



VERIFICATION REPORT LLC “PRIMLIGHT”

VERIFICATION OF THE DISTRIBUTION OF ENERGY EFFICIENT LIGHT BULBS IN PUBLIC AND PRIVATE SECTORS OF UKRAINE

INITIAL AND FIRST PERIODIC
(01/01/2008 – 31/12/2010)

REPORT No. UKRAINE-VER/0364/2011
REVISION No. 02

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT

Date of first issue: 23/09/2011	Organizational unit: Bureau Veritas Certification Holding SAS
Client: LLC "PRIMLIGHT"	Client ref.: Mykola Tonkovyd

Summary:

Bureau Veritas Certification has made the initial and 1st periodic verification of the "Distribution of energy efficient light bulbs in public and private sectors of Ukraine", JI 0254, project of LLC "PRIMLIGHT" located in all regions of 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 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 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 per determined changes. 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. The GHG emission reduction is calculated accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize 207 920 tons of CO₂eq for the monitoring period (01/01/2008 – 31/12/2008).

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

Report No.: UKRAINE-ver/0364/2011	Subject Group: JI
Project title: Distribution of energy efficient light bulbs in public and private sectors of Ukraine	
Work carried out by: Oleg Skoblyk – Team Leader, Lead Verifier Alexey Dzhafarov – Team member, Verifier	
Work reviewed by: Ivan Sokolov – Internal Technical Reviewer	
Work approved by: Flavio Gomes – Operational Manager	
Date of this revision: 26/09/2011	Rev. No.: 02
Number of pages: 30	



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



Table of Contents		Page
1	Introduction	3
1.1	Objective	3
1.2	Scope	3
1.3	Verification Team	3
2	Methodology	4
2.1	Review of Documents	4
2.2	Follow-up Interviews	4
2.3	Resolution of Clarification, Corrective and Forward Action Requests	5
3	verification conclusions	6
3.1	Remaining issues and FARs from determination / previous verifications	6
3.2	Project approval by Parties involved (90-91)	6
3.3	Project implementation (92-93)	7
3.4	Compliance of the monitoring plan with the monitoring methodology (94-98)	9
3.5	Revision of monitoring plan (99-100) (Not applicable)	9
3.6	Data management (101)	10
3.7	Verification regarding programmes of activities (102-110) (Not applicable)	11
4	Verification opinion	11
5	References	13
	Appendix A: VERIFICATION PROTOCOL	18



1 INTRODUCTION

LLC “PRIMLIGHT” has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project “Distribution of energy efficient light bulbs in public and private sectors of Ukraine” (hereafter called “the project”) in all regions of 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.

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

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.

1.3 Verification Team

The verification team consists of the following personnel:

Oleg Skoblyk
Bureau Veritas Certification Team Leader, Climate Change Verifier

Alexey Dzhafarov
Bureau Veritas Certification Team Member, Climate Change Verifier

This verification report was reviewed by:



Ivan Sokolov
Bureau Veritas Certification, Internal Technical Reviewer

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 PRIMLIGHT LLC and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), Approved CDM methodology (if applicable) and/or Guidance on criteria for baseline setting and monitoring, Host party criteria, 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 version(s) 1, 2 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 22/09/2011 Bureau Veritas Certification performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of PRIMLIGHT LLC were interviewed (see References). The main topics of the interviews are summarized in Table 1.

**Table 1 Interview topics**

Interviewed organization	Interview topics
LLC "PRIMLIGHT", "Trading Company Lummax" and "Gazotron –Lux"	Organizational structure Responsibilities and authorities Roles and responsibilities for data collection and processing Installation of equipment Data logging, archiving and reporting Metering equipment control Metering record keeping system, database IT management Training of personnel Quality management procedures and technology Internal audits and check-ups Baseline methodology Monitoring plan Monitoring report

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, 0 Clarification Requests, and 2 Forward Action Requests.

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

3.1 Remaining issues and FARs from determination / previous verifications

There are two pending issues remained from determination: FAR 01 concerning keeping monitoring data for two years after the last transfer of emission reductions units for the project; FAR 02 concerns issuance of the order concerning indication of the names of the personnel involved in the monitoring. These issues are still under consideration. FAR 01 and FAR 02 will be checked during next periodic verification.

3.2 Project approval by Parties involved (90-91)

Written project approval by the Party involved in the JI project, other than the host Party has been received (Written Approval of Voluntary Participation from Estonia's Designed Focal Point under Article 6 of the Kyoto Protocol for the project "Distribution of energy efficient light bulbs in public and private sectors of Ukraine", #12-1/7267 of 27/09/2011).

See CAR 01 of the Verification protocol.

The abovementioned written approval will be unconditional.



3.3 Project implementation (92-93)

The project involves distribution of energy efficient light bulbs to various customers from public and private sectors. The project is conducted within the geographical boundaries of Ukraine and it is implemented and managed by PRIMLIGHT, LLC.

The goal of the project is to enhance the energy efficiency of Ukraine's lighting stock by distributing over a period of 15 years up to 210 million compact fluorescent lamps (CFLs) to Ukrainian customers from private, as well as from public sectors. By doing so, the project abate greenhouse gas emissions through avoided electricity usage, significantly reduce national electricity demand and stress on energy infrastructure, and save customer's money on their electricity bills.

Apart from the direct financial benefit to the project participants in terms of savings on their electricity bills, this JI project activity also generates a range of less tangible social outcomes in education, awareness and collateral energy saving measures. This energy efficiency project creates an opportunity for collective action on climate change, enhancing a sense of responsibility for the future of our planet.

The implementation status is monitored through examining collection of CFL nameplate data, monitoring use of project devices, establishment of project sample group and project database.

The actual operation of the proposed project is the Monitoring report version 2.

Key monitoring activities

Project implementation status. The project activity started on 01.01.2008. The project currently at the phase of distribution of CFLs, combined with monitoring activity.

Monitoring plan.

Collection of CFL Nameplate Data. The project coordinator keeps a record of the power rating of the CFLs distributed during the project activity and uses this to determine the weighted average power rating for the project devices. CFLs distributed under the JI project are marked with a logo and serial number to ensure that they can be unambiguously differentiated from other light bulbs.

Monitoring Use of Project Devices. Monitoring a sample of distributed CFLs to determine average hours of utilisation or total energy consumption has been undertaken by installing metering equipment to consumers belonging to the Project Sample Group (PSG). PSG size is 100 participants.

The annual operating hours of monitored devices are used to determine the energy baseline. The average hours of use of light bulbs found in the PSG are directly extrapolated to all consumers involved in the project.



VERIFICATION REPORT

The purpose of establishing the PSG is to create a representative sample of all other project consumers. It is not possible to monitor all consumers involved in the project, and it is a fundamentally agreed scientific and statistical procedure to apply mean values obtained through sampling to the broader population. Therefore, for each monitoring period a mean value is obtained for the time of use then statistically corrected to a confidence level of 95% (similar to AM0046 version 2), and extrapolated across the total number of bulbs operating during that monitoring period.

Establishment of Project Sample Group

The procedure to determine the sample of CFLs ensures that they adequately represent the broader population, minimizing sampling error. Given that participation in the project is voluntary, determination of the exact population of participating consumers prior to establishment of the PSG is not possible. In addition, because the project coordinator cannot force consumers to participate in sample groups, the devices monitored in the resulting sample are to a degree, self-selected rather than purely random. Despite these limitations, the project owner ensures that devices sampled are representative of the broader population of measures in participating consumers. The results obtained from the sampling process are directly extrapolated across the entire population of consumers participating in the project. Therefore, the proportion of CFLs installed at PSG and continuing to function as determined through the check is taken to be representative of the pattern occurring to all consumers.

Project Database

The project owner develops and manages a project database that records all information relevant to project activities and monitoring, including:

- A list of participating consumers, including information to identify consumers by name and address.
- A record of the CFLs (date, number, type and power) provided to each consumer.
- A list of participants included in the PSG, including information to identify participants (name, address and date added to the sample group).
- The following data relating to monitored CFLs and equipment:
 - o Identification number for each piece of equipment;
 - o Type of monitoring equipment and date of installation;
 - o Confirmation at each check that monitoring equipment is functioning;
 - o Confirmation at each check that the monitored CFL is functioning;
 - o Utilization data (hours of use and/or electricity consumption).

The identified areas of concern as to Project implementation, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR 02, CAR 03, CAR 05, CAR 06, and CAR 07).



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

The monitoring occurred in accordance with the revised monitoring plan included in the Monitoring Report version 2.

For calculating the emission reductions, key factors, such as (total number of CFLs distributed, average operating hours, the number of operational CFLs, wattage difference between CFL corresponding incandescent lamps, and carbon emission factor), influencing the baseline emissions and project emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions, are clearly identified, reliable and transparent.

Emission factors, including default emission factors, 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 identified areas of concern as to Compliance of the monitoring plan with the monitoring methodology, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR 08).

3.5 Revision of monitoring plan (99-100)

The project participants provided an appropriate justification for the proposed revision.

In the course of the monitoring period (01/01/2008 – 31/12/2010) the original monitoring plan described in the final version (01.5) of the PDD was modified by the project participants. The project participants provided an appropriate justification for the proposed revision which was caused by certain reasons: for the monitoring of this monitoring period two entities (namely SLR "Trading Company Lummax" and "Gazotron –Lux") are taken.

Thus, the monitoring databases for the above mentioned period has been drafted by two entities, namely "Gazotron –Lux" Ltd (database A) and SLR "Trading Company Lummax" (database B). The CFLs from their databases clearly traceable and totally different which excludes double counting. Monitoring of CFLs from these databases can be conducted independently and the data from one database does not influence the data from the other. The entities have two separate PSGs and separate measuring equipment. The selections of representatives for both PSGs are



consistent with the selection outlined in the monitoring plan. They are formed from separate representatives that under no circumstances can be duplicated. The rest of the monitoring plan, outlined in PDD and reviewed by AIE, has not been changed.

The times of submitting the monitoring databases by above mentioned entities do not co-inside. Consequently, there is overlapping. The project team argues that in view of the above arguments and in view of “Clarification regarding overlapping monitoring periods under the verification procedure under the Joint Implementation Supervisory Committee” this overlapping is reasonably justified.

This monitoring report is based on database A (prepared by Gazotron – Lux). The data from the database B, prepared by Lummax, will be included in the next monitoring report.

The proposed revision improves the accuracy, transparency, and applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans.

The identified areas of concern as to Revision of monitoring plan, project participants response and BV Certification’s conclusion are described in Appendix A (refer to CAR 04).

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, including the quality control and quality assurance procedures.

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

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

The project owner develops and manages a project database that records all information relevant to project activities and monitoring, including:

- A list of participating consumers, including information to identify consumers by name and address.
- A record of the CFLs (date, number, type and power) provided to each consumer.
- A list of participants included in the PSG, including information to identify participants (name, address and date added to the sample group).



- The following data relating to monitored CFLs and equipment:
 - o Identification number for each piece of equipment
 - o Type of monitoring equipment and date of installation
 - o Confirmation at each check that monitoring equipment is functioning
 - o Confirmation at each check that the monitored CFL is functioning
 - o Utilization data (hours of use and/or electricity consumption)

Personnel responsible of the project owner for the monitoring

Responsibility	Staff
General guidance	Vice- CEO
Selection & recruitment of sample groups	Sales manager
Periodic collection of monitoring data	Sales manager
Preparation of monitoring reports for emission reduction verification	Head Analyst

The data collection and management system for the project is in accordance with the monitoring plan.

The identified areas of concern as to Data management, project participants response and BV Certification's conclusion are described in Appendix A (refer to FAR 01 and FAR 02).

3.7 Verification regarding programmes of activities (102-110) (“Not applicable”)

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the initial and 1st periodic verification of the “Distribution of energy efficient light bulbs in public and private sectors of Ukraine” 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 project design and the baseline and monitoring plan; ii) follow-up



VERIFICATION REPORT

interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

The management of PRIMLIGHT LLC 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 and Verification Plan indicated in the final PDD version 01.5. 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 2 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as per determined changes. 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.

Bureau Veritas Certification can confirm that the GHG emission reduction is accurately calculated and is free of material errors, omissions, or 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, with a reasonable level of assurance, the following statement:

Reporting period: from 01/01/2008 to 31/12/2010

Emission Reductions (Year 2008) :	30 596	t CO ₂ equivalents.
Emission Reductions (Year 2009) :	69 846	t CO ₂ equivalents.
Emission Reductions (Year 2010) :	107 478	t CO ₂ equivalents.

Total emission reductions (2008-2010): 207 920 t CO₂ equivalents (detailed calculation of emission reductions are presented in the Excel-file provided to the verification team).



5 REFERENCES

Category 1 Documents:

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

- /1/ PDD “Distribution of energy efficient light bulbs in public and private sectors of Ukraine” version 01.3 of 21.05.2011.
- /2/ Excel files “Distribution of energy efficient light bulbs in public and private sectors of Ukraine” with ER calculations_2011.
- /3/ Monitoring Report “Distribution of energy efficient light bulbs in public and private sectors of Ukraine” version 1 of 23.09.2011.
- /4/ Monitoring Report “Distribution of energy efficient light bulbs in public and private sectors of Ukraine” version 2 of 26.09.2011.
- /5/ Written Approval of Voluntary Participation from Estonia’s Designed Focal Point under Article 6 of the Kyoto Protocol for the project “Distribution of energy efficient light bulbs in public and private sectors of Ukraine”, #12-1/7267 of 27/09/2011.
- /6/ Letter of Approval for the JI project “Distribution of energy efficient light bulbs in public and private sectors of Ukraine” #2640/23/7 of 20/09/2011.

Category 2 Documents:

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

- /1/ Certificate dated 29/01/2007 of Conformity, Low Voltage Directive 2006/95/EC (evaluation of self-ballasted lamps for general lighting services), report #28203037001, issued by TÜV Rheinland InterCert kft.
- /2/ Certificate #S60017063 dated 30/01/2007, valid till 29/01/2012 (evaluation of self-ballasted lamps for general lighting services), issued by TÜV Rheinland Product Safety GmbH
- /3/ Certificate #V60017068 dated 30/01/2007 (evaluation of self-ballasted lamps for general lighting services), issued by TÜV



Rheinland Product Safety GmbH

- /4/ Certificate dated 26/04/2007 of Conformity to Low Voltage Directive 2006/95/EC (evaluation of self-ballasted lamps for general lighting services), report #28203037002, issued by TÜV Rheinland InterCert kft.
- /5/ Certificate #S60017063 dated 26/04/2007, valid till 29/01/2012 (evaluation of self-ballasted lamps for general lighting services), issued by TÜV Rheinland Product Safety GmbH
- /6/ Certificate #V60017068 dated 26/04/2007 (energy saving lamp), issued by TÜV Rheinland Product Safety GmbH
- /7/ Certificate dated 28/06/2007 of Conformity to Low Voltage Directive 2006/95/EC (evaluation of self-ballasted lamps for general lighting services), report #28203037003, issued by TÜV Rheinland InterCert kft.
- /8/ Certificate #S60017063 dated 28/06/2007, valid till 29/01/2012 (evaluation of self-ballasted lamps for general lighting services), issued by TÜV Rheinland Product Safety GmbH
- /9/ Certificate #V60017068 dated 29/06/2007 (evaluation of self-ballasted lamps for general lighting services), issued by TÜV Rheinland Product Safety GmbH
- /10/ Certificate of conformity #UA1.035.0080031-11, Series BB, valid 21/06/2011-20/06/2012, issued by the State Committee of Ukraine for technical regulation and consumer policy
- /11/ Certificate of conformity #UA1.035.0112774-10, Series BB, valid 14/09/2010-29/09/2015, issued by the State Committee of Ukraine for technical regulation and consumer policy
- /12/ Certificate #UA.2.039.05078-10, dated 30/08/2010 on quality control system, valid till 29/08/2015
- /13/ Certificate of conformity # POCC UA.ME64.BO9357, valid from 29/10/2010 till 29/10/2013
- /14/ Statement dated 10/04/2008 on compact fluorescent lamps marking



VERIFICATION REPORT

- /15/ Statement dated 03/02/2011 on compact fluorescent lamps utilization
- /16/ Statement dated 31/08/2009 on compact fluorescent lamps recording and exploitation rules
- /17/ Contract #06-КП-080110/2 dated 10/01/2008 on purchase-sale of energy efficient light bulbs. (426 contracts on purchase-sale of energy efficient light bulbs are provided to the verification team).
- /18/ Additional agreement #1 dated 31/03/2008 to the Contract #06-КП-080110/2 dated 10/01/2008 on purchase-sale of energy efficient light bulbs
- /19/ Additional agreement #2 dated 17/08/2009 to the Contract #06-КП-080110/2 dated 10/01/2008 on purchase-sale of energy efficient light bulbs
- /20/ Agreement dated 17/08/2009 on change of the Party to the agreement
- /21/ Certificate of conformity # BY/112 03.03.002 15428, series A, valid from 02/12/2010 till 29/08/2015
- /22/ License #564600 dated 22/03/2011, series AB, valid 14/03/2011 – 14/03/2016, issued by the Ministry of Environmental Protection of Ukraine
- /23/ Conclusion of state sanitary and epidemiological expert examination #03.02-22/388/7555 dated 11/10/2006, issued by the Rivne Region Sanitary and Epidemiological Station
- /24/ Conclusion of state sanitary and epidemiological expert examination #03.01-25/48/1519 dated 18/02/2011, issued by the State Sanitary and Epidemiological Service
- /25/ Contract #247 dated 05/07/2011, valid from 05/07/2011 till 31/12/2013
- /26/ Fax #80577544277 dated 17/02/2011 on services cost on handling different types of wastes as of 20/01/2011, Ekosfera Scientific and Production Enterprise LLC
- /27/ License #361301, series AB, dated 21/08/2007, valid 16/08/2007 –



- 16/08/2012, issued by the Ministry of Environmental Protection of Ukraine
- /28/ License #487720, series AB, dated 22/12/2009, valid 23/12/2009 – 23/12/2014, issued by the Ministry of Environmental Protection of Ukraine
- /29/ Contract #02/0203-11 dated 02/03/2011, valid from 05/07/2011 till 31/12/2014
- /30/ Installed equipment registry
- /31/ Photo - Mercury tablet
- /32/ Photo – Cabinet for energy efficient lamps
- /33/ Photo – Installation of energy efficient lamps at Marzan State Enterprise (CO₂ JI Primlight, Not for resale 000000066)
- /34/ Certificate on state metrology attestation #11-00/206 dated 08.07.2011 (lighting logger, #LL10070209), issued by the Scientific and Production Institute of Metrological Assurance of Electromagnetic Units
- /35/ Photo - Lighting logger, #LL10070209

Persons interviewed:

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

- /1/ V. Vezhnin – project manager
- /2/ O. Tymenko – Lummax Trading Company sales director
- /3/ H.Tykhonov – Gazotron-Lux OJSC commercial director
- /4/ V. Koptyn – Gazotron-Lux OJSC technical director
- /5/ M. Kryvyi – Gazotron-Lux OJSC general director
- /6/ M. Tudysh - Gazotron-Lux OJSC financial director
- /7/ S. Patyichuk – Primlight OJSC deputy general director



/8/ A. Alexandrov Primlight head analyst



VERIFICATION REPORT

APPENDIX A: VERIFICATION PROTOCOL

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
Project approvals by Parties involved				
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?	CAR 01. The letters of approval (LoAs) for this project is not provided to the verification team. If the LoAs are present, please provide them for verifiers.	CAR 01	OK
91	Are all the written project approvals by Parties involved unconditional?	All the written project approval by Parties involved are unconditional.	OK	OK
Project implementation				
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	The project has been implemented in accordance with the PDD regarding which the determination has been deemed final.	OK	OK



VERIFICATION REPORT

	UNFCCC JI website?			
93	What is the status of operation of the project during the monitoring period?	<p>CAR 05. Please, describe the status of the project implementation in the section A of the Monitoring Report.</p> <p>CAR 02. Please, indicate the monitoring period in the front page of the monitoring report.</p> <p>CAR 06. Please, while describing the project activity throughout the whole Monitoring Report, use present tense instead of future tense.</p> <p>CAR 07. Please, revise the date of Monitoring Report completion (because it can be 23/09/2011, but not 23/10/2011).</p>	CAR 05	OK
			CAR 02	OK
			CAR 06	OK
			CAR 07	OK
Compliance with monitoring plan				
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?	<p>The monitoring occurred not completely in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final.</p> <p>CAR 04. Please, consider the revision occurred (stated in the Monitoring Report as revision to the PDD) as revision to the</p>	CAR 04	OK



VERIFICATION REPORT

		Monitoring plan and describe this in the sections A.7 and B.1 of the Monitoring Report.		
95 (a)	For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-(vii) above, 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?	For calculating the emission reductions, key factors (such as total number of CFLs distributed, average operating hours, the number of operational CFLs, wattage difference between CFL corresponding incandescent lamps, and carbon emission factor), influencing the baseline emissions and project emissions as well as risks associated with the project were taken into account, as appropriate.	OK	OK
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	Data sources used for calculating emission reductions are reliable. CAR 03. Please, provide Excel-file with emission reductions calculations for this monitoring period. CAR 08. Please, provide project database to the verification team.	CAR 03 CAR 08	OK OK
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission	Emission factors, used for calculating emission reductions, selected by carefully balancing accuracy and reasonableness,	OK	OK



BUREAU
VERITAS

VERIFICATION REPORT

	reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	and appropriately justified of the choice		
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?	The calculation of emission reductions is based on conservative assumptions.	OK	OK
Applicable to JI SSC projects only				
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 project or the bundle for the monitoring period determined?	N/A	N/A	N/A
Applicable to bundled JI SSC projects only				
97 (a)	Has the composition of the	N/A	N/A	N/A



VERIFICATION REPORT

	bundle not changed from that is stated in F-JI-SSCBUNDLE?			
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	N/A	N/A	N/A
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?	N/A	N/A	N/A
Revision of monitoring plan				
Applicable only if monitoring plan is revised by project participant				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	The project participants provided an appropriate justification for the proposed revision. See CAR 04 of this table.	See CAR 04	OK
99 (b)	Does the proposed revision	The proposed revision improve	OK	OK



VERIFICATION REPORT

	improve the accuracy and/or applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans?	transparency and accuracy of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans.		
Data management				
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 is in accordance with the determined monitoring plan, including the quality control and quality assurance procedures.	OK	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	The function of the monitoring equipment, including its calibration status, is in order.	OK	OK
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	FAR 01. The data to be monitored and required for determination are to be kept for two years after the last transfer of emission reductions units for the project. The order concerning the procedure for keeping monitoring data should be issued.	FAR 01	Pending
101 (d)	Is the data collection and management system for the	FAR 02. The order concerning indication of the names of the personnel involved in	FAR 02	Pending



VERIFICATION REPORT

	project in accordance with the monitoring plan?	the monitoring should be issued.		
Verification regarding programs of activities (additional elements for assessment)				
102	Is any JPA that has not been added to the JI PoA not verified?	N/A	N/A	N/A
103	Is the verification based on the monitoring reports of all JPAs to be verified?	N/A	N/A	N/A
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	N/A	N/A	N/A
104	Does the monitoring period not overlap with previous monitoring periods?	N/A	N/A	N/A
105	If the AIE learns of an erroneously included JPA, has the AIE informed the JISC of its findings in writing?	N/A	N/A	N/A
Applicable to sample-based approach only				
106	Does the sampling plan prepared by the AIE: (a) Describe its sample selection, taking into account that:	N/A	N/A	N/A



VERIFICATION REPORT

	<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"> - The types of JPAs; - The complexity of the applicable technologies and/or measures used; - The geographical location of each JPA; - The amounts of expected emission reductions of the JPAs being verified; - The number of JPAs for which emission reductions are being verified; - The length of monitoring periods of the JPAs being verified; and 			
--	---	--	--	--



VERIFICATION REPORT

	- 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?	N/A	N/A	N/A
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?	N/A	N/A	N/A
109	Is the sampling plan available for submission to the secretariat for the JISC.s ex ante assessment? (Optional)	N/A	N/A	N/A
110	If the AIE learns of a fraudulently included JPA, a fraudulently monitored JPA or an inflated	N/A	N/A	N/A



VERIFICATION REPORT

	number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?			
--	---	--	--	--

Table 2 Resolution of Corrective Action and Clarification Requests



VERIFICATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to check list question in table 1	Summary of project participant response	Verification conclusion team
CAR 01. The letters of approval (LoAs) for this project is not provided to the verification team. If the LoAs are present, please provide them for verifiers.	90	The letters of approval have been sent to the verification team.	OK
CAR 02. Please, indicate the monitoring period in the front page of the monitoring report.	93	The correction of the front page has been made.	Due to the corrections made the issue is closed.
CAR 03. Please, provide Excel-file with emission reductions calculations for this monitoring period.	95 (b)	All calculations associated with the current monitoring report have been provided.	The issue is closed based on the information provided.
CAR 04. Please, consider the revision occurred (stated in the Monitoring Report as revision to the PDD) as revision to the Monitoring plan and describe this in the sections A.7 and B.1 of the Monitoring Report.	94	Corresponding corrections have been made on pages 3, 7 and 8 (sections A.7 and B.1).	Based on the modification made in the Monitoring Report, the issue is closed.



VERIFICATION REPORT

CAR 05. Please, describe the status of the project implementation in the section A of the Monitoring Report.	93	Relevant corrections have been made on page 6.	Based on the information added to the Monitoring Report, the issue is closed.
CAR 06. Please, while describing the project activity throughout the whole Monitoring Report, use present tense instead of future tense.	93	The tense has been changed throughout the entire report.	Due to the amendments made, CAR 06 is closed.
CAR 07. Please, revise the date of Monitoring Report completion (because it can be 23/09/2011, but not 23/10/2011).	93	The date has been changed	The issue is closed.
CAR 08. Please, provide project database to the verification team.	95 (b)	The database has been provided.	OK
FAR 01. The data to be monitored and required for determination are to be kept for two years after the last transfer of emission reductions units for the project. The order concerning the procedure for keeping monitoring data should be issued.	101 (c)	The issue will be checked during next verification.	Pending



VERIFICATION REPORT

FAR 02. The order concerning indication of the names of the personnel involved in the monitoring should be issued.	101 (d)	The issue will be checked during next verification.	Pending
---	---------	---	---------