2011



/57/	Domestic gas meter calibration protocol dated 25/03/2011
------	----------------------------------------------------------

**Persons interviewed:**

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

	<b>Name</b>	<b>Organization</b>	<b>Position</b>
/1/	Veremeienko M.V.	PJSC "Mariupolgaz"	General director, Member of the Working Team
/2/	Hrudolov M.A.	PJSC "Mariupolgaz"	Chief Engineer, Head of the Working Team
/3/	Malyshev H.V.	PJSC "Mariupolgaz"	Deputy head of gas networks service, Member of the Working Team
/4/	Koldycheva O.O.	"CEP" LLC	Engineer of production and technical department, Member of the Working Team
/5/	Podhorna R.O.		Engineer of production and technical department, Member of the Working Team
/6/	Pohosov O.H.	"CEP" LLC	Consultant of VEMA S.A.



## VERIFICATION REPORT

## APPENDIX A: PROJECT VERIFICATION PROTOCOL

## BUREAU VERITAS CERTIFICATION HOLDING SAS

## VERIFICATION PROTOCOL

**Table 1. Check list for verification, according to the JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)**

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
<b>Project approvals by Parties involved</b>				
90	Has the DFPs of at least one Party involved, other than the host Party, issued a written project approval when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest?	The project has been approved by both the Host party (Ukraine) and the other Party involved (Switzerland). The Letters of Approval were issued by NFPs of the Parties involved. Two Letters of Approval were available at the beginning of the first verification of the project.	OK	OK
91	Are all the written project approvals by Parties involved unconditional?	Yes, all the written project approvals by Parties involved are unconditional.	OK	OK
<b>Project implementation</b>				
92	Has the project been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	<b>CL 01.</b> Please, provide information relating to the main directions of the project activities.	<b>CL 01</b>	OK
93	What is the status of operation of the	Project implementation status and project milestones	<b>CAR 01</b>	OK



## VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	project during the monitoring period?	<p>in the reporting period of 01/01/2008 – 31/12/2011 are provided in in Section A.6. of the MR version 03 and Annex 2.</p> <p>In 2008-2011, PE-80, PE-100 polyethylene pipes and steel pipes that conform to SSTU 10704-91 with reinforced bituminous mastic sealing under SSTU B.V.2.5.-29:2006 were used in construction.</p> <p><b>CAR 01.</b> Years of implementation of project equipment are not correct in Section A.6. in Table 1 of the MR.</p> <p><b>CAR 02.</b> It is stated in Section A.6. of the MR that the implementation of project measures is in accordance with project plan that is included in the determined PDD version 02; but the latest version of the determined PDD is version 03. Please, correct the discrepancy.</p> <p><b>CAR 03.</b> Monitoring period stated on the front page of the MR is incorrect; please, make the appropriate corrections.</p>	<p><b>CAR 02</b></p> <p><b>CAR 03</b></p>	<p>OK</p> <p>OK</p>
<b>Compliance with monitoring plan</b>				
94	Did the monitoring occur in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	There aren't any changes in or deviations from the registered PDD.	OK	OK
95 (a)	For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-	For calculating the emission reductions, key factors, such as volume of natural gas to be supplied to the consumers, existing tariffs for natural gas	OK	OK





## VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(vii) of the DVM, influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project taken into account, as appropriate?	transportation, public policy in the field of gas supply, experience in implementing activities provided by the project, current practice that exists in this field in Ukraine, financial costs and background, sectoral reform policy in the field of gas supply and legislation, 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, as appropriate.		
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	<p>Data sources used for calculating emission reductions or enhancements of net removals are clearly identified, reliable and transparent.</p> <p><b>CAR 04.</b> The data source for <math>FC_{NG,i,y}</math> parameter is not The national inventory report of anthropogenic greenhouse gas emissions by sources and removals by sinks in Ukraine for 1990-2010.</p> <p><b>CAR 05.</b> The reference to supporting documents is incorrect in Table 6 of the MR.</p> <p><b>CAR 06.</b> Some parameters in Section B of the MR are without indexes. Please, make necessary corrections.</p> <p><b>CAR 07.</b> The name of the methodology whose elements were used to calculate GHG emission reductions is incorrect in Section A.5.2.</p> <p><b>CL 02.</b> Please, in Section D.1.4. state that emission reductions generated by the project are calculated as the difference between baseline and project</p>	<p><b>CAR 04</b></p> <p><b>CAR 05</b></p> <p><b>CAR 06</b></p> <p><b>CAR 07</b></p> <p><b>CL 02</b></p>	<p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p>



## VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		emissions.		
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	Carbon dioxide emission factor for natural gas combustion, carbon dioxide emission factor for fossil fuel combustion, default emission factor for methane at technological gas equipment at end consumer's place, default emission factor for methane in the process of natural gas transportation and distribution, reduced GHG emission factor for natural gas transportation to end consumers are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice. <b>CL 03.</b> State the frequency of monitoring of the reduced GHG emission factor for natural gas transportation to end consumers in Table 6 in Section B.2.3. of the MR.	<b>CL 03</b>	OK
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	Calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner.	OK	OK
<b>Applicable to JI SSC projects only</b>				
96	Is the relevant threshold to be classified as JI SSC project not exceeded during the monitoring period on an annual average basis? If the threshold is exceeded, is the maximum emission reduction level estimated in the PDD for the JI SSC	Not applicable	Not applicable	Not applicable



## VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	project or the bundle for the monitoring period determined?			
<b>Applicable to bundled JI SSC projects only</b>				
97 (a)	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	Not applicable	Not applicable	Not applicable
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	Not applicable	Not applicable	Not applicable
98	If the monitoring is based on a monitoring plan that provides for overlapping monitoring periods, are the monitoring periods per component of the project clearly specified in the monitoring report? Do the monitoring periods not overlap with those for which verifications were already deemed final in the past?	Not applicable	Not applicable	Not applicable
<b>Revision of monitoring plan</b>				
<b>Applicable only if monitoring plan is revised by project participant</b>				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	Not applicable.	Not applicable	Not applicable
99 (b)	Does the proposed revision improve the accuracy and/or applicability of information collected compared to the	Not applicable	Not applicable	Not applicable



## VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans?			
<b>Data management</b>				
101 (a)	Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	The implementation of data collection procedures, including the quality control and quality assurance procedures, is in accordance with the monitoring plan.	OK	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	Routine repair of gas networks is carried out once a year; maintenance - once every six months. Repaired gas equipment is regularly examined to ensure that it works properly and is not a source of gas leaks. Means of metering equipment used for monitoring of the project activity are subject to periodic state verification. <b>CAR 08.</b> The reference to "Tel-SAT" LLC, producer of meters, is not operational in Table 2 Section B.2.1 of the MR.	<b>CAR 08</b>	OK
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	Each quarter, representatives of VEMA S.A., project developers, conduct internal audits of the project monitoring system at PJSC "Mariupolgaz". Internal audit includes measures on verification of consumed gas accounting and record keeping by Gas accounting service, Gas supply regime department; verification of proper working condition	OK	OK



## VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		and periodic maintenance of "Gasolina" software; cross-check of data of the program complexes and records of consumed gas, that are kept by the relevant services of the company; checking the timeliness of natural gas meters verification etc.		
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	The data collection and management system for the project is in accordance with the monitoring plan. The verification team confirms the effectiveness of the existing management and operating systems and considers them suitable for reliable monitoring of the project. <b>CL 04.</b> Please, check the numbering of Tables and Figures in the MR.	<b>CL 04</b>	OK
<b>Verification regarding programs of activities (additional elements for assessment)</b>				
102	Is any JPA that has not been added to the JI PoA not verified?	Not applicable	Not applicable	Not applicable
103	Is the verification based on the monitoring reports of all JPAs to be verified?	Not applicable	Not applicable	Not applicable
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	Not applicable	Not applicable	Not applicable
104	Does the monitoring period not overlap with previous monitoring periods?	Not applicable	Not applicable	Not applicable
105	If the AIE learns of an erroneously included JPA, has the AIE informed the JISC of its findings in writing?	Not applicable	Not applicable	Not applicable



## VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
<b>Applicable to sample-based approach only</b>				
106	<p>Does the sampling plan prepared by the AIE:</p> <p>(a) Describe its sample selection, taking into account that:</p> <p>(i) For each verification that uses a sample-based approach, the sample selection shall be sufficiently representative of the JPAs in the JI PoA such extrapolation to all JPAs identified for that verification is reasonable, taking into account differences among the characteristics of JPAs, such as:</p> <ul style="list-style-type: none"> <li>- The types of JPAs;</li> <li>- The complexity of the applicable technologies and/or measures used;</li> <li>- The geographical location of each JPA;</li> <li>- The amounts of expected emission reductions of the JPAs being verified;</li> <li>- The number of JPAs for which emission reductions are being verified;</li> <li>- The length of monitoring periods of the JPAs being verified; and</li> </ul>	Not applicable	Not applicable	Not applicable





## VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	- The samples selected for prior verifications, if any?			
107	Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation?	Not applicable	Not applicable	Not applicable
108	Has the AIE made site inspections of at least the square root of the number of total JPAs, rounded to the upper whole number? If the AIE makes no site inspections or fewer site inspections than the square root of the number of total JPAs, rounded to the upper whole number, then does the AIE provide a reasonable explanation and justification?	Not applicable	Not applicable	Not applicable
109	Is the sampling plan available for submission to the secretariat for the JISC's ex ante assessment? (Optional)	Not applicable	Not applicable	Not applicable
110	If the AIE learns of a fraudulently included JPA, a fraudulently monitored	Not applicable	Not applicable	Not applicable



VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?			



## VERIFICATION REPORT

**Table 2. Resolution of Corrective Action and Clarification Requests**

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
<b>CAR 01.</b> Years of implementation of project equipment are not correct in Section A.6. in Table 1 of the MR.	93	Years of implementation of project equipment – 2008-2011	CAR 01 is closed as necessary corrections were made in the MR version 03.
<b>CAR 02.</b> It is stated in Section A.6. of the MR that the implementation of project measures is in accordance with project plan that is included in the determined PDD version 02; but the latest version of the determined PDD is version 03. Please, correct the discrepancy.	93	The implementation of project measures is in accordance with project plan that is included in the determined PDD version 03.	CAR 02 is closed necessary corrections were made
<b>CAR 03.</b> Monitoring period stated on the front page of the MR is incorrect; please, make the appropriate corrections.	93	Monitoring period is 01/01/2008-31/12/2011	CAR 03 necessary corrections were made
<b>CAR 04.</b> The data source for $FC_{NG,i,y}$ parameter is not The national inventory report of anthropogenic greenhouse gas emissions by sources and removals by sinks in Ukraine for 1990-2010.	95(b)	The data source for $FC_{NG,i,y}$ parameter is gas meters. Necessary corrections were made in Section B of the MR.	CAR 04 is closed as necessary corrections were made
<b>CAR 05.</b> The reference to supporting documents is incorrect in Table 6 of the MR.	95(b)	Detailed calculation and references to data sources are provided in Annexes 3.1-3.3. (Excel files).	CAR 05 is closed as necessary corrections were made.



## VERIFICATION REPORT

<b>CAR 06.</b> Some parameters in Section B of the MR are without indexes. Please, make necessary corrections.	95 (b)	Corrections were made in the latest version of the MR.	CAR 06 is closed as necessary corrections were made.
<b>CAR 07.</b> The name of the methodology whose elements were used to calculate GHG emission reductions is incorrect in Section A.5.2.	95 (b)	The proposed project uses a specific approach for the determination of JI projects based on approved methodology ACM0009 «Consolidated baseline and monitoring methodology for fuel switching from coal or petroleum fuel to natural gas - Version 3.2»	CAR 07 is closed as necessary corrections were made in the MR
<b>CAR 08.</b> The reference to “Tel-SAT” LLC, producer of meters, is not operational in Table 2 Section B.2.1 of the MR.	101 (b)	Correct reference was provided in the latest version of the MR.	CAR 08 is closed as operational reference was provided.
<b>CL 01.</b> Please, add information relating to the compliance of the project activities in the monitoring period with the determined PDD.	92	The project activities include: <ul style="list-style-type: none"> <li>- Ensuring of the supply of natural gas (gasification) to end users by means of the construction and reconstruction of gas distribution networks;</li> <li>- Replacement of solid and liquid fuels with natural gas;</li> <li>- Increase in heat energy efficiency;</li> <li>- Reduction of greenhouse gases under the Joint Implementation (JI) Mechanism.</li> </ul>	CL 01 is closed as necessary information was provided.
<b>CL 02.</b> Please, in Section D.1.4. state that emission reductions generated by the project are calculated as the difference between	95 (b)	Total emission reductions generated by the project are calculated as the difference between baseline and project	CL 02 is closed as necessary information was provided.



## VERIFICATION REPORT

baseline and project emissions.		emissions. Information is provided in Section A.6. of the MR version 03.	
<b>CL 03.</b> State the frequency of monitoring of the reduced GHG emission factor for natural gas transportation to end consumers in Table 6 in Section B.2.3. of the MR.	95 (c)	The frequency of monitoring of the reduced GHG emission factor for natural gas transportation to end consumers is one year. Relevant information was provided in Section B.2.3. of the MR version 03.	CL 03 is closed as necessary information was provided.
<b>CL 04.</b> Please, check the numbering of Tables and Figures in the MR.	101 (d)	Relevant corrections were made in the MR version 03.	CL 04 is closed as necessary changes were made.