DETERMINATION REPORT

«COMPANY «MT-INVEST» LTD

DETERMINATION OF THE

"IMPLEMENTATION OF COMPLEX TECHNICAL AND TECHNOLOGICAL MODERNIZATION OF ENTERPRISE TO REDUCE ENERGY CONSUMPTION AND IMPLEMENTATION OF RECYCLING ORGANIC WASTE FROM BEER PRODUCTION AT DE PJSC "OBOLON" "ZIBERT'S BREWERY""

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«Company «MT-Invest» LTD	Falendysh Yaroslav

Summary:

Bureau Veritas Certification has made the determination of the «Implementation of complex technical and technological modernization of enterprise to reduce energy consumption and implementation of recycling organic waste from beer production at DE PJSC "Obolon" "Zibert's Brewery"» project of «Company «MT-Invest» LTD located in Fastiv city, 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 will revise 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.

Report No.:	Subject Group:
UKRAINE-det/0339/2011	JI

Project title:
Implementation of complex technical and technological modernization of enterprise to reduce energy consumption and implementation of recycling organic waste from beer production at DE PJSC "Obolon" "Zibert's Brewery"

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1 INTRODUCTION

«Implementation of complex technical and technological modernization of enterprise to reduce energy consumption and implementation of recycling organic waste from beer production at DE PJSC "Obolon" “Zibert’s Brewery”» (hereafter called “the project”) in Fastiv city, 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 derminated 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:

Oleg Skoblyk
Bureau Veritas Certification Team Leader, Climate Change Lead Verifier Technical Specialist

Kateryna Zinevych
Bureau Veritas Certification Team Member, Climate Change Lead Verifier

Denis Pishchalov
Team Member, Bureau Veritas Certification Financial Specialist

This determination report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal reviewer

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) submitted by «Company «MT-Invest» LTD 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, Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by a Accredited Independent Entity were reviewed.

PDD « Implementation of complex technical and technological modernization of enterprise to reduce energy consumption and implementation of recycling organic waste from beer production at DE PJSC "Obolon" “Zibert’s Brewery”» project of «Company «MT-Invest» LTD version 01 was submitted on 18/08/2011.

To address Bureau Veritas Certification corrective action, forward action and clarification requests, «Company «MT-Invest» LTD revised the PDD and resubmitted it as version 02 of 22/09/2011 which is deemed final.

The determination findings presented in this report relate to the project as described in the PDD version 01 dated 18/08/2011 and version 02 dated 22/09/2011.

2.2 Follow-up Interviews

On 20/09/2011 Bureau Veritas Certification performed on-site visit interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of «Company «MT-Invest» LTD and DE PJSC "Obolon" “Zibert’s Brewery” were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
DE PJSC "Obolon" “Zibert’s Brewery”	➢ Implementation schedule ➢ Project management organisation ➢ Evidence and records on reconstruction and new equipment and its operation ➢ Environmental Impact Assessment ➢ Project monitoring responsibilities ➢ Monitoring equipment ➢ Quality control and quality assurance procedures ➢ Environmental impacts affected ➢ Local authorities and public opinion
CONSULTANT «Company «MT-Invest» LTD	➢ 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 Requests (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 use the term Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable JI requirements have been met.

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

The main goal of the Joint Implementation project «Implementation of a complex technical and technological modernization of enterprises to reduce power consumption and implementation of recycling organic waste from beer production at “DE PJSC "Obolon" “Zibert’s Brewery” is the implementation of the integrated programme of technical and technological modernization of the company, adoption of the disposal system for organic waste of brewing, which includes both technical and organizational measures**.**

The adoption of actions provided for by the Project will allow improving energy efficiency of the brewing process, reducing the amount of and assuring environmentally-friendly disposal of organic waste produced during the process. At the same time this will lead to the reduction of power consumed in beer production, will allow giving up removal of organic waste to landfills and, as a result, reducing the emission of greenhouse gasses emitted in the process.

The situation at the moment of the project initiation

Considering that the plant is located in a residential district of Fastiv town, the company has always paid close attention to factors that could have negative effect on the environment. To reduce the amount of pollution that is emitted into the atmosphere as a result of the plant’s work, the management of “DE PJSC "Obolon" “Zibert’s Brewery”has started the installation of the new economic and energy-efficient equipment, high technologies in brewing, bottling and delivering beer to consumers.

However, the implementation of such large-scale program as presented in this project was impossible due to its lack of financial attractiveness (pay-

back period on investment over 10 years, while costs for some investments will have never been recovered), risks associated to its implementation (the general effect from the implementation of the technological processes could be negated in case of partial implementation or if mistakes were made during the process), unstable economic and political situation in Ukraine.

Taking into consideration the above factors, the management of the company has come to the conclusion that it is necessary to implement a program aimed at reducing energy consumption and the amount of residual sparging during the production of beer and implement the utilization of sparging only in 2004, after the ratification of the Kyoto Protocol has allowed recovering a portion of the costs through the mechanisms of the Kyoto Protocol

Project scenario

The Joint Implementation Project is based on the implementation comprehensive technical and technological modernization of the DE PJSC "Obolon" “Zibert’s Brewery” that received financing and was launched in 2004.

Actions taken within the framework of this program allowed the DE PJSC "Obolon" “Zibert’s Brewery”to reduce the specific energy consumption in the brewing process and assure environmental friendliness of the process through the utilization of all organic waste produced.

Baseline scenario

The baseline scenario envisages the further use of the installed equipment with ongoing renovation and restoration works without significant capital expenditures and maintaining the current power consumption and waste production as well as maintaining the practice, commonly used at the time, of removing waste to landfills. The grounds for the baseline scenario are described in section B.

Project history

30/03/2004 – Order #56 established at the DE PJSC "Obolon" “Zibert’s Brewery”a workgroup for reducing power consumption and waste production in the process of brewing and other production activities. The responsibilities of this group include consideration of possibility and ensure that additional investment from the mechanisms of the Kyoto Protocol. This date is the date of this project considered as a JI project.

December 2000 – start of the implementation of measures stipulated by the Project

10/08/2011 – signing of the agreement with “Company MT-Invest” LTD (Agreement #158).

19/08/2011 – preparation and submission of PIN to the State Agency for Ecological Investments.

The tentative plan and the list of measures stipulated by the Project are listed below.

Project benefits

Besides reducing the emission of greenhouse gasses the project of the implementation of the Project has the following benefits:

- . Creation of additional employment opportunities related to the installation of new equipment, technological lines and cycles;
- Reduction of the emission of harmful substances.

The implementation of the Joint Implementation project will have positive effect on the environmental and socio-economic conditions in the town of Fastiv and the region at large.

The production facilities of DE PJSC "Obolon" “Zibert’s Brewery”” are supplied with two kinds of energy that is/was purchased from

Outside suppliers:

- Electric power
- Natural gas

The main reasons for project implementation are greenhouse gas emissions caused:

- Excess energy consumption as a result of: imperfections in the technological processes, use of working but outdated
- Emissions due to the disintegration of sparging at dumps and storage grounds.

Brief description of actions within the project frameworks:

- Implementation of recycling programs of sparging waste by pressing and transfer it into the farms with its further use as feed for animals.
- Replacement of piston air compressors into screw ones.

- Replacement of old refrigerators with modern automatic controlled ones.
- Reconstruction of brew house with the installation of energy-efficient technology of cooking wort.
- Installation of new steam boiler LOOS ZFR-23000.
- Changing steam drying of work clothing with electric heating vans.
- Replacement of glow lamps with energy-saving ones.
- Installation of equipment for preparation of liquid carbon dioxide «Haffmans B.V. Netherlands.
- Installation of heat exchanger for disposal of evaporation of boiler deaerator to heat nourishing water.
- Use continuous blowdown of steam boiler for the primary heating of feedwater from CWC.

Chronology of the implementation:

2004

- Implementation of recycling programs of sparging waste by pressing and transfer it into the farms with its further use as feed for animals.

2007

- Replacement of glow lamps with energy-saving ones.

2008

- Reconstruction of Brewing House with the installation of energy saving technologies of cooking wort. Output of wort 440 Gl for 1brewing, 78 brewings per week. Before the reconstruction wort output was 80 Gl/brewing. Specific direct thermal energy consumption before the reconstruction was 31,25 kg/Gl, after the reconstruction 16,8 kg/Gl, 2950 brewing a year.
- Installation of new steam boiler LOOS int ZFR-23000 with the capacity 22tons of steam per hour. Gas consumption for 1ton of steam 72,1 m^3.

- Changing steam drying of work clothing with electric heating vans.
- Installation of new air compressors Comp Air L132-7, 5 – 3 units.
- Installation of new refrigerators Climaveneta complete with cooling towers.
- Implementation of recycling programs of sparging waste by pressing and transfer it into the farms with its further use as feed for animals.
- Replacement of 2 refrigerators 1-MKT-110 (Russia) with the new one Climaveneta (Italy) complete with compressor and automatic control

2010

- Installation of equipment for preparation of liquid carbon dioxide «Haffmans B.V., Netherlands, with the capacity 500kg/year.

2011

- Installation of heat exchanger for disposal of evaporation of boiler deaerator to heat nourishing water. Fully implemented. Heat saving only for 2011 year 126 Gcal, expected savings 240 Gcal.
- Use continuous blowdown of steam boiler for the primary heating of feed water from CWC. Planned for 2011 year. Fully implemented. Thermal energy saving only for 2011 year is 168 Gcal, expected saving is 320 Gcal.

CARs (CAR01, CAR02, CAR04, CAR16), CLs (CL01, CL02, CL06) and their resolutions/conclusions applicable to project description are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

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 16 Corrective Action Requests and 06 Clarification Requests.

4.1 Project approvals by Parties involved (19-20)

After finishing JI project determination report, the PDD and Determination Report will be presented to State Environmental Investments Agency of Ukraine (SEIA) for receiving the Letter of Approval (LoA).

CARs (CAR03, CAR05), CL03 and their resolutions/conclusions applicable to project approvals by Parties involved are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

The project has no approvals by the Parties involved, therefore CAR05 remains pending. This CAR will be closed after report finalizing.

4.2 Authorization of project participants by Parties involved (21)

The participation of each project participant listed in the PDD will be authorized by Letter of Approval from appropriate party explicitly stating the name of the legal entity.

CAR05, CL03 and their resolutions/conclusions applicable to authorization of project participants by Parties involved are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

The project has no approvals by the Parties involved, therefore CAR05 remains pending. This CAR will be closed after report finalizing.

4.3 Baseline setting (22-26)

The PDD explicitly indicates that JI specific approach was the selected approach for identifying the baseline.

The baseline scenario has been established in accordance with Appendix B of the JI Guidelines and in accordance with the 'Guidance on Criteria for Baseline Setting and Monitoring' (Version 2) adopted at 18th Meeting of the JISC and used Methodological Tool "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0).

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. Continuation of the existing situation;

b. Implementation of the proposed project activity without registering it as a JI project.

(b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector. In this context, the following key factors that affect a baseline are taken into account:

- Complexity of production process
- Permanent change in price of electricity and natural gas in Ukraine.
- Long payback period (more than 15 years).
- Implementation of proposed poject requires significant annual significant capital investments and human resources.
- Ukraine has one of the lowest electricity tariffs in Europe. Therefore, it is really hard invest some cost for the reconstruction or the rehabilitation of the equipment.

In order to establish the baseline scenario project participants has chosen the use of JI specific approach and "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0). Default multi-project emission factors for Ukraine National Power Grid defined by National Environmental Investment Agency of Ukraine have been applied for calculation of greenhouse gases emissions.

All explanations, descriptions and analyses pertaining to the baseline in the PDD are made in accordance with the identified JI specific approach and the baseline is identified appropriately.

CAR06 and its resolution/conclusion applicable to baseline setting are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.4 Additionality (27-31)

Brriers analysis and common practice analysis were used to demonstrate additionality of the project activity. All explanations, descriptions and analyses are made in accordance with the selected tool or method.

The following additionality proofs are provided:

1. there are two alternative scenarios to the project activity identified;
2. the identified financial and other barriers would credibly prevent the implementation of the proposed project activity undertaken without being registered as a JI activity;

3. the common practice analyses carried out by the PP's, complementing barrier analysis.

Additionality is demonstrated appropriately as a result of the analysis using the approach chosen.

CAR07 and its resolution/conclusion applicable to additionality are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.5 Project boundary (32-33)

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;

(ii) Reasonably attributable to the project; and

(iii) Significant, i.e., as a rule of thumb, would by each source account 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 exceed an amount of 2,000 tonnes of CO2 equivalent, whichever is lower.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD.

The AIE determinated the project boundary by:
a) Detailed review of relevant documentation (list of all determinated documents provided in "Category 2 Document" below).
b) Interviews and observations during site visit to DE PJSC "Obolon" "Zibert's Brewery" dated 20/09/2011 (list of interviewd persons provided in "Persons interviewed" below).

Based on the above assessment, the AIE hereby confirms that the identified boundary and the selected sources and gases are justified for the project activity.

CAR08 and its resolution/conclusion applicable to project boundary are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

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 will begin or began, and the starting date is 30/03/2004, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 25 years (300 months).

The PDD states the length of the crediting period in years and months, which is 22 years or 264 months, and its starting date as 01/01/2004, which is the date the first emission reductions or enhancements of net removals are generated by the project.

The PDD states that the crediting period for the issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project.

The PDD states that the extension of its crediting period beyond 2012 is subject to the host Party approval, and the estimates of emission reductions or enhancements of net removals are presented separately for those until 2012 and those after 2012 in all relevant sections of the PDD.

CLs (CL04, CL05) and their resolutions/conclusions applicable to crediting period are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.7 Monitoring plan (35-39)

The PDD, in its monitoring plan section, explicitly indicates that JI specific approach was the selected.

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 fuel saving.

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 or enhancements of net removals to be monitored such as:

1. Amount of electricity consumtion
2. Amount of heat consumtion
3. Amount of natural gas consumtion
4. Quantity of production
5. CO2 emission factor for Ukranian Grid

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, such as PE_y; BE_y; $PE_{ELEC,y}$, $PE_{NG,y}$, $PE_{CH4,y}$, $NCV_{NG,y}$,

$EF_{CO2,ELEC,y}$, $EF_{CO2,NG}$, $FC_{PJ,NG,y}$, $NCV_{NG,y}$, GWP_{CH4}, $BE_{ELEC,y}$, $BE_{NG,y}$, $BE_{CH4,y}$, P_y, P_{BL}, $FC_{BL,y}$, FC_{BL}, $NCV_{NG,BL}$, MCF, DOC_F.

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: $NCV_{NG,y}$, $F_{CO2,NG}$, MCF, DOC_F, F, R_y, OX, GWP_{CH4}, NCV_{BL}, P_{BL}, EC_{BL}, $FC_{BL,NG}$, $MSW_{T,BL}$.

(ii) Data and parameters that are monitored throughout the crediting period, such as: $EC_{PJ,y}$, $FC_{PJ,NG,y}$, $MSW_{T,PJ,y}$, $MSW_{F,PJ,y}$, $EF_{CO2,ELEC,y}$, P_y.

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording depending on its kind. It is provided in comprehensive manner in Tables for the key-parameters in Section B.1 of the PDD.

The monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate, such as:

Project emissions

$$PE_y = PE_{ELEC,y} + PE_{NG,y} + PE_{CH4,y}, \quad (1)$$

where

PE_y = greenhouse gas emissions in the project scenario in year *y*, tCO2e;

$PE_{ELEC,y}$ = greenhouse gas emissions in the project scenario related to the consumption of electric energy in year *y*, tCO2e;

$PE_{NG,y}$ = greenhouse gas emissions in the project scenario related to the consumption of natural gas in year *y*, tCO2e;

$PE_{CH4,y}$ = greenhouse gas emissions in the project scenario related to the utilization of organic waste (sparging) during the production of beer through depositing it at landfills, tCO2e;

y = year for which calculations are carried out.

GHG emissions in the project scenario related to the consumption of electricity are calculated according to the approach described in the Tool to calculate baseline, project and/or leakage emissions from electricity consumption, Version 01.

$$PE_{ELEC,y} = EC_{PJ,y} \cdot EF_{CO2,ELEC,y}, \quad (2)$$

Where
$PE_{ELEC,y}$ = greenhouse gas emissions in the project scenario associated with the consumption of electric energy in year *y*, tCO2e;
$EC_{PJ,y}$ = amount of electricity consumed in the project scenario by DE PJSC «Obolon» “Zibert’s Brewery” in year *y*, MWh;
$EF_{CO2,ELEC,y}$ = indirect emissions of electricity consumption of electric energy consumers from the Joint Energy systems of Ukraine, tCO2e/MWh;
y = year for which calculations are carried out.

GHG emissions related to natural gas consumption are calculated according to the approach described in the Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion*, version 02.

$$PE_{NG,y} = FC_{PJ,NG,y} \cdot NCV_{NG,y} \cdot EF_{CO2,NG} \cdot 4.1868, \quad (3)$$

Where
$PE_{NG,y}$ = gas emissions in the project scenario related to the consumption of natural gas in year *y*, tCO2e;
$FC_{PJ,NG,y}$ = volume of natural gas consumed by the DE PJSC "Obolon" “Zibert’s Brewery” according to project scenario in year *y*, ths m^3;
$NCV_{NG,y}$ = caloricity of natural gas used in year *y*, Gcal/ths m^3;
$EF_{CO2,NG}$ = natural gas emission coefficient, tCO2e/GJ;
4.1868 = conversion coefficient of Gcal into GJ, Gcal/GJ;
y = year for which calculations are carried out.

For calculating GHG emissions according to project scenario related to the utilization of organic waste from the production of beer by depositing it at landfills a typical approached described in1996 IPCC Guidelines for National Greenhouse Gas Inventories was used.

$$PE_{CH4,y} = (MSW_{T,PJ,y} \cdot MSW_{F,PJ,y} \cdot MCF \cdot DOC \cdot DOC_F \cdot F \cdot \frac{16}{12} - R_y) \cdot (1 - OX) \cdot GWP_{CH4} \quad (4)$$

Where
$PE_{CH4,y}$ = greenhouse gas emissions in the project scenario related to the disposal of organic waste (sparging) from beer production by depositing it at landfills in year *y*, tCO2e;
$MSW_{T,PJ,y}$ = total sparging generated according to project scenario in year *y,* tons;
$MSW_{F,PJ,y}$ = fraction of sparging disposed to solid waste disposal sites according to project scenario in year *y*;
MCF = methane correction factor (fraction) (2006 IPCC)
DOC = degradable organic carbon (fraction) (2006 IPCC)
DOC_F = fraction organic waste dissimilated (2006 IPCC)
F = fraction of CH4 in landfill gas (default value 0.5) (1996 IPCC)

* http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-03-v2.pdf

$\frac{16}{12}$ = coefficient of conversion of carbon into methane;
R_y = recovered CH4 in year *y*, tCH4;
OX = oxidation factor, (0 as stated in 1996 IPCC);
GWP_{CH4} = potential of methane global warming, tCO2e/tCH4; (According to the UNFCCC solution and the Kyoto protocol)
y = year for which calculations are carried out.

Baseline emissions

$$BE_y = BE_{ELEC,y} + BE_{NG,y} + BE_{CH4,y}, \quad (5)$$

where
BE_y = GHG emissions according to baseline scenario in year *y*, tCO2e;
$BE_{ELEC,y}$ = baseline GHG emissions related to electric power consumption in year *y*, tCO_2e;
$BE_{NG,y}$ = baseline GHG emissions related to the consumption of natural gas in year *y*, tCO_2e;
$BE_{CH4,y}$ = baseline GHG emissions related to utilization of organic waste from beer production by disposing them at landfills in year *y*, tCO_2e;
y = year for which calculations are carried out.

GHG emissions in baseline scenario related to the consumption of electricity are calculated according to the approach described in the Tool to calculate baseline, project and/or leakage emissions from electricity consumption, Version 01.

$$BE_{ELEC,y} = EC_{BL,y} \cdot EF_{CO2,ELEC,y}, \quad (6)$$

Where
$BE_{ELEC,y}$ = GHG emissions according to baseline scenario related to consumption of electric power in year *y*, tCO_2e;
$EC_{BL,y}$ = amount of electric power consumed according to baseline scenario by DE PJSC "Obolon" “Zibert’s Brewery”in year *y*, MWh;
$EF_{CO2,ELEC,y}$ = indirect GHG emissions from consumption of electric power by consumers of electric power in Ukraine, tCO_2e/MWh; (See the formula 2 above)
y = year for which calculations are carried out.

$$EC_{BL,y} = P_y \cdot \frac{EC_{BL}}{P_{BL}}, \quad (7)$$

Where

$EC_{BL,y}$ =amount of electric power consumed by DE PJSC "Obolon" “Zibert’s Brewery” in the baseline scenario in a year *y*, MWh;
P_y = volumes of beer production in year *y*, t.dal;
P_{BL} = baseline year volumes of beer production, t.dal
EC_{BL} = amount of electric power consumed by DE PJSC "Obolon" “Zibert’s Brewery”in base year, MWh;
y = year for which calculations are carried out.

GHG emissions in project scenario related to the consumption for natural gas are calculated in accordance with approach described in Tool to calculate baseline, project and / or leakage emissions from electricity consumption, Version 02.

$$BE_{NG,y} = FC_{BL,NG,y} \cdot NCV_{NG,BL} \cdot EF_{CO2,NG} \cdot 4.1868, \quad (8)$$

Where
$BE_{NG,y}$ = GHG emissions according to baseline scenario related to consumption of natural gas in year *y*, tCO_2e;
$FC_{BL,NG,y}$ = amount of natural gas consumed by DE PJSC "Obolon" “Zibert’s Brewery”according to baseline scenario in year *y*, ths m^3;
$NCV_{BL,NG}$ = caloricity of natural gas used in beer production in base year, Gcal/ths m^3;
$EF_{CO2,NG}$ = natural gas emissions ratio, tCO_2e/GJ;
4.1868 = conversion of Gcal into GJ coefficient;
y = year for which calculations are carried out.

$$FC_{BL,NG,y} = P_y \cdot \frac{FC_{BL,NG}}{P_{BL}}, \quad (9)$$

Where
$FC_{BL,NG,y}$ = volume of natural gas used by DE PJSC "Obolon" “Zibert’s Brewery” in baseline scenario year *y*, Gcal;
P_y = volumes of beer production in year *y*, t.dal;
P_{BL} = baseline year volumes of beer production, t.dal;
$FC_{BL,NG}$ = volume of natural gas used by DE PJSC "Obolon" “Zibert’s Brewery” in base year, Gcal;
y = year for which calculations are carried out.

For calculating baseline scenario GHG emissions related to utilization of organic waste (sparging) through disposal at landfills was used typical approach described in 1996 IPCC Guidelines for National Greenhouse Gas Inventories was used.

$$BE_{CH4,BL,y} = (MSW_{T,BL,y} \cdot MSW_{F,BL,y} \cdot MCF \cdot DOC \cdot DOC_F \cdot F \cdot \frac{16}{12} - R_{BL}) \cdot (1 - OX) \cdot GWP_{CH4} \quad (10)$$

Where

$BE_{CH4,BL,y}$ = baseline GHG emissions related to utilization of organic waste (sparging) from beer production through disposal at landfills in year *y*, tCO_2e;
$MSW_{T,BL,y}$ = total sparging generated according to baseline scenario in year *y*, tons;
$MSW_{F,BL,y}$ = fraction of sparging disposed to solid waste disposal sites according to baseline scenario in year *y*;
MCF = methane correction factor (fraction); (2006 IPCC);
DOC = degradable organic carbon (fraction); (2006 IPCC);
DOC_F = fraction organic waste dissimilated; (2006 IPCC);
F = fraction of CH4 in landfill gas (default value 0.5); (1996 IPCC);
$\frac{16}{12}$ = coefficient for converting carbon into methane;
R = recovered CH4 in year *y*, tCH4;
OX = oxidation factor (0 as stated in 1996 IPCC);
GWP_{CH4} = potential of global warming of methane, tCO2e/tCH4; (According to the UNFCCC and the Kyoto Protocol)
y = year for which calculations are carried out.

$$MSW_{T,BL,y} = P_y \cdot \frac{MSW_{T,BL}}{P_{BL}}, \qquad (11)$$

Where
$MSW_{T,BL,y}$ = total sparging generated according to baseline scenario in year *y*, tons;
$MSW_{T,BL}$ = total sparging generated in base year, tons;
P_y = volumes of beer production in year *y*, t.dal;
P_{BL} = volumes of beer production in base year, t.dal;
y = year for which calculations are carried out.

Emission reduction

Emission reduction is calculated according to the formula:

$$ER_y = BE_y - PE_y - LE_y, \qquad (12)$$

Where
ER_y = emission reduction in year *y*, tCO2e;
BE_y = baseline GHG emissions in year *y*, tCO2e;
PE_y = GHG emissions from the project activity in year *y*, tCO2e;
LE_y = emissions from leakage in year *y*, tCO2e;
y = year for which calculations are carried out.

The monitoring plan presents the quality assurance and control procedures for the monitoring process. This includes, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available on request.

Data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities. The roles and responsibilities of the persons involved to monitoring process are described in full in section D.3 of PDD and demonstrated on the Scheme of data collection for Monitoring Report.

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

The monitoring plan provides, 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 (e.g. official statistics, IPCC, commercial and scientific literature etc.) but not including data that are calculated with equations.

The monitoring plan indicates that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project.

CARs (CAR09-CAR14) and their resolutions/conclusions applicable to monitoring plan are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential Indirect external leakage of CO2, CH4, N2O generated by fuel production and its transportation and appropriately explains that they are neglected.

No issues applicable to leakage were found.

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 generated by the project.

The PDD provides the ex ante estimates of:

(a) Emissions for the project scenario (within the project boundary), which are:

Year	Greenhouse gases project emission (tonnes of CO2equivalent)
2008	9613
2009	16727
2010	21375
2011	21400
2012	21400
Total 2008-2012:	90515
Average number of emission 2008-2012:	18103
2013	21400
2014	21400
2015	21400
2016	21400
2017	21400
2018	21400
2019	21400
2020	21400
2021	21400
2022	21400
2023	21400
2024	21400
2025	21400
Total 2013-2025:	278200
Average number of emission 2013-2025:	21400
Total 2008-2025:	368715
Average number of emission 2008-2025:	20484

(b) No leakage is expected during the project activity;

(c) Emissions for the baseline scenario (within the project boundary), which are:

Year	Greenhouse gases baseline emission (tonnes of CO2 equivalent)
2008	19578
2009	77514
2010	107291
2011	107354
2012	107354
Total 2008-2012:	419091
Average number of reduction 2008-2012:	83818
2013	107354
2014	107354
2015	107354
2016	107354
2017	107354
2018	107354
2019	107354
2020	107354
2021	107354
2022	107354
2023	107354
2024	107354
2025	107354
Total 2013-2025:	1395602
Average number of emission 2013-2025:	107354
Total 2008-2025:	1814693
Average number of emission 2008-2025:	100816

(d) Emission reductions adjusted by leakage (based on (a)-(c) above), which are:

Year	Estimated emission redactions (tonnes of CO2 equivalent)
2008	9965
2009	60787
2010	85916
2011	85954
2012	85954
Total 2008-2012:	328576
Average number of reduction 2008-2012:	65715

2013	85954
2014	85954
2015	85954
2016	85954
2017	85954
2018	85954
2019	85954
2020	85954
2021	85954
2022	85954
2023	85954
2024	85954
2025	85954
Total 2013-2025:	1117402
Average number of reduction 2013-2025:	85954
Total 2008-2025:	1445978
Average number of reduction 2008-2025:	80332

Emission reductions estimation after the first commitment period

The estimates referred to above are given:

(a) On a periodic basis;

(b) From 01/01/2008 to 31/12/2025, covering the whole crediting period;

(c) On a source-by-source basis;

(d) For CO2
(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, which is

$$ER_y = BE_y - PE_y - LE_y,$$

Where
ER_y = emission reductions in year y, tCO2e;
BE_y = baseline emissions in year y, tCO2e;
PE_y = project emissions in year y, tCO2e;
LE_y = leakages in year y, tCO2e;
y = year of provided calculations.

is consistent throughout the PDD.

Data sources used for calculating the estimates referred to above, such as:

- Statistic data on fuel and energy consumtion of factory and factory production
- Dafault values

are clearly identified, reliable and transparent.

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.

No issues applicable to estimation of emission reductions or enhancements of net removals were found.

4.10 Environmental impacts (48)

Collection, handling and transfer of waste for utilization was carried out in accordance with the law of Ukraine “On waste”.

The legal foundations for handling waste are the current legal and normative acts on environmental safety.

Production waste, depending on its physical, chemical and biological characteristics is divided into four danger classes:

- I class - extremely high-risk waste;
- II class - high-risk waste;
- III class - medium-risk waste;
- IV class - low-risk waste.

Procedures for handling waste are described in Annex 3 of this document.

In accordance with Ukrainian laws new construction projects, reconstruction and technical re-equipment, industrial and civil projects must include Environmental Impact Assessment (EIA), which main

requirements are listed in the State Construction Norms of Ukraine A.2.2-1-2003.

DE PJSC "Obolon" “Zibert’s Brewery” has the necessary Environmental Impact Assessment of its activities in accordance with Ukrainian law.

In general the “Implementation of complex technical and technological modernization of enterprise to reduce energy consumption and implementation of recycling organic waste from beer production at DE PJSC "Obolon" “Zibert’s Brewery”” project will have positive effect on the environment. The following points will give detailed information on the positive effect on the environment:

1. The project implementation will reduce CO_2 emissions in the city of Fastiv due to more effective energy consumption. This will be achieved by implementing modern equipment and preproduction processes.

2. Due to lower fuel consumption, electricity and ecologic technologies for the utilization of organic waste, the implementation of the project will reduce emissions of SO_x, NOx, CO and CH_4 solid particles (co-product of combustion).

No transboundary environmental impact is expected from the implementation of this project.

Impact on the aquatic environment

Impact on the aquatic environment will be the same as in the base scenario. The existing technologies used in the production of beer require the disposal of waste water through the drainage system with mandatory chemical control. All these actions are stipulated by the Water Code of Ukraine, State Standart 28.74-82 “Rules of hygiene and quality control”, Construction rules and regulations 4630-92 that determine the maximum concentration for internal water bodies. Disposal into open water bodies will not be done.

Project implementation will have positive effect. It will allow reducing water consumption and, as a result, lead to the reduction of waste water discharge.

Impact on ambient air

Project implementation will have positive effect on air:

1) Reduce the emissions of NOx, SOx, CO and solid particles due to the use of more environmentally clean technologies and reduction of power consumption;

2) Reduced consumption of electric power will lead to lower emissions of the same pollutants into the air;

3) Will reduce the emission of CH_4 through the utilization of organic waste.

Effects on land use

There will be no effect on land/soil.

The corresponding law on land use is stated in the Land Code of Ukraine. The National technological practice/standart: State Standart 17.4.1.02-83 “Protection of nature, soil. Classificatioin of chemicals for controlling pollution”.

Impact on biodiversity

There will be no impact on biodiversity.

Generation of waste, waste discharge and handling

Generation of waste, waste discharge and handling are present. In the process of project implementation waste will be generated after the collection of physically and morally outdated equipment, burners, pipes etc. There will be construction waste as a result of dismantling of boilers and construction of boiler shops and others.

Collection, handling and transfer of waste for utilization of the enterprise’s waste will be carried out in accordance with the law of Ukraine “On waste”.

Handling procedures are described in Annex 3 of this document.

DE PJSC "Obolon" “Zibert’s Brewery” is certified according to ISO-14001:2004 and OHSAS-18001 systems, which supports the ability and desire of the company to manage its impact on the environment.

CAR15 and its resolution/conclusion applicable to environmental impacts are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.11 Stakeholder consultation (49)

No stakeholders' comments were received.

4.12 Determination regarding small scale projects (50-57)

Not applicable

4.13 Determination regarding land use, land-use change and forestry (LULUCF) projects (58-64)

Not applicable

4.14 Determination regarding programmes of activities (65-73)

Not applicable

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 "Implementation of complex technical and technological modernization of enterprise to reduce energy consumption and implementation of recycling organic waste from beer production at DE PJSC "Obolon" "Zibert's Brewery"" project of «Company «MT-Invest» LTD located in Fastiv, 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 participant/s used the latest "Combined tool to identify the baseline scenario and demonstrate additionality". In line with this tool, the PDD provides barrier 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 one pending issue 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 02 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

The review of the project design documentation (version 02) 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 «Company «MT-Invest» LTD that relate directly to the GHG components of the project.

/1/ PDD «Implementation of complex technical and technological modernization of enterprise to reduce energy consumption and implementation of recycling organic waste from beer production at DE PJSC "Obolon" “Zibert’s Brewery”» project of «Company «MT-Invest» LTD version 01 dated 18/08/2011.
/2/ PDD «Implementation of complex technical and technological modernization of enterprise to reduce energy consumption and implementation of recycling organic waste from beer production at DE PJSC "Obolon" “Zibert’s Brewery”» project of «Company «MT-Invest» LTD version 02 dated 22/09/2011.
/3/ Zibert_v.2.xls – excel file

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

/1/ Decree of Cabinet of Ministers of Ukraine #206, dated 22/02/2006
/2/ Joint Implementation Project Design Document Form, version 01
/3/ Guidelines for Users of the Joint Implementation Project Design Document Form/Version 04, JISC.
/4/ JISC Guidance on criteria for baseline setting and monitoring.

Version 02.
/5/ "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0)
/6/ Glossary of Joint Implementation Terms, Version 03.
/7/ Decree #43 on approval of indexes of specific carbon dioxide emissions in the year 2010 issued by NEIA dated 28.03.2011.
/8/ Decree #62 on approval of indexes of specific carbon dioxide emissions in the year 2008 issued by NEIA dated 15.04.2011.
/9/ Decree #63 on approval of indexes of specific carbon dioxide emissions in the year 2009 issued by NEIA dated 15.04.2011.
/10/ Decree #75 on approval of indexes of specific carbon dioxide emissions in the year 2011 issued by NEIA dated 12.05.2011.
/11/ Order № 56, dated 30 Mar 2004, Fastiv
/12/ Operating instructions on "Screw compressor L90 - L132"
/13/ Agreement № 15/08 dated 27 Feb 2008, Kyiv
/14/ Annex №1 to the Agreement 15/08 dated 27 Feb 2008
/15/ Boiler passport reg. № 1026
/16/ Boiler passport № 96332
/17/ Purchase and Sale Agreement № 09.0266 dated 17 Mar 2010
/18/ Annex №1 to Agreement № 09.0266 dated 17 Mar 2010
/19/ "Refrigeration equipment with air cooled condenser" - Installation, commissioning, operation and maintenance instructions, 2007
/20/ "General instructions on installation and commissioning of water chillers" - №: 015173, 01051732, 0151733, 2007
/21/ Waste report, 2010
/22/ Report on the formation and recycling of waste I - III danger class, 2009
/23/ Instructions on waste recycling, 20 Jul 2011
/24/ Permission for the emission of pollutants into the air from stationary sources № 3211200000 – 5, 16 Aug 2007
/25/ Permission for the emission of pollutants into the air from stationary sources № 3211200000 – 62, 17 Nov 2010
/26/ Permission for the waste disposal in 2011 № 48 – 12, 28 May 2010
/27/ Annex to permission for the waste disposal in 2011 № 48 – 12, 28 May 2010
/28/ Conclusion of the State Ecological Expertise on the project "Reconstruction of SE "Obolon" "Zibert's Brewery", 3, Pyshkina Str., Fastiv, Kyiv Region" 28 Apr 2009
/29/ A copy of the situational plan of Fastiv - the technical re-equipment of the SE "Obolon" "Zibert's Brewery" on Pushkina Str., Fastiv №3, dated 13 Nov 2008
/30/ Purchase and Sale Agreement, dated 03 Oct 2007
/31/ Purchase and Sale Agreement, dated 08 Jul 2008
/32/ Purchase and Sale Agreement, dated 01 Apr 2008
/33/ Purchase and Sale Agreement, dated 01 Oct 2008
/34/ Purchase and Sale Agreement №6, dated 20 Mar 2009
/35/ Purchase and Sale Agreement, dated 01 May 2009

/36/ Purchase and Sale Agreement, dated Purchase and Sale Agreement, dated 07 Sept 2009
/37/ Purchase and Sale Agreement, dated 12 Oct 2009
/38/ Purchase and Sale Agreement, dated 22 Jul 2009
/39/ Purchase and Sale Agreement, dated 21 Jan 2010
/40/ Purchase and Sale Agreement, dated 10 Jan 2010
/41/ Purchase and Sale Agreement, dated 11 Jan 2010
/42/ Purchase and Sale Agreement, dated 14 Jan 2010
/43/ Purchase and Sale Agreement, dated 13 Jan 2010
/44/ Purchase and Sale Agreement, dated 12 Jan 2010
/45/ Purchase and Sale Agreement, dated 12 Jan 2010. “Horse-Clim” is the Buyer
/46/ Purchase and Sale Agreement № 4/23, dated 10 Jan 2011
/47/ Purchase and Sale Agreement № 5, dated 10 Jan 2011
/48/ Purchase and Sale Agreement № 10, dated 11 Jan 2011
/49/ Purchase and Sale Agreement № 13, dated 10 Jan 2011
/50/ Purchase and Sale Agreement № 18, dated 11 Jan 2011
/51/ Purchase and Sale Agreement № 19, dated 11 Jan 2011
/52/ Purchase and Sale Agreement № 24, dated 11 Jan 2011
/53/ Purchase and Sale Agreement № 25, dated 11 Jan 2011
/54/ Purchase and Sale Agreement 31, dated 25 Mar 2011
/55/ Purchase and Sale Agreement 32, dated 25 Mar 2011
/56/ Actual fuel emissions on the production of certain products and works in 2004
/57/ Actual fuel emissions on the production of certain products and works in 2006
/58/ Actual fuel emissions on the production of certain products and works in 2007
/59/ Actual fuel emissions on the production of certain products and works in 2008
/60/ Actual fuel emissions on the production of certain products and works in 2009
/61/ Actual fuel emissions on the production of certain products and works in 2010
/62/ Electric balance sheet, the composition of power equipment and report on the stations work in 2006
/63/ Electric balance sheet, the composition of power equipment and report on the stations work in 2007
/64/ Electric balance sheet, the composition of power equipment and report on the stations work in 2008
/65/ Electric balance sheet, the composition of power equipment and report on the stations work in 2009
/66/ Electric balance sheet, the composition of power equipment and report on the stations work in 2010
/67/ Report on the results of fuel, heat and power consumption in 2004
/68/ Report on the results of fuel, heat and power consumption in Jan-Feb 2006

/69/ Report on the results of fuel, heat and power consumption in Jan-Feb 2005
/70/ Report on the results of fuel, heat and power consumption in Jan-Feb 2007
/71/ Report on the results of fuel, heat and power consumption in Jan-Feb 2008
/72/ Report on the results of fuel, heat and power consumption in Jan-Feb 2009
/73/ Report on the results of fuel, heat and power consumption in Jan-Feb 2010
/74/ Annex to the Agreement, dated 23 Sept 2011
/75/ Verification certificate of measuring equipment № 39-1/0090
/76/ Verification passport for resistance thermocouple TSP100P, 1187, №43
/77/ Passport for sstandard aperture with an angular manner of pressure changing selection № 062
/78/ Certificate of State Metrological Certification dated 10 Aug 2009
/79/ Certificate of acceptance, and packaging of electricity counter EuroALFA №01186692
/80/ Certificate of acceptance, and packaging of electricity counter EuroALFA №01186683
/81/ Certificate of acceptance, and packaging of electricity counter EuroALFA №01122658
/82/ Certificate of acceptance, and packaging of electricity counter EuroALFA №01122659
/83/ Act of delivery - acceptance of works № 05429, dated 01 Aug 2011
/84/ Act of fixed assets commissioning № 216, dated 30 Jun 2008
/85/ Act of fixed assets commissioning № 216, dated 30 Jun 2008 Screw air compressor L132-7.5F/2
/86/ Act of fixed assets commissioning № 216, dated 30 Jun 2008 Screw air compressor L132-7.5F/2
/87/ Act of fixed assets commissioning № 216, dated 30 Sept 2008 Water chillers FOCS WATER 4802
/88/ Act of fixed assets commissioning № 222, dated 31 Oct 2008 Water chillers FOCS WATER 4802
/89/ Act of fixed assets commissioning № 199, dated 31 Jul 2007 Water chillers CHILLER
/90/ Act of fixed assets commissioning № 222, dated 31 Dec 2010 Station of carbon dioxide recovery
/91/ Act of the facility readiness to commissioning, 2008
/92/ Quality protocol for gas №01-1 04 Jun 2011
/93/ Quality protocol for gas №01-1 01 Nov 2010
/94/ Quality protocol for gas №01-1 06 Dec 2009

/95/ Quality protocol for natural gas №1/09 from 1 to 30 Sept 2008
/96/ Quality certificate for natural gas №1/05 from 1 to 31 May 2007
/97/ Quality protocol for natural gas №1/02 from 1 to 28 Feb 2006
/98/ Quality protocol for natural gas №1/06 from 1 to 30 Jun 2005
/99/ Quality certificate for natural gas № 1/1 from 1 to 31 Jun 2004

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/ Sergei Skalenko - Technical Director

/2/ Alexander Lyhoshert - Chief power engineer

/3/ Viktor Klets - Chief of cooking workshop

/4/ Taras Shevchenko - Foreman of fermentation

/5/ Nicheporuk Yuriy - Ecologist

/6/ Evgen Zuravliov – Director on Ecology projects

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APPENDIX A: DETERMINATION PROTOCOL

Table 1 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?	Implementation of complex technical and technological modernization of enterprise to reduce energy consumption and implementation of recycling organic waste from beer production at DE PJSC "Obolon" "Zibert's Brewery"	OK	OK
-	Is the sectoral scope to which the project pertains presented?	Scope #3:Energy demand Scope #13: Waste handling and disposal Corrective Action Request (CAR) 16: The proposed project activity not related to the scope #2. Please correct.	CAR16	OK
-	Is the current version number of the document presented?	PDD version number: 02	OK	OK
-	Is the date when the document was completed presented?	Data of Completion: 22/09/2011	OK	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)?	Corrective Action Request (CAR) 01: Please use in the PDD font size provided «JOINT IMPLEMENTATION PROJECT DESIGN DOCUMENT FORM» - version 01.	CAR01	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
-	Is the history of the project (incl. its JI component) briefly summarized?	Yes, brief description of project history provided.	OK	OK
Project participants				
-	Are project participants and Party(ies) involved in the project listed?	Project participants and parties listed in the table in section A.3 of PDD. Parties Project: Ukraine (host country).	OK	OK
-	Is the data of the project participants presented in tabular format?	Corrective Action Request (CAR) 02: Table A.3 in the PDD must be submitted in a format that provided in the version 04 of the "Guidelines for users of the JI PDD form".	CAR02	OK
-	Is contact information provided in Annex 1 of the PDD?	Corrective Action Request (CAR) 03: "Company "MT-Invest" Ltd. Is not Project Participant. Please exclude information about it from Annex 1.	CAR03	OK
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Yes, Ukraine is a host Party	OK	OK
Technical description of the project				
Location of the project				
-	Host Party(ies)	Ukraine	OK	OK
-	Region/State/Province etc.	The project is located in the Kyiv oblast	OK	OK
-	City/Town/Community etc.	Fastiv city	OK	OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	The DE PJSC "Obolon" "Zibert's Brewery" is located in the city of Fastiv. Clarification Request (CL) 06: In PDD indicated only the coordinates of Fastiv. Please specify geographic coordinates of DE PJSC "Obolon" "Zibert's Brewery".	CL06	OK
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	List and brief description of mesures to be implemented by the project provided in section A.4.2 of PDD.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	schedule described?			
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)	Corrective Action Request (CAR) 04: Clarification how anthropogenic GHG emission reductions are to be achieved is not provided. Please correct.	CAR04	OK
-	Is it provided the estimation of emission reductions over the crediting period?	Clarification Request (CL) 01: Please include in this section refer to the corresponding «Excel» file with the calculations. Clarification Request (CL) 02: Please number the tables with information of the estimates (calculations) of emission reductions.	CL01 CL02	OK OK
-	Is it provided the estimated annual reduction for the chosen credit period in tCO2e?	Yes, the estimated annual reduction for the chosen credit period in tCO2e is provided.	OK	OK
-	Are the data from questions above presented in tabular format?	Yes.	OK	OK
Estimated amount of emission reductions over the crediting period				
-	Is the length of the crediting period Indicated?	Yes, leight of crediting period is 18 years (216 months).	OK	OK
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	Yes, estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided in section A.4.3.1 of PDD.	OK	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as “Parties involved” in the PDD provided written project approvals?	Clarification Request (CL) 03: Section A.5 PDD must specify the names of DFPs (parties involved) that will approve the project.	CL03	OK
19	Does the PDD identify at least the host Party as a “Party involved”?	Yes, Ukraine is the Host Party.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	Corrective Action Request (CAR) 05: No Letters of Aapproval of the project issued by the parties involved.	CAR05	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
20	Are all the written project approvals by Parties involved unconditional?	See CAR05 above.	OK	OK
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?	See CAR05 above.	OK	OK
Baseline setting				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? − JI specific approach − Approved CDM methodology approach	PDD describes the JI specific approach used to identify the baseline scenario. Corrective Action Request (CAR) 06: Please provide date of baseline setting according required format DD/MM/YYYY.	CAR06	OK
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	Yes, the PDD provide a detailed theoretical description in a complete and transparent manner.	OK	OK
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?	In the PDD in a reasonable way showed that the baseline was determined by compiling a listing and description of real scenarios of future scenarios based on conservative assumptions and subsequent selection the most attractive of these scenarios.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− 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?			
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?	To determine the baseline scenario and demonstrate additionality used "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0).	OK	OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	For baseline emissions calculations were used CO2 emission factor for the projects of reducing electricity consumption from Ukraine electricity network, emission factor for natural gas and global warmig potential of methane. All factors are justified.	OK	OK
Approved CDM methodology approach only				
26 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	OK	OK
26 (a)	Is the approved CDM methodology the most	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?			
26 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	OK	OK
26 (c)	Are all explanations, descriptions and analyses pertaining to the baseline in the PDD made in accordance with the referenced approved CDM methodology?	N/A	OK	OK
26 (d)	Is the baseline identified appropriately as a result?	N/A	OK	OK
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	In section B.1 of the PDD was provided the analysis of project additionality, which aims to demonstrate that the project scenario is not part of the specified baseline, and that the project will achieve GHG emissions reductions against to baseline. The analysis was performed based on the latest version of "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0), which was approved by the CDM Executive Board and fully applied to JI projects.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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".			
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	Barriers analysis and common practice analysis which applied are widely used for additionality demonstration of the project activity.	OK	OK
29 (b)	Are additionality proofs provided?	Yes, justification of additionality provided in section B.1 of PDD.	OK	OK
29 (c)	Is the additionality demonstrated appropriately as a result?	Corrective Action Request (CAR) 07: In the PDD does not specify how the registration of this project as JI project will help overcome identified barriers.	CAR07	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 made in accordance with the "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0).	OK	OK
Approved CDM methodology approach only				
31 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	OK	OK
31 (b)	Does the PDD provide a description of why and how the referenced approved CDM methodology is applicable to the project?	N/A	OK	OK
31 (c)	Are all explanations, descriptions and analyses with regard to additionality made in accordance with the selected methodology?	N/A	OK	OK
31 (d)	Are additionality proofs provided?	N/A	OK	OK
31 (e)	Is the additionality demonstrated appropriately as a result?	N/A	OK	OK
Project boundary (applicable except for JI LULUCF projects)				
JI specific approach only				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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?	Corrective Action Request (CAR) 08: Determinated monitoring plan includes calculations of GHG emissions associated with utilizations of organic waste in project scenario. But these emissions are absence in table 4 of PDD. Please correct or explain.	CAR08	OK
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?	Yes, the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above.	OK	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?	Yes, project boundary represented in scheme form on Pic. 3.1 and Pic. 3.2 and in tabular form in Table 4.	OK	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?	See CAR06 above.	OK	OK
Approved CDM methodology approach only				
33	Is the project boundary defined in accordance with the approved CDM methodology?	N/A	OK	OK
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?	30/03/2004 – Order #56 established at the DE PJSC "Obolon" “Zibert’s Brewery” a workgroup for reducing power consumption and waste production in the process of brewing and other production activities. The responsibilities of this group include consideration of possibility and ensure that additional investment from the mechanisms of the Kyoto Protocol. This date is the date of this project considered as a JI project.	OK	OK
34 (a)	Is the starting date after the beginning of 2000?	Yes.	OK	OK
34 (b)	Does the PDD state the expected operational	25 years (300 months)	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	lifetime of the project in years and months?			
34 (c)	Does the PDD state the length of the crediting period in years and months?	18 years (216 months)	OK	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?	Yes, starting date of the crediting period is after the date the first emission reductions are generated.	OK	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?	Clarification Request (CL) 04: Please specify that the crediting period of ERUs generating started after the beginning of 2008 and continuing over the life cycle.	CL04	OK
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	Clarification Request (CL) 05: Please specify that crediting period extension beyond 2012 requires approval by the Host country.	CL05	OK
Monitoring plan				
35	Does the PDD explicitly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology approach	JI specific approach was used.	OK	OK
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?	Corrective Action Request (CAR) 09: In calculations was used constant NCV 8.1 Gcal/ths m^3. But analysis of documentation showed that NCV of natural gas is variable value. Please correct or clarify.	CAR09	OK
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable,	Yes, the monitoring plan specified the indicators, constants and variables used that are reliable, valid and provide	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	transparent picture of the emission reductions or enhancements of net removals to be monitored.		
36 (b)	If default values are used: − 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?	Corrective Action Request (CAR) 10: Not all needed sources and references were provided. Please correct.	CAR10	OK
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?	Yes. All procedures of selection and justification of necessary values are described.	OK	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?	Corrective Action Request (CAR) 11: Please specify who is responsible for providing actual value of CO2 emission factor for the projects of reducing electricity consumption by Ukraine consumers.	CAR11	OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	Corrective Action Request (CAR) 12: Please indicate in PDD that the data monitored and required for the project determination will be kept for two years after the last transfer of ERUs the project. Corrective Action Request (CAR) 13: DE PJSC "Obolon" “Zibert’s Brewery” produces soft drinks besides the production of beer. But under the proposed monitoring plan all calculations are performed only to brewed beer. Please clarify or correct.	CAR12 CAR13	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (b) (iv)	Are International System Unit (SI units) used?	No.	OK	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?	Yes, value of beer production and CO2 emission factor for the projects of reducing electricity consumption by Ukrainian consumers used to calculate baseline emissions but are obtained through monitoring.	OK	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	Yes, use of parameters, coefficients, variables, etc. is consistent between the baseline and monitoring plan.	OK	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"?	Yes monitoring plan developed in line with "Guidance on criteria for baseline setting and monitoring".	OK	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 period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	Yes, all relevant parameters are described (see section D.1 of PDD).	OK	OK
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	The table in section D.1.1 PDD defined time (regularity) of monitoring and information sources with respect to all parameters and data to be monitored.	OK	OK
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the	In the PDD described and explained all the algorithms and formulas used to calculating emissions for the baseline and	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?	project scenarios.		
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Yes, all necessary algorithms and formulae are clearly described.	OK	OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Yes, all variables, equation format, subscripts etc. used consistent.	OK	OK
36 (f) (iii)	Are all equations numbered?	Yes.	OK	OK
36 (f) (iv)	Are all variables, with units indicated defined?	Yes.	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Yes, analysis of supporting document justified conservativeness of the algorithms/procedures of monitoring.	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	The level of uncertainty of data specified in the table of quality control and quality assurance procedures (see Section D.2 PDD). Taken into account that all used most of data and parameters are defined based on statistic data and results of measurements by calibrated measuring equipment with the relevant accuracy and crosschecked by energy resouces supplyer and state autorities their level of uncertainty is defined as low.	OK	OK
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?	Yes.	OK	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	No, all algorithms and formulas clearly explained	OK	OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Yes.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (f) (vii)	Are references provided as necessary?	See CAR09 above.	OK	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	Yes, all implicit and explicit assumptions explained in a transparent manner.	OK	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?	Used assumptions and procedures not have significant uncertainty.	OK	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 net removals provided?	Uncertainty range was defined as low.	OK	OK
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?	All monitoring standards that used in proposed monitoring plan are commonly used in Ukraine for energy consumtion metering.	OK	OK
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	See CAR08 above.	OK	OK
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?	The quality assurance and control procedures described in section D.2 of PDD.	OK	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Yes, the responsibilities and the authority regarding the monitoring activities are clearly identified in section D.3 of PDD.	OK	OK
36 (k)	Does the monitoring plan, on the whole, reflect	Corrective Action Request (CAR) 14:	CAR14	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	Section D.1.5 of the PDD requires from project participants to submit information about collection and archiving data on the environment impact as well as references to relevant norms of the host country. Please provide relevant data.		
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?	Yes, all used parameters presented in sections D.1.1.1 and D.1.1.3 of PDD.	OK	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?	See CAR11 above.	OK	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?	No any selected elements or combinations of approved CDM methodologies or methodological tools used in monitoring plan.	OK	OK
Approved CDM methodology approach only				
38 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	OK	OK
38 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
38 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	OK	OK
38 (c)	Are all explanations, descriptions and analyses pertaining to monitoring in the PDD made in accordance with the referenced approved CDM methodology?	N/A	OK	OK
38 (d)	Is the monitoring plan established appropriately as a result?	N/A	OK	OK
Applicable to both JI specific approach and approved CDM methodology approach				
39	If the monitoring plan indicates overlapping monitoring periods during the crediting period: (a) Is the underlying project composed of clearly identifiable components for which emission reductions or enhancements of removals can be calculated independently? (b) Can monitoring be performed independently for each of these components (i.e. the data/parameters monitored for one component are not dependent on/effect data/parameters to be monitored for another component)? (c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding monitoring are met? (d) Does the monitoring plan explicitly provide for overlapping monitoring periods of clearly defined project components, justify its need and state how the conditions mentioned in (a)-(c) are met?	There are no overlapping monitoring periods during the crediting period.	OK	OK
Leakage				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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 is expected in proposed project activity.	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	No leakage is expected in proposed project activity.	OK	OK
Approved CDM methodology approach only				
41	Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?	N/A	OK	OK
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 or net removals in the baseline scenario and in the project scenario was used.	OK	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 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?	Emissions for the project, baseline scenario and emission reductions were ex ante estimated. Results of estimations provided in section E of PDD and excel spreadsheets.	OK	OK
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)?	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(b) Leakage, as applicable? (c) Emission reductions or enhancements of net removals adjusted by leakage?			
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 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?	Yes, calculation of emission reductions presented in the PDD of the proposed project corresponds to all the requirements of paragraph 45 of DVM.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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 enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
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?	Yes, the PDD include an illustrative ex ante emissions calculation.	OK	OK
Approved CDM methodology approach only				
47 (a)	Is the estimation of emission reductions or enhancements of net removals made in accordance with the approved CDM methodology?	N/A	OK	OK
47 (b)	Is the estimation of emission reductions or enhancements of net removals presented in the PDD: − On a periodic basis? − At least from the beginning until the end of the crediting period? − On a source-by-source/sink-by-sink basis? − For each GHG? − In tones of CO_2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol?	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− Are the formula used for calculating the estimates consistent throughout the PDD? − Are the estimates consistent throughout the PDD? − Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
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?	Corrective Action Request (CAR) 15: There is no information on transboundary impacts in the PDD.	CAR15	OK
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?	No significant environmental impacts related to project implementation expected. Therefore separate environmental impact assessment is not required.	OK	OK
Stakeholder consultation				
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?	Procedures of Ukraine did not require consultations with stakeholders for proposed project. However, information on implementation measures of reducing technological power consumtion provided in the media and in electronic media (see section G of PDD). No negative stakeholders' comments were received on company adress.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(b) The nature of the comments? (c) A description on whether and how the comments have been addressed?			
Determination regarding small-scale projects (additional elements for assessment)				
50	Does the PDD appropriately specify and justify the SSC project type(s) and category(ies) that fall under: (a) One of the types and thresholds of JI SSC projects as defined in .Provisions for joint implementation small-scale projects.? If the project contains more than one JI SSC project type component, does each component meet the relevant threshold criterion? (b) One of the SSC project categories defined in the most recent version of appendix B of annex II to decision 4/CMP.1, or an additional project category approved by the JISC in accordance with the relevant provision in “Provisions for joint implementation small-scale projects”?	N/A	OK	OK
51	Does the SSC PDD confirms and shows that the proposed JI SSC project is not a debundled component of a large project by explaining that there does not exist a JI (SSC) project with a publicly available determination in accordance with paragraph 34 of the JI guidelines: (a) Which has the same project participants; and (b) Which applies the same technology/measure and pertains to the same project category; and (c) Whose determination has been made publicly available in accordance with paragraph	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	34 of the JI guidelines within the previous 2 years; and (d) Whose project boundary is within 1 km of the project boundary of the proposed JI SSC project at the closest point?			
Applicable to bundled JI SSC projects only				
52 (a)	Do all projects in the bundle: (i) Have the same crediting period? (ii) Comply with the provisions for JI SSC projects defined in "Provisions for joint implementation small-scale projects", in particular the thresholds referred to in 50 (a) above? (iii) Retain their distinctive characteristics (i.e. location, technology/measure etc.)?	N/A	OK	OK
52 (b)	Does the composition of the bundle not change over time?	N/A	OK	OK
52 (c)	Has the AIE received (from the project participants): (i) Information on the bundle using the form developed by the JISC (F-JI-SSCBUNDLE)? (ii) A written statement signed by all project participants indicating that they agree that their individual projects are part of the bundle and nominating one project participant to represent all project participants in communicating with the JISC? (iii) Indication by the Parties involved that they are aware of the bundle in their project approvals referred to in 19 above?	N/A	OK	OK
53	If the project participants prepared a single SSC PDD for the bundled JI SSC projects,	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	do(are) all the projects: (a) Pertain to the same JI SSC project category? (b) Apply the same technology or measure? (c) Located in the territory of the same host Party?			
54	If the project participants prepared separate SSC PDDs for the bundled JI SSC projects, do(are) all the projects: (a) Have SSC PDDs been prepared for all JI SSC projects in the bundle? (b) Does each SSC PDD contain a single JI SCC project in the bundle?	N/A	OK	OK
55	If the projects in the bundle use the same baseline, does the F-JI-SSC-BUNDLE provide an appropriate justification for the use of the same baseline considering the particular situation of each project in the bundle?	N/A	OK	OK
56	Does the PDD indicate which of the following approaches is used for establishing a monitoring plan? (a) By preparing a separate monitoring plan for each of the constituent projects; (b) By preparing an overall monitoring plan including a proposal of monitoring of performance of the constituent projects on a sample basis, as appropriate.	N/A	OK	OK
56 (b)	If the approach 57 (b) above is used, (i) Are all the JI SSC projects located in the territory of the same host Party? (ii) Do all the JI SSC projects pertain to the same project category? (iii) Do all the JI SSC projects apply the same	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	technology or measure? (iv) Does the overall monitoring plan reflect good monitoring practice appropriate to the bundled JI SSC projects and provide for collection and archiving of the data needed to calculate the emission reductions achieved by the bundled projects?			
Applicable to all JI SSC projects				
57	Is the leakage only within the boundaries of non-Annex I Parties considered?	N/A	OK	OK
Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)				
58	Does the PDD appropriately specify how the LULUCF project conforms to: (a) The definitions of LULUCF activities included in paragraph 1 of the annex to decision 16/CMP.1, applying good practice guidance for LULUCF as decided by the CMP, as appropriate? (b) In the case of afforestation, reforestation and/or forest management projects, the definition of "forest" selected by the host Party, which specifies: (i) A single minimum tree crown cover value (between 10 and 30 per cent)? and (ii) A single minimum land area value (between 0.05 and 1 hectare)? and (iii) A single minimum tree height value (between 2 and 5 metres)?	N/A	OK	OK
JI specific approach only				
59	Baseline setting - in addition to 22-26 above Does the PDD provide an explanation how the baseline chosen:	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− Takes into account the good practice guidance for LULUCF, developed by the IPCC? − Ensures conformity with the definitions, accounting rules, modalities and guidelines under Article 3, paragraphs 3 and 4, of the Kyoto Protocol?			
60	Project boundary - alternative to 32-33 (a) Does the project boundary geographically delineate the JI LULUCF project under the control of the project participants? (a) If the JI LULUCF project contains more than one discrete area of land, (i) Does each discrete area of land have a unique geographical identification? (ii) Is the boundary defined for each discrete area? (ii) Does the boundary not include the areas in between these discrete areas of land? (b) Does the project boundary encompass all anthropogenic emissions by sources and removals by sinks of GHGs which are: (i) Under the control of the project participants; (ii) Reasonably attributable to the project; and (iii) Significant? (c) Does the project boundary account for all changes in the following carbon pools: − Above-ground biomass; − Below-ground biomass; − Litter; − Dead wood; and − Soil organic carbon? (c) Does the PDD provide: (i) The information of which carbon pools are	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	selected? (ii) If one or more carbon pools are not selected, transparent and verifiable information that indicates, based on conservative assumptions, that the pool is not a source? (d) Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria in (b) above?			
61 (a)	Project boundary - alternative to 32-33 (cont.) Are the delineation of the project boundary and the gases and sources/sinks included appropriately described and justified in the PDD?	N/A	OK	OK
61 (b)	Project boundary - alternative to 32-33 (cont.) Are all gases and sources/sinks included explicitly stated, and the exclusions of any sources/sinks related to the baseline or the LULUCF project appropriately justified?	N/A	OK	OK
62	Monitoring plan - in addition to 35-39 Does the PDD provide an appropriate description of the sampling design that will be used for the calculation of the net anthropogenic removals by sinks occurring within the project boundary in the project scenario and, in case the baseline is monitored, in the baseline scenario, including, inter alia, stratification, determination of number of plots and plot distribution etc.?	N/A	OK	OK
63	Does the PDD take into account only the increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary?	N/A	OK	OK
Approved CDM methodology approach only				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
64 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	OK	OK
64 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	N/A	OK	OK
64 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	OK	OK
64 (c)	Are all explanations, descriptions and analyses made in accordance with the referenced approved CDM methodology?	N/A	OK	OK
64 (d)	Are the baseline, additionality, project boundary, monitoring plan, estimation of enhancements of net removals and leakage established appropriately as a result?	N/A	OK	OK
Determination regarding programmes of activities (additional/alternative elements for assessment)				
66	Does the PDD include: (a) A description of the policy or goal that the JI PoA seeks to promote? (b) A geographical boundary for the JI PoA (e.g. municipality, region within a country, country or several countries) within which all JPAs included in the JI PoA will be implemented? (c) A description of the operational and management arrangements established by the coordinating entity for the implementation of the JI PoA, including:	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− The maintenance of records for each JPA? − A system/procedure to avoid double counting (e.g. to avoid including a new JPA that has already been determined)? − Provisions to ensure that persons operating JPAs are aware and have agreed to their activity being added to the JI PoA? (d) A description of each type of JPAs that will be included in the JI PoA, including the technology or measures to be used? (e) The eligibility criteria for inclusion of JPAs to the JI PoA for each type of JPA in the JI PoA?			
67	*Project approvals by Parties involved - additional to 19-20* Are all Parties partly or entirely within the geographical boundary for the JI PoA listed as "Parties involved" and indicated as host Parties in the PDD?	N/A	OK	OK
68	*Authorization of project participants by Parties involved - additional to 21* Is the coordinating entity presented in the PDD authorized by all host Parties to coordinate and manage the JI PoA?	N/A	OK	OK
69	*Baseline setting - additional to 22-26* Is the baseline established for each type of JPA?	N/A	OK	OK
70	*Additionality - additional to 27-31* Does the PDD indicate at which of the following levels that additionality is demonstrated? (a) For the JI PoA (b) For each type of JPA	N/A	OK	OK
71	*Crediting period - additional to 34*	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	Is the starting date of the JI PoA after the beginning of 2006 (instead of 2000)?			
72	*Monitoring plan - additional to 35-39* Is the monitoring plan established for each technology and/or measure under each type of JPA included in the JI PoA?	N/A	OK	OK
73	Does the PDD include a table listing at least one real JPA for each type of JPA?	N/A	OK	OK
73	For each real JPA listed, does the PDD provide the information of: (a) Name and brief summary of the JPA? (b) The type of JPA? (c) A geographical reference or other means of identification? (d) The name and contact details of the entity/individual responsible for the operation of the JPA? (e) The host Party(ies)? (f) The starting date of the JPA? (g) The length of the crediting period of the JPA? (h) Confirmation that the JPA meets all the eligibility requirements for its type, including a description of how these requirements are met? (i) Confirmation that the JPA has not been determined as a single JI project or determined under a different JI PoA?	N/A	OK	OK

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
Corrective Action Request (CAR) 01: Please use in the PDD font size provided «JOINT IMPLEMENTATION PROJECT DESIGN DOCUMENT FORM» - version 01.	-	PDD was corrected in line with «JOINT IMPLEMENTATION PROJECT DESIGN DOCUMENT FORM» - version 01. See PDD v.02.	PDD version 02 was checked and recognized as satisfactory. Issue is closed.
Corrective Action Request (CAR) 02: Table A.3 in the PDD must be submitted in a format that provided in the version 04 of the "Guidelines for users of the JI PDD form".	-	Table A.3 was corrected. See PDD v.02.	Issue is closed due to the amendments made in the PDD.
Corrective Action Request (CAR) 03: "Company "MT-Invest" Ltd. Is not Project Participant. Please exclude information about it from Annex 1.	-	Information on "Company "MT-Invest" Ltd. excluded from Annex 1.	The issue is closed due to the corrections made.
Corrective Action Request (CAR) 04: Clarification how anthropogenic GHG emission reductions are to be achieved is not provided. Please correct.	-	Relevant information provided in section A.4.3 of PDD version 02.	Based on the modifications made, CAR04 is closed.
Corrective Action Request (CAR) 05: No Letters of Aapproval of the project issued by the parties involved.	Item 19	Pending	Pending
Corrective Action Request (CAR) 06: Please provide date of baseline setting according required format DD/MM/YYYY.	Item 22	Corrected.	CAR06 is closed

Corrective Action Request (CAR) 07: In the PDD does not specify how the registration of this project as JI project will help overcome identified barriers.	Item 29 (c)	Description how the registration of this project as JI project will help overcome identified barriers provided in section B.1 of PDD v.02.	The response to CAR07 was found satisfactory. CAR07 is closed.
Corrective Action Request (CAR) 08: Determinated monitoring plan includes calculations of GHG emissions associated with utilizations of organic waste in project scenario. But these emissions are absence in table 4 of PDD. Please correct or explain.	Item 32 (a)	Table 4 was corrected. See PDD version 02.	CAR08 is closed based on the amendments made in the PDD.
Corrective Action Request (CAR) 09: In calculations was used constant NCV 8.1 Gcal/ths m^3. But analysis of documentation showed that NCV of natural gas is variable value. Please correct or clarify.	Item 36 (a)	According to statistic data Net calorific value is variable and variables in period 8100-8300 ccal/m^3 (8.1-8.3 Gcal/ths m^3). To simplify the calculations and taking into account the statistics of the enterprise in the calculations used $NCV_{NG,y}$ = 8.1 Gcal/ths m^3, which objectively reflects the lower calorific value of natural gas consumed by the DE PJSC "Obolon" “Zibert’s Brewery”.	CAR09 is closed based on the provided information.
Corrective Action Request (CAR) 10: Not all needed sources and references were provided. Please correct.	Item 36 (b)	Sources of data and parameters and relevant references were provided in section D of PDD version 02.	PDD version 02 was checked and recognized as satisfactory. Issue is closed.
Corrective Action Request (CAR) 11: Please specify who is responsible for proniding actual value of CO2 emission factor for the projects of reducing electricity consumption by Ukraine consumers.	Item 36 (b) (ii)	“Company “MT-Invest” Ltd. is responsible for providing actual value of CO2 emission factor for the projects of reducing electricity consumption by Ukraine consumers. Relevant information was added to PDD version 02.	The issue is closed due to the corrections made.

Corrective Action Request (CAR) 12: Please indicate in PDD that the data monitored and required for the project determination will be kept for two years after the last transfer of ERUs the project.	Item 36 (b) (iii)	Relevant information was added to PDD version 02.	The issue is closed based on the corrections made in the PDD.
Corrective Action Request (CAR) 13: DE PJSC "Obolon" “Zibert’s Brewery” produces soft drinks besides the production of beer. But under the proposed monitoring plan all calculations are performed only to brewed beer. Please clarify or correct.	Item 36 (b) (iii)	Consumption of energy DE PJSC «Obolon» “Zibert’s Brewery” is in the following areas: • Production of beer; • Other production consumption. All pages of consumption of energy resources that belong to other production consumption directly or indirectly related to beer production, but due to the peculiarities of the balance sheet brewery it was made a separate paragraph. Analysis of the structure of energy consumption DE PJSC «Obolon» “Zibert’s Brewery” (form number 11-MPT in 2010) showed that the production of beer is the main area of breweryenergy consumption. Energy consumption in "other production consumption" is less than 1% of the total energy balance of the plant.	Due to the corrections made and necessary information provided, the issue is closed.

		Taking into account that other production consumption directly or indirectly related to beer production, with the aim of simplifying the calculations were made relative to the value of beer produced. Natural gas used only for heat producing by plant boiler house. Relevant information added to section D of PDD version 02.	
Corrective Action Request (CAR) 14: Section D.1.5 of the PDD requires from project participants to submit information about collection and archiving data on the environment impact as well as references to relevant norms of the host country. Please provide relevant data.	Item 36 (k)	Relevant information added to section D.1.5 of PDD version 02.	Necessary corrections have been made. The issue is closed.
Corrective Action Request (CAR) 15: There is no information on transboundary impacts in the PDD.	Item 48 (a)	No transboundary environmental impact is expected from the implementation of this project. Relevant information added to section F.1 of PDD version 02.	The issue is closed based on the corrections made in the PDD.
Corrective Action Request (CAR) 16: The proposed project activity not related to the scope #2. Please correct.	-	Corrected.	The issue is closed based on the corrections made in the PDD.
Clarification Request (CL) 01: Please include in this section refer to the corresponding «Excel» file with the calculations.	-	Relevant references added to PDD version 02.	CL01 is closed based on the amendments made in the PDD.
Clarification Request (CL) 02: Please number the tables with information of the estimates (calculations) of emission reductions.	-	Tables were numbered.	Necessary corrections have been made. The issue is closed.

Clarification Request (CL) 03: Section A.5 PDD must specify the name DFPs (parties involved) that will approve the project.	Item 19	State Environmental Investment Agency of Ukraine is DFP of Ukraine. Sponsor Party wasn't determinated on this stage of Project. Relevant information added to PDD.	CL03 is closed based on the amendments made in the PDD
Clarification Request (CL) 04: Please specify that the crediting period of ERUs generating started after the beginning of 2008 and continuing over the life cycle.	Item 34 (d)	Relevant references added to section C.3 of PDD version 02.	PDD version 02 was checked and recognized as satisfactory. Issue is closed.
Clarification Request (CL) 05: Please specify that crediting period extension beyond 2012 requires approval by the Host country.	Item 34 (d)	Relevant references added to section C.3 of PDD version 02.	Issue is closed due to the amendments made in the PDD.
Clarification Request (CL) 06: In PDD indicated only the coordinates of Fastiv. Please specify geographic coordinates of DE PJSC "Obolon" "Zibert's Brewery".	-	Corrected. See section A.4.1.4 of PDD.	Issue is closed.