VERIFICATION REPORT

LLC FIRM "ASTARTA-KYIV"

VERIFICATION OF THE

ENERGY EFFICIENCY PROGRAMME AT THE PLANTS OF LLC FIRM "ASTARTA-KYIV

REPORT NO. UKRAINE-VER/0293/2011

REVISION NO. 02

BUREAU VERITAS CERTIFICATION

Report No: UKRAINE-ver/0293/2011

VERIFICATION REPORT

Date of first issue: 09/08/2011	Organizational unit: Bureau Veritas Certification Holding SAS
Client: LLC Firm “Astarta-Kyiv”	Client ref.: Victor Ivanchyk

Summary:
Bureau Veritas Certification has made the initial verification of the JI project ”Energy Efficiency Programme at the plants of LLC Firm “Astarta-Kyiv”, project of LLC Firm “Astarta-Kyiv” located Town of Kobelyaky, Kobelyatsky rayon, Poltavska oblast and Village of Zhdanivka, Khmilnytsky rayon, Vinnytska oblast, 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 Requests, 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 being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is ready to generate GHG emission reductions. The GHG emission reduction is calculated accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize 60 775 t CO2 equivalents for the period from 01/01/2008 to 31/12/2009 (27 708 t CO2 equivalents for the monitoring period 01/01/2008 – 31/12/2008; 33 067 t CO2 equivalents for the monitoring period 01/01/2009 – 31/12/2009).

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/0293/2011	Subject Group: JI	
Project title: ”Energy Efficiency Programme at the plants of LLC Firm “Astarta-Kyiv”		
Work carried out by: Rostislav Topchiy – Team Leader, Verifier Vitaliy Minyaylo – Team Member, Verifier Oleg Skoblyk - Team Member, Verifier		
Work reviewed by: Ivan Sokolov - Internal Technical Reviewer		
Work approved by: Flavio Gomes - Operational Manager		
Date of this revision: 22/08/2011	Rev. No.: 02	Number of pages: 48

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1 INTRODUCTION

LLC Firm “Astarta-Kyiv” has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project ”Energy Efficiency Programme at the plants of LLC Firm “Astarta-Kyiv” (hereafter called “the project”) at town of Kobelyaky, Kobelyatsky rayon, Poltavska oblast and Village of Zhdanivka, Khmilnytsky rayon, Vinnytska oblast, 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

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

The 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:

Rostislav Topchiy
Bureau Veritas Certification Team Leader, Climate Change Verifier

Vitaliy Minyaylo
Bureau Veritas Certification Team Member, Climate Change Verifier

Oleg Skoblyk

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 reports (MRs) submitted by Carbon Marketing and Trading Ltd. and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), developed JI specific approach 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 for the period 01/01/2008 – 31/12/2009 version 01 dated 10/06/2011 and Monitoring report for the period 01/01/2008 – 31/12/2009 version 02 dated 08/08/2011;
- project as described in the determined PDD.

2.2 Follow-up Interviews

On 21-22/07/2011 Bureau Veritas Certification during site visit performed interviews with project stakeholders to confirm selected information and to

resolve issues identified in the document review. Representatives of Kobeliatsky and Zhdanivsky sugar plants and LLC Firm "Astarta-Kyiv" were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
LLC Firm "Astarta-Kyiv", Kobeliatsky and Zhdanivsky sugar plants	➢ Organizational structure ➢ Responsibilities and authorities ➢ Training of personnel ➢ Quality management procedures and technology ➢ Implementation of equipment (records) ➢ Metering equipment control ➢ Metering record keeping system, database ➢ Monitoring procedure ➢ Baseline methodology ➢ Monitoring plan ➢ Monitoring reports ➢ Deviations from PDD ➢ Emission reduction calculation

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 reports 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 AIE 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.

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 Requests, Corrective Action Requests 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 31 Corrective Action Requests, 02 Clarification Requests and 01 Forward Action Request .

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

3.1 Remaining issues and FARs from previous verifications

Remaining issues and FARs from previous verification are absent.
Not applicable.

3.2 Project approval by Parties involved (90-91)

Written project approval by Ukraine was issued at the determination stage. Written project approval by Netherlands has been issued when submitting the first verification report (see category 1 reference /4/).

The abovementioned written approval is unconditional.

3.3 Project implementation (92-93)

All measures listed in section A.4 of the PDD document, Version 2.2, for years 2007-2009 inclusive have been implemented at the two sugar plants.

The project scenario involves implementing energy efficiency technologies at each of the sugar plants. These technologies have resulted in the plants running at a much higher efficiency level. Technologies installed as part of this project, for each of the two plants, are listed below.

Implemented Measures at Kobeliatsky 2007-2009

Year	Kobeliatsky sugar plant	Details of new equipment that is planned to be Installed (Description, Manufacture Make and Model)
2007		
1	Replacement of Vertical Presses with horizontal Deep Pulp Presses	Refer to Annex A of MR for further details and full description of this technology improvement.
2	Installation of pre-limer, implementation of suspension flow-back scheme after first carbonation	Refer to Annex A of MR for further details and full description of this technology improvement.
3	Heat insulation of the heat-exchange equipment. Modernization of the heat scheme	Refer to Annex A of MR for further details and full description of this technology improvement.
4	Installation of Frequency Converters	Refer to Annex A of MR for further details and full description of this technology improvement.
5	Replacement of pumps	Refer to Annex A of MR for further details and full description of this technology improvement.
6	Replacement of A-centrifugals	Refer to Annex A of MR for further details and full description of this technology improvement.
7	Modernization of the scheme for pulp drying and pulp granulating departments	Refer to Annex A of MR for further details and full description of this technology improvement.
8	Automation of the purification station	Refer to Annex A of MR for further details and full description of this technology improvement.
2008		
1	Installation of beet slicers "PUTSH"	Refer to Annex A of MR for further details and full description of this technology

		improvement.
2	Reconstruction of the 1st and 2nd carbonatation decanters	Refer to Annex A of MR for further details and full description of this technology improvement.
3	Installation of A and C-centrifugals	Refer to Annex A of MR for further details and full description of this technology improvement.
4	Installation of Frequency Converters	Refer to Annex A of MR for further details and full description of this technology improvement.
2009		
1	Installation of plate heat-exchangers ALFA-LAVAL	Installation of plate heat-exchangers ALFA-LAVAL before evaporation station has influenced gas consumption. It has been reduced by 1,58m³/t of sugar beets
2	Use of sweet-water for lime slaking	Implementation of sweet-water remove scheme for lime slaking will reduce gas consumption because less water adds to the juice at vacuum filters.
3	Heating of A and B-molasses by secondary steam	Heating of run-offs by extra steam and ammonia condensate reduces the consumption of exhausted steam decreasing the consumption of fuel by 1,2m³/t of sugar beets.
4	Increase of raw juice draft from 116% to 112% (to sugar beets)	Increase of draft from diffuser reduces the quantity of water to be evaporated out of juice.

Table 3. Implemented Measures at Zhdanivsky 2007-2009

Year	Zhdanivsky sugar plant	Details of new equipment that is planned to be Installed
2007		
1	Modernization of Vertical Presses department	Refer to Annex A of MR for further details and full description of this technology improvement.

2	Modernization of the washing department	Refer to Annex A of MR for further details and full description of this technology improvement.
3	Replacement of syrup filters	Refer to Annex A of MR for further details and full description of this technology improvement.
4	Usage of condensate, made from juice steam, for preparation of the feed-water for sugar extraction at the diffuser stage	Refer to Annex A of MR for further details and full description of this technology improvement.
5	Installation of heat exchangers for heating molasses after the first crystallation process	Refer to Annex A of MR for further details and full description of this technology improvement.
6	Modernization of the lime kiln with partial replacement of cladding	Refer to Annex A of MR for further details and full description of this technology improvement.
2008		
1	Replacement of the brick lining and heat insulation of lime kiln	Refer to Annex A of MR for further details and full description of this technology improvement.
2	Improving of transportation system of diffusion and heat exchange equipment at the heating scheme of diffusion	Refer to Annex A of MR for further details and full description of this technology improvement.
3	Replacement of vacuum pans with mechanical stirrers and complete automation system	Refer to Annex A of MR for further details and full description of this technology improvement.
4	Decreasing of energy consumption by implementation of a new heat system	Refer to Annex A of MR for further details and full description of this technology improvement.
5	Implementation of the automation system for monitoring steam consumption and its optimal distribution	Refer to Annex A of MR for further details and full description of this technology improvement.
2009		

1	Installation of centrifugals of 1st product BMA -3 units	Centrifugals BMA (3 units). Reduction of electric load to generator what leads to fuel consumption reduction for electricity generation.
2	Installation of additional pan of 3-A hull F-1800 m2 with modernization of heating scheme	Evaporation pan F=1800 to 3-A pan. Transfer of evaporation device to 5-hull one. Reallocation of steam extraction will give the ability to increase the rate of evaporation, effectively use steam of last hulls VU, implementation of 2 - stage scheme of heating of feeding water for diffusion pan with using of heat of massecute steams and steam of 5-th hull VU.
3	Capital maintenance of envelope of boiler number 2, replacement of pipes of side water walls and down comers of boiler number 3	Replacement of economizer of boiler number 2, side water walls, envelope of side water walls and economizer; boiler number 3- replacement of down comers, rear water wall. Repair of envelope will allow to reduce infiltrations at the tract of boiler, increase boiler efficiency and reduce specific fuel consumption per 1 Gcal of heat
4	Heat isolation of heating and technological equipment	Isolation of evaporation pan with mineral cotton and silver paper, repair of isolation of pipelines with juice, syrup and steam within evaporation device. It will allow reducing heat to the environment - therefore reducing fuel consumption for additional heating of the product.
5	Installation of frequency converters to the engines of juice for production and evaporation device	Frequency converters -2 units, at the pumps- the juice for production and juice to the corpus 3-A. It will provide main regulation of pump operation, reduce electric loading and reduce of fuel consumption for electric power generation.

6	To make the diffusion juice by the value 116%, modernization of scheme of pulp drying water	Installation of heater F=20 м² for heating of pulp pressing water, replacement of pumps SOT-30 by SVN-40/40- 2 units Supply of regular feeding of diffusion device by pulp drying water, reduction of diffusion juice pumping, reduction of water anti-damping and reduction of fuel to its additional evaporation.
7	Modernization of scheme of gas accounting according to the requirements of State Standards	Installation of additional detecting element of pressure drop "Sapfir" 1 unit, installation of sharpen straight area before and after diaphragm of accounting according to new State Standard. Installation of detecting element to lower pressure drop will give the ability to reduce the value of zone of uncertainty from 1605 m³ to 477 m³/h. This will supply more qualified accounting of actually consumed gas.
8	Implementation of scheme of giving of wash of vacuum filters to lime suppressing modernization of scheme for gas supply to the boiler of 1st saturation	Receiver- 1 unit, collector -1 unit, pump SOT-30 2 units, level sensor - 2 units, level regulator - 2 units, damper valves- 3 units. It will allow reduction of water with water milk. This will reduce fuel consumption previously needed for additional evaporation.

The identified areas of concern as to Project implementation, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CL 01, CAR 01, CAR 02, CAR 03, CAR 04).

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 sugar production, average sugar content in sugar beets in year, natural gas consumption, net calorific value of natural gas, coal consumption, net calorific value of coal, limestone consumption, percent of $CaCO_3$ in raw, percent of $MgCO_3$ in raw influencing the baseline emissions and the activity level of the project and the emissions due to the JI project as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions or enhancements of net removals, such as (plants records, supplier's certificate, plants statistics, IPCC Guidelines for National Greenhouse Inventories) 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 or enhancements of net removals is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The monitoring equipment used for baseline and project emission calculation is present in the section D.2.1 of Monitoring Reports.

The identified areas of concern as to Compliance with monitoring plan, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CAR 05-28, CL 02).

3.5 Revision of monitoring plan (99-100)

The project participants provided an appropriate justification for the proposed revision, which a difference between the emission reductions given in PDD and actual emission reductions mentioned in monitoring report.

In PDD the coke emission reductions for Zhdanivskiy sugar plant in 2004 were calculated using carbon content in coke as 81.4%. It was mentioned in PDD that the factor is taken from TU U "Coke for blast furnaces". In fact it was a conservative approach.

In monitoring report the coke emission reductions for Zhdanivskiy sugar plant in 2004 were re-calculated using carbon content in coke as 83% from 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 3: Energy, Chapter 4: METAL INDUSTRY EMISSIONS, Table 4.3 Tier 2 material-specific carbon contents for iron and steel and coke production.

The proposed revision improves 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.

3.6 Data management (101)

The data and their sources, provided in Monitoring reports, are clearly identified, reliable and transparent.

Data sources used for calculating emission reductions are clearly identified, reliable and transparent. On site responsible persons register data from the measurement equipments and fixed monitoring data to logbooks, monthly data collected to the technical reports. Moreover, there is electronic database of monitoring data. All roles and responsibilities are described in details in the Monitoring reports.

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 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 Table 2 (refer to CAR 29, CAR 30, CAR 31, FAR 01).

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the initial verification of the JI project "Energy Efficiency Programme at the plants of LLC Firm "Astarta-Kyiv" project of LLC Firm "Astarta-Kyiv" located Town of Kobelyaky, Kobelyatsky rayon, Poltavska oblast and Village of Zhdanivka, Khmilnytsky rayon, Vinnytska oblast, 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 interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

The management of LLC Firm "Astarta-Kyiv" 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 02. 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 reports version 02 for the reporting periods as indicated below. Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. 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 31/12/2008

Baseline emissions	: 102 865	t CO_2 equivalents
Project emissions	: 75 157	t CO_2 equivalents
Leakages	: 0	t CO_2 equivalents
Emission reductions (Year 2008)	: 27 708	t CO_2 equivalents

Reporting period from 01/01/2009 to 31/12/2009

Baseline emissions	: 96 762	t CO_2 equivalents
Project emissions	: 63 695	t CO_2 equivalents
Leakages	: 0	t CO_2 equivalents
Emission reductions (Year 2009)	: 33 067	t CO_2 equivalents

Total for the period from 01/01/2008 to 31/12/2009

Emission reductions:	60 775	t CO_2 equivalents

5 REFERENCES

Category 1 Documents:
Documents provided by LLC Firm “Astarta-Kyiv” that relate directly to the GHG components of the project.

/1/ PDD of the JI project ”Energy Efficiency Programme at the plants of LLC Firm “Astarta-Kyiv” version 2.2 dated 28/07/2011
/2/ Monitoring report for the period 01/01/2008 – 31/12/2009 of JI project ”Energy Efficiency Programme at the plants of LLC Firm “Astarta-Kyiv” version 01 dated 10/06/2011
/3/ Monitoring report for the period 01/01/2008 – 31/12/2009 of JI project ”Energy Efficiency Programme at the plants of LLC Firm “Astarta-Kyiv” version 02 dated 08/08/2011
/4/ Letter of Approval from NL Agency Ministry of Economic Affairs, Agriculture and Innovation The State of the Netherlands № 2011JI22 dated 04/07/2011
/5/ Excel spreadsheet of the emission reductions calculation version

Category 2 Documents:
Background documents related to the design and/or methodologies employed in the design or other reference documents.

Zhdanivsky sugar plants
/1/ Contract №86/07A with «Agroprogaz" (the supply of natural gas) dated 18/07/2007
/2/ Contract № DP-49/09C with "Gazprom zbyt Ukraine" (the supply of natural gas) dated 10/04/2009
/3/ Act of acceptance of gas equipment for the comprehensive testing "Reconstruction of the commercial metering of natural gas» dated 28/08/2009
/4/ Act of acceptance of putting into operation of commercial metering of natural gas, industrial devices equipped with measuring equipment dated 10/09/2009
/5/ The working draft of Reconstruction DP "Energouchet" 2009.
/6/ The act of checking of the calculation of natural gas. JSC "Vinnitsagaz" dated 14/10/2008
/7/ The checking device records - The complex of “Universal” № 1810 dated 14/10/2008
/8/ Logbook of consumption of natural gas
/9/ Training program for operators of boilershouse in 2008
/10/ Courses on occupational safety in 2009
/11/ Schedule for revalidation in 2009
/12/ Plan of localization and liquidation of emergencies and accidents for the "Zhdanivsky Sugar Plant" LLC "Khmelnytsky" in 2009.

/13/ Permission for waste disposal #629/08 dated 12/10/2008.
/14/ Permission for special use of water № 3493 dated 03/11/2008.
/15/ Limits on waste disposal in 2009 №629/08 dated 12/10/2008r.
/16/ Permit for emissions №524881801-1 dated 03/09/2007.
/17/ Report on the inventory of emissions to air from Zhdanivsky sugar plant in 2011
/18/ Report on Air Protection in 2008 #2TP"vozduh"
/19/ Report on Air Protection in 2009 #2TP"vozduh"
/20/ Act on transportation and consumption of natural gas for September 2008.
/21/ Act on transportation and consumption of natural gas for October 2008.
/22/ Act on transportation and consumption of natural gas for November 2008.
/23/ Act on transportation and consumption of natural gas for December 2008.
/24/ Act on transportation and consumption of natural gas for September 2009.
/25/ Act on transportation and consumption of natural gas for October 2009.
/26/ Passport of physical-chemical parameters of natural gas # 9 for September 2009.
/27/ Passport of physical-chemical parameters of natural gas #10 for October 2009.
/28/ Passport of physical-chemical parameters of natural gas #11 for November 2009.
/29/ Certificate for the quality of coal #43 dated 06/09/2009
/30/ The act of acceptance after the installation dated 28/07/2009
/31/ The act of acceptance after the installation dated 28/08/2009
/32/ The act of acceptance after the installation dated 25/08/2009
/33/ The act of acceptance after the installation dated 18/08/2009
/34/ The act of acceptance after the installation dated 05/08/2009
/35/ The act of acceptance after the installation dated 18/09/2009
/36/ The act of acceptance after the installation dated 30/07/2009
/37/ The act of acceptance after commissioning dated 20/09/2009
/38/ The act of putting into operation dated 22/09/2009
/39/ The act of acceptance after the installation dated 31/08/2009
/40/ The act of acceptance after commissioning dated 16/09/2009
/41/ The act of putting into operation dated 17/09/2009
/42/ The act of acceptance after the installation dated 11/08/2009
/43/ The act of acceptance after commissioning dated 25/09/2009
/44/ The act of putting into operation dated 19/09/2009
/45/ The passport of measuring the parameters and characteristics of the Measuring transducer TEX UA № 0301087
/46/ Passport. Temperature Sensor PVT-01-1 № 1806
/47/ Passport. The pressure sensor PS-28
/48/ Passport. The pressure sensor "Safir-M" 5410 № 07147010
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/55/ Photo. Diaphragm # 223 730

/56/ Photo. Volume of the gas meter "Universal-01» № 1810
/57/ Invoice for coal # 26 dated 02/01/2008
/58/ Invoice for Fluxing Limestone # 820 dated 07/10/2008
/59/ Invoice for Coal # 990 dated 18/11/2008
/60/ Invoice for Fluxing Limestone # 975 dated 17/11/2008
/61/ Act of reception and transmission of natural gas № 01/10 dated 31/10/2008
/62/ Invoice for Fluxing Limestone #943 dated 27/10/2008
/63/ Invoice for Fluxing Limestone # 42 dated 28/01/2008
/64/ Invoice for Coal # 41 dated 16/01/2008
/65/ Invoice for Fluxing Limestone #39 dated 03/01/2008
/66/ Invoice for Fluxing Limestone #38 dated 02/01/2008
/67/ The contract for the supply of electricity with «Vinnitsaoblenergo» № 175 dated12/04/2010
/68/ Letter from Zhdanivsky village council on the approval of the modernization of the object " Zhdanivsky Sugar Plant" dated 24/07/2011
/69/ Order about keeping records and documents dated 08/08/2011.
/70/ Certificate of calibration measurement equipment № 240-657.
/71/ Certificate of calibration measurement equipment № 14-525.
/72/ Certificate of calibration measurement equipment № 14-526.
/73/ Certificate of calibration measurement equipment № 240-658.
/74/ Certificate of calibration measurement equipment № 240-577.
/75/ Certificate of calibration measurement equipment № 240-578.
/76/ Certificate of calibration measurement equipment № 240-658.
/77/ Certificate of calibration measurement equipment № 240-659.
/78/ Certificate of calibration measurement equipment № 240-411.
/79/ Certificate of calibration measurement equipment № 240-412.
/80/ The act of equipment and commissioning acceptance dated 21/08/2007
/81/ The act of equipment and commissioning acceptance dated 28/07/2007
/82/ The act of equipment and commissioning acceptance dated 28/07/2007
/83/ The act of equipment and commissioning acceptance dated 17/07/2007
/84/ The act of equipment and commissioning acceptance dated 12/08/2008
/85/ The act of equipment and commissioning acceptance dated 28/08/2008
/86/ The act of equipment and commissioning acceptance dated 15/07/2008
/87/ The act of equipment and commissioning acceptance dated 19/08/2008
/88/ The act of equipment and commissioning acceptance dated 26/08/2008
/89/ The act of equipment and commissioning acceptance dated

11/08/2009
/90/ The act of equipment and commissioning acceptance dated 27/08/2009
/91/ The act of equipment and commissioning acceptance dated 17/07/2009
/92/ The act of equipment and commissioning acceptance dated 30/07/2009
/93/ The act of equipment and commissioning acceptance dated 25/08/2009
/94/ The act of equipment and commissioning acceptance dated 18/08/2009
/95/ The act of equipment and commissioning acceptance dated 17/09/2009
/96/ The act of equipment and commissioning acceptance dated 28/08/2009
/97/ TU U 322-00190443-114-96. Specifications. Coke
/98/ Photo. Insulation of Communications
/99/ Photo. Syrup department. Cartridge filter syrup
/100/ Photo. Centrifuges BMA
/101/ Photo. Lime kiln

Kobeliatsky sugar plants

/102/ Letter from Belitskii village council on the approval of the modernization of the object Kobelyatsky Sugar Plant dated 04/08/2011
/103/ Order № 111 about keeping records and documents dated 05/08/2011
/104/ Protocol № 144 committee meeting to verify the knowledge on safety dated 12/09/2008
/105/ Protocol № 139 committee meeting to verify the knowledge on safety dated 06/09/2008
/106/ Protocol № 140 committee meeting to verify the knowledge on safety dated 07/09/2008
/107/ Protocol № 138 committee meeting to verify the knowledge on safety dated 05/09/2008
/108/ Protocol № 143 committee meeting to verify the knowledge on safety dated 15/09/2009
/109/ Protocol № 142 committee meeting to verify the knowledge on safety dated 14/09/2009
/110/ Protocol № 140 committee meeting to verify the knowledge on safety dated 12/09/2009
/111/ Protocol № 138 committee meeting to verify the knowledge on safety dated 09/09/2009
/112/ Protocol № 137 committee meeting to verify the knowledge on safety dated 08/09/2009
/113/ Protocol № 136 committee meeting to verify the knowledge on safety dated 07/09/2009

/114/ Protocol № 1 committee meeting to verify the knowledge on technology dated 08/09/2009
/115/ Protocol № 2 committee meeting to verify the knowledge on technology dated 09/09/2009
/116/ Protocol № 3 committee meeting to verify the knowledge on technology dated 10/09/2009
/117/ Protocol № 4 committee meeting to verify the knowledge on technology dated 11/09/2009
/118/ Protocol № 1 committee meeting to verify the knowledge on technology dated 15/09/2008
/119/ Protocol № 2 committee meeting to verify the knowledge on technology dated 17/09/2008
/120/ Protocol № 3 committee meeting to verify the knowledge on technology dated 18/09/2008
/121/ Plans of localization and liquidation of emergency situations in the "Kobelyatsky Sugar Plant"
/122/ Gas consumption logbook
/123/ Certificate № 92/08 physical-chemical quality of natural gas dated 28/10/2008
/124/ Certificate № 71/08 physical-chemical quality of natural gas dated 30/09/2008
/125/ Certificate № 70/09 physical-chemical quality of natural gas dated 31/08/2009
/126/ Certificate № 77/09 physical-chemical quality of natural gas dated 29/09/2009
/127/ Certificate № 86/09 physical-chemical quality of natural gas dated 22/10/2009
/128/ Act on transportation and consumption of natural gas for September 2008.
/129/ Act on transportation and consumption of natural gas for October 2008.
/130/ Act on transportation and consumption of natural gas for November 2008.
/131/ Act on transportation and consumption of natural gas for December 2008.
/132/ Act on transportation and consumption of natural gas for September 2009.
/133/ Act on transportation and consumption of natural gas for October 2009.
/134/ Act on transportation and consumption of natural gas for November 2009
/135/ Invoice for Natural gas # 3603 dated 29/12/2008
/136/ Invoice for Natural gas # 3602 from 29/12/2008g
/137/ Invoice for Natural gas # 3601 from 29/12/2008
/138/ Resolution № 5321855300-5 Emissions of pollutants into the air from stationary sources "Kobelyatsky Sugar Plant" dated 07/08/2009
/139/ Resolution № 5321855300-4 Emissions of pollutants into the air from stationary sources "Kobelyatsky Sugar Plant" dated 26/09/2008
/140/ Report on the inventory of emissions to air from "Kobelyatsky sugar factory"
/141/ Logbook of stationary pollution sources and their characteristics
/142/ Report on Air Protection in 2008 #2TP"vozduh"

/143/ Report on Air Protection in 2009 #2TP"vozduh"
/144/ Permission for special use of water “Kobelyatsky sugar plant” № 3998 dated15/09/2009
/145/ Permission for waste disposal in 2008 # 08015 dated 01/07/2007.
/146/ Limits on waste disposal in 2008# 08015.
/147/ Environmental action plan for “Kobelyatsky sugar plant” in 2008.
/148/ Environmental action plan for “Kobelyatsky sugar plant” in 2009.
/149/ Certificate of calibration device measuring equipment to 15/09/2011 #16-03/3339. gas volume meter № 346
/150/ Certificate of calibration device measuring equipment to 15/09/2011 #16-04/3338. Differential pressure sensor № 91662676
/151/ Certificate of calibration device measuring equipment № 07-02/0105. Pressure transmitter EJX № 91G626762
/152/ Certificate of calibration device measuring equipment to 15/09/2011 #16-04/3337. Differential pressure sensor № 91G626763
/153/ Certificate of calibration device measuring equipment № 07-02/0106. Pressure transmitter EJX № 91G626763
/154/ Certificate of calibration weighting controller SUM-232
/155/ Verification certificate. Dispenser DVS-301 № 97
/156/ Certificate of calibration measurement equipment № 1905/1300.
/157/ Certificate of calibration measurement equipment № 16-03/3339. gas volume meter VG-1 № 346
/158/ Photo. Gas volume meter № 346
/159/ Photo. Differential pressure sensor № 91662676
/160/ Photo. Pressure transmitter EJX № 91G626762
/161/ Photo. Differential pressure sensor № 91G626763
/162/ Photo. Pressure transmitter EJX № 91G626763
/163/ Photo. Weighting controller SUM-232
/164/ Photo. Dispenser DVS-301 № 97
/165/ The act of acceptance after commissioning dated 28/12/2007
/166/ The act of acceptance after commissioning dated 28/12/2007
/167/ The act of acceptance after commissioning dated 28/12/2007
/168/ The act of acceptance after commissioning dated 28/12/2007
/169/ The act of acceptance after commissioning K-32-000742 dated 30/09/2007
/170/ The act of acceptance after commissioning K-32-000741 dated 30/09/2007
/171/ The act of acceptance after commissioning K-32-000740 dated 30/09/2007
/172/ The act of acceptance after commissioning K-32-000507 dated 21/08/2007
/173/ The act of acceptance after commissioning K-32-000508 dated 21/08/2007
/174/ The act of acceptance after commissioning K-32-000505 dated 21/08/2007
/175/ The act of acceptance after commissioning K-32-000506 dated

21/08/2007
/176/ The act of acceptance after commissioning K-32-0001068 dated 28/12/2007
/177/ The act of acceptance after commissioning K-32-000675 dated 06/09/2007
/178/ The act of acceptance after commissioning K-32-000588 dated 06/09/2007
/179/ The act of acceptance after commissioning K-32-000564 dated 06/09/2007
/180/ The act of acceptance after commissioning K-32-000565 dated 06/09/2007
/181/ The act of acceptance after commissioning K-32-000587 dated 06/09/2007
/182/ The act of acceptance after commissioning K-32-000563 dated 06/09/2007
/183/ The act of acceptance after commissioning K-32-000562 dated 06/09/2007
/184/ The act of acceptance after commissioning K-32-000536 dated 03/09/2007
/185/ The act of acceptance after commissioning K-32-000535 dated 03/09/2007
/186/ The act of acceptance after commissioning K-32-000274 dated 03/08/2007
/187/ The act of acceptance after commissioning K-32-000105 dated 16/05/2007
/188/ The act of acceptance after commissioning K-32-000106 dated 16/05/2007
/189/ The act of acceptance after commissioning K-32-000108 dated 16/05/2007
/190/ The act of acceptance after commissioning K-32-000107 dated 16/05/2007
/191/ The act of acceptance after commissioning K-32-000145 dated 20/06/2007
/192/ The act of putting into operation of fixed assets dated 27/12/2008
/193/ The act of acceptance after commissioning K-32-001112 dated 27/12/2008
/194/ The act of acceptance after commissioning № 06302005501 dated 27/12/2008
/195/ The act of acceptance after commissioning K-32-000356 dated 30/07/2008
/196/ The act of acceptance after commissioning K-32-000357 dated 30/07/2008
/197/ The act of acceptance after commissioning K-32-000148 dated 08/04/2008
/198/ The act of acceptance after commissioning K-32-000149 dated 21/04/2008
/199/ The act of acceptance after commissioning K-32-000375 dated

06/08/2008
/200/ The act of acceptance after commissioning K-32-000377 dated 06/08/2008
/201/ The act of acceptance after commissioning K-32-000376 dated 06/08/2008
/202/ The act of acceptance after commissioning K-32-000378 dated 06/08/2008
/203/ The act of acceptance after commissioning K-32-000380 dated 06/08/2008
/204/ The act of acceptance after commissioning K-32-000379 dated 06/08/2008
/205/ The act of acceptance after commissioning K-32-000950 dated 30/10/2008
/206/ The act of acceptance after commissioning K-32-000381 dated 06/08/2008
/207/ The act of acceptance after commissioning K-32-000928 dated 23/10/2008
/208/ The act of acceptance after commissioning K-32-000930 dated 23/10/2008
/209/ Photo. Centrifuge BMA
/210/ Photo. Beets cutter TSM 2200-22-600

Persons interviewed:

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

Zhdanivsky sugar plants

/1/ Omelchenko V.A. - Technical Director
/2/ Vernigora O.A. - Energy management specialist
/3/ Poludnenko V.G. - Chief Engineer
/4/ Tkachuk A.N. - Chief Mechanical Engineer
/5/ Poludnenko N.I. - Environmental Engineer
/6/ Omelchenko L.F. - Senior Specialist on Occupational Safety

Kobeliatsky sugar plants

/7/ Perhaylo P.V. - Deputy Director
/8/ Andreev Yu. N. - Chief Technologist
/9/ Andreeva I.S. - Leading specialist on Occupational Safety and environmental
/10/ Bochulya R.L. - Chief Engineer
/11/ Matviyshin I.B. - chief mechanical engineer

APPENDIX A: COMPANY PROJECT 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
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?	DFPs of Netherlands have issued written project approvals (LoA) when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines.	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
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 UNFCCC JI website?	Implementation of the project activity was realized according to the project implementation schedule described in the project design document. There are no deviations or revisions to the determined PDD. CAR 01. The geographical coordinates of the object do not match (Zhdanivsky Sugar Factory) CAR 02. There is no numbering of the tables in the monitoring report	CAR 01 CAR 02 CAR 03	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 03. You need to specify the exact start and finish dates of the project in the format DD / MM / YYYY in Section A.7.		
93	What is the status of operation of the project during the monitoring period?	Monitoring reports indicated the current status of the project activity implementation. Based on provided materials, there is known that all project equipments were operational in the reporting period. On the whole project has been implemented as defined in the PDD and the implementation is evidenced by statements of work completion (see list of verified documents). CAR 04. Please, provide reports of the implementations of measures for the 2007-2009. CL 01 Please, provide the confirmation of execution measure “Installation of plate heat-exchanger ALFA-LAVAL”.	CAR 04 CL 01	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?	CAR 05. Please, provide TU U 322-00190443-114-96. CAR 06. There is no value for the Carbon content in coke in the TU U 322-00190443-114-96. Make the necessary changes.	CAR 05 CAR 06	OK
95 (a)	For calculating the emission	All key factors influencing the baseline	CAR 07-	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?	emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project were taken into account, as appropriate for calculating the emission reductions or enhancements of net removals. CAR 07. Need to bring into the line delimiters (dots or comas) in the tables CAR 08. The average gas consumption in the table «Kobeliatsky Baseline Gas Consumption» calculated incorrectly CAR 09. Wrong rounding in the table «Kobeliatsky Baseline Coal Consumption» Column «Coal Emissions per Sugar Production» CAR 10. Wrong rounding in the table «Kobeliatsky Baseline Coal Consumption» Column «Carbon Emissions» CAR 11. Wrong rounding in the table «Kobeliatsky Baseline Limestone Consumption» Column «Calcination Emissions per Beets Processed» CAR 12. The average value in the table «Zhdanivsky Baseline Gas Consumption» Column «Natural Gas Consumption» incorrectly calculated CAR 13. The amount in the table «Zhdanivsky Baseline Coke Consumption» Column «Carbon Emissions» incorrectly calculated	23 CL 02	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 14. The average value in the table «Zhdanivsky Baseline Limestone Consumption» Column «Calcination Emissions per Beets Processed» incorrectly calculated CAR 15. The average value in the table «Zhdanivsky Baseline Summary (per beets)» column «Coal + Coke Consumption per Beets Processed» incorrectly calculated CAR 16. The amount in the table «Kobeliatsky Project Year 2008 Coal Consumption» Column «Carbon Emissions» incorrectly calculated CAR 17. The amount in the table «Kobeliatsky Project Year 2008 Limestone Consumption» Column «Carbon Emissions» (to integers) incorrectly calculated CAR 18. Wrong rounding in the table «Kobeliatsky Project Year 2009 Coal Consumption» Column «Carbon Emissions» CAR 19. Wrong rounding in the table «Kobeliatsky Project Year 2009 Limestone Consumption» Column «Carbon Emissions (to integers) CAR 20. Wrong rounding in the table «Zhdanivsky Project Year 2008 Coal Consumption» Column «Carbon Emissions (to integers) CAR 21. The amount in the table «Zhdanivsky Project Year 2008 Limestone Consumption»		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Column «Carbon Emissions» (rounding) incorrectly calculated CAR 22. Wrong rounding in the table «Zhdanivsky Project Year 2009 Coal Consumption» Column «Carbon Emissions (to integers) CAR 23. To round Emission Reduction Units (tCO2e) to an integer value CL 02. Please, give an explanation why all the cells «Total» and «Baseline Average» in the tables on page 33 are not filled		
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 clearly identified, reliable and transparent. On site responsible persons register data from the measurement equipments and fixed monitoring data to logbooks, monthly data collected to the technical reports. All roles and responsibilities are described in details in the Monitoring reports. CAR 24. Give an exact reference to the documents listed on the links 4 and 5. CAR 25. Please, specify the name of responsible person in Section A.8. CAR 26. Please, specify the names of responsible persons for the collecting	CAR 24-28	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		requiring information in the plants and the main office in Section C.1. CAR 27. You need to specify the exact version of IPCC in Table D.2 CAR 28. Give an exact reference to the documents listed on the links 15 and 16.		
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?	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	OK	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?	The calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner. As a result of documents revision, all data connected with estimation of emission reduction are consistent through the Monitoring reports and excel spreadsheets with calculation.	OK	OK
Applicable to JI SSC projects only				
96	Is the relevant threshold to be	Not applicable	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
Applicable to bundled JI SSC projects only				
97 (a)	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	Not applicable	OK	OK
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring reports?	Not applicable	OK	OK
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 reports? Do the monitoring periods not overlap with those for which verifications were already deemed final in the past?	Not applicable	OK	OK
Revision of monitoring plan				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Applicable only if monitoring plan is revised by project participant				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	In 2008 and 2009, there was a difference between the emission reductions given in PDD and actual emission reductions mentioned in monitoring report. In PDD the coke emission reductions for Zhdanivskiy sugar plant in 2004 were calculated using carbon content in coke as 81.4%. It was mentioned in PDD that the factor is taken from TU U "Coke for blast furnaces". In fact it was a conservative approach. In monitoring report the coke emission reductions for Zhdanivskiy sugar plant in 2004 were re-calculated using carbon content in coke as 83% from 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 3: Energy, Chapter 4: METAL INDUSTRY EMISSIONS, Table 4.3 Tier 2 material-specific carbon contents for iron and steel and coke production.	OK	OK
99 (b)	Does the proposed revision 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	Yes, the proposed revision 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	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?	Procedures of data collection are implemented in compliance with the approved monitoring plan. Monitoring data of the project is monitored in compliance with scheduled frequency approved in the developed monitoring plan and monitoring procedure. The quality control and quality assurance procedures realised due to checking measures, participation of third parties, and carrying out of procedures of emergencies finding.	OK	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	All monitoring equipments have calibration. It is calibrated with periodic frequency (passport states the calibration frequency for every device) according to the national regulations. During site visit verifiers received and reviewed passports and/or certificates on calibration of all measurement equipments. CAR 29. There is no list of the measuring equipment in the monitoring report CAR 30. There are no supporting documents for verification of measurement equipment for the monitoring period 2008-2009 (Zhdanivsky	CAR 29-30	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		and Kobeliatsky Sugar Plants)		
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The evidence and records used for the monitoring are maintained on site of some devices and in responsible departments in a traceable manner.	OK	OK
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 approved monitoring plan. Implementation of monitoring system was checked through site visit, and concluded that monitoring system is completely in accordance with the monitoring plan. This fact is also confirmed by the documents. FAR 01. There is no information in the reports 2-TP 'air' in 2008-2009 about the activities of reducing emissions of pollutants and greenhouse gases in the air. CAR 31. Please, provide documentation about approval of the modernization from Zhdanivsky and Kobeliatsky Village Council.	FAR 01 CAR 31	OK
Verification regarding programs of activities (additional elements for assessment)				
102	Is any JPA that has not been added to the JI PoA not verified?	Not applicable	OK	OK
103	Is the verification based on the	Not applicable	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	monitoring reports of all JPAs to be verified?			
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	Not applicable	OK	OK
104	Does the monitoring period not overlap with previous monitoring periods?	Not applicable	OK	OK
105	If the AIE learns of an erroneously included JPA, has the AIE informed the JISC of its findings in writing?	Not applicable	OK	OK
Applicable to sample-based approach only				
106	Does the sampling plan prepared by the AIE: (a) Describe its sample selection, taking into account that: (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,	Not applicable	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	such as: − 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 − 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	OK	OK
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	Not applicable	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	root of the number of total JPAs, rounded to the upper whole number, then does the AIE provide a reasonable explanation and justification?			
109	Is the sampling plan available for submission to the secretariat for the JISC.s ex ante assessment? (Optional)	Not applicable	OK	OK
110	If the AIE learns of a fraudulently included JPA, a fraudulently monitored JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?	Not applicable	OK	OK

Appendix B Resolution of Corrective Action Requests and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR 01. The geographical coordinates of the object do not match (Zhdanivsky Sugar Factory)	92	The geographical coordinates of Zhdanivskiy sugar plant were corrected on page 4 of monitoring report.	CAR 01 is closed based on the information provided and amended to the MR.
CAR 02. There is no numbering of the tables in the monitoring report	92	All the tables were numbered. Tables from Section D.4 were united into one summary table 10 (page 26).	CAR 02 is closed based on the information provided and amended to the MR.
CAR 03. You need to specify the exact start and finish dates of the project in the format DD / MM / YYYY in Section A.7.	92	The dates were changed in monitoring report: since 01/01/2008 till 31/12/2012 and since 01/01/2013 till 31/12/2017.	CAR 03 is closed based on the information provided and amended to the MR.

CAR 04. Please, provide reports of the implementations of measures for the 2007-2009.	93	The commissioning certificates and delivery and acceptance certificates which prove that the project measures were implemented at Kobeliakskiy sugar plant in 2007-2009 are attached in zip files: - "CAR 21.Kobeliaky cert 2007"; - "CAR 21.Kobeliaky cert 2008"; - "CAR 21.Kobeliaky cert 2009". The commissioning certificates and acceptance and commissioning certificates which prove that the project measures were implemented at Zhdanivskiy sugar plant in 2007-2009 are attached in zip files: - "CAR 21 Zhdanivka cert 2007"; - "CAR 21 Zhdanivka cert 2008"; - "CAR 21 Zhdanivka cert 2009".	CAR 04 is closed based on the information provided and amended to the MR.

CL 01 Please, provide the confirmation of execution measure “Installation of plate heat-exchanger ALFA-LAVAL”.	93	Zhdanivskiy sugar plant: The measure “Installation of plate heat-exchanger Alfa-Laval” was not implemented at Zhdanivskiy sugar plant as PDD included mostly planned actions. Kobeliatskiy sugar plant: The acceptance certificate of heat exchangers is attached as zip file “CI Kobeliaky Alfa-Laval”.	CL 01 is closed based on the documents provided to the verification team.
CAR 05. Please, provide TU U 322-00190443-114-96.	94	TU U 322-00190443-114-96 was provided.	CAR 05 is closed based on the information provided and amended to the MR.

CAR 06. There is no value for the Carbon content in coke in the TU U 322-00190443-114-96. Make the necessary changes.	94	In PDD it was used the factor of carbon content in coke as 81.3%. There was a reference on TU U "Coke for blast furnaces". As a result of verification it was determined that TU U "Coke for blast furnaces" does not include the carbon content factor for blast furnaces 81.3%. The factor used in PDD was a conservative approach. The emission reductions for Zhdanivskiy sugar plant in 2004 were re-calculated using carbon content in coke as 83% from 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 3: Energy, Chapter 4: METAL INDUSTRY EMISSIONS, Table 4.3 Tier 2 material-specific carbon contents for iron and steel and coke production.	CAR 06 is closed based on the information provided and amended to the MR.
CAR 07. Need to bring into the line delimiters (dots or comas) in the tables	95 (a)	The delimiters (dots and comas) were brought into the line beginning from page 33.	CAR 07 is closed based on the information provided and amended to the MR.
CAR 08. The average gas consumption in the table «Kobeliatsky Baseline Gas Consumption» calculated incorrectly	95 (a)	The average gas consumption in the table «Kobeliatsky Baseline Gas Consumption» was calculated taking into account all three figures. The figures were rounded to 0.	CAR 08 is closed based on the information provided and amended to the MR.

CAR 09. Wrong rounding in the table «Kobeliatsky Baseline Coal Consumption» Column «Coal Emissions per Sugar Production»	95 (a)	The rounding of factors in the table "Kobeliatskiy Baseline Coal Consumption" Column "Coal Emissions per Sugar Production" influences the final results of calculations.	CAR 09 is closed based on the information provided and amended to the MR.
CAR 10. Wrong rounding in the table «Kobeliatsky Baseline Coal Consumption» Column «Carbon Emissions»	95 (a)	The average gas consumption in the table «Kobeliatsky Baseline Gas Consumption» was calculated taking into account all three figures. The figures were rounded to 0.	CAR 10 is closed based on the information provided and amended to the MR.
CAR 11. Wrong rounding in the table «Kobeliatsky Baseline Limestone Consumption» Column «Calcination Emissions per Beets Processed»	95 (a)	The rounding of the factors in the table «Kobeliatsky Baseline Limestone Consumption» Column «Calcination Emissions per Beets Processed» influences the final results of calculations.	CAR 11 is closed based on the information provided and amended to the MR.
CAR 12. The average value in the table «Zhdanivsky Baseline Gas Consumption» Column «Natural Gas Consumption» incorrectly calculated	95 (a)	The figures in the table «Zhdanivsky Baseline Gas Consumption» Column «Natural Gas Consumption» were rounded to 0.	CAR 12 is closed based on the information provided and amended to the MR.
CAR 13. The amount in the table «Zhdanivsky Baseline Coke Consumption» Column «Carbon Emissions» incorrectly calculated	95 (a)	The figures in the table «Zhdanivsky Baseline Coke Consumption» Column «Carbon Emissions» were rounded to 0.	CAR 13 is closed based on the information provided and amended to the MR.

CAR 14. The average value in the table «Zhdanivsky Baseline Limestone Consumption» Column «Calcination Emissions per Beets Processed» incorrectly calculated	95 (a)	The average gas consumption in the table «Zhdanivsky Baseline Limestone Consumption» Column «Calcination Emissions per Beets Processed» was calculated taking into account all three figures and rounded to 0.	CAR 14 is closed based on the information provided and amended to the MR.
CAR 15. The average value in the table «Zhdanivsky Baseline Summary (per beets)» column «Coal + Coke Consumption per Beets Processed» incorrectly calculated	95 (a)	The average gas consumption in the table «Zhdanivsky Baseline Summary (per beets)» column «Coal + Coke Consumption per Beets Processed» was calculated taking into account all three figures.	CAR 15 is closed based on the information provided and amended to the MR.
CAR 16. The amount in the table «Kobeliatsky Project Year 2008 Coal Consumption» Column «Carbon Emissions» incorrectly calculated	95 (a)	The figures in the table «Kobeliatsky Project Year 2008 Coal Consumption» Column «Carbon Emissions» were rounded to 0.	CAR 16 is closed based on the information provided and amended to the MR.
CAR 17. The amount in the table «Kobeliatsky Project Year 2008 Limestone Consumption» Column «Carbon Emissions» (to integers) incorrectly calculated	95 (a)	The figures in the table «Kobeliatsky Project Year 2008 Limestone Consumption» Column «Carbon Emissions» were rounded to 0.	CAR 17 is closed based on the information provided and amended to the MR.
CAR 18. Wrong rounding in the table «Kobeliatsky Project Year 2009 Coal Consumption» Column «Carbon Emissions»	95 (a)	The figures in the table «Kobeliatsky Project Year 2009 Coal Consumption» Column «Carbon Emissions» were rounded to 0.	CAR 18 is closed based on the information provided and amended to the MR.

CAR 19. Wrong rounding in the table «Kobeliatsky Project Year 2009 Limestone Consumption» Column «Carbon Emissions (to integers)	95 (a)	The figures in the table «Kobeliatsky Project Year 2009 Limestone Consumption» Column «Carbon Emissions» were rounded to 0.	CAR 19 is closed based on the information provided and amended to the MR.
CAR 20. Wrong rounding in the table «Zhdanivsky Project Year 2008 Coal Consumption» Column «Carbon Emissions (to integers)	95 (a)	The figures in the table «Zhdanivsky Project Year 2008 Coal Consumption» Column «Carbon Emissions» were rounded to 0.	CAR 20 is closed based on the information provided and amended to the MR.
CAR 21. The amount in the table «Zhdanivsky Project Year 2008 Limestone Consumption» Column «Carbon Emissions» (rounding) incorrectly calculated	95 (a)	The figures in the table «Zhdanivsky Project Year 2008 Limestone Consumption» Column «Carbon Emissions» were rounded to 0.	CAR 21 is closed based on the information provided and amended to the MR.
CAR 22. Wrong rounding in the table «Zhdanivsky Project Year 2009 Coal Consumption» Column «Carbon Emissions (to integers)	95 (a)	The figures in the table «Zhdanivsky Project Year 2009 Coal Consumption» Column «Carbon Emissions» were rounded to 0.	CAR 22 is closed based on the information provided and amended to the MR.
CAR 23. To round Emission Reduction Units (tCO2e) to an integer value	95 (a)	The figures in the table were rounded to 0.	CAR 23 is closed based on the information provided and amended to the MR.
CL 02. Please, give an explanation why all the cells «Total» and «Baseline Average» in the tables on page 33 are not filled	95 (a)	The cells «Total» and «Baseline Average» were filled.	CL 02 is closed based on the information provided and amended to the MR.

CAR 24. Give an exact reference to the documents listed on the links 4 and 5.	95 (b)	In connection with changing of some parts of PDD, the numbers of links were changed too. In updated monitoring report the links 4 and 5 are the links 3 and 4. The exact reference to the documents listed on the links 3 and 4 were added to monitoring report	CAR 24 is closed based on the information provided and amended to the MR.
CAR 25. Please, specify the name of responsible person in Section A.8.	95 (b)	Jussi Nykanen is responsible person from GreenStream. It was added to Section A.8. of the monitoring report.	CAR 25 is closed based on the information provided and amended to the MR.

CAR 26. Please, specify the names of responsible persons for the collecting requiring information in the plants and the main office in Section C.1.	95 (b)	Responsible persons for data collecting were added to page 14 Section C.1.of monitoring report. Responsible persons for data collecting from the Sugar Department of Head office of "Astarta-Kyiv": - Kozubenko Anatoliy (Leading specialist on standartization and certification; - Tatyana Belyaeva (Specialist on standartization, certification and quality). Responsible persons from Zhdanivskiy sugar plant: - Olga Vernigora (the Head of Fuel and Energy Resources Saving Department), - Olena Yurchychyna (Chief Technologist), - Volodymyr Daniel (Vice Director of the plant); - Volodymyr Mudruk (Engineer). Responsible persons from Kobeliatskiy sugar plant: - Yuriy Andreev (Chief Engineer); - Nadia Zalubovska (Engineer Ecologist); - Nadia Maryenkova (Chief Technologist); - Iryna Andreeva (Occupational Safety Engineer).	CAR 26 is closed based on the information provided and amended to the MR.

CAR 27. You need to specify the exact version of IPCC in Table D.2	95 (b)	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Vol.2 was used in Table D.2. It was added to Table D.2.	CAR 27 is closed based on the information provided and amended to the MR.
CAR 28. Give an exact reference to the documents listed on the links 15 and 16.	95 (b)	In connection with changing of some parts of PDD, the numbers of links were changed too. In updated monitoring report the links 15 and 16 are the links 13 and 14. The exact reference to the documents listed on the links 13 and 14 were added to monitoring report.	CAR 28 is closed based on the information provided and amended to the MR.
CAR 29. There is no list of the measuring equipment in the monitoring report	101 (b)	The list of measuring equipment was added to the monitoring report as tables 4 and 5 (pages 14-15 of monitoring report)	CAR 29 is closed based on the information provided and amended to the MR.
CAR 30. There are no supporting documents for verification of measurement equipment for the monitoring period 2008-2009 (Zhdanivsky and Kobeliatsky Sugar Plants)	101 (b)	The copies of supporting documents for calibration of measuring equipment for Zhdanivskiy sugar plant are attached in the zip file. The copies of supporting documents for calibration of measuring equipment for Zhdanivskiy sugar plant are attached in the zip file.	CAR 30 is closed based on the information provided.

FAR 01. There is no information in the reports 2-TP 'air' in 2008-2009 about the activities of reducing emissions of pollutants and greenhouse gases in the air.	101 (d)	In 2008-2009 the State Statistics Committee did not require the list of activities of reducing emissions of pollutants and greenhouse gases in the air. This information will be added into the reports 2-TP air since 2011.	FAR 01 remains open until next periodic verification.
CAR 31. Please, provide documentation about approval of the modernization from Zhdanivsky and Kobeliatsky Village Council.	101 (d)	The documentation about approval of the modernization from Zhdanivka Village Council is attached in zip file The approval from Bilyky Village Council will be issued on August 26, 2011. The application for documentation about approval of the modernization was submitted to Village Council (attached as zip file).	CAR 31 is closed based on the information provided.