DETERMINATION REPORT

LLC "AGRICULTURAL PRODUCE ORGANIZATION "TSUKROVYK POLTAVSCHYNY"

DETERMINATION OF THE

ENERGY EFFICIENCY PROGRAMME AT THE PLANTS OF LLC "AGRICULTURAL PRODUCE ORGANIZATION "TSUKROVYK POLTAVSCHYNY"

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LLC "Agricultural Produce Organization "Tsukrovyk Poltavschyny"	Mr Yuriy Matsak

Summary:

Bureau Veritas Certification has made the determination of the "Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" project located in Poltava region of Ukraine 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 determination scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, 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 determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the determination process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies Guidance on criteria for baseline setting and monitoring and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

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1 INTRODUCTION

LLC “Agricultural Produce Organization “Tsukrovyk Poltavschyny” has commissioned Bureau Veritas Certification to determine its JI project Energy Efficiency Programme at the plants of LLC “Agricultural Produce Organization” Tsukrovyk Poltavschyny”(hereafter called “the project”) in Poltava region of Ukraine.

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

1.1 Objective

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

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

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

1.3 Determination team

The determination team consists of the following personnel:

Kateryna Zynevich
Bureau Veritas Certification Team Leader, Climate Change Verifier

Svitlana Gariyenchyk

Bureau Veritas Certification Team Member, Climate Change Verifier

Denis Pishchalov

Bureau Veritas Certification Financial Specialist

This determination report was reviewed by:

Ivan Sokolov

Bureau Veritas Certification, Internal Technical Reviewer

Vyacheslav Yeriomin

Bureau Veritas Certification Technical Specialist

2 METHODOLOGY

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

In order to ensure transparency, a determination 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 determination and the results from determining the identified criteria. The determination protocol serves the following purposes:

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

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

2.1 Review of Documents

The Project Design Document (PDD) version 1.6 dated 27/11/2009 submitted by LLC“Agricultural Produce Organization “Tsukrovyk Poltavschyny” and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for users of the joint

implementation project design document form, Approved CDM methodologies and Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by an Accredited Independent Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, Project Participants revised the PDD and resubmitted it as the following versions:

No	Version	Submission date
1	1.6	27/11/2009
2	1.7	14/12/2009
3	1.9	04/05/2010
4	2.0	29/11/2010
5	2.1	06/06/2011
6	2.2	01/06/2012
7	2.4	12/07/2012

The determination findings presented in this report relate to the project as described in the PDD version 2.4.

2.2 Follow-up Interviews

On January 22-23, 2010 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of LLC “Agricultural Produce Organization “Tsukrovyk Poltavschyny” and GreenStream Network Plc were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
LLC "Agricultural Produce Organization "Tsukrovyk Poltavschyny"	➢ Implementation schedule ➢ Project management organisation ➢ Environmental Impact Assessment ➢ Project monitoring responsibilities ➢ Measurement equipment ➢ Quality control and quality assurance procedures ➢ Environmental impacts affected Local authorities and public opinion
GreenStream Network Plc	➢ Applicability of methodology ➢ Baseline and Project scenarios ➢ Barriers analysis ➢ Additionality justification ➢ Common practice analysis ➢ Monitoring plan ➢ Conformity of PDD to JI requirements

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the project design.

Corrective Action Request (CAR) is issued, where:

(a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;

(b) The JI requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

The determination team may also issue Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable JI requirements have been met.

The determination team may also issue Forward Action Request (FAR), informing the project participants of an issue that needs to be reviewed during 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 PROJECT DESCRIPTION

LLC “Agricultural Produce Organization” Tsukrovyk Poltavschyny” is an agri-industrial holding and one of the leading companies in the Ukrainian sugar sector. From 2004 to 2007 Tsukrovyk has been one of Top-5 Ukrainian sugar producers. Tsukrovyk’s operations are focused on the production and sale of sugar made from sugar beets, sugar by-products and related services. Tsukrovyk has leased 91,000 hectares of land to grow their own sugar beets as well as other crops and raise cattle.

This project is being conducted at three sugar beet processing plants under ownership and operation of the project company Tsukrovyk. The project activity is comprised of various energy efficiency improvements being implemented at each of the three sugar plants. The sugar plants are located in the towns of Globyno, Veseliy Podil and Yareski within Poltava oblast, Ukraine.

The proposed JI project is aimed at the reduction of the emissions of carbon dioxide from the two main sources:

(1) The combustion of fossil fuel and

(2) Decomposition of limestone within the calcination process (as well as reduction emissions from coal combustion from the calcination process).

Overall the project aims at reducing anthropogenic emissions by reducing the energy requirements of the plant’s operation as well as introducing measures which lead to a reduced need for the calcination of limestone; through increased juice purity.

The start date of the project has been identified as 02/11/2006 which is the date of the Contract No 102806 with the company “PERRY VIDEX” LLC for the purchase of 7 pulp presses manufactured by “Babbini”, type P-18 (Refer to the document listed under No 4 in Section 7 References Category 2 Documents).

Each plant is operated by utilizing heat and power produced onsite at a Combined Heat and Power (CHP) Plant. The CHP Plants are powered exclusively by natural gas and are operated to supply the plants with the necessary electricity and heat needed to power the beet processing equipment. Prior to the implementation of the project, the plants operate using commonly available technologies available in Ukraine. These technologies, which produce sugar from sugar beet with average to efficiency values, are in line with common practise in Ukraine.

The baseline scenario consists of continuing to operate the sugar facilities at their pre-project state. Equipment utilized prior to the beginning of the project could continue operation, with normal maintenance, throughout the crediting period.

The project scenario is aimed at saving/reducing the need for electricity and heat consumption, as well as decreasing the limestone-based clarifying agent required for sugar production. All savings in electricity and heat directly correlate to a reduced need for natural gas required at the CHP generating units. Maximizing the use of waste energy resources by optimizing the heat scheme of the evaporation system will also reduce the CHP natural gas consumption. Reductions will also result from lower quantities of natural gas being consumed to dry pressed pulp; as increased pressing ability in the project result in lower moisture content in the pressed pulp. Furthermore, increased purity of the pressed juice will result in a lower need for the purification via lime-milk usage. (Lime-milk is the term given for the products of the calculation process (lime) and water; producing a milk like lime liquid). By reducing the lime-milk required for sugar production the plants will reduce the corresponding coal and limestone firing required to produce the clarifying agent.

The identified areas of concern as to the project description, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR24, CAR45, CAR52, Car65, CAR59, CAR25, CAR26, CAR27, CL11,CL19, CAR 38, CL20, CL21, CAR 08, CAR57, CAR 07).

4 DETERMINATION CONCLUSIONS

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

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

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Determination Protocol in Appendix A. The determination of the Project resulted in 59 Corrective Action Requests and 26 Clarification Requests.

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

4.1 Project approvals by Parties involved (19-20)

The project "Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" has already been supported by the Ukrainian Designated Focal Point (DFP), namely

by the National Environmental Investment Agency of Ukraine, which has issued a Letter of Endorsement (LoE) for the JI Project (LoE №173/23/7 dated 27/02/2009). Bureau Veritas Certification received this letter from the project participants and does not doubt its authenticity.
After receiving Determination Report from the Accredited Independent Entity the project documentation will be submitted to the National Environmental Investment Agency of Ukraine for receiving a Letter of Approval.

As the project has no approvals by the Parties involved, CAR 01 remains pending and will be closed after report finalizing (refer to the Appendix A).

The identified areas of concern as to the project approvals by parties, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR01, CAR02, CL01, CAR06).

4.2 Authorization of project participants by Parties involved (21)

The official authorization of each legal entity listed as project participant in the PDD by Parties involved will be provided in the written project approvals (refer to 4.1 above).

4.3 Baseline setting (22-26)

The PDD explicitly indicates that baseline selection has been determined and justified by following Annex B of the JI Guidelines and the "Guidance on criteria for baseline setting and monitoring", version 03 developed by the JISC. From these guidance documents the JI Specific approach was selected for baseline setting with the availability to select and apply elements or combinations of approved CDM methodologies, as appropriate and an approach taken in comparable JI cases were selected for baseline setting. The paragraph 11 of the Guidance further explains that project that select a JI-specific approach may use selected elements or combinations of approved CDM baseline and monitoring methodologies or approved CDM methodological tool.
In accordance with Paragraph 9(a) of the "Guidance on criteria for baseline setting and monitoring" it is used JI specific approach regarding baseline setting and monitoring.

The PDD provides a detailed theoretical description in a complete and transparent manner, as well as justification, that the baseline is established:

(a) By listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one:

a. The proposed project activity without being registered as a JI project
b. All equipment upgrades completed with new equipment
c. Continuation of current equipment and practice

(b) Taking into account the following key factors that affect a baseline:

a. Sectoral reform policies and legislation
b. Economic situation/growth and socio-demographic factors in the relevant sector as well as resulting predicted demand
c. Availability of capital
d. Local availability of technologies/techniques, skills and know-how and availability of best available technologies/techniques in the future
e. Fuel prices and availability
f. National and/or subnational expansion plans for the energy sector
g. National and/or subnational forestry or agricultural policies, as appropriate

which are comprehensively described in the PDD Sections B.1.and B.2.

Furthermore, in accordance with "Guidance on criteria for baseline setting and monitoring" version 03, the baseline was established:

(a) In a transparent manner with regard to the choice of approaches, assumptions,methodologies, parameters, data sources and key factors that are provided in the tables 16-18 QA/QC Procedures for the plants
(b) Taking account of uncertainties and using conservative assumptions, for instance, the forecast of sugar production is based on the average sugar/beet rations during 2004-2006. Another example is the estimated project investment cost was very conservative. As presented in Table 12, the realised project investment cost is much higher than the estimation when the investment decision was made in 2006.

The identified areas of concern as to the baseline setting, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR03, CAR04, CAR28, CAR30, CAR05, CL02, CAR16, CAR32).

4.4 Additionality (27-31)

For this project a JI specific approach and an approach taken in comparable JI cases were selected for baseline setting..To further extend the application of the JI Specific approach, and to comply with paragraph 2(c), of Annex 1, of the "Guidance on Criteria for baseline setting and

monitoring" version 03, a full additionality assessment has been preformed.

The PDD provides a justification of the applicability of the approach with a clear and transparent description, as per item 3.3 above.
To demonstrate that the project is not a plausible baseline scenario without being registered as a JI project, a four-step process is undertaken:

(1) Identification and analysis of investment opportunities which are the same as the baseline scenarios identified;

(2) Investment analysis of the project that has been implemented in compliance with the "Tool for the Demonstration and Assessment of Additionality" Version 06.0.0 and "Guidelines on the Assessment of Investment Analysis" version 05. The project participants apply the benchmark analysis based on weighted average cost of capital (WACC). Since the energy efficiency measures are implemented independently at different plants, economic effect (IRR) of energy saving is assessed separately for each plant. The Veselopodilskiy plant was planned to be decommissioned after the 2008 season and, for this reason, was not included in the assessment because of the very negative investment return. As a summary of investment analysis, the conclusion of addtionality is reliable that the project activity is not financially attractive without the Emission Reduction Sales. To prove the robustness of the investment analysis, *a sensitivity analysis* with variables of the price of nature gas, the capital expense and the sugar production was conducted as well to assure that without the help from JI, the project activity would not be invested and continued.

(3) Barrier analysis demonstrating that the project faces

- technological barrier regarding technology upgrades and installation difficulty;
- financial barrier connected with the large number of measures to be implemented in three different locationson on the one hand, and a serious problem with attracting commercial investment and a high level of risks in proposed crediting conditions on the other hand;
- social barrier connected with instalment of more advanced equipment and organizational measures that in their turn necessitate training of plants' managers, technical specialists and workers.

(4) Common practice analysis clearly demonstrating that in comparison to current technologies used in the sugar beets processing business in Ukraine, Tsukrovyk technologies

installed in the project go above and beyond that of common practice.

With regards to the additionality proofs, it should be specially admitted that Energy efficiency projects are typically associated with high transaction costs for the planning, implementation and monitoring phases. In Tsukrovyk's case this is even more pronounced due to the large number of measures in three different locations. Without the sale of carbon credits, this is a serious barrier for attracting commercial investment. Technical assistance from EBRD in form of an energy audit was instrumental to lower the barrier.

Based on the substantial barriers to project implementation, including financial, investment, technological, training and prevailing practice it is concluded that the project is additional.

Traceable and transparent information showing that the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to reductions of anthropogenic emissions by sources or enhancements of net anthropogenic removals by sinks of GHGs was provided.

The identified areas of concern as to the additionality, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR19, CL12, CAR20, CAR21, CAR22, CAR23, CAR40, CAR 41).

4.5 Project boundary (32-33)

The project boundary has been applied to the geographic location of Yareskivskiy, Globinskiy and Veselopodilskiy Plants with all equipments. The detailed description of project boundaries is given in the PDD Section B.3. Both beet processing and pulp drying operations are included. The main energy consumption is direct fossil fuel combustion in the existing steam boilers, the pulp drying facilities and the lime kiln. In addition to the fuel combustion emissions, emissions of CO2 from the decomposition of lime during the beet processing process are taken into account. Emissions of other greenhouse gases, such as methane and N2O from fuel combustion were not taken into account. This is a conservative assumption.

The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are:

(i) Under the control of the project participants such as:
- the combustion of fossil fuel;
- decomposition of limestone within the calcination process;
- Coal combustion from the calcination process.

(ii) Reasonably attributable to the project such as;
- emissions as a result of natural gas combustion in boilers of CHP;
- emissions as a result of natural gas combustion in pulp drier;
- emissions as a result of coal combustion in the lime kilns;
- emissions as a result of limestone consumption in the lime kilns

No leakage was identified outside the project boundary. As the energy efficiency project, the main potential of leakage emission is the continuously used of the replaced equipment in another user outside the project boundary. In the project activity the replaced equipments will not be transferred to another user and continue the service. The reason is that these pieces of equipments keep functional only when they serve as a part of the whole system. They are useless after they are replaced.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD Section B.3 Table 13.

The identified areas of concern as to the project boundary, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR29, CAR31, CL13, CAR42, CAR33, CAR34).

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the implementation or construction or real action of the project began, and the starting date is 02/11/2006, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 10 years or 120 months, including 60 months within the Kyoto crediting period (2008-2012) and 60 months post-Kyoto period (2013-2017).

All equipment at the sugar plants could maintain operation, with regular maintenance, throughout the entire operational lifetime of the project.

The PDD states the length of the crediting period in years and months, which is 10 years (or 120 months): 5 years for the 1st commitment period (2008-2012) and 5 years for the period following the 1st commitment period (2013-2017), and its starting date is 01/01/2008, which is after the date the first emission reductions are generated by the project. The end date of the crediting period is defined as 31/12/2017.

The estimates of emission reductions are presented separately for those until 2012 and those after 2012 in all relevant sections of the PDD.

The identified areas of concern as to the crediting period, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR09, CAR24, CAR 58, CAR39, CL18).

4.7 Monitoring plan (35-39)

The PDD, in its monitoring plan section, explicitly indicates that JI specific approach from "Guidance on criteria for baseline setting and monitoring" was selected to establish the monitoring plan. The paragraph 11 of the Guidance further explains that project that select a JI specific approach may use selected elements or combinations of approved CDM baseline and monitoring methodologies or approved CDM methodological tool.
The monitoring plan describes all relevant factors and key characteristics that will be monitored, and the period in which they will be monitored, in particular also all decisive factors for the control and reporting of project performance, such as

- sugar production in year y at plant i
- average sugar content in sugar beets in year y at plant i
- natural gas consumption for sugar plants needs
- coal consumption for sugar plants needs
- the mass of raw material limestone burned in the kiln in project year y at plant i
- the percent of CaCO3 in the raw material limestone in project year y at plant i
- the percent of MgCO3 in the raw material limestone in project year y at plant i
- The mass of raw material limestone burned in the kiln in project year y at plant i

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. be clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions to be monitored such as

- carbon emissions factor for natural gas
- carbon emission factor for coal
- carbon emission factor for CaCO3
- carbon emission factor for MgCO3
- net calorific value of natural gas
- net calorific value of coal

The monitoring plan draws on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring" developed by the JISC, as appropriate.
The monitoring plan explicitly and clearly distinguishes:

(i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination, such as those ones listed in the PDD Section D.1. Table 14 and taken for the historic period 2004-2006. that are needed for setting the baseline

(ii) There are no data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination.

(iii) Data and parameters that are monitored throughout the crediting period are presented in the PDD Section D.1. Table15.

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording, such as direct measurement with a bag accounting system to weight sugar produced, a semi-automatic line to weight sugar content in sugar beets, an automated measuring-management meter to account natural gas consumed, mechanical scales to weigh coal and limestone; coal and limestone suppliers' certificates, as well as calculations with different recording frequency(monthly and annually) and electronic or paper recording method.

The monitoring plan elaborates all algorithms and formulae used for the calculation of baseline emissions and project emissions, such as:

Formulae used to estimate baseline emissions:

$$BE_{y,i} = BE_{NG,y,i} + BE_{Coal,y,i} + BE_{Calcin,y,i}$$

where:

$BE_{y,i}$ is the baseline carbon emissions in year *y* at plant *i* (tCO2)
$BE_{NG,y,i}$ is the baseline carbon emissions from natural gas consumption in year *y* at plant *i* (tCO2)
$BE_{Coal,y,I}$ is the baseline carbon emissions from coal consumption in year *y* at plant *i* (t CO2)
$BE_{Calcin,y,I}$ is the baseline average carbon emissions from calcination of limestone in year *y* at plant *i* (t CO2)

Formulae used to estimate project emissions:

$$PE_{y,i} = PE_{NG,y,i} + PE_{Coal,y,i} + PE_{Calcin,y,i}$$

where :

$PE_{y,i}$ is the project carbon emissions in project year *y* at plant *i* (t CO2)
$PE_{NG,y,i}$ is the project carbon emissions from natural gas consumption in project year *y* at plant *i* (t CO2)
$PE_{Coal,y,i}$ is the project carbon emissions from coal consumption in project year *y* at plant *i* (t CO2)
$PE_{Calcin,y,I}$ is the project carbon emissions from calcination of limestone in project year *y* at plant *i* (t CO2)

No leakage emissions are considered

Formula used for Determination of the Emission Reductions

$$ER_y = BE_y - PE_y - LE_y$$

where
ER_y = emissions reduction in year *y*, t CO2e;
BE_y = greenhouse baseline emissions in year *y*, t CO2e;
PE_y = project emissions in year *y*, t CO2e;
LE_y = emissions from leakages in year *y*, t CO2e.

The monitoring plan presents the quality assurance and control procedures for the monitoring process which is sufficiently described for each plant separately in Tables 16-18 in Section D.2. of the PDD. The following tables outline the procedures required for proper management of the project information at each plant, as described by data requirements and include, as appropriate, measurement method, uncertainty level of data, information on calibration.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities. Management of beet processing is completed on a site-by-site basis with a plant manager and Chief Engineer overseeing each plant. However the overall operational control of the plants is managed through the head office in Kyiv, Ukraine. The head office of the project company oversees and prescribes the site management and operational practices that are adhered to at each of the individual facilities. Thus, directors and technical leads at each plant must adhere to the practices outlined by the head office. This allows for direction to come from head office for each of the sugar plants. Records collected at the individual sites will be sent to the head office for retention, and quality assurance and quality control measures have been introduced to ensure accurate management of the JI project is completed.
Organizational chart of the management structure in the company for the JI project is presented in the PDD Section D.3.Figure 17.
Organizational structure of gathering and achieving of data for JI project at Globinskiy and Yareskivskiy sugar plants is presented in the PDD Section D.3. Table19. The PDD also mentions that the data subject to

monitoring will be kept for 2 years after the last transfer of ERUs on the project.
It is worth mentioning that Yareskivskiy and Globinskiy sugar plants implemented and certified Quality Management System by DSTU ISO 9001 in accordance with Ukrainian procedure UkrSEPRO. The Quality Management System assists to optimize the management of the plants.

On the whole, the monitoring report reflects good monitoring practices appropriate to the project type.

The identified areas of concern as to the monitoring plan, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CL04, CAR10, CAR11, CL09, CAR35, CAR36, CL14, CAR43, CAR44, CAR46, CL08, CAR18,CAR17, CAR47, CL25, CAR12, CAR48, CAR49, CL05, CL15, CL16, CAR50, CAR51, CL03, CAR13, CAR14, CL06, CL07, CAR37).

4.8 Leakage (40-41)

No leakage was identified outside of the project boundaries.

4.9 Estimation of emission reductions or enhancements of net removals (42-47)

The PDD indicates assessment of emissions in the baseline scenario and in the project scenario as the approach chosen to estimate the emission reductions or enhancement of net removals generated by the project.

The PDD provides:

(a) ex ante estimates of emissions for the project scenario (within the project boundary), which are 448,993 tonns of CO2equivalent for Kyoto crediting period and 431,190 tonns of CO2equivalent for the Post Kyoto crediting period;

(b) Leakage are zero tonns of CO2equivalent;

(c) ex-post estimate of emissions for the baseline scenario (within the project boundary), which are 671,239 tonns of CO2equivalent for Kyoto crediting period and 692,075 tonns of CO2equivalent for the Post Kyoto crediting period;

(d) ex ante estimates of emission reductions adjusted by leakage (based on (a)-(c) above), which are 222,246 tonns of CO2equivalent for Kyoto crediting period and 260,885 tonns of CO2equivalent for the Post Kyoto crediting period .

The estimates referred to above are given:

(a) On an annual basis;

(b) From 01/01/2008 to 31/12/2017, covering the whole crediting period;

(c) On a source-by-source;

(d) For CO2 GHG gas;

(e) In tonnes of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol;

The formula used for calculating the estimates referred above are in section 4.6 above. All formulas are consistent throughout the PDD.

For calculating the estimates referred to above, key factors, e.g. mentioned in Section 4.3. of the present Report influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating the estimates referred to above, such as JISC documents, 2006 IPCC Guidelines, National Inventory Report of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases in Ukraine for 1990-2009, information provided by national Bank of Ukraine, EBRD's data, "Tsukrovyk" internal documentation, external sugar sector concerned online and printed resources, materials of technical and scientific conferences of sugar producers of Ukraine, and other resources are clearly identified, reliable and transparent.

Emission factors, such as carbon emission factor for coal, natural gas, CaCO3, MgCO3, were selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

The estimation referred to above is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The estimates referred to above are consistent throughout the PDD.

The identified areas of concern as to the estimation of emission reductions, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CL10, CL17, Cl22, CL23, CAR53, CAR54, CAR55).

4.10 Environmental impacts (48)

Air pollution is a major environmental concern of the Ukraine's sugar industry including Tsukrovyk. The national legislation has established maximum permissible emission standards for the following air pollutants being emitted by sugar plants: nitrogen dioxide, carbonic oxide, sulfurous anhydride, ammonia, sugar dust, wooden dust, scraping metal dust, ash, ferric oxide, calx, calcium hydrate.

In addition to these standards, regional departments of the Ukraine's Ministry of ecology and natural resources in some cases establish special standards for sugar facilities depending on their particular operating features.

In compliance with the national legislation and regulation, Tsukrovyk sugar plants collect and record on a regular basis data on air pollution, water use, solid wastes generation and disposal.

The PDD lists and attaches documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party, such as:

- Reports on test measurements at the Veselopodilskiy plant taken by the certified organization "TeploEcoNaladka", city of Poltava, at the Globinskiy and the Yareskivskiy plants – by the certified organization "PromEcoService", city of Poltava. The most recent reports available at the Globinskiy (2006-2008), Yareskivskiy (2000-2008) and Veselopodilskiy plants (2004-2007) confirm that actual air pollution emissions at the plants are within the standards.
- Valid Air Emissions Permits;
- Valid Water Usage Permist;
- Valid Permits for Waste Generation and Disposal;
- "Environmental impact assessment of rehabilitation of beet processing department in the main building and the station for deep pulp presses at the Yareskivskiy sugar plant" was commissioned by the plant and prepared by the licensed design company "Proektbudmontazh", Kharkiv in 2007;
- The EIA of the project "Rehabilitation of the existing facilities to install three pulp presses and equipment for cargo handling and lifting machinery P-10 at the Globinskiy plant's site" was commissioned by the plant and completed by the licensed design company "Proektbudmontazh", Kharkiv as a part of the design project documents prepared by the Ukrainian design and research institute "Ukrtsukroproekt" under the Ministry of Agrarian Policy of Ukraine in 2009.

The shortest distances between the Tsukrovyk's plants and the state border between Ukraine and Russia are: 180 kilometers (Yareskivskiy

plant) and 270 kilometers (Globinskiy and Veselopodilskiy plants). The plants do not have negative transboundary pollution impacts on the territory of Russia and other of neighbouring foreign countries.

The PDD provides conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party.

The identified areas of concern as to theenvironmental impacts, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR15, CL26).

4.11 Stakeholder consultation (49)

Due to the nature of the modernization measures being implemented at the plants, public consultations are not required by Ukraine's national legislation and, therefore, have not been conducted.

5 SUMMARY AND REPORT OF HOW DUE ACCOUNT WAS TAKEN OF COMMENTS RECEIVED PURSUANT TO PARAGRAPH 32 OF THE JI GUIDELINES

No comments, pursuant to paragraph 32 of the JI Guidelines, were received.

6 DETERMINATION OPINION

Bureau Veritas Certification has performed a determination of the Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" Project in Ukraine. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The determination consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final determination report and opinion.

Project participants used the latest tool for demonstration of the additionality. In line with this tool, the PDD provides barrier and investment analysis and common practice analysis, to determine that the project activity itself is not the baseline scenario.

Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the

project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The determination revealed two pending issues related to the current determination stage of the project: the issue of the written approval of the project and the authorization of the project participant by the host Party. If the written approval and the authorization by the host Party are awarded, it is our opinion that the project as described in the Project Design Document, Version 2.4 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

The review of the project design documentation version 2.4 and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

The determination is based on the information made available to us and the engagement conditions detailed in this report.

7 REFERENCES

Category 1 Documents:

Documents provided by Type the name of the company that relate directly to the GHG components of the project

/1/ PDD "Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" version 1.6 dated 27/11/2009.

/2/ PDD "Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny"version 1.7 dated 14/12/2009.

/3/ PDD PDD "Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny"version 1.9 dated 04/05/2010.

/4/ PDD "Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" version 2.0, dated 29/11/2010

/5/ PDD "Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" version 2.1 dated 06/06/2011.

/6/ PDD "Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" version 2.2 dated 01/06/2012

/7/ PDD "Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" version 2.4 dated 12/07/2012

/8/ Emission Reductions Calculation Excel Spreadsheet

/9/ A Letter of Endorsement №173/23/7 of National Environmental Investment Agency dated 27.02.2009

Category 2 Documents:

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

/1/ Contract on purchase and sale of "Globinskiy Sugar Plant Ltd" BCM #3189 dd 01/10/2005

/2/ Veseliy Podil, Certificate on Proprietory with an Extract No 20749191 dated 30/10/2005

/3/ Yareski, Certificate on Proprietory with an Extract No 28956529 dated 10/02/2011

/4/ Contract No 102806 dated 02/11/2006 with the company "PERRY VIDEX" LLC for the purchase of 7 pulp presses manufactured by "Babbini", type P-18

/5/ Statement #09/ДП-57/09С dated 30/09/2009 on natural gas acceptance-transferring

/6/ Statement #10/ДП-57/09С dated 31/09/2009 on natural gas acceptance-transferring

/7/ Statement on replacement of the meter #95180953, type ZMD410CR44 dated 16.07.2009
/8/ Statement dated 20/09/2007 on acceptance of category IУ steam pipe at boiler house JE “Globinskiy Sugar Plant” issued by the contracting organization JC "NPF" CTM"
/9/ Statement on natural gas acceptance-transferring for December 2006 dated 24/12/2006
/10/ Statement on natural gas acceptance-transferring for September 2006 dated 30/09/2006
/11/ Statement on natural gas acceptance-transferring for September 2007 dated 01/10/2007
/12/ Statement on natural gas acceptance-transferring for October 2006 dated 31/12/2006
/13/ Statement on natural gas acceptance-transferring for October 2007 dated 31/10/2007
/14/ Statement on natural gas acceptance-transferring for November 2006 dated 30/11/2006
/15/ Statement on natural gas acceptance-transferring for November 2007 dated 14/11/2007
/16/ Statement on technical testing of power facilities #№95180953. ZMD410CR44 dated 16.07.2009
/17/ Report JE “Globinskiy Sugar Plant” LLC IIC "Poltavzernoprodukt" on actual showings of calculating devices for recording electricity dated 20.05.2009
/18/ Report JE “Globinskiy Sugar Plant” on actual showings of calculating devices for recording electricity dated 20.07.2009
/19/ Report JE “Globinskiy Sugar Plant” on actual showings of calculating devices for recording electricity dated 20.08.2009
/20/ Report JE “Globinskiy Sugar Plant” LLC IIC "Poltavzernoprodukt" on actual showings of calculating devices for recording electricity dated 20.10.2009
/21/ Report LLC IIC "Poltavzernoprodukt" on actual showings of calculating devices for recording electricity dated 20.11.2009
/22/ Report LLC IIC "Poltavzernoprodukt" on actual showings of calculating devices for recording electricity dated 20.12.2009
/23/ Permit #5320610100 on air pollution emissions by stationary sources issued to LLC "Investment-industrial company "Poltavzernoprodukt" JE “Globinskiy Sugar Plant” dated 27/08/2009. Annex to the permit on air pollution emissions by stationary sources.
/24/ Permit for special water usage issued to LLC "Investment-industrial company "Poltavzernoprodukt" JE “Globinskiy Sugar Plant” dated 28/09/2009
/25/ Passport dated 07/07/2009. Diaphragm serial #5217
/26/ Passport. Weigh-scales АЦ-30. Serial #7654. Calibration date: 19/08/2009
/27/ Passport. Weigh-scales АЦ-30. Serial7659. Calibration date:

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/28/ Passport. Weigh-scales АЦ-60. Serial #2873. Calibration date: 19/08/2009
/29/ Passport. Weigh-scales АЦ-60. Serial #4247. Calibration date: 19/08/2009
/30/ Passport. Weigh-scales АЦ-60. Serial #4249. Calibration date: 19/08/2009
/31/ Passport. Weigh-scales АЦ-60. Serial #6938. calibration date: 19/08/2009
/32/ Passport. Weigh-scales АЦ-60. Serial #7907. Calibration date: 19/08/2009
/33/ Passport. Norma-S weighting controller. Serial #472
/34/ Passport. Norma-S weighting controller. Serial #451
/35/ Passport. Norma-S weighting controller. Serial #1160
/36/ Passport. Norma-S weighting controller. Serial #1475
/37/ Passport. Norma-S weighting controller. Serial #1476
/38/ Passport. Norma-S weighting controller. Serial #1477
/39/ Study manual "Rules of power stations and networks technical operation". Thermal technical part. Dated 1976
/40/ Regional corporate informational newspaper of LLC "Dovzhenko AC", "Restored land", #2 dated 14/01/2010
/41/ Acceptance certificate of Floutek-TM-BP-1" serial#1-873.
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/43/ Certificate on automated weighmeasuring complex calibration, serial #3118308. Calibration date: 18/08/2009
/44/ Certificate on automated weigh measuring complex calibration, serial #3118718. Calibration date: 18/08/2009
/45/ Certificate #2948 dated 12/08/2009 on measurement equipment working device calibration, serial #114,
/46/ Certificate #2943 dated 12/08/2009 on measurement equipment working device calibration, serial #300835
/47/ Certificate #2945 dated 12/08/2009 on measurement equipment working device calibration, serial #300836
/48/ Certificate #2946 dated 12/08/2009 on measurement equipment working device calibration, serial #600933
/49/ Certificate #2947 dated 12/08/2009 on measurement equipment working device calibration, serial #601003
/50/ Certificate #3283 dated 23/06/2009 on measurement equipment working device calibration
/51/ Certificate #3973 dated 05/08/2009 of measurement equipment working device calibration
/52/ Protocol #3973 of measurement complex calibration based on calculator Floutek TM, serial #1-873. JE "Yareskivskiy Sugar Plant", pipeline #1.
/53/ Passport to the diaphragm, registration #682 dated 07/07/2009
/54/ Certificate #3974 dated 05/08/2009 of measurement equipment

working device calibration

/55/ Certificate #3284 dated 23/06/2009 of measurement equipment working device calibration

/56/ Protocol #3974 of measurement complex calibration based on calculator Floutek TM, serial #1-873. JE "Yareskivskiy Sugar Plant", pipeline #2

/57/ Passport dated 07/07/2009 on the diaphragm, registration #0021

/58/ Certificate #71/09 dated 31/08/2009 on physical and chemical parameters of natural gas quality

/59/ Certificate #78/09 physical and chemical parameters of natural gas quality dated 31.09.2009

/60/ Certificate of physical and chemical parameters of natural gas dated 2007

/61/ Cost note on performed contract works/expenses for August 2007. JE "Globinskiyi Sugar PLant" CJSC "KRMP". Statement #18-04-4-50 on acceptance of performed contract work for August 2007. Beet tank БР1 construction. Resource report on the local cost estimate #18-04-4-50 (ВДЦ №1) (Ф2 №18-04-4-50).

/62/ Cost note on performed contract works/expenses for August 2007. JE "Globinskiy Sugar PLant" CJSC "KRMP". Statement #18-04-4-51 on acceptance of performed contract work for August 2007. Beet tank БР1 installation. Resource list on the local cost estimate #18-04-4-51 (ВДЦ №1) (Ф2 №18-04-4-51).

/63/ Cost note on performed contract works/expenses for August 2007. JE "Globinskiy Sugar Plant" CJSC "KRMP". Statement #18-05-6-16 on acceptance of performed contract work for August 2007. Beet slicer metal structures shelving unit installation. Resource report on the local cost estimate #18-05-6-16-3 (ВДЦ №1) (Ф2 №18-05-6-16).

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/65/ Cost note on performed contract works/expenses for August 2007. JE "Globinskiy Sugar Plant" CJSC "KRMP". Statement #18-08-6-05 on acceptance of performed contract work for August 2007. Pulp supply gallery unit construction. Resource list on the local cost estimate #1 (ВДЦ №1) (Ф2 №18-08-6-05).

/66/ Cost note on performed contract works/expenses for September 2007. JE "Globinskiy Sugar Plant" CJSC "KRMP". Statement #18-09-4-55 on acceptance of performed contract work for September 2007. Deep pressure station and pulp supply gallery equipment installation. Resource list on the local cost estimate #18-09 (Copy-1) (ВДЦ №1) (Ф2 №18-09-4-55).

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09-4-56 on acceptance of performed contract work for September 2007. Constructing of feeding mines for pulp presses Babbini H18N. Resource list on the local cost estimate #8/1 (ВДЦ №1) (Ф2 №18-09-4-56).

/68/ Cost note on performed contract works/expenses for September 2007 JE "Globinskiy Sugar Plant" CJSC "KRMP". Statement #18-09-4-57 on acceptance of performed contract work for September 2007. Additional work on pulp supply gallery construction and installation.

/69/ Cost note on performed contract works/expenses for September 2007. JE "Globinskiy Sugar Plant" CJSC "KRMP". Statement #18-09-6-05 on acceptance of performed contract work for September 2007. Deep extraction station frame construction.

/70/ Cost note on performed contract works/expenses for September 2007. JE "Globinskiy Sugar Plant" CJSC "KRMP". Statement #18-09-6-06 on acceptance of performed contract work for September 2007. Deep extraction station frame construction installation.

/71/ Cost note on performed contract works/expenses for September 2007. JE "Globinskiy Sugar Plant" CJSC "KRMP". Statement #18-09-6-07 on acceptance of performed contract work for September 2007. Assembling of the gallery pulp supply construction.

/72/ Measurement parameters of produced electricity ТГ-1 for 2007

/73/ Measurement parameters of produced electricity ТГ-2 for 2007

/74/ Measurement parameters of produced electricity ТГ-1 for 2008

/75/ Measurement parameters of produced electricity ТГ-2 for 2008

/76/ Measurement parameters of produced electricity ТГ-1 for 2009

/77/ Measurement parameters of produced electricity ТГ-2 for 2009

/78/ Photo - Maguin.SA 02800 charms serial #0131/01

/79/ Photo - Filter #50086 X1 L14893

/80/ Photo - Filter #50086 X2 L14893

/81/ Photo - Filter #50087 X1 L14867

/82/ Photo - EATON Type VMBF-0802-AS10-150D-11VCN-M serial #V12884

/83/ Photo - EATON Type VMBF-0802-AS10-150D-11VCN-M serial #V12885

/84/ Photo - EATON Type VMBF-0802-AS10-150D-11VCN-M serial #V128848

/85/ Photo - EATON Type VMBF-0802-AS10-150D-11VCN-M serial #V128849

/86/ Photo - Harrer & Kassen GmbH #2685

/87/ Photo - Harrer & Kassen GmbH #2683

/88/ Photo - Silver-Weibull #2259

/89/ Photo - Silver-Weibull #2374

/90/ Photo - Meter #325505

/91/ Photo - Meter #325508

/92/ Photo - Meter #333508

/93/ Photo - Meter #333504

/94/ Project documents of environmental impact assessment. Reconstruction of main block of beet processing department, station of deep extraction at JE "Yareskivskiy Sugar Plant" in Yareskivskiy village, Poltava region Shyshaky district. Statement of activity effects on environment.

/95/ Activity report, Determination of hydro geological conditions of the sedimentation tank area and organization of monitoring concerning possible pollution sources of geological environment at JE "Yareskivskiy Sugar Plant" in Yareskivskiy village of Poltava region Shyshaky district, dated 2005.

/96/ Interim activity report (I stage), Monitoring of possible pollution sources of geological environment at JE "Yareskivskiy Sugar Plant" in Yareskivskiy village of Poltava region Shyshaky district, dated 2006.

/97/ Activity report, Monitoring of possible pollution sources of geological environment at JE "Yareskivskiy Sugar Plant" in Yareskivskiy village of Poltava region Shyshaky district, dated 2006.

/98/ Documentation that justifies the amount of emissions in order to obtain the permission of air pollutants emission by stationary sources for LLC "Agrofirma "Dovzhenko" production unit JE "Yareskivskiy Sugar Plant" dated 30/06/2009

/99/ Permission #5325786001-4 dated 27/08/2009 on air pollutant emissions by stationary sources

/100/ Report on inventory of stationary sources of air pollutant emissions at LLC "Agrofirma "Dovzhenko" production unit JE "Yareskivskiy Sugar Plant" dated 2009

/101/ Technical report on instrumental laboratory control for compliance with the legislation concerning the maximum permissible limits of air pollutant emissions by stationary emission sources at the JE "Yareskivskiy Sugar Plant and LLC "Agricultural Produce Organisation "Tsukrovyk Poltavschyny" in 2007 according to the requirements of "Control schedule" and permit #5325786001 dated 02/11/2007 on the emissions (to the reporting materials according to the contract #89 dated 01/10/2007).

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#5325786001 dated 02/11/2007 and "Control schedule" for 2008 (to the reporting materials of the contract #138 dated 09/10/2008)
/104/ Protocol #212/2 dated 05/09/2009 of labour protection knowledge assessment commission meeting
/105/ Protocol #212/1 dated 06/09/2009 of labour protection knowledge assessment commission meeting
/106/ Labour protection training plan for workers.
/107/ Permit #21017 for waste allocation in 2007 (is not valid without limit) dated 01/07/2006
/108/ Limit #21017 for waste generation and allocation for 2007 (limit is not valid without permit).
/109/ Permit #21017 for waste allocation in 2008 (is not valid without limit) dated 01.07.2007
/110/ Limit #21017 for waste generation and allocation for 2008 (limit is not valid without permit).
/111/ Letter #2552/9-03 dated 24/09/2009 to the general director of LLC "AF "Dovzhenko" V. Skochok
/112/ Permit #21017 for waste allocation in 2009 (is not valid without limit) dated 01/07/2008
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/114/ Permit #21030 for waste allocation in 2010 (is not valid without limit) dated 01/07/2009
/115/ Limit #21030 for waste generation and allocation for 2010 (limit is not valid without permit).
/116/ Current individual balance standards of water consumption and wastewater of JE "Yareskivskiy Sugar Plant" LLC "AF "Dovzhenko" dated 2009
/117/ Permit #4001 for special water usage dated 28/09/2009
/118/ Plan of localization and elimination of emergency situations and accidents at SU "Iareskivskyi tsukrovyi zavod" of LLC "Agroindustrial association "Tsukrovyk Poltavschyny", located: Poltava region, Shyshaky district, Iareski village, 24 Novatoriv st.
/119/ Identification of potentially dangerous object at JE "Yareskivskiy Sugar Plant" CJSC "Agricultural Produce Organization "Tsukrovyk Poltavschyny", located: Poltava region, Shyshaky district, Iareski village, 24 Novatoriv st.
/120/ Note on results of potentially dangerous objects identification at Structural unit (SU) "Yareskivskiy Sugar Plant"
/121/ Permit #271.09.53-01.30.0 dated 28/08/2009 on the launching of increased risk equipment commissioning and operation (valid from 28/08/2009 till 27/08/2012)
/122/ Permit #170.03.53.ПР on the launching into operation
/123/ Declaration dated 20/12/2004 on safety of the increased risk object
/124/ Engineering works complex of pulp drying department

modernization of JE "Yareskivskiy Sugar Plant" LLC AF "Dovzhenko". calibration calculation of pulp drying devices and additional equipment 46.09/07/07-2-К of 2009

/125/ Operating manual. Membrane press-filter serial #50067, 50068, 50069.

/126/ Technical passport summary dated 01/09/2008

/127/ Beet processing and consumed gas monthly data

/128/ Invoice of the thermal power production for September 2009

/129/ Invoice of the thermal power production for October 2009

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/131/ Statement #06/ДП-66/09С of the acceptance-transferring of natural gas dated 31/10/2009

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/137/ Project statement dated 06/02/2007

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/141/ Statement of electricity accounting devices technical calibration dated 16/07/2009

/142/ Decision on work recommencement, object, machines, mechanisms, equipment operation #03/11-21 dated 15/02/2007

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/144/ Passport of grounding device of SU "Iareskivskyi tsukrovyi zavod", 10kV, serial #6648, dated 2007

/145/ Passport on switch and control gear, serial #6648, section 102, dated 2005.

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/153/ Protocol #102 dated 10/11/2005 of measuring current transformers 10 kV calibration

/154/ Protocol #101 dated 10/11/2005 of measuring current transformers 10 kV calibration

/155/ Protocol #74 dated 28/10/05 current transformer calibration, serial #18874

/156/ Passport on current transformer, serial #41176

/157/ Passport on current transformer, serial #13882

/158/ Passport on current transformer, serial #18721

/159/ Passport on current transformer, serial #18874

/160/ Passport on current transformer, serial #40281

/161/ Passport on current transformer, serial #6934

/162/ Report on electricity consumption for December 2009

/163/ JE "Yareskivskiy Sugar Plant" on actual data of electricity calculation devices dated 23/11/2009 till 23/12/2009

/164/ State observation statistics, Energy balance, energy equipment structure and report on power plant operation (electric generator units)

/165/ Transformer substation of energy system connection RU-10kV, T-R 10/6kV 2500kVA, T-R 10/0,4kV 630kVA, RU-0,4kV

/166/ Photo - ELVIN ET 3A5E7KLRT #11776

/167/ Photo - Meter Diris A40

/168/ Photo - Pressure sensor, serial #26150985FB

/169/ Photo - Pressure sensor, serial #2615OACBF

/170/ Photo - Complex ФЛОУТЕК-ТМ #1-873

/171/ Photo - Wavecom Fasttrack

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/176/ Passport 25080879.00002.002 ПС dated 2004. Automated carriage weight complex. Certificate of calibration of automated carriage weight complex serial #3118308. Calibration date 18/08/2009

/177/ Operating manual ВКФБ 000.02 НЕ. Булат-В2-150-Н strain-gauge carriage weighing machine
/178/ Calculation, made by ФЛОУТЕК-ТМ-ВР-1 measuring control complex, of natural gas consumed by pulp drying furnace
/179/ Report on the consumed gas amount
/180/ Operation data of Poltava OJSC plants for season 2009
/181/ Passport 24260059.002 PS-002d on multifunctional three phase electricity meter, serial #1776
/182/ Permit to the waste allocation in 2009 (it is not valid without limit) #03013 dated 01/07/2008
/183/ Limit #03013 for waste generation and allocation in 2009 (limit is not valid without permit) dated 28/08/2008
/184/ Passport #3981 of gas purifying device of SU "Globynskyi tsukrovyi zavod" (sugar drying department) dated 2006
/185/ Statement on technical condition calibration of dust and gas capturing device (source #13) dated 2006
/186/ Statement on technical condition calibration of dust and gas capturing device (source #13) dated 20/10/2006
/187/ Statement on actual operation data verification of gas purifying device by project (GPU work efficiency) at the emission (source #13) dated 12/11/2009. Registration #3981.
/188/ Statement on technical condition verification of gas purifying device (at the emission source #13) dated 12/11/2009. Registration #3981.
/189/ Passport #3982 of gas purifying device of SU "Globynskyi tsukrovyi zavod" (sugar drying department) dated 2006
/190/ Statement on work efficiency verification of dust and gas capturing device (source #14) dated 20/10/2006
/191/ Statement on technical condition verification of dust and gas capturing device (source #14) dated 2006
/192/ Statement on actual operation parameters verification of the gas purification device in compliance with project (work efficiency GOU) (on the emission source #14) dated 12/11/2009 Registration #3982.
/193/ Statement on technical condition verification of gas purifying device (on the emission source #14) dated 12/11/2009. Registration #3982.
/194/ Passport #3983 of gas purification device at SU "Globynskyi tsukrovyi zavod" (sugar drying department) dated 2006
/195/ Statement on technical condition verification of dust and gas capturing device (source #15) dated 2006
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/197/ Statement on actual operation parameters verification of the gas purification device in compliance with project (work efficiency GOU) (on the emission source #15) dated 12/11/2009. Registration #3983.

/198/ Statement on technical condition verification of the gas purification device (on the emission source #15) dated 12/11/2009. Registration #3983.
/199/ Documentation that justifies the amount of emissions in order to obtain the permission of air pollutants emission by stationary sources for LLC "Poltavazernoprodukt", JE "Globinskiy Sugar Plant"
/200/ Report on air pollutant emissions stationary sources inventory at LLC "Industrial and investment company "Poltavazernoprodukt" Production unit JE "Globinskiy Sugar Plant" dated 2009
/201/ Instrumental laboratory control technical report of the compliance to the legislation on maximum permitted air emissions by stationary emission sources at LLC "IIC "Poltavazernoprodukt" JE "Globinskiy Sugar Plant"ated 08/11/2009 according to the requirements of permit of the pollutant emissions into the air #5320610100-20 dated 27/08/2009
/202/ Instrumental laboratory control technical report of compliance to the legislation on maximum permitted air emissions by stationary emission sources at the industrial area of JE "Globinskiy Sugar Plant" CJSC "Agricultural Produce Organization "Tsukrovyk Poltavschyny" in 2008 according to the emissions permit #5320610100-2 dated 09/11/2007 section 5 compulsory requirements and "Control schedule" for 2008
/203/ Instrumental laboratory control technical report of compliance to the legislation on maximum permitted air emissions by stationary emission sources at JE "Globinskiy Sugar Plant" CJSC "Agricultural Produce Organization "Tsukrovyk Poltavschyny"in 2007 according to the requirements of "Control schedule" and emissions permit #5320610100-2 dated 09/11/2007
/204/ Warranty certificate #1/29.07 LLC "CAЄP Ukraine" serial #2222175 dated 29/07/2008
/205/ Technical report on development and implementation of technical actions connected with the improvement of the heating system at JE "Globinskiy Sugar Plant" dated 2008
/206/ Operational manual of periodic centrifuges (B): Type DCS800-S02-0450-04 serial #08247957, Type DCS800-S02-0450-04 serial #08247958, Type DCS800-S02-0450-04 serial #08247961, Type DCS800-S02-0450-04 serial #08247949.
/207/ User's manual, Semi B frequency converter, # EN 5350512-1A
/208/ Protocol #733 on acceptance-transferring calibration, serial #4ПФМ 250МУХЛ4 dated 08/07/2007. Certificate of acceptance, serial #95553
/209/ Passport of boiler (superheater, economizer) registration #657 dated 15/08/1977
/210/ Executive documentation on steam boiler repair БГМ-35М registration #657, stat. #4 dated 2007. Inventory of technical documentation.

/211/ Passport of boiler (superheater, economizer) registration #656 dated 15/08/1977. It was replaced on 03/07/1999
/212/ Executive documentation on steam boiler repair БГМ-35М registration #656, stat. #3 dated 2007. Inventory of technical documentation.
/213/ Passport of boiler (steam superheater, economizer) registration #655 dated 15.08.1977. It was replaced at 20/08/2007
/214/ Executive documentations on repair of boiler steam БГМ-35М registration #655, stat. #2 dated 2007 Inventory of technical documentation.
/215/ Note on lime stone and coal usage at JE "Globinskiy Sugar Plant" #31 dated 01/11/2009
/216/ Analysis of the furnace condition, daily data from 31 to 1 November 2008
/217/ Invoice requirement on warehouse materials turnover dated 30/10/2009
/218/ Decade data of JE "Globinskiy Sugar Plant"
/219/ Logbook of limestone consumption for shifts, daily data.
/220/ Passport. Fans and fan devices 1ВГ25, 2ВГ50, 2ВГ70В for cooling towers serial #01538 dated 2008
/221/ Amount of natural gas consumption for 2008
/222/ Report of results of fuel, heat and electricity consumption for January-December 2009
/223/ Report on heat power supply dated 17/01/2010
/224/ Report on heat power plant work for 2009
/225/ Electricity balance, electric equipment system and report on power plant operation (electric generator devices) for 2009
/226/ Working project of evaporating station reconstruction. General explanatory note Ш1-П1708.00.000 ПЗ. Volume 1 dated 2007.
/227/ 4-section condensate. Evaporating station 2007, 2nd copy.
/228/ 6-section condensate. Evaporating station 2007, 1st copy. Design tasks.
/229/ Photo - Maguin Slicer No.2 serial #340 92009301
/230/ Photo - Maguin Slicer No.1 serial #41 92009301
/231/ Photo - Drum beet-slicer, serial #4192009301
/232/ Photo - pressure transmitter, serial №010206G188
/233/ Photo - pressure transmitter, serial №001108H408
/234/ Photo - Automated control system
/235/ Photo - Generator reactive energy meter
/236/ Photo - Heater #1 of defecated juice
/237/ Photo - Heater #2 of defecated juice
/238/ Photo - Condensate collecting tank
/239/ Photo - Beet-slicer, serial #701981
/240/ Photo - Beet-slicer, serial #411980
/241/ Expenditure invoice #a-00000231 dated 03/11/2008
/242/ Expenditure invoice #a-00000239 dated 11/11/2008
/243/ Electricity balance, electric equipment system and report on

power plant operation (electric generator devices) for 2008 at JE "Veselopodilskiy Sugar Plant"
/244/ Working project. Deep extraction station at "Veselopodilskiy Sugar Plant", Semenivka district of Poltava region, dated 2007
/245/ Working project. Station of deep extraction, pulp drying, pulp granulation department and storehouse at "Veselopodilskiyi Sugar Plant" , Semenivka district of Poltava region, dated 2006. Pulp drying and pulp granulation department.
/246/ Working project. Station of deep extraction at "Veselopodilskiy Sugar Plant", Semenivka district of Poltava region. Cost estimation. Volume 2 dated 2006.
/247/ Invoice #285 dated 07/07/2009
/248/ Invoice #188 dated 30/05/2009
/249/ Invoice #189 dated 30/05/2009
/250/ Letter of attorney #72 dated 08/07/2208 on issuing valuables
/251/ Invoice #161 dated 21/05/2009
/252/ Invoice #162 dated 21/05/2009
/253/ Invoice #127 dated 07/05/2009
/254/ Invoice #160 dated 21/05/2009
/255/ Letter of attorney #857 dated 08/07/2009 on issuing valuables
/256/ Contract #4 dated 14/03/2006 on equipment production
/257/ Invoice #145 dated 20/05/2009
/258/ Contract #09-0308 dated 04/04/2008
/259/ Contract #4/04T/08 on technical work implementation for anti-corrosion protection of 4 diffusers ДС-12 dated 07/04/2008
/260/ Invoice #126 dated 07/05/2009
/261/ Invoice #235 dated 17/06/2009
/262/ Contractor's agreement #226/08-08 dated 01/08/2008
/263/ Permit #3024 on special water usage dated 09/2004
/264/ Permit #5324555100-9 on the air pollutant emissions by stationary sources dated 26/06/2008
/265/ Current individual balance norms of water consumption and wastewater. JE "Veselopodilsk Sugar Plant" of CJSC Agricultural Produce Organization "Tsukrovyk Poltavschyny" dated 2009
/266/ Tax payment dated 12/10/2009 for environmental pollution at JE "Veselopodilskiyi Sugar Plant" of CJSC IIC "Poltavazernoprodukt"
/267/ Tax payment dated 18/01/2010 for environmental pollution at JE "Veselopodilskiy Sugar Plant" of CJSC Agricultural Produce Organization "Tsukrovyk Poltavschyny"
/268/ Working project. Sugar drying department upgrading by sugar drying complex installation, capacity 500 t per day, Poland, building of area for juice saturation tank II for JE "Veselopodilskiy Sugar Plant", Semenivka district of Poltava region. Estimate documentation. Object #2177-02 dated 2008
/269/ Report on engineering and geological research for working project on technical reequipment of crystallization station of "Veselopodilskiy Sugar Plant" dated 2005

/270/ Working project on foundation building for two crystallizers in the process of technical reequipment of crystallizers station dated 2005. License AA #775887 inv. #720.
/271/ Working project on foundation building for two crystallizers in the process of technical reequipment of crystallizers station. Explanatory note dated 2005. License AA #775885 inv. #721
/272/ CDM: Recommendation Form for Small Scale Methodologies (version 01) (To be used for presenting questions/proposals/amendments to the simplified methodologies for small-scale CDM project activity categories). Date of meeting: 24-27 February 2009, SSC WG 19. Consideration of leakage due to transfer of equipment outside the project boundary in SSC methodologies (AMS-II.D)
/273/ Report ОЧ-Ц.0.06.04.2010 on international assessment of sugar plants (CJSC "Tsukrovyk Poltavschyny") equipment operation resources condition and determination
/274/ Acceptance statement on performed contract work for August 2007
/275/ Acceptance statement on performed contract work for March 2008
/276/ Acceptance statement on performed contract work for March 2008
/277/ Statement on the amount of consumed (transferred) energy during the period from 20/05/2009 till 20/06/2009 JE "Globinskiy Sugar Plant" of CJSC Agricultural Produce Organization "Tsukrovyk Poltavschyny"
/278/ Record on actual electricity measurement equipment indexes JE "Globinskiy Sugar Plant" during the period from 20/06/2009 till 20/07/2008
/279/ Record on actual electricity measurement equipment indexes JE "Globinskiy Sugar Plant" during the period from 20/04/2009 till 20/05/2008
/280/ Record on actual electricity measurement equipment indexes JE "Globinskiy Sugar Plant" during the period from 20/10/2009 till 20/11/2008
/281/ Record on actual electricity measurement equipment indexes JE "Globinskiy Sugar Plant" during the period from 20/11/2009 till 20/12/2008
/282/ Record on actual electricity measurement equipment indexes JE "Globinskiy Sugar Plant" during the period from 20/07/2009 till 20/08/2008
/283/ Record on actual electricity measurement equipment indexes JE "Globinskiy Sugar Plant" during the period from 20/08/2009 till 20/09/2008
/284/ Record on actual electricity measurement equipment indexes JE "Globinskiy Sugar Plant" during the period from 20/09/2009 till 20/10/2008
/285/ Statement dated 27/08/2009 on gas meter unit inspection and sealing

/286/ Statement dated 16/07/2009 on energy meter units technical test
/287/ Statement dated 16/07/2009 on sealing
/288/ Statement #11/ДП-57/09С(ц) dated 30/11/2009 on natural gas acceptance-transferring
/289/ Certificate dated 22/10/2009 on physical and chemical parameters of natural gas quality
/290/ Certificate #12/ДП-57/09С(ц) dated 31/12/2009 on natural gas acceptance-transmitting
/291/ Certificate #97/09 dated 30/11/2009 on physical and chemical parameters of natural gas quality
/292/ Statement on natural gas acceptance-transferring for September 2008 dated 01/10/2008
/293/ Statement on natural gas acceptance-transferring for October 2008 dated 31/10/2008
/294/ Statement #11/86/77/С-08 dated 31/11/2008 on natural gas acceptance-transferring
/295/ Statement #12/86/77/С-08 dated 31/12/2008 on natural gas acceptance-transferring
/296/ Operational Life Time of Old/Replaced Equipment at Globynsky Sugar Plant
/297/ Note on equipment (vertical crystallizer tank V=150m³, Babbini P-12 pulp press) being on a balance of CJSC "Tsukrovyk Poltavschyny"
/298/ Operational Life Time of Old/Replaced Equipment at Veselopodilskiyi Sugar Plant
/299/ Operational Life Time of Old/Replaced Equipment at Yareskivskiyi Sugar Plant
/300/ Contract #102806 dated 02/11/2006
/301/ Operational Lifetime of New Equipment Installed at Globynsky Sugar Plant in 2007-2008
/302/ Operational Lifetime of New Equipment Installed at Globynsky Sugar Plant in 2010
/303/ Operational Lifetime of New Equipment Installed at Globynsky Sugar Plant in 2012
/304/ Operational Lifetime of New Equipment Installed at Globynsky Sugar Plant in 2011
/305/ Operational Lifetime of New Equipment Installed at Iareskivsky Sugar Plant in 2007-2008
/306/ Operational Lifetime of New Equipment Installed at Iareskivsky Sugar Plant in 2010
/307/ Operational Lifetime of New Equipment Installed at Yareskivskiy Sugar Plant in 2011
/308/ Operational Life Time of New Equipment Installed at Yareskivskiy Sugar Plant in 2012
/309/ Sugar production amount at Globynsky Sugar Plant in 2000-2006
/310/ Sugar production amount at Veselopodilskiy Sugar Plant in 2000-2006

/311/ Sugar production amount at Yareskivskiy Sugar Plant in 2000-2006
/312/ Monthly average price for September-December (Globinskiy sugar plant)
/313/ Globynsky residual asset value calculation
/314/ Gas price (including transportation) at the Yareskivskiy Sugar Plant in 2006
/315/ Yareskivskiy Sugar Plant residual asset value calculation
/316/ Electricity bill #A436/09 dated 20/09/2009
/317/ Electricity bill #P436 dated 22/10/2007
/318/ Electricity bill #A436/10 dated 20/10/2008
/319/ Electricity bill #A436/11 dated 21/11/2007
/320/ Power invoice #ВП2-001782 dated 23/09/2008
/321/ Power invoice #ВП2-001827 dated 24/09/2007
/322/ Power invoice #ВП2-002226 dated 24/10/2007
/323/ Power invoice #ВП2-002089 dated 23/10/2008
/324/ Power invoice #ВП2-002359 dated 23/11/2008
/325/ Power invoice #ВП2-002611 dated 24/11/2007
/326/ Statement dated 13/09/2007 on conveying unit decommissioning
/327/ Statement dated 27/06/2008 on БОУ40-3-10 vacuum filter decommissioning
/328/ Statement dated 26/06/2008 on Т2М-СЦ2Б-12 beet slicer decommissioning
/329/ Statement #215 dated 05/11/2008 on ФПИ-1321К-01 centrifuge decommissioning
/330/ Statement #215 dated 05/11/2008 on ФПИ-1251Т-1 centrifuge decommissioning
/331/ Statement #132 dated 20/11/2009 on NUSA Nдв-110kW press granulating machine decommissioning
/332/ Statement #132 dated 20/11/2009 on antileakage cooling device type GTO 10*14 decommissioning
/333/ Statement #11 dated 04/08/2009 on decommissioning
/334/ Statement #8 dated 04/07/2009
/335/ Yareskivskiy prove of scrap metal
/336/ Expenditure invoice #PH-0000104 dated 09/07/2008
/337/ Invoice #42 dated 23/07/2008
/338/ Expenditure invoice #45 dated 30/07/2008
/339/ Certificate on Quality Management System in accordance with the requirements of DSTU ISO:9001:2009 issued to Globynsky Sugar Plant on 23/09/2011 valid 22/09/2016
/340/ Certificate on Quality Management System in accordance with the requirements of DSTU ISO:9001:2009 issued to Yareskivskiy Sugar Plant on 16/02/2010 valid 08/02/2014

Persons interviewed:

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

/1/ Aleksandr Tkachenko – Director, Yareskivskiy Sugar Plant

/2/ Nicolai Savchenko – Chief of Production and Technical Department, Yareskivskiy Sugar Plant

/3/ Vasiliy Tretyak – Chief of Instrumentation and Control Department, Yareskivskiy Sugar Plant

/4/ Viktoriya Tretyak – Engineer-Ecologist, Yareskivskiy Sugar Plant

/5/ Vladimir Solyanyk – Labour Protection Deputy Director, Yareskivskiy Sugar plant

/6/ Yaroslav Shulga – Chief Power Engineer, Yareskivskiy Sugar plant

/7/ Lubov Voronina – Director, Veselopodilskiy Sugar Plant

/8/ Anatoly Khandiy – Deputy Chief Engineer, Veselopodilskiy Sugar Plant

/9/ Oksana Ganzha – Chief Accountant, Veselopodilskiy Sugar Plant

/10/ Vladimir Khrlanchuk – Chief Power Engineer, Veselopodilskiy Sugar Plant

/11/ Vladimir Deryvedmyd – Director, Globynsky Sugar Plant

/12/ Sergey Tkachenko – Chief of Boiler House, Globynsky Sugar Plant

/13/ Vladimir Lazursky – Chief Engineer, Globynsky Sugar Plant

/14/ Andrey Semeryanyn – Engineer-Ecologist, Globynsky Sugar Plant

/15/ Nicolai Belous – Chief Power Engineer, Globynsky Sugar Plant

/16/ Valery Rashko - Energy Saving Lead Engineer , LLC Firm “Astarta-Kyiv”

/17/ Tatyana Zolotova – Standardization and Certification Specialist, LLC Firm “Astarta-Kyiv”

/18/ Michael Leering – Consultant, CSA Standards on behalf of GreenStream Network Plc

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BUREAU VERITAS CERTIFICATION HOLDING SAS

DETERMINATION PROTOCOL

Check list for determination, according JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
General description of the project				
Title of the project				
-	Is the title of the project presented?	The title of the project is: Energy Efficiency Programme at the plants of LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny **CAR 24.** Please, remove the horizontal strip from p.1 **CAR 45.** The page numbering is not in accordance with the template. **CAR 52.** According to the requirements of the Guidelines for Users of JI PDD Form, each annex shall be started with a new page. Make corrections concerning annex 3. **CAR 56.** Full names, version number and references to all methodological tools used in the PDD shall be provided.	CAR24 CAR45 CAR52 CAR56	OK OK OK OK
-	Is the sectoral scope to which the project pertains presented?	The sectoral scope of is (3) Energy demand.	CAR59	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 59. The activities implemented within the project don't refer to sectoral scope (4) Manufacturing Industries.		
-	Is the current version number of the document presented?	The current version number of the document is 2.4. **CAR 25.** The version of the PDD refers to the document previously submitted. Please change it for the current one.	CAR25	OK
-	Is the date when the document was completed presented?	The document is dated 12 July 2012 **CAR 26.** Please, change the date on which the current PDD version was submitted.	CAR26	OK
Description of the project				
-	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting date of the project; b) Baseline scenario; and c) Project scenario (expected outcome, including a technical description)?	Overall the project aims at reducing anthropogenic emissions by reducing the energy requirements of the plant's operation as well as introducing measures which lead to a reduced need for the calcination of limestone; through increased juice purity. The proposed JI project is aimed at the reduction of the emissions of carbon dioxide from the two main sources: (1) The combustion of fossil fuel and (2) Decomposition of limestone within the calcination process (as well as reduction emissions from coal combustion from the calcination process). Requirements a), b), c) to the content of Section A.2 are met.	CAR27 CL11	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 27. Is the calcination process meant on p.3? Please, correct that typo. **CL 11.** Please, explain why the project is considered a large scale?		
-	Is the history of the project (incl. its JI component) briefly summarized?	The history of the project (incl. its JI component) is briefly summarized		OK
Project participants				
-	Are project participants and Party(ies) involved in the project listed?	Party(ies) and project participants involved in the project are listed as follows: - Party A: Ukraine and its legal entity LLC "Agricultural Produce Organization "Tsukrovyk Poltavschyny"; - Party B: The Netherlands, Spain, Switzerland and its legal entity Stitching Carbon Finance (SCF)		OK
-	Is the data of the project participants presented in tabular format?	The data of the project participants are presented in due tabular format.		OK
-	Is contact information provided in Annex 1 of the PDD?	Contact information is provided in Annex 1 of the PDD.		OK
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Ukraine is indicated as a Host Party.		OK
Technical description of the project				
Location of the project				
-	Host Party(ies)	Ukraine		OK
-	Region/State/Province etc.	Poltava Oblast		OK
-	City/Town/Community etc.	Globyno, Veseliy Podil and Yareski.		OK
-	Detail of the physical location, including	The sugar plants are located at the following specific		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	information allowing the unique identification of the project. (This section should not exceed one page)	locations Globinskiy: 49.2427, 33.1322 Veselopodilskiy: 49.3615, 33.1156 Yareskivskiy: 49.5011, 33.5558		
Technologies to be employed, or measures, operations or actions to be implemented by the project				
-	Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule described?	PDD Section A.4.3 provides in-depth technical data of the equipment installed, technological processes and actions to be implemented by the project as well as the project implementation schedule separately for each of the three plants. **CL 19.** Please, provide explanation on whether the project uses state of the art technology (ies) or would the technology (ies) result in a significantly better performance than any commonly used technologies in Ukraine. (Take it, e.g. from the Additionality Assessment Section or supporting documents and insert in Section A.4.3.) **CAR 38.** Please, provide information on whether the project requires extensive initial training and maintenance efforts in order to work as presumed during the project period **CL 20.** Please, explain whether the project technology (ies) likely to be substituted by other or more efficient technologies within the project period.	CL19 CAR38 CL20 CL21	OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CL 21. Please, provide information on training and maintenance needs envisaged by the project.		
Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
-	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)	The proposed JI project is aimed at the reduction of the emissions of carbon dioxide from the two main sources: (1) The combustion of fossil fuel and (2) Decomposition of limestone within the calcination process (as well as reduction emissions from coal combustion from the calcination process). Overall the project will conduct series of energy efficiency measures aims at reducing the energy requirements of the plant's operation as well as introducing measures which lead to a reduced need for the calcination of limestone through increased juice purity. Consequently, the emissions of carbon dioxide will be reduced. **CAR 08.** Please, note that the length of Section A.4.3. can not exceed one page. Please, make respective corrections. **CAR 57.** There is no brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project in Section A.4.3.	CAR08 CAR57	OK OK
-	Is it provided the estimation of emission reductions over the crediting period?	The estimation of emission reductions over the crediting period is provided.		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
-	Is it provided the estimated annual reduction for the chosen credit period in tCO2e?	The estimated annual reduction for the chosen credit period is provided in tCO2e.		OK
-	Are the data from questions above presented in tabular format?	The data from questions above are presented in tabular format. Refer to Tables 7 and 8 in the PDD Section A.4.3.1.		OK
Estimated amount of emission reductions over the crediting period				
-	Is the length of the crediting period Indicated?	The length of the crediting period is indicated as 10years.		OK
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	**CAR 07.** Please, note that different tables are presented under the same number 7. Please, correct this.	CAR07	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	**CAR 01.** The project has no written approvals by the Parties involved. The project approval by the Host Party will be provided after the determination statement is issued by the AIE. **CAR 02.** LoE for the project mentions CJSC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" as a legal entity while PDD mentions its status as LLC. Regarding this, the explanation should be provided in PDD and the respective legal documents to confirm the current status of the enterprise are to be provided to the AIE. **CL 01.** Please, make clear where the supporting	CAR01 CAR02 CL01	OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		document #11 the PPs refer to can be found		
19	Does the PDD identify at least the host Party as a "Party involved"?	The PDD identifies the following Parties involved: - Ukraine and its legal entity LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny; - Netherlands, Spain, Switzerland and its legal entity Stitching Carbon Finance (SCF) **CAR 06.** The required format of the Table in section A.3., Tables 7 and 8 (A.4.3.1.), Table 7 (B.1.) is not preserved. Please, make corrections to the format accordingly.	CAR06	OK
19	Has the DFP of the host Party issued a written project approval?	Refer to **CAR 01.**		Pending
20	Are all the written project approvals by Parties involved unconditional?	Refer to **CAR 01.**		Pending
Authorization of project participants by Parties involved				
21	Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: − A written project approval by a Party involved, explicitly indicating the name of the legal entity? or − Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	The project participants will likely be authorized with the issue of the relevant project approvals. Pending a response to **CAR 01.**		OK
Baseline setting				
22	Does the PDD explicitly indicate which of	It is stated that "Baseline selection has been	CAR03	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the following approaches is used for identifying the baseline? − JI specific approach − Approved CDM methodology approach	determined and justified by following the Appendix B of JI Guideline30 and Guidance on Criteria for Baseline Setting and Monitoring version 03 developed by the JISC… In accordance with Paragraph 9(a) of the "Guidance on criteria for baseline setting and monitoring" it is used JI specific approach regarding baseline setting and monitoring". **CAR 03.** The valid version of the Guidance on criteria for baseline setting and monitoring at the time of PDD submission is 03. Please, make respective corrections to the PDD taking into considerations revisions to this document. **CAR 04.** The valid version of the Tool for demonstration additionality at the time of PDD submission is 0.6. Please, make respective corrections to the PDD taking into considerations revisions to this document **CAR 28.** In Section B.1. p.34 the full title of the Guidance should be provided. **CAR 30.** Please take into consideration that the description of a baseline scenario is to be provided in Section B.1. Section B.2. is meant for providing the additionality proofs. Make due corrections on p.37 in the subsection describing a baseline scenario.	CAR04 CAR28 CAR30	OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	A detailed theoretical description in a complete and transparent manner is provided for the applied JI specific approach. It includes the following steps: - Identification and listing of the likely future baseline scenarios and selection of the most plausible one; - Setting baseline based on historical data on fossil fuels, i.e. natural gas and coal, and resources consumption that allows to determine specific consumption per unit of manufactured product.; - Description of the methodology for estimation of greenhouse gas emissions; - Provision of data for each year of the historical period 2004-2006 at each of the plants on: • the amount of beets processed; • sugar quantity; • sugar content in sugar beets; • coal consumption; • natural gas consumption; • limestone consumption; • carbon emissions factor for natural gas; • net calorific value of natural gas; • carbon emission factor for coal; • net calorific value of coal; • carbon emission factor for CaCO3; • the percent of CaCO3 in raw material limestone; • carbon emission factor for MgCO3;		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		• the percent of MgCO3 in the raw material limestone - Identification and listing key factors for baseline setting.		
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one? (b) Taking into account relevant national and/or sectoral policies and circumstance? − Are key factors that affect a baseline taken into account? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (d) Taking into account of uncertainties and using conservative assumptions? (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure? (f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate?	Baseline is established: (a) By listing and describing likely future scenarios available for the project owner LLC "Agricultural Produce Organization "Tsukrovyk Poltavschyny"and selecting the most plausible one. Three alternatives were listed and assessed. Based on the alternatives analysis taking into account the results of the investment, barrier and common practice analyses presented in Section B.2, a conclusion is made that *"The baseline scenario is the continuation of current equipment and practice. Baseline scenario foresees further use of existing equipment with undertaking of planned maintenance and renovation works without sufficient capital expenditures".* Taking into account relevant national and/or sectoral policies and circumstance regarding a number of Laws of Ukraine, a few regulations of the Cabinet of Ministers, scientific-technical sectoral programs in field of sugar production sector etc.(All the governmental regulations are given at the internet site of National Association of Sugar Producers of Ukraine - http://sugarua.com/ua/legislative_base), as well as key appropriate factors that affect a baseline, such as economic situation in sugar market, availability of capital for the project implementation; local availability	CAR05 CL02 CAR16 CAR32	OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		of project technologies and techniques, skills and know-how, prices and availability of natural gas and coal, national expansion plans for the energy sector, national agricultural policies; (b) In a generally transparent manner with regard to the choice of the JI specific approach and related assumptions, parameters, data sources and key factors for baseline setting, which are listed in tabular format in Section B.1. (c) Taking into account of the uncertainty and using a conservative (the examples are provided). (d) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure. (e) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring". **CAR 05.** Please, list and describe the key factors influencing the baseline in accordance with the requirements of paragraphs 25 and 26 of the Guidance on criteria for baseline setting version 03. **CL 02.** Please, explain in what way the uncertainties and conservative assumption were taken into consideration while setting the baseline. **CAR 16.** Please, present more specifically in Section B.1. the time for determination as well as the sources		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		of data where they are mentioned as “Once” and “Appropriate data collected as part of JI project”. Make them consistent with the data presented in Tables D.1.1.1. and D.1.1.3. of the PDD. **CAR 32.** In accordance with the GUIDANCE ON CRITERIA FOR BASELINE SETTING AND MONITORING version 03 paragraphs 36 and 41, the project participants are encouraged to apply the country-specific values of the parameters subject to monitoring, i.e. in conformity with the latest National Inventory Report of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases in Ukraine for 1990-2009, Ministry of Ecology and Natural Resources of Ukraine, State Environmental Investment Agency of Ukraine.- Kyiv, 2011 Please, make corrections in respective PDD sections.		
24	If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants in line with 23 above?	N/A		
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	Emission factors for coal, natural gas, $CaCO_3$ and $MgCO_3$ are used with appropriate justification in the PDD Section B.1. and Annex 2.		OK
Approved CDM methodology approach only_Paragraphs 26(a) – 26(d)_Not applicable				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".	The analysis of alternatives, investment, barrier and common practice analyses were undertaken to demonstrate additionality of the project. **CAR 19.** The developer is applying JI specific approach. For this reason the application of the Tool for the Demonstration and Assessment of Additionality is not mandatory. At the same time the developer refers to the Tool for the Demonstration and Assessment of Additionality" (Version 05.2), Annex: "Guidance on the Assessment of Investment Analysis (version 02) in context of the investment analysis. Please note that the version of the document referred to is too old. Several newer revisions have been issued. The version to be used at present is the Guidance on the Assessment of Investment Analysis (version 05) approved 15.07.2011 (hereinafter referred as Guidance). Please note that now this is the separate document and the reference to the Additionality Tool is unnecessary.	CAR19	OK
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	**CL 12.** Please provide a more clear description of the approach chosen to proof additionality. The choice of approaches available for demonstrating additionality is provided in GUIDANCE ON CRITERIA FOR	CL12	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		BASELINE SETTING AND MONITORING version 03.		
29 (b)	Are additionality proofs provided?	To prove additionality the analysis of alternatives, investment, barrier and common practice analyses were undertaken. Investment analysis is performed on excel spreadsheet made available to AIE. As a summary of investment analysis, the project IRR of each plant in the condition without and with Emission Reduction Sales leads to the conclusion that addtionality is reliable, the project activity is not financially attractive without the Emission Reduction Sales. The sensitivity analysis of ±10% changes of natural gas prise, the capital expense and the sugar production gave the same results. The application of barrier analysis, including technological, financing and social barriers proves that the proposed JI project activity is not the baseline scenario and is additional. Common practice analyses showed that the proposed project activity is not a common practice within a sector in the applicable geographical area. **CAR 20.** Please note that the Guidance 12 introduces the methodology how the benchmark IRR shall be established: "*Local commercial lending rates or weighted average costs of capital (WACC) are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for an equity IRR. Benchmarks supplied*	CAR20 CAR21 CAR22 CAR23 CAR40 CAR41	Ok OK OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		by relevant national authorities are also appropriate if the DOE can validate that they are applicable to the project activity and the type of IRR calculation presented." I kindly ask you to follow the methodology prescribed by the Guidelines. **CAR 21.** For estimation of the inflation Guidance suggests: "In situations where an investment analysis is carried out in nominal terms, project participants can convert the real term values provided in the table below to nominal values by adding the inflation rate. The inflation rate shall be obtained from the inflation forecast of the central bank of the host country for the duration of the crediting period. If this information is not available, the target inflation rate of the central bank shall be used. If this information is also not available, then the average forecasted inflation rate for the host country published by the IMF (International Monetary Fund World Economic Outlook) or the World Bank for the next five years after the start of the project activity shall be used." For this reason I suggest using inflation forecast for 2007 in Euro area which can be found in IMF WEO published April 2006. Reference: http://www.imf.org/external/pubs/ft/weo/2006/01/pdf/weo0406.pdf page 188. Fortunately the value is the same as applied before - 2.2%. **CAR 22.** Excel spreadsheets enclosed seem to be		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		incorrect as the IRR values contained in the tables are vastly different from those indicated on the PDD page 52. In addition IRR calculations and sensitivity analysis for Veselopodilskiy plant are absent. Please re-check file Tsukrovyk_Calculations_BEET_FINAL_FEbr28__2012.xls **CAR 23.** In the section devoted to demonstration of the additionality the developer does not follow the Guidance for the Assessment of Investment analysis (hereinafter referred as the Guidance) Although the guidance is not mandatory taking into account the fact that the developer does not introduce any new methodology it is recommended to adhere to the guidance. **CAR 40.** Please note that IRR calculated in financial model are already calculated in real terms not nominal because inputs do not account for inflation (fixed prices are used for all project period). Thereby IRR values do not need any further negative adjustment using inflation rate. In contrast the benchmark value which is nominal value shall be converted to real terms using the formula you have indicated on page 51 of the PDD (1+0,1555)/(1+0,022)-1 = 13,06%. This value 13,06% shall be employed as the benchmark to be compared with project IRR. Please note again that you do not		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		have to adjust IRR for inflation. **CAR 41.** The table 10 on page 54 shows the IRR values for +-10% sugar production scenarios mixed up.		
29 (c)	Is the additionality demonstrated appropriately as a result?	All steps of the applied Tool are satisfied. The proposed JI project activity is not the baseline scenario and is additional.		OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	All explanations, descriptions and analyses are made in accordance with the selected tool.		OK
Approved CDM methodology approach only_ Paragraphs 31(a) – 31(e)_Not applicable				
Project boundary (applicable except for JI LULUCF projects				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are (i) under the control of the project participants, (ii) reasonably attributable to the project, and (iii) significant. These are: - Baseline CO_2 emissions as a result of natural gas combustion in boilers of CHP; - Baseline CO_2 emissions as a result of natural gas combustion in pulp drier; - Baseline CO_2 emissions as a result of coal combustion in the lime kilns; Baseline CO_2 emissions as a result of limestone	CAR29 CAR31 CL13 CAR42	OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		consumption in the lime kilns; - Project CO2 emissions as a result of natural gas combustion in boilers of CHP ; - Project CO2 emissions as a result of natural gas combustion in pulp drier; - Project CO2 emissions as a result of coal combustion in the lime kilns; - Project CO2 emissions as a result of limestone consumption in the lime kilns. **CAR 29.** The description of the project boundaries should be provided in Section B.3. Please make appropriate corrections on p.37 of the PDD. **CAR 31.** Please note that carbon oxide is not a greenhouse gas, it shouldn't be included to the potential sources of GHG emissions. The description of the GHG sources along with justification for the GHG inclusions or exclusions is to be provided in Section B.3. that describes the project boundaries. Make due corrections on p.37 in the subsection describing a baseline scenario. **CL 13.** In accordance with paragraph 14 of the GUIDANCE ON CRITERIA FOR BASELINE SETTING AND MONITORING version 03, the project boundary shall encompass all anthropogenic emissions by sources of GHGs which are:		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		(i) Under the control of the project participants; (ii) Reasonably attributable to the project; and (iii) Significant, i.e. the source accounts, on average per year over the crediting period, for more than 1 per cent of the annual average anthropogenic emissions by sources of GHGs, or exceeds an amount of 2,000 tonnes of CO2 equivalent, whichever is lower. Please provide more clear justification for the exclusion of the GHGs other than CO2. Please explain what "insufficient source" means in this context. **CAR 42.**The detailed description of project boundaries is to beprovided in Section B.3. Please, correct the mistake on p.37.		
32 (b)	Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?	Project boundary is defined on the basis of case-by-case assessment of different emission sources.		OK
32 (c)	Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	Delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD by using Figure16 and Table 13.		OK
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	All gases and sources included are explicitly stated; refer to 32 (a) above. All exclusions made are appropriate as conservative.	CAR33 CAR34	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 33. Section B.3. requires the description of the potential leakage for the project. **CAR 34.** All information should be presented in English. Please make due corrections to Figure 16.		
Approved CDM methodology approach only_Paragraph 33_ Not applicable				
Crediting period				
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	The starting date of the project is 02/11/2006. **CAR 09.** Please, indicate a specific starting date of the project. **CAR 58.** Dates in Section C are provided in a wrong format. **CL 24.** Please, provide a document proving the starting date of the project Please, alsomention it in the PDD.	CAR09 CAR24 CAR58	OK OK OK
34 (a)	Is the starting date after the beginning of 2000?	Refer to 34 (a).		OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	Operational lifetime is defined as 10 years (120 months). **CAR 39.** In order to make sure that the crediting period shall not extend beyond the operational lifetime of the project and taking into consideration that some of the equipment to be installed in the course of the project has been formerly used, please, provide transparent	CAR39 CL18	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		and persuasive arguments that the existing equipment at all sugar plants is able to continue normal operation at least until the end of the crediting period as it is stated in the PDD **CL 18.** Please provide information on the method of assessment applied by "TEPLOKOM" in its independent expert Report to determine the project equipment operational lifetime, as its description is not available there.		
34 (c)	Does the PDD state the length of the crediting period in years and months?	The length of crediting period is defined as 10 years (120 months), including (01/01/2008-12/31/2012) – Kyoto period (01/01/2013-12/31/2017) – Post-Kyoto period		OK
34 (c)	Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	Starting day is 02/11/2006 which is the date of signing the contract No 102806 with the company "PERRY VIDEX" LLC for the purchase of 7 pulp presses manufactured by "Babbini", type P-18 (Refer to the document listed under No 4 in Section 7 References Category 2 Documents)		OK
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	The crediting period is defined as from 01/01/2008 till 31/12/2017.		OK
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party	The estimates of emission reductions are presented separately for those until 2012 and those after 2012?		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?			
Monitoring plan				
35	Does the PDD explicitly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology approach	It is explicitly indicated that a JI specific approach is chosen. **CL 04.** Please, improve the statement in the first paragraph of Section D.1. so as to make it more understandable. **CAR 10.** Please, clearly provide statement as well as the respective references (indicating paragraphs of the documents referred to or quotation from them) to prove this statement as for the approach chosen by the PPs for setting the baseline, demonstrating additionality and establishing the monitoring plan. **CAR 11.** The statement in Section D.1. reads the following: "The monitoring methodology specifically asks that in the case of replacement, modification and retrofit measures, for the purpose of energy efficiency, the monitoring shall consist of: a) Documenting the specifications of the equipment replaced; b) Metering the energy use of the industrial or mining	CL04 CAR10 CAR11 CL09 CAR35 CAR36 CL14 CAR43 CAR44 CAR46	OK OK OK OK OK OK OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		and mineral production facility, processes or the equipment affected by the project activity; c) Calculating the energy savings using the metered energy obtained from subparagraph (b)" It is taken from the justification of the methodology used for the previous PDD version and can't be applied to the current version as it is a large scale project now. Please, provide justification of the monitoring methodology used for the present version of the PDD. **CL 09.** Please, specify the guidance methodology the Project Participants refer to in Section D. of the PDD **CAR 35.** The format in Section D.1.1.1 is altered. Please, bring it in compliance with the required template. **CAR 36**. Please mention in Section D.1.3.1. that it was left blank on purpose **CL 14.** Please clarify what the abbreviation HPP stands for. **CAR 43.**The format of the template has been changed in Section D. This whole section should be presented in a landscape layout. **CAR 44.** In Section D.1. correct the name of the approach chosen for the establishing monitoring plan		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 46. There is no Table under number 13. Please delete it and adjust the numbering of tables throughout the PDD accordingly.		
JI specific approach only				
36 (a)	Does the monitoring plan describe: − All relevant factors and key characteristics that will be monitored? − The period in which they will be monitored? − All decisive factors for the control and reporting of project performance?	The monitoring plan describes: - data to be monitored: • carbon emissions factor for natural gas • carbon emission factor for coal • carbon emission factor for CaCO3 • carbon emission factor for MgCO3 • natural gas consumption; • coal consumption; • limestone consumption; • net calorific value of natural gas; • net calorific value of coal; • percent of CaCO3 in raw; • percent of MgCO3 in raw; • the mass of raw material limestone burned in the kiln; • sugar production; • sugar content in sugar beets. (Refer to Table 14, as well as the PDD Sections D.1.1.1 and D.1.1.3); - the period in which they will be monitored: monthly and annually; - all decisive factors for the control and reporting of	CL08 CAR18	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		project performance: the internal data of the project owner; quality control (QC) and quality assurance (QA) procedures; the operational and management structure that will be applied in implementing the monitoring plan. **CL 08.** Please, explain why several variables for monitoring presented in Table D.1.1.1. are mentioned twice **CAR 18.** Please, delete the numbering for Tables 13 and 14 of the PDD as their format is determined by the JI PDD Form.		
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	The monitoring plan specifies the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions to be monitored. For data to be monitored, please refer to 36(a) above. For constants please refer to the next paragraph. **CAR 17.** Please, provide the full names for parameters 8 and 9 presented in Table D.1.1.1. **CAR 47.** The sources of data for the carbon emission factor of natural gas, coal, CaCo3 and MgCo3 are inconsistent in Section D.1.1.1., Annex 2 and Section B.1. (Table 9). Please bring them in line.	CAR17 CAR47	OK OK
36 (b)	If default values are used:	Constants used are the default values of the		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− Are accuracy and reasonableness carefully balanced in their selection? − Do the default values originate from recognized sources? − Are the default values supported by statistical analyses providing reasonable confidence levels? − Are the default values presented in a transparent manner?	parameters as follows: • GWP for methane. • carbon emissions factor for natural gas • carbon emission factor for coal • carbon emission factor for CaCO3 • carbon emission factor for MgCO3 • net calorific value of natural gas • net calorific value of coal The default values originate from recognized sources and are presented in a transparent manner.		
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	The monitoring plan clearly indicates QC and QA procedures that are to be followed for those values that are to be provided by the project participants. **CL 25.** It is stated in Section D.1. on p.65 that documentation on some parameters subject to monitoring should be collected and archived at the plants. Is it a full list of parameters on which documentation will be collected and archieved?	CL25	OK
36 (b) (ii)	For other values, − Does the monitoring plan clearly indicate the precise references from which these values are taken? − Is the conservativeness of the values provided justified?	The monitoring plan provides clearly indicates the precise references from which these default values are taken (National Inventory Report of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases in Ukraine for 1990-2009)		OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed	All data are available		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	if expected data are unavailable?			
36 (b) (iv)	Are International System Unit (SI units) used?	International System Units (SI units) are used.		OK
36 (b) (v)	Does the monitoring plan note any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring?	The monitoring plan notes parameters, coefficients, variables, etc. that are used to calculate baseline emissions based on the actual historic data on specific consumption of fuel and resources for the 3 year period (2004-2006) before the project start (refer to Table 9 of the PDD Section B.1.)		OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	There is consistency between parameters, coefficients, variables, etc. used in baseline and monitoring plan.		OK
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"?	The monitoring plan draws on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring" where appropriate.		OK
36 (d)	Does the monitoring plan explicitly and clearly distinguish: (i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination? (ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting	Description of the monitoring plan in Section D.1 explicitly and clearly distinguishes: (i) Refer to Table 14 of the PDD. (ii) N/A. iii) Refer to Table 15 of the PDD. **CAR 12.** According to the Guidelines for users of the JI PDD Form version 04, it is required that data and parameters for monitoring be explicitly and clearly distinguished according to the following three categories: a) Data and parameters that are not monitored	CAR12	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination regarding the PDD; b) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination regarding the PDD; and c) Data and parameters that are monitored throughout the crediting period. Please, distinguish them in Section D. of the PDD		
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	Yes, the methods used, such as direct measurement with a bag accounting system to weight sugar produced, a semi-automatic line to weight sugar content in sugar beets, an automated measuring-management meter to account natural gas consumed, mechanical scales to weigh coal and limestone; coal and limestone suppliers' certificates, as well as calculations with different recording frequency(monthly and annually) and electronic or paper recording method.		OK
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project	These are Formulae presented in Section D of the PDD: (1) – (4) - for project emissions, (5) – (12) - for baseline emissions,	CAR48 CAR49	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?	N/A, (13) - for emission reduction. **CAR 48.** In sections D.1.1.2. and D.1.1.4 there are words not translated into English. Please correct this. **CAR 49.** In Section D.1.1.2. change the order of parameters in formula (1) to make it consistent with the order of parameters description and the formula used for the baseline emissions calculation.		
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Yes		OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Consistent variables, equation formats, subscripts etc. are used.		OK
36 (f) (iii)	Are all equations numbered?	Yes.		OK
36 (f) (iv)	Are all variables, with units indicated defined?	Yes.		OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Various measures have been conducted to lead to the baseline with the less uncertainties and the conservative assumption. For instance, the forecast of sugar production is based on the average sugar/beet rations during 2004-2006.		OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	Uncertainties are taken into account and mentioned in the tables 11-13 QA/QC Procedures for the plants. **CL 05.** Please, make clear in the PDD in what way the level of uncertainty of the data and parameters subject to monitoring was identified. Please, demonstrate it	CL05	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		with an example.		
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	There is consistency between the elaboration on the baseline scenario and calculating the baseline emission in the monitoring plan and on spreadsheet.		OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	N/A		OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Yes, the monitoring is in line with current operational routines.		OK
36 (f) (vii)	Are references provided as necessary?	References are provided as necessary		OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	All key assumptions are explained in a transparent manner if needed.		OK
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	The baseline scenario foresees the same quantity of processed beets as project scenario. Taking into account that the final sugar production depends upon not only beets processing technology, but also upon the sugar content in sugar beets, the approach foresees exclusion of defined effect. The conversion factor of sugar yield to the project level is used for this. The actual (ex post) data on sugar production and sugar content in beets is used to determine baseline emissions.		OK
36 (f) (vii)	Is the uncertainty of key parameters described and, where possible, is an uncertainty range at 95% confidence level for key parameters for the calculation of emission reductions or enhancements of	The uncertainty of key parameters is described in Tables 16-18 of the PDD (QA/QC Procedures) for each of the three project plants. The level of confidence is assured by the QA/QC Procedures, such as calibration of the project equipment conducted by the state		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	net removals provided?	authorized enterprises, performing periodic checks and test calibration with the use of an sampling measuring equipment, by applying automated devices capable of measuring data on a momentary, hourly, daily and monthly base. Monthly records and billing for gas consumption are taken from this metering device, and is certified by the gas supplier.		
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?	N/A		
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	N/A		
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available upon request?	QC/QA procedures are outlined in PDD Section D.2. These are routine enterprise procedures. The established QA/QC procedures ensure proper handling of collected data as well as guarantee disciplined data recording and equipment calibration. The Tables 16-18 of the PDD Section D.2. outline the procedures required for proper management of the project information at each plant to increase transparency of the quality assurance and quality control measures of the project.	CL15 CL16 CAR50 CAR51 CL03	OK OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CL 15. Please clarify whether there is an automatic data collection system functioning at the enterprises? If yes, please, provide its description. **CL 16.** Are there any Quality Management Systems implemented within the enterprise? **CAR 50.** It is stated in the PDD Section B.2. that the project faces a social barrier due to the necessity in qualified personnel to operate the project equipment, to implement the monitoring procedure. Are there any measures envisaged in this respect? Please describe them in the respective PDD section. **CAR 51**. In accordance with the requirement of paragraph 37 of JI Guidelines, as well as paragraph 42 of the Guidance on criteria for baseline setting and monitoring version 03, it shall be stated in the MP that data monitored and required for determination are to be kept for two years after the last transfer of ERUs for the project. **CL 03.** Please, make clear in what way the requirement on data saving will be met. Are there special orders issued within the plants on procedure on data keeping and saving, assigning the roles and responsibilities and communicated to the personnel involved in the project?		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	The operational and management structure that the project participants(s) will implement in order to monitor emission reduction generated by the project is described in sufficient detail in PDD Section D.3. Figure 17. provides organizational chart of the management structure in the company for the JI project. Table 18 presents organizational structure of gathering and achieving of data for JI project at Globinskiy and Yareskivskiy sugar plants **CAR 13.** Please, give the title of the organisational chart presented in Section D.3.of the PDD. **CAR 14.** Please, provide the name of a Project Participant presented in the chart in Section D.3. as a Leader and a Technical Expert **CL 06.** Please, describe a system for data collection for the project starting with the emission sources and ending up with their compilation and archiving. **CL 07.** Please, explain whether there is a system of automatic data collections in the plants involved in the project. Provide the name and description of those systems, if applicable. **CAR 37.** In Section D.3. bring the name of the LHV parameter in conformity with the one used in the tables of parameters.	CAR13 CAR14 CL06 CL07 CAR37	OK OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	Monitoring techniques are in line with current operation routines at the enterprise.		OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	Tables D.4., D.1.1.1 and D.1.1.3 provide compilation of all data needed to monitor project and baseline emissions.		OK
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?	In accordance with the requirement of paragraph 37 of JI Guidelines, as well as paragraph 42 of the Guidance on criteria for baseline setting and monitoring version 03, it is stated in the MP that data monitored and required for determination are to be kept for two years after the last transfer of ERUs for the project.		OK
37	If selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	N/A		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Approved CDM methodology approach only_Paragraphs 38(a) – 38(d)_Not applicable				
Applicable to both JI specific approach and approved CDM methodology approach_Paragraph 39_Not applicable				
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	No leakage was identified outside the project boundary. As the energy efficiency project, the main potential of leakage emission is the continuously used of the replaced equipment in another user outside the project boundary. In the project activity the replaced equipments will not be transferred to another user and continue the service. The reason is that these pieces of equipments keep functional only when they serve as a part of the whole system. They are useless after they are replaced.		OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	N/A		OK
Approved CDM methodology approach only_Paragraph 41_Not applicable				
Estimation of emission reductions or enhancements of net removals				
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	Assessment of emissions in the baseline scenario and in the project scenario is chosen.		OK
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the	PDD provides: (a) ex ante estimates of emissions for the project scenario (Section E.1);	CL10	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	project scenario (within the project boundary)? (b) Leakage, as applicable? (c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	(b) N/A; (c) ex-post estimates of emissions for the baseline scenario (Section E.4); (d) ex ante estimates of emission reductions adjusted by leakage (Section E.6). **CL 10.** Please, provide the actual gas savings achieved by each plant in 2009, 2010 and 2011		
44	If the approach (b) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emission reductions or enhancements of net removals (within the project boundary)? (b) Leakage, as applicable? (c) Emission reductions or enhancements of net removals adjusted by leakage?	N/A		OK
45	For both approaches in 42 (a) Are the estimates in 43 or 44 given: (i) On a periodic basis? (ii) At least from the beginning until the end of the crediting period? (iii) On a source-by-source/sink-by-sink basis? (iv) For each GHG? (v) In tones of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the	(a) Estimates in 43 are given on the periodic basis, from the beginning until the end of the crediting period, in tones of CO2 equivalent, on a source-by-source basis, for each CO2. (b) The formulae used in PDD are consistent. (c) Key factors described in Section B.1. of the PDD influencing the baseline emissions and the activity level of the project and the project emissions are taken into account, as appropriate. (d) Data sources used for calculating the estimates are clearly identified, reliable and transparent. (e) Default values of carbon emissions factor for	CL17 CL22 CL23 CAR53 CAR54 CAR55	OK OK OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	Kyoto Protocol? (b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or 44, are key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project taken into account, as appropriate? (d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent? (e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice? (f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner? (g) Are the estimates in 43 or 44 consistent throughout the PDD? (h) Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or	natural gas, coal, CaCO3, MgCO3, NCV_{NG}, NCV_{COA} are taken from identified sources. (f) Estimation in 43 is based on conservative assumptions and the most plausible scenario in a transparent manner. (g) Estimates in 43 are consistent throughout the PDD. **CL 17.** Table 1 in Section A.4.1. provides the expected mass of beet production at all three Tsukrovyk sugar plants for 2008-2017. Please provide information on the beet production actually achieved for the past period split by years. **CL 22.** Please provide in a clear and transparent way justification that conservative assumptions have been used to calculate project GHG emissions **CL 23.** Please, provide additional information on the following documents referred to in the PDD: Energy Efficiency Programme, 2006 Annual Report, IPO Prospectus **CAR 53.** The expected volume of beet produced at Astarta agriculture provided in Section E. is presented in Table 19. Please make corrections respectively. **CAR 54.** Delete the last sentence in Section E. as it doesn't refer to it.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?	**CAR 55.** Data on Forecast Beet Production has been presented in Section A.4.2.Table 1. Please delete it from Section E.		
46	If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	Illustrative ex-ante estimation of emission reduction is made on the excel spreadsheet made available to AIE.		OK
Approved CDM methodology approach only_Paragraphs 47(a) – 47(b)_Not applicable				
Environmental impacts				
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party?	In compliance with the national legislation and regulation, Tsukrovyk sugar plants collect and record on a regular basis data on air pollution, water use, solid wastes generation and disposal. The PDD lists and attaches documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party, such as: The projects do not have negative transboundary pollution impacts on the territory of neighboring foreign countries. **CAR 15.** In accordance with the requirement of the Guidelines for users of the JI PDD Form version 04, the PPs are to list and attach the documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party.	CAR15 CL26	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CL 26. Are there any more recent reports on test measurements confirming that the air pollution level at the project plants is within the established norms?		
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?	PDD Section F.2 provides a list of EIAs performed for each plant. It provides evidence that the project is in compliance with the national environmental legislation and regulations. The expert conclusion on the EIA documents was approved by the Poltava Regional Department of Environmental Protection.		OK
Stakeholder consultation OK				
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	Due to the nature of the modernization measures being implemented at the plants, public consultations are not required by Ukraine's national legislation and, therefore, have not been conducted.		OK
Determination regarding small-scale projects (additional elements for assessment)_Paragraphs 50 - 57_Not applicable				
Determination regarding land use, land-use change and forestry projects _Paragraphs 58 – 64(d)_Not applicable				
Determination regarding programmes of activities_Paragraphs 66 – 73_Not applicable				

Table 2 Resolution of Corrective Action 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	Determination team conclusion
CAR 01. The project has no approval of the host Party.	-	Conclusion is pending. The approval should be obtained following the determination of the project.	Pending.
CAR 02. LoE for the project mentions CJSC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" as a legal entity while PDD mentions its status as LLC. Regarding this, the explanation should be provided in PDD and the respective legal documents to confirm the current status of the enterprise are to be provided to the AIE.	-	CJSC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" was renamed to LLC "Agricultural Produce Organization" Tsukrovyk Poltavschyny" in accordance with Resolution of Poltava District Administrative Court dated 19.10.2011 (Act № 2a-1670/7753/11) (attachment 1). Relevant changes were made to the PDD (page 34).	Issue is closed.
CL 01. Please, make clear where the supporting document #11 the PPs refer to can be found	-	The supporting document # 11 (LoE) is attached (attachment 2).	Issue is closed.
CAR 03. The valid version of the Guidance on criteria for baseline setting and monitoring at the time of PDD submission is 03. Please, make respective corrections to the PDD taking into considerations revisions to this document	22	The Guidance on criteria for baseline setting and monitoring version 03 has been well complied in the revised PDD. Section B.2 and Section D have been revised with respect to the Guidance.	Issue is closed.

CAR 04. The valid version of the Tool for demonstration additionality at the time of PDD submission is 0.6. Please, make respective corrections to the PDD taking into considerations revisions to this document	22	The methodological tool for the demonstration and assessment of additionality version 06.0.0 has been fully complied in the Section B.2 of the revised PDD.	Issue is closed.
CAR 05. Please, list and describe the key factors influencing the baseline in accordance with the requirements of paragraphs 25 and 26 of the Guidance on criteria for baseline setting version 03.	23	Each of the key factors influencing baseline was described in the PDD. Relevant information was added to the PDD (pages 35-36).	Issue is closed.
CL 02. Please, explain in what way the uncertainties and conservative assumption were taken into consideration while setting the baseline.	23	The uncertainties and conservative assumptions were described in the PDD (page 36).	Issue is closed.
CL 03. Please, make clear in what way the requirement on data saving will be met. Are there special orders issued within the plants on procedure on data keeping and saving, assigning the roles and responsibilities and communicated to the personnel involved in the project?	36 (i)	The Orders of the Directors of the plants were issued. In accordance with these Orders all the data connected with JI project should be saved and achieved during 2 years after the end of crediting period. The responsible workers for Kyoto protocol were appointed by the Order (attachments 3, 4, 5, 6).	Issue is closed.
CAR 06. The required format of the Table in section A.3., Tables 7 and 8 (A.4.3.1.), Table 7 (B.1.) is not preserved. Please, make corrections to the format accordingly.	19	Relevant corrections were made in the tables format 7, 8, 9 in the PDD (pages 33, 37-49).	Issue is closed.
CAR 07. Please, note that different tables are presented under the same number 7. Please, correct this.	-	Relevant corrections were made in the PDD (pages 33, 37).	Issue is closed.

CAR 08. Please, note that the length of Section A.4.3. can not exceed one page. Please, make respective corrections.	-	Relevant changes were made in the PDD (page 32).	Issue is closed.
CAR 09. Please, indicate a specific starting date of the project.	34 (a)	The starting date of the project was added to the Section C.1 of the PDD (page 63).	Issue is closed.
CL 04. Please, improve the statement in the first paragraph of Section D.1. so as to make it more understandable.	35	Section D.1. has been revised to be more understandable.	Issue is closed.
CAR 10. Please, clearly provide statement as well as the respective references (indicating paragraphs of the documents referred to or quotation from them) to prove this statement as for the approach chosen by the PPs for setting the baseline, demonstrating additionality and establishing the monitoring plan.	35	Section B.1, B.2 and Section D.1 have been revised with more reference, indication and justification.	Issue is closed.

CAR 11. The statement in Section D.1. reads the following: "The monitoring methodology specifically asks that in the case of replacement, modification and retrofit measures, for the purpose of energy efficiency, the monitoring shall consist of: a) Documenting the specifications of the equipment replaced; b) Metering the energy use of the industrial or mining and mineral production facility, processes or the equipment affected by the project activity; c) Calculating the energy savings using the metered energy obtained from subparagraph (b)" It is taken from the justification of the methodology used for the previous PDD version and can't be applied to the current version as it is a large scale project now. Please, provide justification of the monitoring methodology used for the present version of the PDD.	35	The specific JI approach from 'Guidance on criteria for baseline setting and monitoring" version 03 was selected to establish the monitoring plan. The relevant information was added to the Section D.1. of the PDD (page 65- 66).	Issue is closed.

CAR 12. According to the Guidelines for users of the JI PDD Form version 04, it is required that data and parameters for monitoring be explicitly and clearly distinguished according to the following three categories: a) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination regarding the PDD; b) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination regarding the PDD; and c) Data and parameters that are monitored throughout the crediting period. Please, distinguish them in Section D. of the PDD	36 (d)	Section D.1. of the PDD has been revised. All the data and parameters referred to in the calculation of emission reduction have been batched into three categories (tables 14, 15).	Issue is closed.
CAR 13. Please, give the title of the organisational chart presented in Section D.3.of the PDD.	36 (j)	The title of the organizational chart was added in Section D.3 of the PDD (page 117).	Issue is closed.
CAR 14. Please, provide the name of a Project Participant presented in the chart in Section D.3. as a Leader and a Technical Expert	36 (j)	The names of Project Leader and Technical Expert were added to the chart in Section D.3. (page 117).	Issue is closed.

CAR 15. In accordance with the requirement of the Guidelines for users of the JI PDD Form version 04, the PPs are to list and attach the documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party.	48 (a)	In accordance with the national construction norms and rules, the plants obtained permits from Regional State Environmental Department (attachments 7 and 8). The Environmental Specialists of Yareskivskiy and Globinskiy sugar plants develop the water, air and wastes reports for authorized governmental bodies each year. Annual water, air and wastes reports from Yareskivskiy and Globinskiy sugar plants are attached (attachments 9 and 10). The regional departments of Regional State Environmental Department in some cases establish special standards for sugar facilities depending on their particular operating features. In compliance with the national legislation and regulation, sugar plants collect and record data on air pollution emissions on a regular basis. In addition, national certified organizations with specialized laboratories take test measurements of air pollution usually once a year during beets processing season when plants operate at their full capacity. The projects do not have negative transboundary pollution impacts on the territory of neighboring foreign countries. The Environmental Impact Assessments were undertaken at Globinskiy and Yareskivskiy sugar plants (attachment 11). More detailed information is given is the Section F of the PDD.	Issue is closed.

CAR 16. Please, present more specifically in Section B.1. the time for determination as well as the sources of data where they are mentioned as "Once" and "Appropriate data collected as part of JI project". Make them consistent with the data presented in Tables D.1.1.1. and D.1.1.3. of the PDD.	23	The time of determination and sources of data were presented more specifically in Section B.1 in the PDD (pages 37-49).	Issue is closed. Issue is closed.
CAR 17. Please, provide the full names for parameters 8 and 9 presented in Table D.1.1.1.	36 (b)	The full names were provided for parameters 8, 9 in the Table D.1.1.1 of the PDD (page 98-99).	Issue is closed.
CL 05. Please, make clear in the PDD in what way the level of uncertainty of the data and parameters subject to monitoring was identified. Please, demonstrate it with an example.	36 (f) (v)	Information concerning uncertainty level was added to the PDD (page 109). The uncertainty level is given at the technical passport of the measuring equipment and at the certificate of checks of the equipment. The examples of these documents are given at the attachments (attachment 12).	Issue is closed.
CL 06. Please, describe a system for data collection for the project starting with the emission sources and ending up with their compilation and archiving.	36 (j)	The organizational structure of gathering and archiving of data for JI project at Globinskiy and Yareskivskiy sugar plants was added to Section D.3. of the PDD. The system of data collection is added to the Section D.3. (pages 117-119).	Issue is closed.
CL 07. Please, explain whether there is a system of automatic data collections in the plants involved in the project. Provide the name and description of those systems, if applicable.	36 (j)	There is no system of automatic data collections at the sugar plants. The automatic system would be implemented at the sugar plants in 2012.	

CL 08. Please, explain why several variables for monitoring presented in Table D.1.1.1. are mentioned twice	36 (a)	The titles of variables were specified in the Table D.1.1.1. of the PDD (page 98-99).	Issue is closed.
CAR 18. Please, delete the numbering for Tables 13 and 14 of the PDD as their format is determined by the JI PDD Form.	36 (a)	The numbering of tables in Section D.1 of the PDD (pages 98 and 103) was deleted as their format is determined by the JI PDD Form.	Issue is closed.
CL 09. Please, specify the guidance methodology the Project Participants refer to in Section D. of the PDD	35	«Guidelines for the implementation of Article 6 of the Kyoto Protocol» (Appendix B) is the guidance methodology. This information has been complemented in the revised PDD.	Issue is closed.
CL 10. Please, provide the actual gas savings achieved by each plant in 2009, 2010 and 2011	43	Actual gas saving at Yareskivskiy and Globinskiy sugar plants in 2009-2011. Yareskivskiy sugar plant 2009 - 2448.4 ths. m^3 2010 - 3609.6 ths. m^3 2011 - (- 2027.9 ths. m^3) In 2011 more natural gas was combusted. It is connected with plant's capacity increasing. Globinskiy sugar plant 2009 - 1314.8 ths. m^3 2010 - 1758.1 ths.m^3 2011 - 1254.8 ths. m^3. Veselopodilskiy sugar plant was not in operation in 2009-2011.	Issue is closed.

CAR 19. The developer is applying JI specific approach. For this reason the application of the Tool for the Demonstration and Assessment of Additionality is not mandatory. At the same time the developer refers to the Tool for the Demonstration and Assessment of Additionality" (Version 05.2), Annex: "Guidance on the Assessment of Investment Analysis (version 02) in context of the investment analysis. Please note that the version of the document referred to is too old. Several newer revisions have been issued. The version to be used at present is the Guidance on the Assessment of Investment Analysis (version 05) approved 15.07.2011 (hereinafter referred as Guidance). Please note that now this is the separate document and the reference to the Additionality Tool is unnecessary.	28	In the revised PDD, the Tool for the Demonstration and Assessment of Additionality (version 6.0.0) and Guidelines on the Assessment of Investment Analysis (version 5) are applied.	Issue is closed.
CAR 20. Please note that the Guidance 12 introduces the methodology how the benchmark IRR shall be established: "*Local commercial lending rates or weighted average costs of capital (WACC) are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for an equity IRR. Benchmarks supplied by relevant national authorities are also appropriate if the DOE can validate that they are applicable to the project activity and the type of IRR calculation presented."* I kindly ask you to follow the methodology prescribed by the Guidelines.	29 (b)	In the revised financial analysis, WACC is selected to be the benchmark for a project IRR. The justification of the calculation of WACC is elaborated in the PDD. The WACC is determined to be 15.55%.	Issue is closed.

CAR 21. For estimation of the inflation Guidance suggests: "In situations where an investment analysis is carried out in nominal terms, project participants can convert the real term values provided in the table below to nominal values by adding the inflation rate. The inflation rate shall be obtained from the inflation forecast of the central bank of the host country for the duration of the crediting period. If this information is not available, the target inflation rate of the central bank shall be used. If this information is also not available, then the average forecasted inflation rate for the host country published by the IMF (International Monetary Fund World Economic Outlook) or the World Bank for the next five years after the start of the project activity shall be used." For this reason I suggest using inflation forecast for 2007 in Euro area which can be found in IMF WEO published April 2006. Reference: http://www.imf.org/external/pubs/ft/weo/2006/01/pdf/weo0406.pdf page 188. Fortunately the value is the same as applied before - 2.2%.	29 (b)	In the revised PDD the reference of the inflation rate has been updated as IMF WEO publication.	Issue is closed.
CAR 22. Excel spreadsheets enclosed seem to be incorrect as the IRR values contained in the tables are vastly different from those indicated on the PDD page 52. In addition IRR calculations and sensitivity analysis for Veselopodilskiy plant are absent. Please re-check file Tsukrovyk_Calculations_BEET_FINAL_FEbr28__2012.xls	29 (b)	The previous Excel Spreadsheet had the calculation mistake, i.e. the natural gas saving was calculated by multiplying the quantity of beet volume with the natural gas saving per ton of sugar production. The mistake has been corrected by multiplying the quantity of sugar production with the natural gas saving per ton of sugar production. The PDD has been revised correspondingly.	Issue is closed.

CAR 23. In the section devoted to demonstration of the additionality the developer does not follow the Guidance for the Assessment of Investment analysis (hereinafter referred as the Guidance) Although the guidance is not mandatory taking into account the fact that the developer does not introduce any new methodology it is recommended to adhere to the guidance.	29 (b)	In the revised PDD the Guidelines on the Assessment of Investment Analysis, version 5, is complied with. Please refer to the PDD.	Issue is closed.
CAR 24. Please, remove the horizontal strip from p.1	-	The horizontal strip was removed from p.1.	Issue is closed.
CAR 25. The version of the PDD refers to the document previously submitted. Please change it for the current one.	-	The number of version of the PDD was changed (page 2).	Issue is closed.
CAR 26. Please, change the date on which the current PDD version was submitted.	-	The date of version of the PDD was changed (page 2).	Issue is closed.
CAR 27. Is the calcination process meant on p.3? Please, correct that typo.	-	The typo was corrected on page 3 of the PDD.	Issue is closed.

CL 11. Please, explain why the project is considered a large scale?	-	The project activity applies the similar technologies and monitoring plan with JI project *Energy Efficiency Programme at the Plants of LLC firm "Astarta-Kyiv"* (UA1000288). LLC irm "Astarta-Kyiv" belongs to the same corporate group as the proposed project activity owner. The *Energy Efficiency Programme at the Plants of LLC Firm "Astarta-Kyiv" Project* is categorized as a large scale project and its JI documents were developed in large scale forms. In order to save the time and effort for the development of the JI circle and the monitoring of the project operation, the project developer of the proposed project activity decided to refer to the *Energy Efficiency Programme at the Plants of LLC Firm "Astarta-Kyiv" Project* and apply the large scale document format. In the understanding of the project participants of the project activity, the project participants of a small-scale JI project are free to develop its project with the large-scale format and apply the large scale methodology. The application of the small-scale format and methodology is for the purpose of simplified documentary work, simpler calculation of emission reduction and monitoring, easier demonstration of additionality. There is not any JI directive forbidding the large scale documentation work for a small-scale project. It is acceptable as far as the project participants agree to comply with the strict requirement of calculation of ER, monitoring and demonstration of additionality.	Issue is closed.

CAR 28. In Section B.1. p.34 the full title of the Guidance should be provided.	22	JI Guideline refers to the group of JI regulation available at: http://unfccc.int/resource/docs/2005/cmp1/eng/08a02.pdf#page=2. This information has been given in Section B.1 (page 34).	Issue is closed.
CAR 29. The description of the project boundaries should be provided in Section B.3. Please make appropriate corrections on p.37 of the PDD.	32 (a)	The project boundary is the physical, geographical site of the project facilities, production process, and the equipment that are affected by the project activity. More description of the project boundary is complemented in Section B.3 (pages 61-63).	Issue is closed.
CAR 30. Please take into consideration that the description of a baseline scenario is to be provided in Section B.1. Section B.2. is meant for providing the additionality proofs. Make due corrections on p.37 in the subsection describing a baseline scenario.	22	The description of baseline alternatives in Section B.1 has been revised in consistent with Section B.2. The over-lapping part of Section B.1 and Section B.2 has been eliminated.	Issue is closed.
CAR 31. Please note that carbon oxide is not a greenhouse gas, it shouldn't be included to the potential sources of GHG emissions. The description of the GHG sources along with justification for the GHG inclusions or exclusions is to be provided in Section B.3. that describes the project boundaries. Make due corrections on p.37 in the subsection describing a baseline scenario.	32 (a)	The sentence related to Carbon Oxide in p.37 of PDD has been deleted. More justification and description of each type of emission source have been complemented in Table 11 of Section B.3.	Issue is closed.

CAR 32. In accordance with the GUIDANCE ON CRITERIA FOR BASELINE SETTING AND MONITORING version 03 paragraphs 36 and 41, the project participants are encouraged to apply the country-specific values of the parameters subject to monitoring, i.e. in conformity with the latest National Inventory Report of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases in Ukraine for 1990-2009, Ministry of Ecology and Natural Resources of Ukraine, State Environmental Investment Agency of Ukraine.- Kyiv, 2011 Please, make corrections in respective PDD sections.	23	The country-specific values of 4 parameters have been applied in the revised PDD and calculation, i.e. the emission factor of natural gas, coal, $CaCO_3$, and $MgCO_3$.	Issue is closed.
CL 12. Please provide a more clear description of the approach chosen to proof additionality. The choice of approaches available for demonstrating additionality is provided in GUIDANCE ON CRITERIA FOR BASELINE SETTING AND MONITORING version 03.	29 (a)	The approach given by paragraph 2 (c) of Annex 1 of the "Guidance on Criteria for Baseline Setting and Monitoring" version 03 is chosen to demonstrate the additionality, which complies with the Tool for the demonstration and assessment of additionality version 06. Section B.2 of PDD has been revised.	Issue is closed.
CAR 33. Section B.3. requires the description of the potential leakage for the project.	32 (d)	Section B.3 has been complemented with more description of the leakage emission.	Issue is closed.
CAR 34. All information should be presented in English. Please make due corrections to Figure 12.	32 (d)	Relevant changes were made in the PDD.	Issue is closed.

CL 13. In accordance with paragraph 14 of the GUIDANCE ON CRITERIA FOR BASELINE SETTING AND MONITORING version 03, the project boundary shall encompass all anthropogenic emissions by sources of GHGs which are: (i) Under the control of the project participants; (ii) Reasonably attributable to the project; and (iii) Significant, i.e. the source accounts, on average per year over the crediting period, for more than 1 per cent of the annual average anthropogenic emissions by sources of GHGs, or exceeds an amount of 2,000 tonnes of CO2 equivalent, whichever is lower. Please provide more clear justification for the exclusion of the GHGs other than CO2. Please explain what "insufficient source" means in this context.	32 (a)	More justifications for the exclusion of CH_4 and N_2O have been complemented in the revised PDD. The term of "insufficient source" has been replaced by the term of "insignificant source" and "Not relevant".	Issue is closed.
CAR 35. The format in Section D.1.1.1 is altered. Please, bring it in compliance with the required template.	35	Relevant changes were made in the Section D.1.1.1 of the PDD (page 98).	Issue is closed.
CAR 36. Please mention in Section D.1.3.1. that it was left blank on purpose	35	The relevant change was added to the Section D.1.3.1 (page 107).	Issue is closed.
CL 14. Please clarify what the abbreviation HPP stands for.	35	The abbreviation HPP (Heat and Power Plant) was changed to CHP (Combined Heat and Power) Plant at the PDD (pages 117-119).	Issue is closed.
CAR 37. In Section D.3. bring the name of the LHV parameter in conformity with the one used in the tables of parameters.	36 (j)	The LHV parameters in Section D.3. were renamed to net calorific value parameters as it is mentioned in the tables of parameters.	Issue is closed.

CL 15. Please clarify whether there is an automatic data collection system functioning at the enterprises? If yes, please, provide its description.	36 (i)	The following automatic data collection systems are functioning at Yareskivskiy and Globinskiy sugar plants: - Device "ASP svekla" which accounts sugar beets quantity; - Natural Gas Accounting System ; - Automation System of Gas Kilns ASUTP which includes: - Coal and Limestone Accounting System; - Water Accounting System; - Steam Accounting System. In 2012 it is planned to implement Sugar Information System which will transfer the data to the Head office of "Astarta-Kyiv".	Issue is closed.
CL 16. Are there any Quality Management Systems implemented within the enterprise?	36 (i)	Information on Quality Management System in accordance with ISO 9001 was added to the PDD (page 119). The certificates on ISO 9001 are attached (attachment 13).	Issue is closed.

CL 17. Table 1 in Section A.4.1. provides the expected mass of beet production at all three Tsukrovyk sugar plants for 2008-2017. Please provide information on the beet production actually achieved for the past period split by years.	45	Actual sugar beets processing in 2008-2011. Yareskivskiy sugar plant 2008 – 331,362 t 2009 – 419,306 t 2010 – 293,360 t 2011 – 409,016 t Globinskiy sugar plant 2008 --- 264,016 t 2009 --- 349,028 t 2010 --- 315,540 t 2011 --- 522,627 t Veselopodilskiy sugar plant 2008 – 254,298 t	Issue is closed.
CAR 38. Please, provide information on whether the project requires extensive initial training and maintenance efforts in order to work as presumed during the project period	-	Explanation is provided in Section A.4.3.	Issue is closed.
CAR 39. In order to make sure that the crediting period shall not extend beyond the operational lifetime of the project and taking into consideration that some of the equipment to be installed in the course of the project has been formerly used, please, provide transparent and persuasive arguments that the existing equipment at all sugar plants is able to continue normal operation at least until the end of the crediting period as it is stated in the PDD	34 (b)	Expert Report on independent assessment of the existing equipment and its operational lifetime was prepared by the expert commission led by “Meganom” and submitted to BV. Signatures of experts provided in reports.	Issue is closed.

CL 18. Please provide information on the method of assessment applied by "TEPLOKOM" in its independent expert Report to determine the project equipment operational lifetime, as its description is not available there.	34 (b)	COMPLETED (as confirmed from email April 12, 2011)	Issue is closed.
CL 19. Please, provide explanation on whether the project uses state of the art technology (ies) or would the technology (ies) result in a significantly better performance than any commonly used technologies in Ukraine. (Take it, e.g. from the Additionality Assessment Section or supporting documents and insert in Section A.4.3.)	-	The project uses state-of-the-art technologies which results in significantly better performance than any commonly used technologies in Ukraine. These technologies are manufactured by famous European manufacturers as BMA (Germany), Babbini (Italy), Maguin (France), Silverweibul (Sweden), etc. The installation of these technologies sets higher standards for beets processing and sugar production than what was available prior to the implementation of the project. Explanation is provided in Section A.4.3.	Issue is closed.
CL 20. Please, explain whether the project technology (ies) likely to be substituted by other or more efficient technologies within the project period.	-	The existing equipment at the three sugar plants can meet the market demand at least until the end of the crediting period, provided normal maintenance is performed on the regular basis. Explanation is provided in Section A.4.3.	Issue is closed.

CL 21. Please, provide information on training and maintenance needs envisaged by the project.	-	Implementation of project activities will require training of plants' managers, technical specialists and workers and the hiring of outside experts for installation of equipment and training of local personnel. In 2007-2008, training programs in occupational health and safety were delivered to engineering personnel and workers at each of the three plants: at Globinskiy plant - by Kremenchug educational organization, 60 people were trained; at Yareskivskiy – by Poltava educational centre, 125 people were trained; and at Vesepodilsky plant –also by Poltava educational centre, 65 people were trained. In 2009 training of plants' personnel in this area continues. Outside experts were brought to Tsukrovyk to help overcome technological barriers to implementation. A technical expert from France was hired while a local firm "Ukrservisavtomatica" was involved in setting up the automation systems and training of the personnel. Information is provided in Section A.4.3.	Issue is closed.

CL 22. Please provide in a clear and transparent way justification that conservative assumptions have been used to calculate project GHG emissions	45	GHG such as N_2O and CH_4 have been excluded to ensure conservative estimations are achieved. Also, all ERU estimates are based on the reduction of natural gas only. No further ERUs have been claimed for electricity savings, this is conservative. The natural gas meter is monitored and calibrated by the gas supplier directly; providing an accurate and verifiable record to base ERUs on. This is a conservative method of calculating.	Issue is closed.
CL 23. Please, provide additional information on the following documents referred to in the PDD: Energy Efficiency Programme, 2006 Annual Report, IPO Prospectus	45	Please find the documents attached, as requested.	Issue is closed.

CAR 40. Please note that IRR calculated in financial model are already calculated in real terms not nominal because inputs do not account for inflation (fixed prices are used for all project period). Thereby IRR values do not need any further negative adjustment using inflation rate. In contrast the benchmark value which is nominal value shall be converted to real terms using the formula you have indicated on page 51 of the PDD (1+0,1555)/(1+0,022)-1 = 13,06%. This value 13,06% shall be employed as the benchmark to be compared with project IRR. Please note again that you do not have to adjust IRR for inflation.	29(b)	AIE's financial comments have been well considered into the revision of PDD and Financial Model. The project participant decides to re-calculate the benchmark using the formula indicated in PDD. The calculated benchmark is 13.06% against the project IRR conducted from Financial Model. Because all the inputs used to calculate the IRR in the financial model do not account for inflation, the IRR result does not account for inflation as well. In order to present the real investment return the IRR result should be adjusted with the inflation. As described in the PDD, the real IRR of the project activity is calculated with the nominal IRR with adjustment of the inflation. The project activity applies the benchmark an alysis to demonstrate that the investment is not the financially attractive. In the benchmark analysis, both of the financial indicator (Project IRR) and the selected benchmark have accounted the effect from inflation. The real IRR of the project activity is calculated with the nominal IRR with adjustment of the inflation. The selected benchmark consists of the OVDP yield and the lending interest rate of Ukraine, both of which are	As you correctly notice your present IRR calculations do not account for inflation. This situation obviously does not correspond to economic realities. You may rectify this situation in two ways: 1. adjust operational cash flow inputs for inflation rate of 2.1% each year, or 2. Adjust IRR calculated in your model from real (Please note the "real" is always referred to the values derived from model based on fixed prices) to nominal terms IRR nominal = (1+IRRr)*(1+InflRate)-1 (please note multiplication not division). In this case you would be able to employ the benchmark of 15.55% to compare it with nominal IRR calculated as described above.

		impacted by the realised inflation and the inflation in prediction. Thus, the benchmark analysis in PDD is appropriate. No revision is made. The project participant would like to point out that there was a calculation mistake in the previous Financial Model, i.e. the Residual Asset Value was double accounted as the negative Capital Expense in 2017 (Cell M11_Spreadsheet Yareskivskiy Financial) and the positive Cash flow (Cell M12_ Spreadsheet Yareskivskiy Financial). This mistake happened in the Globynskiy plant as well. The mistake has been corrected in the attached financial model.	Issue is closed.
CAR 41. The table 10 on page 54 shows the IRR values for +-10% sugar production scenarios mixed up.	29(b)	PDD has been revised with respect of AIE's comment.	Issue is closed.
CAR 42. The detailed description of project boundaries is to beprovided in Section B.3. Please, correct the mistake on p.37.	32 (a)	More details of the project boundary have been provided in Section B.3. The mistake on page 37 of the PDD was corrected.	Issue is closed.
CL 24. Please, provide a document proving the starting date of the project Please, also mention it in the PDD.	34 (a)	The JI project activities consist of various measurements to improve the energy efficiency. The earliest measurement was conducted on 02 Nov 2006, which includes the purchase of 7 pulp presses (manufactured by "Babbini", type P-18). The cover page and the signing page are attached.	Issue is closed.

CAR 43. The format of the template has been changed in Section D. This whole section should be presented in a landscape layout.	35	The layout of Section D has been modified as the format of landscape.	Issue is closed.
CAR 44. In Section D.1. correct the name of the approach chosen for the establishing monitoring plan	35	"JI-specific approach" is the used to establish the monitoring plan.	Issue is closed.
CL 25. It is stated in Section D.1. on p.65 that documentation on some parameters subject to monitoring should be collected and archived at the plants. Is it a full list of parameters on which documentation will be collected and archieved?	36 (b) (i)	Yes, it is the full list of the parameters that will be collected and archived at the plants.	Issue is closed.
CAR 45. The page numbering is not in accordance with the template.	-	PDD has been revised for easier understanding and tracking. Some page numbers have been corrected and some have been deleted.	Issue is closed.
CAR 46. There is no Table under number 13. Please delete it and adjust the numbering of tables throughout the PDD accordingly.	35	The PDD has been revised accordingly.	Issue is closed.

CAR 47. The sources of data for the carbon emission factor of natural gas, coal, CaCo3 and MgCo3 are inconsistent in Section D.1.1.1., Annex 2 and Section B.1. (Table 9). Please bring them in line.	36 (b)	*Response 1* The Table in Annex 2 has been deleted because the information has been provided throughout the PDD. The only inconsistence of these parameters between Table 9 and Table 14 is the EF_{MgCO3}. This parameter will be monitored annually and has been removed from Table 14 and has been listed in Table 15 in the revised PDD. *Response 2* Section D.1.1.1 has been updated with the reference of National Inventory Report of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases in Ukraine for 1990-2009;	*Conclusion on Response 1* Issue is not closed. **The sources of data** for the carbon emission factor of natural gas, coal, CaCo3 and MgCo3 are still inconsistent in Section D.1.1.1. and Section B.1(Table 9) of the updated PDD version. *Final conclusion:* Issue is closed
CAR 48. In sections D.1.1.2. and D.1.1.4 there are words not translated into English. Please correct this.	36 (f)	"Де" has been deleted from PDD.	Issue is closed.
CAR 49. In Section D.1.1.2. change the order of parameters in formula (1) to make it consistent with the order of parameters description and the formula used for the baseline emissions calculation.	36 (f)	Formula 1 has been revised to represent the same the order of the parameters.	Issue is closed.

CAR 50. It is stated in the PDD Section B.2. that the project faces a social barrier due to the necessity in qualified personnel to operate the project equipment, to implement the monitoring procedure. Are there any measures envisaged in this respect? Please describe them in the respective PDD section.	36 (i)	The information on advanced trainings for workers of Yareskivskiy and Globinskiy plants was added to the Section B.2. of the PDD (page 57).	Issue is closed.
CAR 51. In accordance with the requirement of paragraph 37 of JI Guidelines, as well as paragraph 42 of the Guidance on criteria for baseline setting and monitoring version 03, it shall be stated in the MP that data monitored and required for determination are to be kept for two years after the last transfer of ERUs for the project.	36 (i)	*Response 1* The descriptions of the monitoring plan of these parameters that are monitored throughout the crediting period have been completed with respect with the comment. *Response 2* Section D.2 of PDD has been completed in line with AIE's request.	*Conclusion on Response 1* Issue is not closed. It shall be mentioned in the MP and further during verification proved by the written order issued within the enterprise. *Final conclusion:* Issue is closed
CAR 52. According to the requirements of the Guidelines for Users of JI PDD Form, each annex shall be started with a new page. Make corrections concerning annex 3.	-	Annex 3 starts from a new page in the revised PDD.	Issue is closed.
CAR 53. The expected volume of beet produced at Astarta agriculture provided in Section E. is presented in Table 19. Please make corrections respectively.	45	The Table of Forecasted Beet Production has been deleted from Section E as pre requested by AIE. Thus, no more action needs to be done.	Issue is closed.
CAR 54. Delete the last sentence in Section E. as it doesn't refer to it.	45	The Section E has been revised.	Issue is closed.
CAR 55. Data on Forecast Beet Production has been presented in Section A.4.2.Table 1. Please delete it from Section E.	45	The Table of Forecasted Beet Production has been deleted from Section E.	Issue is closed.

CL 26. Are there any more recent reports on test measurements confirming that the air pollution level at the project plants is within the established norms?	48 (a)	The current water, air and wastes permits were provided as attachments. Information on environmental permits was added to the Section F of the PDD (pages 122-124).	Issue is closed.
CAR 56. Full names, version number and references to all methodological tools used in the PDD shall be provided.	-	The names and version numbers of the referred to Tool, Guidelines and Guidance have been cross-checked and corrected.	Issue is closed.
CAR 57. There is no brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project in Section A.4.3.	-	Section A.4.3. has been completed as per requested by AIE.	Issue is closed.
CAR 58. Dates in Section C are provided in a wrong format.	34 (a)	The formats of the Dates have been corrected.	Issue is closed.
CAR 59. The activities implemented within the project don't refer to sectoral scope (4) Manufacturing Industries.	-	The sectoral scope has been changed in the updated PDD vertion to the sectoral scope (3) Energy demand	Issue is closed.