



DETERMINATION REPORT CEP CARBON EMISSIONS PARTNERS S.A.

DETERMINATION OF THE
“Reduction of greenhouse gas emissions
by application of No-till technology at LLC
“Vishva Ananda” farmlands”

REPORT NO. UKRAINE-DET/0610/2012

REVISION NO. 02

BUREAU VERITAS CERTIFICATION



DETERMINATION REPORT

Date of first issue 02/10/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: CEP Carbon Emissions Partners S.A.	Client ref.: Fabian Knodel

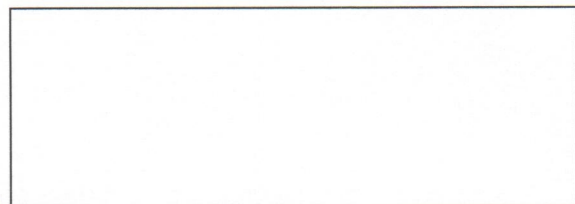
Summary:
Bureau Veritas Certification has made the determination of the "Reduction of greenhouse gas emissions by application of No-till technology at LLC «Vishva Ananda» farmlands" project of CEP CARBON EMISSIONS PARTNERS S.A., located in Kherson region and the Autonomous Republic of Crimea, Ukraine, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

The determination scope is defined as an independent and objective review of the project design document the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

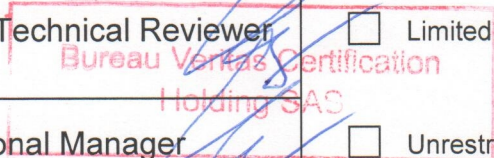
The first output of the determination process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies the 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.: UKRAINE-DET/0610/2012	Subject Group: JI
Project title: "Reduction of greenhouse gas emissions by application of No-till technology at LLC «Vishva Ananda» farmlands"	
Work carried out by: Oleg Skoblyk – Team Leader, Climate Change Lead Verifier Vladimir Kulish – Team Member, Climate Change Lead Verifier	
Work reviewed by: Ivan Sokolov - Internal Technical Reviewer	
Work approved by: Ivan Sokolov – Operational Manager	
Date of this revision: 03/10/2012	Rev. No.: 02
Number of pages: 62	



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





 DETERMINATION REPORT

Table of Contents		Page
1	INTRODUCTION	4
1.1	Objective	4
1.2	Scope	4
1.3	Determination team	4
2	METHODOLOGY	5
2.1	Review of Documents	5
2.2	Follow-up Interviews	6
2.3	Resolution of Clarification and Corrective Action Requests	6
3	PROJECT DESCRIPTION.....	7
4	DETERMINATION CONCLUSIONS	9
4.1	Project approvals by Parties involved (19-20)	9
4.2	Authorization of project participants by Parties involved (21)	10
4.3	Baseline setting (22-26)	10
4.4	Additionality (27-31)	12
4.5	Project boundary (32-33)	13
4.6	Crediting period (34)	14
4.7	Monitoring plan (35-39)	14
4.8	Leakage (40-41)	20
4.9	Estimation of emission reductions or enhancements of net removals (42-47)	20
4.10	Environmental impacts (48)	21
4.11	Stakeholder consultation (49)	22
4.12	Determination regarding small-scale projects (50-57)	22
4.13	Determination regarding land use, land-use change and forestry (LULUCF) projects (58-64)	22
4.14	Determination regarding programmes of activities (65-73)	22
5	SUMMARY AND REPORT OF HOW DUE ACCOUNT WAS TAKEN OF COMMENTS RECEIVED PURSUANT TO PARAGRAPH 32 OF THE JI GUIDELINES	22
6	DETERMINATION OPINION.....	22
7	REFERENCES	24
	APPENDIX A: COMPANY PROJECT DETERMINATION PROTOCOL.....	27



1 INTRODUCTION

CEP CARBON EMISSIONS PARTNERS S.A. has commissioned Bureau Veritas Certification to determine its JI project “Reduction of greenhouse gas emissions by application of No-till technology at LLC «Vishva Ananda» farmlands” (hereinafter called “the project”) located in Kherson region and the Autonomous Republic of Crimea, 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 to all projects. The determination is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are determined in order to confirm that the project design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Determination is a requirement for all JI projects and is seen as necessary and obligatory 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, the monitoring plan and other relevant documents. The information in these documents meets the Kyoto Protocol requirements, UNFCCC rules and associated interpretation.

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

1.3 Determination team

The determination team consists of the following personnel:

Oleh Skoblyk

Bureau Veritas Certification Team Leader, Climate Change Lead Verifier



DETERMINATION REPORT

Vladimir Kulish

Bureau Veritas Certification Team Member, Climate Change Lead Verifier

This determination report was reviewed by:

Ivan Sokolov

Bureau Veritas Certification Internal Technical 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 verification and the results from determining the identified criteria.

The determination protocol serves the following purposes:

- It organizes, describes 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 determination protocol consists of two tables and is enclosed in Appendix A to this report.

2.1 Review of Documents

The Project Design Document (PDD) was submitted by CEP CARBON EMISSIONS PARTNERS S.A. and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for users of the joint implementation project design document form, Approved CDM methodology and/or Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by an Accredited Independent Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, CEP CARBON EMISSIONS PARTNERS S.A. revised the PDD version 01 of 12/09/2012 and resubmitted it on 01/10/2012 as version 02.

The determination findings presented in this report relate to the project as described in the PDD versions 01 and 02.

 DETERMINATION REPORT

2.2 Follow-up Interviews

On 01/10/2012 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of LLC “Vishva Ananda” and CEP CARBON EMISSIONS PARTNERS S.A. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview Topics

Interviewed organization	Interview topics
LLC “Vishva Ananda”	<ul style="list-style-type: none"> ➤ Project History ➤ Project approach ➤ Project boundary ➤ Implementation schedule ➤ Organizational Structure ➤ Responsibilities and obligations ➤ Personnel training ➤ Quality control procedures and technologies ➤ Modernization / installation of equipment (records) ➤ Control over metering equipment ➤ System of measurements record-keeping, database ➤ Technical Documentation ➤ Monitoring Plan and procedures ➤ Permits and licenses ➤ Environmental Impact Assessment ➤ Stakeholders’ response
CEP Carbon Emissions Partners S.A.	<ul style="list-style-type: none"> ➤ Baseline methodology ➤ Monitoring plan ➤ Additionality proofs ➤ Calculations of emission reductions ➤ Project design ➤ Legal issues relating to the project ➤ Environmental impacts ➤ Approval by the host party

2.3 Resolution of Clarification and Corrective Action Requests

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

Corrective Action Request (CAR) is issued, where:



DETERMINATION REPORT

- (a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- (b) The JI requirements have not been met;
- (c) There is a risk that emission reductions cannot be monitored or calculated.

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

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

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

3 PROJECT DESCRIPTION

The purpose of the Joint Implementation (JI) Project is to reduce anthropogenic greenhouse gas (GHG) emissions resulting from crop growing by changing the agricultural land management system, namely replacement of traditional soil tillage in agriculture with No-till technology.

Emissions are reduced due to lower carbon dioxide emissions from farmland by lower (almost zero) topsoil disturbance by tillage in the course of crops growing.

LLC "Vishva Ananda" (the Farm), established in 2000, is engaged in agricultural activity in the southeastern part of Ukraine.

The company's primary activity is growing, processing, storage and sale of agricultural products. The company is also involved in milk farming activities and also provides services on grain and grain legumes harvesting.

Prior to the project, LLC "Vishva Ananda" used traditional land cultivation system. This system involves tillage that provides for turning over of topsoil to create homogeneous and mellow seedbed. The basic operation causing CO₂ emissions is ploughing during which crop residues are buried in the soil and weeds are removed.

In 2004, the Farm started to grow crops applying No-till technology (also referred to as "direct sowing technology") (see Table 1). This technology



DETERMINATION REPORT

differs from the traditional technology with fewer technological procedures, which prevents the topsoil from a major disturbance, as well as with the way to utilize plant residues. The number of technological procedures of plant growing and harvesting is almost the same in the two technologies, the main difference being that the traditional technology separates fertilizer application, land ploughing, cultivation, furrowing and seeding (multiple passage of the machinery across the field) in contrast to direct sowing with simultaneous fertilizer application (single passage of the machinery). The lower number of technological procedures in No-till provides for up to 60% lower fuel consumption in internal combustion engines of tractors and other agricultural machinery.

In 2004, the Farm started purchases of necessary agricultural equipment for direct sowing farming as part of the Joint Implementation Project. The equipment package included:

- seed drills for direct seeding;
- special tractors;
- herbicide sprayers;
- seed and fertilizer drill systems;
- combine harvesters and other machinery required by the technology.

No-till technology provides for the ground surface covered with a layer of mulch, i.e. residues of purposely shredded plants. The topsoil is not disturbed, which, along with the plant residues, creates a protective layer, preventing water and wind erosion of soil and ensuring much better water retention; it also nullifies GHG emissions into the atmosphere.

Additional benefits of the project (apart from those indicated in the purpose of the project):

- a) lower consumption of chemical fertilizers;
- b) lower impact of weather conditions on yields;
- c) lower wind and water soil erosion, better soil fertility.

Historical details of the project

22/02/2004 - a contract between LLC "Vishva Ananda" and Maharishi Vedic Organic Farm, LLC for the purchase of agricultural equipment was signed.

01/05/2004 - the start of project design document development for the JI project "Reduction of greenhouse gas emissions by application of No-till technology at LLC "Vishva Ananda" farmlands"



DETERMINATION REPORT

31/07/2012 – preparation and submission of the project idea note to support anthropogenic GHG emission reductions to the State Environmental Investment Agency of Ukraine.

01/10/2012 - the State Environmental Investment Agency issued Letter of Endorsement No. 2816/23/7 for the Joint Implementation project “Reduction of greenhouse gas emissions by application of No-till technology at LLC "Vishva Ananda" farmlands”.

The determination protocol of the project contains CARs and CLs for PDD versions 01 and 02.

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 30 Corrective Action Requests and 7 Clarification Requests.

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

4.1 Project approvals by Parties involved (19-20)

The project “Reduction of greenhouse gas emissions by application of No-till technology at LLC “Vishva Ananda” farmlands” has already obtained endorsement from the government of Ukraine, namely a Letter of Endorsement No.2816/23/7 issued by the State Environmental Investment Agency of Ukraine dated 01/10/2012.

Bureau Veritas Certification received this letter from the project participants and does not doubt its authenticity.

Upon completion of the Determination Report the project design document will be submitted to the State Environmental Investment Agency of Ukraine for receiving a Letter of Approval.

As the project has no approval by the Host Party, CAR 17 remains pending and will be closed after report finalizing (see Appendix A).



DETERMINATION REPORT

The identified areas of concern as to the project approval, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CAR 17).

4.2 Authorization of project participants by Parties involved (21)

The participation for each of the legal entities listed as project participants in the PDD will be authorized by the Parties involved, through the written Letters of Approval (from the government of Ukraine as the host party and from the other party involved – country-participant). See CAR 17.

4.3 Baseline setting (22-26)

The PDD explicitly indicates that using a methodology for baseline setting and monitoring developed in accordance with Appendix B of the JI Guidelines (hereinafter referred to as JI specific approach) was the selected approach for identifying the baseline (in accordance with paragraph 11 of the Guidance on criteria for baseline setting and monitoring (Version 03)).

A JI-specific approach was used for baseline setting, because for this project activity there is no approved methodology for baseline setting and monitoring at the moment.

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 current situation, without the JI project implementation.
 - b. Proposed project activity without the use of the JI mechanism.
 - c. Partial project activities (some of the project activities are implemented) without the use of the Joint Implementation Mechanism.

- (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:



- a. Agriculture is one of the leading industries in Ukraine; agriculture in general and agro-industrial complex (AIC) in particular are a political factor of sovereignty. Ukraine is deemed to be one of the most agrarian states of the world; its foreign trade turnover of agricultural products amounted to USD 19.8 billion in 2011. On January 12, 2012, National Scientific Centre "Institute of Agricultural Policy" under the direction of the National Academy of Agricultural Sciences of Ukraine developed "Strategic guidelines for the development of agriculture of Ukraine till 2020". According to this strategy further development of the industry requires major transformation, one of which is the implementation of No-till technologies. These technologies are capable of ensuring the competitiveness of agricultural production and food security through the decrease of production costs by introducing environment-friendly, energy- and resource-saving technologies.
- b. In the framework of the existing market model for the growing of AIC products, the effective competition among the producers can't be achieved; this market model can't also provide for the competitive pricing, which would stimulate the producers to improve efficiency and increase investment in the sector. Existing market mechanisms and targeted administrative measures don't provide for the necessary modernization and upgrading of the existing AIC product growing systems. The situation becomes particularly critical given the growth of the need for food products both at the national level and worldwide; the lack of these products represents a threat to safe development of global economy and a human being.
- c. Existing prices for AIC product growing are regulated by the state and do not include depreciation and investment needs of producers. This causes permanent shortage of funding and impossibility to conduct timely overhauls, ensure stable operation of equipment and invest into modernization and development of infrastructure.
- d. The current Ukrainian system of formation of prices for AIC products does not include an investment component for the development of agriculture. According to the Law "On Agriculture" LLC "Vishva Ananda" is neither obliged nor unmotivated to carry out modernization of its own production facilities. Meanwhile, state investment programs in most cases are targeted at administrative and organizational implementations.



DETERMINATION REPORT

- e. State support in the agricultural sector is provided in amounts of funds provided by the law of Ukraine on State Budget of Ukraine for the relevant year.
- f. The project scenario requires attracting significant additional funds. Such investment is characterized by a significant payback period and high investment risks, that is why it is not attractive for investors.
- g. Ukraine has no experience in implementing similar JI projects in agricultural sector. The project implementation by means of selling emission reduction units will give Ukraine an opportunity to gain useful experience of application of No-till technology.

The PDD provides a detailed description in a complete and transparent manner, as well as justification, that the baseline was duly set.

The methods of calculation used to determine the ex-ante and ex-post baseline emissions, are sufficiently described in Sections E and D of the PDD, respectively.

The identified areas of concern as to the baseline, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CAR 18 – CAR 19; CL 04).

4.4 Additionality (27-31)

The most recent version of the "Tool for the demonstration and assessment of additionality" approved by the CDM Executive Board was used in accordance with the JI specific approach, defined pursuant to paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", version 03. All explanations, descriptions and analyses are made in accordance with the selected tool or method.

The PDD provides a justification of the applicability of the approach with a clear and transparent description, as per item 4.3 above.

The developer of the project proved that anthropogenic emissions under the project are lower than the emissions that would take place in the absence of the project activity.

Additionality proofs are provided.

Three plausible and realistic alternative scenarios of the project were identified:

- Alternative 1.1: Continuation of the current situation, without the JI project implementation.
- Alternative 1.2: Proposed project activity without the use of the JI mechanism.



DETERMINATION REPORT

➤ Alternative 1.3: Partial implementation of the project (only some of project activities implemented) without the use of the JI mechanism. and the mandatory compliance of the scenarios with the legislation and legal acts was demonstrated.

According to the “Tool for the demonstration and assessment of additionality” (Version 06.0.0) simple cost analysis and common practice analysis were used in the PDD to justify additionality of the project.

Thus, the overall conclusion is that the project activity meets the criteria of additionality, is not a baseline scenario and is additional.

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

The identified areas of concern as to the additionality, project participants’ response and Bureau Veritas Certification’s conclusion are described in Appendix A to Determination Report (refer to CAR 20 – CAR 23; CL 05, CL 06).

4.5 Project boundary (32-33)

The project boundary, which is defined in the PDD and in accordance with the specific approach, delineated by the physical, geographical location of farmlands with the total area of 41 570.028 ha where LLC “Vishva Ananda” grows crop products, encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are:

- (i) Under the control of the project participants, such as:
 - CO₂ emissions due to mechanical treatment that involves tillage in the process of crop growing.
- (ii) Reasonably attributable to the project, such as:
 - CO₂ emissions due to mechanical soil treatment (No-till technology) in the process of crop growing. Such emissions are absent;
- (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.



DETERMINATION REPORT

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

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the contract between LLC “Vishva Ananda” and Maharishi Vedic Organic Farm, LLC for the purchase of agricultural equipment was signed, and the starting date is 22/02/2004, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 19 years and 11 months or 239 months – from February 22, 2004 to December 31, 2023.

The PDD states the length of the crediting period in years and months, which is 19 years and 11 months or 239 months, and its starting date of the crediting period is 22/02/2004, which is the date the first emission reductions are expected to be generated by the project.

The PDD states that the crediting period for the issuance of emission reductions 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.

The identified areas of concern as to the crediting period, project participants’ response and Bureau Veritas Certification’s conclusion are described in Appendix A to Determination Report (refer to CAR 24).

4.7 Monitoring plan (35-39)

The PDD in the section relating to the monitoring plan clearly states that a specific JI approach was chosen.

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 reporting forms, operational structure and management structure of the enterprise that will be applied when implementing the monitoring plan.

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

 DETERMINATION REPORT

transparent picture of the emission reductions or enhancements of net removals to be monitored such as: humus content in the soil of field cultivated using traditional tillage; soil density at field cultivated using traditional tillage; depth of soil layer disturbance at field when conventional tillage is applied; area of field cultivated using No-till technology; humus content in the soil of field cultivated using No-till technology.

The monitoring plan draws on the list of standard variables contained in appendix B of “Guidance on criteria for baseline setting and monitoring” developed by the JISC, as appropriate, among which: baseline emissions (BE_y), project emissions (PE_y).

According to the Guidelines for users of the JI PDD form, revision # 04, the described approach to monitoring clearly states:

- a) Data and parameters that are not subject to monitoring during the crediting period but are identified only once and are available at the PDD development stage:

$k_{b,i,y}$	humus content in the soil of field i cultivated using traditional tillage in period y , %
$\rho_{i,y}$	soil density in field i , cultivated using traditional tillage in period y , t/m^3 ;
$h_{b,i}$	depth of soil layer disturbance at field i when conventional tillage is applied, m

- b) Data and parameters that are not controlled during the crediting period but are identified only once (and thus remain fixed for the crediting period) and are not available at the PDD development stage: none.
- c) Data and parameters that are monitored throughout the crediting period, such as:

$S_{p,i}$	area of field i cultivated using No-till technology
$k_{p,i,y}$	humus content in the soil of field i cultivated using No-till technology in period y , %

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording, such as data archiving in hard copy and electronic form.

The most objective and cumulative factor that provides a clear picture of whether the emission reductions took place is the fact of GHG emission reductions by reducing carbon dioxide emissions by tilled soil due to

 DETERMINATION REPORT

reduction (almost to zero) of topsoil disturbance in the process of technological procedures of soil cultivation for crop growing. It can be defined as the difference between baseline emissions and GHG emissions after the project implementation.

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

Formulae used to estimate project emissions (for each gas, source etc.; emissions in units of CO₂ equivalent):

$$PE_y = 0 \quad , \quad (1)$$

where:

PE_y – project GHG emissions in period y, t CO₂eq;

[y] - index for monitoring period.

Formulae used to estimate baseline emissions (for each gas, source, etc.; emissions in units of CO₂ equivalent):

Baseline emissions in period y are calculated according to the following formula:

$$BE_y = BE_{A,y} \quad , \quad (2)$$

where:

BE_y – baseline GHG emissions in period y, t CO₂eq;

BE_{A,y} – baseline GHG emissions due to baseline land cultivation technology, in period y, t CO₂eq;

[y] - index for monitoring period;

[A] – index for baseline land cultivation technology.

Baseline emissions due to application of baseline land cultivation technology can be calculated as follows:

$$BE_{A,y} = \sum BE_{A,i,y} \quad , \quad (3)$$

where:

BE_{A,y} – baseline GHG emissions due to baseline land cultivation technology, in period y, t CO₂eq;

BE_{A,i,y} – baseline GHG emissions due to baseline land cultivation technology, in period y, t CO₂eq;

[y] - index for monitoring period;

[A] – index for baseline land cultivation technology;

[i] - index for number of fields.

DETERMINATION REPORT

Baseline GHG emissions due to baseline land cultivation technology, which involves tillage, for field i are calculated using the formula, according to the "Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities" (Version 01.1.0):

$$BE_{A,i,y} = 0,9 \times S_{pi} \times (SOC_{p,y,i} - SOC_{b,y,i}) \times \frac{44}{12}, \quad (4)$$

where:

$BE_{A,i,y}$ – baseline GHG emissions due to baseline land cultivation technology, in period y , t CO₂eq;

$S_{p,i}$ – area of field i cultivated using No-till technology, ha;

$SOC_{p,y,i}$ – soil organic carbon content in the soil of field i cultivated using No-till technology in period y , t C/ha;

$SOC_{b,y,i}$ – soil organic carbon content in the soil of field i cultivated using traditional tillage technology in period y , t C/ha;

44/12 – CO₂ to C molecular masses ratio;

0.9 – factor that takes account of 10% of emissions from the project activity, which includes creation of anti-fire furrows and minimal topsoil disturbance when No-till technology is implemented;

[y] - index for monitoring period;

[b] - index for baseline technology;

[p] - index for project technology;

[A] – index for baseline land cultivation technology;

[i] - index for number of fields.

Soil organic carbon content in soil of field i cultivated using No-till technology is calculated by the following formula:

$$SOC_{p,y,i} = h_{b,i} \times \rho_i \times k_{p,i,y} \div 1,724 \times 10000 \div 100\% , \quad (5)$$

where:

$SOC_{p,y,i}$ – soil organic carbon content in the soil of field i cultivated using No-till technology in period y , t C/ha;

$h_{b,i}$ – depth of soil disturbance in field i cultivated using traditional tillage, m;

ρ_i – pre-project soil density in field i , cultivated using traditional tillage in period y , t/m³;

$k_{p,i,y}$ – humus content in the soil of field i cultivated using No-till technology in period y , %;

1,724 – organic carbon to humus conversion coefficient (according to GOST 23740)

10000 – m² to ha conversion coefficient;

[y] - index for monitoring period;

[b] - index for baseline technology;

[p] - index for project technology;

[i] - index for number of fields.

Soil organic carbon content in soil of field i cultivated using traditional tillage is calculated by the following formula:

$$SOC_{b,y,i} = h_{b,i} \times \rho_i \times k_{b,i,y} \div 1,724 \times 10000 \div 100\% , \quad (6)$$

where:

DETERMINATION REPORT

$SOC_{b,y,i}$ – soil organic carbon content in the soil of field i cultivated using traditional tillage technology in period y , t C/ha;
 $h_{b,i}$ – depth of soil disturbance in field i cultivated using traditional tillage, m;
 ρ_i – soil density in field i , cultivated using traditional tillage in period y , t/m³;
 $k_{b,i,y}$ – humus content in the soil of field i cultivated using traditional tillage in period y , %;
 1,724 – organic carbon to humus conversion coefficient (according to GOST 23740)
 10000 – m² to ha conversion coefficient;
 [b] - index for baseline technology;
 [y] - index for monitoring period;
 [i] - index for number of fields.

The content of humus in the soil in the baseline scenario is calculated using historical data over a four-year period. Linear dependence proved to be the most reliable (100%) of them all. It provides for the extrapolation of humus content to years of the project life. As a result of linear approximation, the dependence is as follows (extrapolation is performed for each field individually):

$$k_{b,i,y} = a \cdot y + b, \quad (7)$$

coefficients a , b (see Supporting Document 1) are determined using Microsoft Excel features by building a trend line on the basis of historical data over the 5 years prior to the project. The linear dependence has the lowest function error.

where:

$k_{b,i,y}$ – humus content in the soil of field i cultivated using traditional tillage in period y , %;
 a – coefficient of linear dependence;
 b - coefficient of linear dependence;
 y – monitoring period;
 [b] - index for baseline technology;
 [i] - index for number of fields;
 [y] - index for monitoring period.

Formulae used to estimate emission reductions for the project (for each gas, source etc.; emissions/emission reductions in units of CO₂ equivalent):

Emission reductions in the project scenario are calculated under the formula that follows:

$$ER_y = BE_y - PE_y, \quad (8)$$

where:

ER_y – emission reduction due to project activity in period y , t CO₂eq;
 BE_y – baseline GHG emissions in period y , t CO₂eq;
 PE_y – project GHG emissions in period y , t CO₂eq;
 [y] - index for monitoring period.



DETERMINATION REPORT

Supporting Document 1 contains a calculation of baseline emissions and project emissions as well as emission reductions for each year of the reporting period.

The monitoring plan represents quality control procedures and quality assurance for the monitoring process, which are sufficiently described in tabular form in PDD Sections D.1.1.1., D.1.1.3. and D.2. This includes, where appropriate, provision and submission on request of information about calibration, as well as information about how data are recorded and/or how the applicability of the method and accuracy of data are assured.

The monitoring plan clearly establishes responsibility and authority in respect of monitoring actions. To implement the project the operational structure was created; it includes LLC "Vishva Ananda" agrotechnicians and engineers (responsible for accounting of area treated with No-till technology), the research laboratory (responsible for provision of agrochemical data for project monitoring), LLC "Vishva Ananda" chief agrotechnician (recording and reporting data in the table), and LLC "Vishva Ananda" manager (data processing and archivation).

The data subject to monitoring and required for the determination and further verification will be archived and stored in paper and electronic form at LLC "Vishva Ananda" for two years after the transfer of emission reduction units generated by the project.

Management structure includes the Director of LLC "Vishva Ananda" and developers of the project.

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, expert judgment, proprietary data, 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.

The identified areas of concern as to the monitoring plan, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CAR 25 - CAR 29).



DETERMINATION REPORT

4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential leakage of the project and appropriately explains which sources of leakage are to be calculated, and which can be neglected.

According to the selected specific approach used in this JI project, there are no potential sources of leakage from the project activity.

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 or net removals for the project scenario (within the project boundary), which are 0 tons of CO₂eq for 2004-2007, 0 tons of CO₂eq for 2008-2012, 0 tons of CO₂eq for 2013-2023;

(b) Leakage is not expected in the project boundary;

(c) Emissions or net removals for the baseline scenario (within the project boundary), which are 341 622 tons of CO₂eq for 2004-2007, 3 258 074 tons of CO₂eq for 2008-2012, 11 065 967 tons of CO₂eq for 2013-2023;

(d) Emission reductions adjusted by leakage (based on (a)-(c) above), which are 341 622 tons of CO₂eq in 2004-2007, 3 258 074 tons of CO₂eq in 2008-2012, 11 065 967 tons of CO₂eq in 2013-2023.

The estimates referred to above are given:

(a) on an annual basis;

(b) from 22/02/2004 to 31/12/2023, covering the entire crediting period;

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

(d) for each GHG, which is 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 formulae used for calculating the estimates referred above are given in Section 4.7. All formulae are consistent throughout the PDD.



DETERMINATION REPORT

For calculating the estimates referred to above, such key factors as the Ukrainian environmental legislation and other national legislation, as well as key relevant factors such as availability of funds for implementation of measures envisaged by the project, prices that are set by the state, modern technology and the ability to implement know-how in the agricultural sector, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating the estimates referred to above, such as documents and archival data of the enterprise, standards and statistical forms, results of periodic verifications 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.

The annual average of estimated emission reductions or enhancements of net removals over the crediting period is calculated by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period, and multiplying by twelve.

Detailed algorithms of calculations and their results are described in sections D, E and Supporting Documents to the PDD.

The identified areas of concern as to the evaluation of emission reductions, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (CAR 30).

4.10 Environmental impacts (48)

Sections F.1. and F.2. of the PDD provide information about documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party.

The PDD states that according to the law of Ukraine "On Environmental Protection" and DBN A.2.2-1-2003 "Composition and content of the materials of environment impact assessment (EIA) for design and construction of plants, buildings and structures", LLC "Vishva Ananda" is not obliged to carry out EIA development for this type of project.



DETERMINATION REPORT

In general, the project will have positive impact on the environment because the replacement of conventional tillage with No-till technology will result in lower GHG emissions into the atmosphere and lower diesel fuel consumption for LLC "Vishva Ananda" farmland cultivation.

Transboundary impacts from the project activity, according to their definition in the text of "Convention on long-range transboundary pollution" ratified by Ukraine, will not take place.

The PDD provides opinions and references to supporting documents on environmental impact assessment, which is carried out in accordance with the procedures set by the host Party.

The identified areas of concern as to the environmental impact, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CL 07).

4.11 Stakeholder consultation (49)

LLC "Vishva Ananda" informed the community through mass media. All comments relating to the project implementation were positive. No negative 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 "Reduction of greenhouse gas emissions by application of No-till technology at LLC «Vishva Ananda» farmlands" in Ukraine. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.



DETERMINATION REPORT

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 tool for demonstration of the additionality. In line with this tool, the PDD provides investment analysis and common practice analysis to determine that the project activity 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 by the host Party (Ukraine). If the written approval by the host Country is provided, it is our opinion that the project as described in the Project Design Document, version 02 dated 20/09/2012 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Country criteria as well as expectations of the stakeholders.

The review of the project design documentation (version 02 dated 20/09/2012) 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.

DETERMINATION REPORT

7 REFERENCES**Category 1 Documents:**

Documents provided by CEP CARBON EMISSIONS PARTNERS S.A. that relate directly to the GHG components of the project.

/1/	PDD "Reduction of greenhouse gas emissions by application of No-till technology at LLC «Vishva Ananda» farmlands", version 01 dated 12/09/2012
/2/	PDD "Reduction of greenhouse gas emissions by application of No-till technology at LLC «Vishva Ananda» farmlands" , version 02 dated 01/10/2012
/3/	Supporting Document 1. "Reduction of greenhouse gas emissions by application of No-till technology at LLC «Vishva Ananda» farmlands"
/4/	Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities (Version 01.1.0).
/5/	Letter of Endorsement No. 2816/23/7 issued by the State Environmental Investment Agency of Ukraine dated 01/10/2012
/6/	Guidelines for users of the JI PDD form. Version 04, JISC.
/7/	Tool for the demonstration and assessment of additionality, Version 06.0.0.
/8/	Kyoto Protocol
/9/	Marrakech Accords, JI Methods
/10/	National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990-2010
/11/	Ukraine's Third National Communication on Climate Change under the Kyoto Protocol
/12/	Ukraine's Fourth National Communication on Climate Change under the Kyoto Protocol
/13/	Ukraine's Fifth National Communication on Climate Change under the Kyoto Protocol
/14/	Law of Ukraine "On the basic principles of the governmental agrarian policy for the period until 2015"
/15/	Law of Ukraine "On environmental protection"
/16/	Strategic guidelines for the development of agriculture of Ukraine till 2020

DETERMINATION REPORT

/17/	JI Guidelines. Appendix to decision 9/CDM.1
/18/	JI Guidance for determination and verification, version 01
/19/	Guidance on criteria for baseline setting and monitoring, JISC. Version 03

Category 2 Documents:

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

/1/	Fixed assets lease agreement No.120 dated 22/02/2004
/2/	Fixed assets lease agreement No.400 dated 01/03/2011
/3/	Fixed assets lease agreement No.337 dated 03/06/2011
/4/	Fixed assets lease agreement No.336 dated 14/05/2011
/5/	Fixed assets lease agreement No.169 dated 16/05/2011
/6/	Machine registration license No.03745 (Class Atles 946 wheel tractor) dated 15/09/2008
/7/	Machine registration license No.03878 EN (Challenger MT-865B tractor) dated 19/05/2007
/8/	Machine registration license No.03877 EN (Challenger MT-865B tractor) dated 19/06/2007
/9/	Machine registration license No.03879 EN (Challenger MT-865B tractor) dated 19/06/2007
/10/	Machine registration license No.03880 EN (Challenger MT-865B tractor) dated 19/06/2007
/11/	Machine registration license No.443288 (AT300 Seed Drill) dated 18/04/2008
/12/	Machine registration license No.443290 (AT300 Seed Drill) dated 18/04/2008
/13/	Machine registration license No.443294 (WENZ/ECO-DYN Seed Drill) dated 18/04/2008
/14/	Machine registration license No.443291 (AT300 Seed Drill) dated 18/04/2008
/15/	Machine registration license No.443284 (AT300 Seed Drill) dated 18/04/2008
/16/	Machine registration license No.443293 (WENZ/ECO-DYN Seed Drill) dated 18/04/2008
/17/	Machine registration license No.443292 (AT300 Seed Drill) dated 18/04/2008
/18/	Machine registration license No.443286 (AT300 Seed Drill) dated 18/04/2008
/19/	Machine registration license No.443285 (AT300 Seed Drill) dated 18/04/2008
/20/	Machine registration license No.443287 (AT300 Seed Drill) dated 18/04/2008
/21/	Machine registration license No.443289 (AT300 Seed Drill) dated



DETERMINATION REPORT

18/04/2008

Persons interviewed:

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

	Name	Organisation	Title
/1/	Serhii Omelchenko	LLC "Vishva Ananda"	Director
/2/	Oleksandr Tykhomyrov	LLC "Vishva Ananda"	Chief Accountant
/3/	Serhii Bereznytskyi	LLC "Vishva Ananda"	Chief Agrotechnician
/4/	Serhii Chabanenko	LLC "Vishva Ananda"	Chief Engineer
/5/	Iryna Naumenko	"CEP" LLC	CEP CARBON EMISSIONS PARTNERS S.A. Consultant



DETERMINATION REPORT

APPENDIX A: COMPANY PROJECT DETERMINATION PROTOCOL

BUREAU VERITAS CERTIFICATION HOLDING SAS

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

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
Guidelines for Users of the JI PDD form				
Section A General description of the project				
A.1. Title of the project				
A.1	Is the title of the project presented?	The project title is presented: "Reduction of greenhouse gas emissions by application of No-till technology at LLC «Vishva Ananda» farmlands".	OK	OK
A.1	Is the sectoral scope to which the project pertains presented?	Sectoral scope: Sector 15 - Agriculture.	OK	OK
A.1	Is the current version number of the document presented?	The current version of the document: PDD, Version 02 dated 01/10/2012. See Section A.1.	OK	OK
A.1	Is the date when the document was created presented?	The date when the document was created: 01/10/2012.	OK	OK
A.2. Description of the project				
A.2	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	The purpose of the Joint Implementation (JI) Project is to reduce anthropogenic greenhouse gas (GHG) emissions resulting from agricultural activities by changing the agricultural land management system, namely replacement of traditional soil tillage in	CAR 01	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	<p>b) Baseline scenario and c) Project scenario (expected outcome, including a technical description)?</p>	<p>agriculture with No-till technology. Emissions are reduced due to lower carbon dioxide emissions from farmland by lower (almost zero) topsoil disturbance by tillage in the course of crops growing.</p> <p>In 2004, the Farm started to grow crops applying No-till technology (also referred to as “direct sowing technology”) (see Table 1). This technology differs from the traditional technology with fewer technological procedures, which prevents the topsoil from a major disturbance, as well as with the way to utilize plant residues. The number of technological procedures of plant growing and harvesting is almost the same in the two technologies, the main difference being that the traditional technology separates fertilizer application, land ploughing, cultivation, furrowing and seeding (multiple passage of the machinery across the field) in contrast to direct sowing with simultaneous fertilizer application (single passage of the machinery). The lower number of technological procedures in No-till provides for up to 60% lower fuel consumption in internal combustion engines of tractors and other agricultural machinery.</p> <p>Detailed information on the baseline and project scenarios with technical description is given in Sections A.2 and A.4.2. of the PDD.</p> <p>CAR 01. Please provide information on the baseline scenario in Section A.2.</p>		



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
A.2	Is the history of the project (incl. its JI component) briefly summarized?	<p>CAR 02. The name of the institution that issued the Letter of Approval is incorrect.</p> <p>CAR 03. Please specify the starting date of the project in PDD Section A.2.</p>	<p>CAR 02</p> <p>CAR 03</p>	<p>OK</p> <p>OK</p>
A.3. Project participants				
A.3	Are project participants and Party(ies) involved in the project listed?	CAR 04. The party (country) involved LHCarbon OÜ is incorrect.	CAR 04	OK
A.3	Is the data of the project participants presented in tabular format?	The data of the project participants is presented in tabular format.	OK	OK
A.3	Is contact information provided in Annex 1 of the PDD?	<p>Annex 1 to the PDD provides contact information of LLC "Vishva Ananda", EVO CARBON TRADING SERVICES LTD, CEP Carbon Emissions Partners S.A., LHCarbon OÜ.</p> <p>CAR 05. Tables of Annex 1 do not comply with the format recommended by the Guidelines for users of the JI PDD form, version 04.</p> <p>CAR 06. Please provide e-mail address of EVO CARBON TRADING SERVICES LTD.</p>	<p>CAR 05</p> <p>CAR 06</p>	<p>OK</p> <p>OK</p>
A.3	Is it indicated, if it is the case, that the Party involved is a host Party?	Ukraine is the Host Party.	OK	OK
A.4 Technical description of the project				
Location of the project				
A.4.1.1	Host Party(ies)	Ukraine is the Host Party.	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
A.4.1.2	Region/State/Province etc.	Kherson region, AR of Crimea, Ukraine	OK	OK
A.4.1.3	City/Town/Community etc.	Villages of Kherson region, AR of Crimea	OK	OK
A.4.1.4	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page).	Information about location (list of districts) is given in Section A.4.1.4 of the PDD. CAR 07. Please provide a map representing the location of facilities of LLC "Vishva Ananda" in Krasnoperekopsky and Suvorovsky districts the Autonomous Republic of Crimea.	CAR 07	OK
A.4.2. Technologies to be employed, or measures, operations or actions to be implemented by the project				
A.4.2	Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule described?	PDD Section A.4.2 provides the description of the main stages of the project implementation, the annual project activities schedule, some relevant technical data relating to key equipment to be installed as well as project activities. Project engineering represents the current cutting-edge practice. CAR 08. Section A.4.2. states that systematic implementation of No-till technology was carried out on the basis of Challenger sowing complexes, whereas the technologies implemented include other foreign manufacturers. CAR 09. Section A.4.2. indicates that the project provides for the use of modern equipment from John Deere, whereas there are no John Deere units listed in the PDD. CAR 10. Please provide an overview of the equipment	CAR 08 CAR 09 CAR 10 CAR 11 CAR 12 CAR 13 CL 01 CL 02 CL 03	OK OK OK OK OK OK OK OK OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		<p>to be implemented in Section A.4.2.</p> <p>CAR 11. Please provide the project schedule in Section A.4.2.</p> <p>CAR 12. Reference 50 in Annex 4 on Bourgault-8810-54 Seed Drill is incorrect.</p> <p>CAR 13. Table 3 Annex 4 by mistake presents specifications of the model other than provided by the project.</p> <p>CL 01. Please clarify whether the project equipment is planned to be replaced within the project period.</p> <p>CL 02. Please clarify whether the project equipment is in line with the global practice.</p> <p>CL 03. Please clarify whether it is reasonable to conduct trainings for LLC “Vishva Ananda” employees.</p>		
<p>A.4.3. 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</p>				
<p>A.4.3</p>	<p>Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)</p>	<p>Emissions are reduced due to lower (almost zero) topsoil disturbance by tillage and, as a result, higher carbon sequestration (storage) in the soil by plants that take carbon from the atmosphere and transfer it into the soil (with further fixation therein) in the course of their biological activity.</p> <p>The project is unlikely to be implemented without the JI mechanism, which is a strong additional incentive. This</p>	<p>CAR 14</p>	<p>OK</p>



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		<p>is caused by the following:</p> <ul style="list-style-type: none"> – In Ukraine there are no legal requirements associated with the introduction of direct sowing technology instead of conventional mechanical tillage systems. Implementation of this project could only be an initiative of an enterprise itself. No significant changes in the legislation that could force enterprises to give up the existing tillage practice, involving ploughing, are expected. – GHG emission restrictions are absent and not expected to be implemented in Ukraine; – Implementation of the project requires considerable investment in agricultural equipment and is associated with financial risks and risks relating to the operation of new technology, such as issues of productivity and use of new machinery. The project is not attractive enough in terms of investment without the income from sales of emission reduction units (ERUs). <p>CAR 14. Please provide information on whether CO2 emission reductions would take place in the absence of the project.</p>		
A.4.3	Is it provided the estimation of emission reductions over the crediting period?	<p>The estimation of emission reductions over the crediting period is provided in Section A.4.3.1. of the PDD.</p> <p>CAR 15. Tables of Section A.4.3.1 presenting GHG emission reductions do not comply with the format</p>	CAR 15	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		recommended by the Guidelines for users of the JI PDD form, version 04.		
A.4.3	Is it provided the estimated annual reduction for the chosen credit period in tCO ₂ e?	CAR 16. Table 8 in Section A.4.3.1. does not provide the average annual GHG emission reduction in 2008-2012.	CAR 16	OK
A.4.3	Are the data from questions above presented in tabular format?	Information for the credit period and after the credit period is presented in tabular format. See PDD (Version 02) Tables 7, 8 and 9, Section A.4.3.1.	OK	OK
A.4.3.1. Estimated amount of emission reductions over the crediting period				
A.4.3.1	Is the length of the crediting period Indicated?	The length of the crediting period is indicated in the PDD Section A.4.3.1. and Section C.	OK	OK
A.4.3.1	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO ₂ equivalent provided?	Total as well as annual and average annual emission reductions in tonnes of CO ₂ equivalent are provided in accordance with the calculated values in the tables of Section A of PDD and the Supporting documents. See CAR 16.	OK	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	CAR 17. The project has no approval of the Host Party and the investing country. To obtain the Letter of Approval the final Determination report must be submitted to the State Environmental Investment Agency of Ukraine that includes this Determination Protocol and the list of sources of Reference Information. A Letter of Approval by the Government of another party involved from the country-participant has not	CAR 17	Pending decision.



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		been obtained at the current stage of the Project either. CAR 17 will be closed after the Letter of Approval is issued by the Party involved.		
19	Does the PDD identify at least the host Party as a "Party involved"?	The Host Party involved is Ukraine.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	Reference to CAR 17 .	CAR 17	Pending decision.
20	Are all the written project approvals by Parties involved unconditional?	Reference to CAR 17 .	CAR 17	Pending decision.
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? – Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	Party involved 1: Ukraine (the Host Party), legal entity is LLC "Vishva Ananda". Party involved 2: Estonia, legal entity is LHCarbon OÜ The project participants will be authorized in accordance with the relevant project approvals. Pending CAR 17 .	CAR 15	Pending decision.
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	The baseline chosen is described in Section B.1 of the PDD. A specific JI approach is used for setting the baseline.	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	<p>The choice of the applicable baseline for the project is justified; theoretical description is provided in section B.1 of PDD version 02.</p> <p>CAR 18. Step 2 Section B.1. of the PDD incorrectly indicates the year of potential baseline options.</p> <p>CAR 19. Please verify the description of kb,i,y parameter in formulae 5 and 6.</p>	<p>CAR 18</p> <p>CAR 19</p>	<p>OK</p> <p>OK</p>
23	<p>Does the PDD provide justification that the baseline is established:</p> <p>(a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one?</p> <p>(b) Taking into account relevant national and/or sectoral policies and circumstance?</p> <p>- Are key factors that affect a baseline taken into account?</p> <p>(c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors?</p> <p>(d) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors?</p> <p>(e) In such a way that ERUs cannot be</p>	<p>The PDD provides a detailed theoretical description in a complete and transparent manner, as well as justification, that the baseline was established:</p> <p>a) by listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one:</p> <ul style="list-style-type: none"> - Alternative 1.1: Continuation of the current situation, without the JI project implementation. - Alternative 1.2: Proposed project activity without the use of the JI mechanism. - Alternative 1.3: Partial implementation of the project (only some of project activities implemented) without the use of the JI mechanism. <p>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</p>	CL 04	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	<p>earned for decreases in activity levels outside the project or due to force majeure?</p> <p>(f) By drawing on the list of standard variables contained in appendix B to “Guidance on criteria for baseline setting and monitoring”, as appropriate?</p>	<p>sector. In this context, the following key factors that affect a baseline are taken into account:</p> <ul style="list-style-type: none"> - Agriculture is one of the leading industries in Ukraine; agriculture in general and agro-industrial complex (AIC) in particular are a political factor of sovereignty. - In the framework of the existing market model for the growing of AIC products, the effective competition among the producers can't be achieved; this market model can't also provide for the competitive pricing, which would stimulate the producers to improve efficiency and increase investment in the sector. - Existing prices for AIC product growing are regulated by the state. - The current Ukrainian system of formation of prices for AIC products does not include an investment component for the development of agriculture. - State support in the agricultural sector is provided in amounts of funds provided by the law of Ukraine on State Budget of Ukraine for the relevant year. <p>(c) In a transparent manner with regard to the choice of JI approach and assumptions, parameters, data sources and key factors for identifying initial conditions listed in tabular format in Section B.1.</p> <p>(d) Taking into account of uncertainties and using conservative assumptions</p> <p>(e) In such a way that ERUs cannot be earned for</p>		



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		decreases in activity levels outside the project or due to force majeure (f) By drawing on the list of standard variables. The baseline is identified, the description is given in Section B of the PDD. CL 04. Please provide references to Decision 9/CMP.		
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?	When the project was under development, there were no approved CDM methodologies for this type of activity. Therefore, the proposed project applies a specific approach to baseline setting and monitoring based on provisions of the following documents:	OK	OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	The PDD applies the multi-project emission factor to calculate GHG emission reductions.	OK	OK
CDM methodology approach only				
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	The PDD indicates that the project scenario is not a part of the established baseline scenario. It is also stated that the project will lead to emission reductions. Additionality of the project activity is demonstrated and assessed in Section B.2. of the PDD using the "Tool for the demonstration and assessment of additionality" (Version 06.0.0). CL 05. Please provide references to the Law of	CL 05 CAR 20 CAR 21 CAR 22 CAR 23	OK OK OK OK OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	<p>and that the project will lead to emission reductions or enhancements of removals</p> <p>(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</p> <p>(c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".</p>	<p>Ukraine "On the basic principles of the governmental agrarian policy for the period until 2015"</p> <p>CAR 20. The Outcome of Step 1a states that two plausible alternatives were identified, whereas there are three alternatives indeed.</p> <p>CAR 21. In the description of plausibility of ALternative 1.1, only Kherson region is mentioned, whereas the project is implemented in the territory of two AR Crimea districts.</p> <p>CAR 22. In this case, investment analysis is irrelevant, because there may be no additional profit in the absence of the project.</p> <p>CAR 23. Provide the outcome of Section B.2.</p>		
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	Detailed analysis described in Section A.4.3, B.1 and B.2, shows that emissions of the baseline scenario are likely to exceed emissions of the project scenario due to the implementation of project activities.	OK	OK
29 (b)	Are additionality proofs provided?	Yes. Refer to section B.2. of the PDD.	OK	OK
29 (c)	Is the additionality demonstrated appropriately as a result?	<p>The fact that the project activity itself is not the baseline scenario is clearly demonstrated in sections A.2, B.1, B.2 of the PDD.</p> <p>CL 06. Please specify whether there are any mandatory government programs or policy which provide for implementation of No-till technology for</p>	CL 06	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		agricultural companies.		
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	All explanations, descriptions and analyses are made in accordance with the newest version of the "Tools for the demonstration and assessment of additionality" (Version 06.0.0)	OK	OK
Approved CDM methodology approach only_ Paragraphs 31(a) – 31(e)_ Not applicable				
Project boundary (applicable except for JI LULUCF projects)				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants, such as: - CO ₂ emissions due to mechanical treatment that involves tillage in the process of crop growing. (ii) Reasonably attributable to the project, such as: - CO ₂ emissions due to mechanical soil treatment (No-till technology) in the process of crop growing. Such emissions are absent; (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		



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		annual average anthropogenic emissions by sources of GHGs, or exceed an amount of 2,000 tonnes of CO ₂ equivalent, whichever is lower.		
32 (b)	Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?	Project boundary is defined on the basis of case-by-case assessment of different emission sources.	OK	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 if it is possible?	The project boundary is presented in a tabular form and are understandable enough so that there is no need of graphic presentation.	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?	All gases and sources included are explicitly stated. See Section B of the PDD.	OK	OK
Approved CDM methodology approach only_Paragraph 33_ Not applicable				
Crediting period				
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	The starting date of the project was identified using the "Glossary of Joint Implementation Terms" version 03 and is considered 22/02/2004, when a contract for equipment purchase was signed. The project's starting date is identified and specified in Section C. 1 of the PDD.	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
34 (a)	Is the starting date after 2000?	The starting date is after 2000.	OK	OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	The expected operational lifetime of the project in years and months is 19 years and 11 months / 239 months: from 22/02/2004 to 31/12/2023.	OK	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	The length of the crediting period in years and months is stated in Section C.3. CAR 24. The number of months of the crediting period is incorrect.	CAR 24	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?	The starting date of the crediting period is the date when the first emission reductions are expected to be generated, namely January 01, 2008.	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?	ERU generation belongs to the first commitment period of 5 years (January 1, 2008 – December 31, 2012).	OK	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?	The PDD states that the prolongation of the crediting period beyond 2012 is subject to approval of the host party and estimation of emission reductions is presented separately for those until 2012 and those after 2012 in the relevant sections of the PDD. If after the first commitment period the Kyoto Protocol is prolonged, the crediting period under the project will be extended by 11 years/132 months until December	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		31, 2023.		
Monitoring plan				
35	Does the PDD clearly indicate which of the following approaches is used? - JI specific approach - Approved CDM methodology approach.	The proposed project uses a JI-specific approach in accordance with paragraph 9 (a) of the JI "Guidance on criteria for baseline setting and monitoring", Version 03.	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?	The monitoring plan specifies all decisive factors for the control and reporting of project performance: quality control (QC) and quality assurance (QA) procedures; operational and management structures that will be applied when implementing the monitoring plan. CAR 25. Section D.1 indicates that GPS is installed only in Challenger tractors, whereas Agrottron tractors also have GPS installed.	CAR 25	OK
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	The monitoring plan specifies indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancement of net removals to be monitored. Data to be monitored are presented in PDD Section D. CAR 26. Please verify the units for monitoring data and parameters in Sections D.1.1.1 and D.1.1.3 of the PDD in accordance with the formulae stated in the PDD. CAR 27. Please verify the description of $k_{b,i,y}$ parameter in Section D.	CAR 26 CAR 31.	OK OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
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?	Default values are provided in the table of Annex 3 to the PDD. They originate from recognized sources and are presented in a transparent manner.	OK	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?	The monitoring plan clearly indicates how the values are to be selected and justified.	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?	CAR 28. Please number all the formulae in Section D of the PDD.	CAR 28	OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	Refer to section D of the PDD. CAR 29. Please add information regarding collecting and archiving of data in Section D.1.1.	CAR 29	OK
36 (b) (iv)	Are International System Unit (SI units) used?	The International System Units are used for some parameters.	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
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?	Relevant data necessary for determining the baseline of anthropogenic emissions of greenhouse gases within the project boundary is presented in table D.1.1.3. of the PDD.	OK	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	The use of parameters, coefficients and variables 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"?	The monitoring plan is identified on the basis of the Guidance on criteria for baseline setting and monitoring, Version 03.	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?	Monitoring plan explicitly distinguishes between all these three types of data and parameters. Refer to Section D.1. of the PDD. (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 monitored throughout the crediting period. (iii) 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	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	(iii) Data and parameters that are monitored throughout the crediting period?	the stage of determination.		
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	In tables of parameters provided in section D.1.1.1. of the PDD the time of monitoring (frequency) and the source of data to be used, as well as recording method are indicated for all the monitored parameters and data.	OK	OK
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?	All algorithms and formulae used for the estimation of baseline and project emissions are indicated and explained in the PDD. The description of formulae is given in Section D of the PDD.	OK	OK
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Refer to section 36 (f) of this table.	OK	OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Consistent variables, equation formats, subscripts etc. are used.	OK	OK
36 (f) (iii)	Are all equations numbered?	See CAR 28 .	OK	OK
36 (f) (iv)	Are all variables, with units indicated defined?	Yes. Refer to section D of the PDD.	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Yes, algorithms/procedures comply with state norms and are conservative.	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	Uncertainty in parameters used is low taking into account the algorithms of data monitoring.	OK	OK
36 (f) (vi)	Is consistency between the elaboration of	There is consistency between the elaboration on the	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	baseline scenario and calculating the baseline emission in the monitoring plan and in tables.		
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	The formulae used in the PDD are sufficiently described.	OK	OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Monitoring under the project does not require changes in existing record-keeping and data collection system existing at LLC "Vishva Ananda".	OK	OK
36 (f) (vii)	Are references provided as necessary?	Yes, all references are provided.	OK	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	All key assumptions are 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?	N/A	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?	For the sake of conservativeness of parameters, metering equipment is subject to regular calibration and the latest versions of regulations and specifications are used. If the latest versions are unavailable, the previous versions are used.	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	The monitoring plan identifies that constant routine calibration of measuring equipment is carried out and the latest editions of the regulatory and technical documentation is used.	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	reference as to where a detailed description of the standard can be found?			
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	Yes.	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?	Verification (calibration) of measurement devices is carried out in accordance with manufacturer's manuals, approved methodologies on metering devices verification/calibration, as well as with the state standards of Ukraine.	OK	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Detailed operational structure and management structure is provided in the Annex 3 of the PDD.	OK	OK
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	Monitoring under the project does not require changes in existing accounting system and data collection.	OK	OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are	Tables D.1.1.1 and D.1.1.3 provide compilation of all data needed to monitor project and baseline emissions.	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	measured or sampled and data that are collected from other sources but not including data that are calculated with equations?			
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?	Data to be monitored and required for determination will be kept for two years after the last transfer of ERUs for the project.	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?	Yes, selected elements of "Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities" (Version 01.1.0) are used for setting the baseline scenario. The selected elements and combinations with additional elements that were additionally developed by the project participants are in line with requirements of paragraph 36 above.	OK	OK
Approved CDM methodology approach only_Paragraphs 38(a) – 38(d)_Not applicable				
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?	No periods to overlap during the crediting period are expected.	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	<p>(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)?</p> <p>(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?</p> <p>(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?</p>			
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	According to the JI specific approach, there aren't any potential sources of leakage due to the project activities.	OK	OK
40 (b)	Does the PDD provide a procedure for an	The PDD states that there isn't any leakage.	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	ex ante estimate of leakage?			
Approved CDM methodology approach only_Paragraph 41_Not applicable				
Estimation of emission reductions or enhancements of net removals				
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	In the PDD the approach of estimation of emissions in the baseline scenario and in the project scenario is indicated. CAR 30. Please verify table numbering in PDD Section E. Make the necessary corrections.	CAR 30	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?	PDD provides estimates of: (a) Emissions in the project scenario (Section E.1) (b) Leakage (Section E.2) (c) Emissions in the baseline scenario (Section E.4) (d) Emission reductions adjusted by leakage (Section E.6).	OK	OK
44	If the approach (b) 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)?	N/A	N/A	N/A



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	(b) Leakage, as applicable? (d) Emission reductions or enhancements of net removals adjusted by leakage?			
45	<p>For both approaches in 42</p> <p>(a) Are the estimates in 43 or 44 given:</p> <ul style="list-style-type: none"> (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 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? <p>(b) Are the formulae used for calculating the estimates in 43 or 44 consistent throughout the PDD?</p> <p>(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</p>	<p>(a) Estimates in 43 are given on the periodic basis, in tonnes of CO₂ equivalent, on a source-by-source basis, before, during and after the crediting period.</p> <p>(b) The formulae used in PDD are consistent.</p> <p>(c) Key factors influencing baseline emissions and activity level of the project and risks associated with the project are taken into account, as appropriate.</p> <p>(d) Data sources used to calculate the estimates are clearly identified, reliable and transparent.</p> <p>(e) Emission factors were taken from the defined sources.</p> <p>(f) Estimation in 43 is based on conservative assumptions and the most plausible scenario in a transparent manner.</p> <p>(g) Estimates in 43 are consistent throughout the PDD.</p> <p>(h) The annual average of estimated emission reductions are calculated correctly (by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period and multiplying by twelve).</p>	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	<p>appropriate?</p> <p>(d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent?</p> <p>(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?</p> <p>(f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner?</p> <p>(g) Are the estimates in 43 or 44 consistent throughout the PDD?</p> <p>(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?</p>			
46	If the calculation of the baseline emissions or net removals is to be performed de facto, does the PDD include an illustrative forecasted emissions or net removals calculation?	Baseline emission level is calculated using the specific approach employing elements of “Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities” (Version 01.1.0).	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		Forecasted emissions calculation is clearly provided in the PDD.		
Approved CDM methodology approach only Paragraphs 47(a) – 47(b) Not applicable				
Environmental impacts				
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party?	The environmental impacts of the project have been sufficiently described	OK	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?	CL 07. Please, provide a reference to the “Convention on long-range transboundary pollution” in Section F.1.	CL 07	OK
Stakeholder consultations				
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	LLC “Vishva Ananda” informed the community through mass media. All comments relating to the project implementation were positive. No negative comments were received.	OK	OK



DETERMINATION REPORT

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	received, if any? (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)				
Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)				
Determination regarding programmes of activities (additional/alternative elements for assessment)				



DETERMINATION REPORT

TABLE 2 RESOLUTION OF CORRECTIVE ACTION AND CLARIFICATION REQUESTS

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 01. Please provide information on the baseline scenario in Section A.2.	A.2	The baseline scenario provides for the use of traditional soil cultivation technology, which involves mechanical tillage resulting in emissions of CO ₂ . The basic operation causing CO ₂ emissions is ploughing during which crop residues are buried in the soil and weeds are removed. Relevant information is provided in Section B.3. of PDD version 02.	The relevant information is provided, the issue is closed.
CAR 02. The name of the institution that issued the Letter of Approval is incorrect.	A.2	The State Environmental Investment Agency of Ukraine/	Relevant corrections are made, the issue is closed.
CAR 03. Please specify the starting date of the project in PDD Section A.2.	A.2	22/02/2004 – Signing of an equipment purchase contract (starting date of the project)	The information is provided, the issue is closed.
CAR 04. The party (country) involved LHCarbon OÜ is incorrect.	A.3	Estonia, LHCarbon OÜ	The corrections are made, the issue is closed.
CAR 05. Tables of Annex 1 do not comply with the format recommended by the Guidelines for users of the JI PDD form, version 04.	A.3	The tables were revised to comply with the format recommended by the Guidelines for users of the JI PDD form, version 04.	Corrections are made, the issue is closed.
CAR 06. Please provide e-mail address of EVO CARBON TRADING SERVICES LTD.	A.3	E-mail address of EVO CARBON TRADING SERVICES LTD: negorova@evocarbontrading.co.uk.	The relevant information is provided, the issue is closed.



DETERMINATION REPORT

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 07. Please provide a map representing the location of facilities of LLC "Vishva Ananda" in Krasnoperekopsky and Suvorovsky districts the Autonomous Republic of Crimea.	A.4.1.4	A map representing the location of facilities of LLC "Vishva Ananda" in Krasnoperekopsky and Suvorovsky districts the Autonomous Republic of Crimea is provided. See Section A.4.1. of the PDD	Relevant changes were made, the issue is closed.
CAR 08. Section A.4.2. states that systematic implementation of No-till technology was carried out on the basis of Challenger sowing complexes, whereas the technologies implemented include other foreign manufacturers.	A.4.2	The systematic implementation of No-till technology at all farmlands was carried out using sowing complexes of foreign manufacture by Challenger, Bourgault, Case and Agrotion.	The information was added. The issue is closed.
CAR 09. Section A.4.2. indicates that the project provides for the use of modern equipment from John Deere, whereas there are no John Deere units listed in the PDD.	A.4.2	Natural and ploughing-caused compaction should be eliminated with a chisel plough or other deep tillage tools. The information is provided in Section A.4.2. PDD version 02.	The information is provided, the issue is closed.
CAR 10. Please provide an overview of the equipment to be implemented in Section A.4.2.	A.4.2	The project provides for the implementation of agricultural machinery, namely: - Bourgault 8810-54 Culti-Drill - Case SDX 40 Air Seeder - DEUTZ-FAHR Agrotion 105 Tractor - Challenger MT865C Tractor	The information is provided in the corresponding section. The issue is closed.
CAR 11. Please provide the project schedule in Section A.4.2.	A.4.2	The relevant information is provided. See Section A.4.2. of the PDD.	The information is provided, the issue is closed.



DETERMINATION REPORT

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 12. Reference 50 in Annex 4 on Bourgault-8810-54 Seed Drill is incorrect.	A.4.2	The reference has been checked, a new reference has been provided. See PDD version 02.	Relevant corrections have been made, the issue is closed.
CAR 13. Table 3 Annex 4 by mistake presents specifications of the model other than provided by the project.	A.4.2	Table 3 contains DEUTZ-FAHR Agrottron 105 Tractor Specifications.	The issue is closed, the information is verified.
CAR 14. Please provide information on whether CO2 emission reductions would take place in the absence of the project.	A.4.3	Without the project implementation, LLC "Vishva Ananda" would continue its customary activities, which involve mechanical tillage resulting in GHG emissions. Thus, GHG emission reductions are impossible without the project activity.	The information is provided, the issue is closed.
CAR 15. Tables of Section A.4.3.1 presenting GHG emission reductions do not comply with the format recommended by the Guidelines for users of the JI PDD form, version 04.	A.4.3	The tables are amended in accordance with the Guidelines for Users of the JI PDD form, version 04.	The issue is closed as corresponding changes are made.
CAR 16. Table 8 in Section A.4.3.1. does not provide the average annual GHG emission reduction in 2008-2012.	A.4.3	The average annual GHG emission reductions in 2008-2012 is 631 122 t CO ₂ .	The issue is closed as relevant information is provided.
CAR 17. The project has no approval of the Host Party and the investing country.	19	To obtain the Letter of Approval the final Determination report must be submitted to the State Environmental Investment Agency of Ukraine that	The issue will be closed after the Letters of Approval are issued by the Parties involved.



DETERMINATION REPORT

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
		includes this Determination Protocol and the list of sources of Reference Information. A Letter of Approval by the Government of another party involved from the country-participant has not been obtained at the current stage of the Project either.	
CAR 18. Step 2 Section B.1. of the PDD incorrectly indicates the year of potential baseline options.	23	Corrections were made. See PDD version 02.	Relevant corrections are made, the issue is closed.
CAR 19. Please verify the description of $k_{b,i,y}$ parameter in formulae 5 and 6.	23	$k_{b,i,y}$ – humus content in the soil of field i cultivated using traditional tillage in period y , %	The corresponding changes are made, the issue is closed.
CAR 20. The Outcome of Step 1a states that two plausible alternatives were identified, whereas there are three alternatives indeed.	28	Outcome of Sub-step 1a. Three realistic alternative scenarios to the project activity were identified.	The issue is closed as corresponding changes are made.
CAR 21. In the description of plausibility of ALternative 1.1, only Kherson region is mentioned, whereas the project is implemented in the territory of two AR Crimea districts.	28	Alternative 1.1: Continuation of the current situation in the agricultural sector of Kharkiv region and the Autonomous Republic of Crimea is the most realistic and plausible alternative to the Project implementation.	The issue is closed as necessary information is provided.
CAR 22. In this case, investment analysis is irrelevant, because there may be no additional profit in the absence of the project.	28	A simple cost analysis was chosen for proving the project additionality. See PDD version 02.	Relevant changes are made, the issue is closed.



DETERMINATION REPORT

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 23. Provide the outcome of Section B.2.	28	Based on the above analysis it can be concluded that the project is additional. See PDD version 02.	The issue is closed as relevant information is provided.
CAR 24. The number of months of the crediting period is incorrect.	34(c)	The duration of the crediting period in years and months is 20 years, or 240 months: 01/01/2008- 31/12/2012 (5 years, or 60 months), upon prolongation of the Kyoto Protocol: 01/01/2013- 30/12/2027 (15 years, or 180 months).	The boundaries of the crediting period are set in Section C of the PDD. The issue is closed.
CAR 25. Section D.1 indicates that GPS is installed only in Challenger tractors, whereas Agrottron tractors also have GPS installed.	36(a)	Field areas are measured by agrotechnicians and verified by accountants of LLC "Vishva Ananda" using GPS equipment installed in Challenger and Agrottron agricultural machinery.	The information has been added, the issue is closed.
CAR 26. Please verify the units for monitoring data and parameters in Sections D.1.1.1 and D.1.1.3 of the PDD in accordance with the formulae stated in the PDD.	36(b)	The units for monitoring data and parameters have been verified, the corrections are made to Sections D.1.1.1 and D.1.1.3. of the PDD.	The corrections are accepted, the issue is closed.
CAR 27. Please verify the description of $k_{b,i,y}$ parameter in Section D.	36(b)	The information has been verified, relevant corrections have been made.	Corrections are made, the issue is closed.
CAR 28. Please number all the formulae in Section D of the PDD.	36 (b) (ii)	All the formulae given in Section D of the PDD version 02 were numbered.	The issue is closed as corresponding changes are made.



DETERMINATION REPORT

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 29. Please add information regarding collecting and archiving of data in Section D.1.1.	36 (b) (iii)	In Sections D.1.1.1. and D.1.1.3., ways of data collection and the form of archivation are specified.	The information is provided, the issue is closed.
CAR 30. Please verify table numbering in Section E. of the PDD and make the necessary corrections.	42	The table numbering in Section E has verified. The corrections have been made.	Corrections are made, the issue is closed.
CL 01. Please clarify whether the project equipment is planned to be replaced within the project period.	A.4.2	If the equipment introduced under the project is serviced properly, it is not expected to need replacement during the project life.	The clarification is provided, the issue is closed.
CL 02. Please clarify whether the project equipment is in line with the global practice.	A.4.2	This technology meets the modern agricultural standards.	The issue is closed as necessary explanations are provided.
CL 03. Please clarify whether it is reasonable to conduct trainings for LLC "Vishva Ananda" employees.	A.4.2	Workers and specialists of LLC "Vishva Ananda" will be trained the same way they used to before the project was launched. If needed, which means if their skill level is not high enough to work with the equipment introduced under the project, equipment producers will give instructions and training, which is mentioned in the contracts for equipment purchase.	The issue is closed as necessary explanations are provided.
CL 04. Please provide references to Decision 9/CMP.	23	John Deere 8530 is a third-class power rating tractor designed for operation in plant farming, feed	The overview of the machinery is provided, the issue is closed.



DETERMINATION REPORT

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
		industry and transport. Great weight and extended wheelbase of this tractor provide not only the longitudinal stability, but also increase the traction-grip performance while working with tillage machinery such as ploughs, chisel ploughs, cultivators, disk harrow, etc. Extended wheelbase ensure lower soil compaction. For more details see Section A.4.2 of the PDD version 02.	
CL 05. Please provide references to the Law of Ukraine “On the basic principles of the governmental agrarian policy for the period untill 2015”	28	References to the Law of Ukraine “On the basic principles of the governmental agrarian policy for the period untill 2015” are provided in the new PDD version.	The issue is closed as relevant reference is provided.
CL 06. Please specify whether there are any mandatory government programs or policy which provide for implementation of No-till technology for agricultural companies.	29 (c)	There are neither programmes nor policies to bind LLC “Vishva Ananda” to implement No-till technology and nothing puts legislative limits on the baseline scenario. The detailed information was provided in Section B.	Explanation is sufficient. The issue is closed.
CL 07. Please, provide a reference to the “Convention on long-range transboundary pollution” in Section F.1.	48(b)	The reference has been provided in the newest PDD version.	The issue is closed as relevant reference is provided.