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Determination Report

Determination of the JI Track 2 Project:
BIKIN TIGER CARBON PROJECT –
PERMANENT PROTECTION OF OTHERWISE LOGGED BIKIN FOREST, IN PRIMORYE RUSSIA

REPORT NO. 600500624

30 October 2012

TÜV SÜD Industrie Service GmbH

Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY

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Subject: Determination of a JI Track-2 project

Accredited TÜV SÜD Unit:	**TÜV SÜD Contract Partner:**
TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich, Germany	TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich, Germany
Project Participants: • **Tribal Commune Tiger** 1-5 Novaya Street, Pozharsky District Primorsky Krai, 692017, Russian Federation • **CF Partners (UK) LLP** 149 Hammersmith Road W14 0QL London United Kingdom	**Project Site(s):** The project is located on 450,374 ha in the Northern Part of Primorsky Krai, Russian Far East. The PDD includes information on the geographic boundary. Boundary information is also available in digital form (in shapefile format, in line with UNFCCC CDM EB 41, item 34, taken as reference for JI).

Project Title: Bikin Tiger Carbon Project - Permanent protection of otherwise logged Bikin Forest, in Primorye Russia

Applied Methodology / Version: JI project specific approach, using a methodology for baseline setting and monitoring in accordance with appendix B of the JI guidelines. The methodology applied is based on the methodology VM 0011 version 01 of the Verified Carbon Standard (VCS).	**Scope(s):** 14 **Technical Area(s):** 14.1

First PDD Version:		**Final PDD version:**	
Date of issuance:	09 Nov 2011	Date of issuance:	26 Oct 2012
Version No.:	01	Version No.:	1.5
Starting Date of GSP	01 Feb 2012		

Estimated Annual Emission Reduction: 156,438 tCO_2e (annual average between 03 Jun 2009 to 31 Dec 2012 in line with DVM §45 h)

Total volume 03 Jun 2009 to 31 Dec 2012: 560,569 tCO_2e

Assessment Team Leader:	**Technical Reviewer:**
Olena Maslova	Robert Mitterwallner, Martin Seitz
Further Assessment Team Members:	**Certification Body responsible:**
Igor Kachan, Sebastian Hetsch	Thomas Kleiser

Summary of the Determination Opinion:

☒ The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence for the determination of the project's fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the JI. Therefore, TÜV SÜD recommends the project for registration by the JISC if the letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively.

☐ The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence, TÜV SÜD will not recommend the project for registration by the JISC as a JI Track-2 project and will inform the project participants and the JI Supervisory committee on this decision.

Abbreviations

AAU	Annual Allowable Cut
AIE	Accredited Independent Entity
AM	Approved Methodology
CAR	Corrective Action Request
CR	Clarification Request
DBH	Diameter at Breast Height (of a tree)
DFP	Designated Focal Point
DVM	Determination and Verification Manual
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission Reduction
ERUs	Emission Reduction Unit(s)
FAR	Forward Action Request
GHG	Greenhouse gas(s)
GIS	Geographic Information System
GPS	Global Positioning System
GWP	Global Warming Potential
HWP	Harvested Wood Products
IE	Independent Entity
IPCC	Intergovernmental Panel on Climate Change
IRL	Information Reference List
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
KP	Kyoto Protocol
LULUCF	Land Use, Land Use Change and Forestry
MP	Monitoring Plan
NTFP	Non-timber forest product
NGO	Non Governmental Organisation
NHZ	Nut Harvesting Zone
PDD	Project Design Document
PP	Project Participant
SOC	Soil Organic Carbon
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard

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1 INTRODUCTION

1.1 Objective

The objective of the determination process is to provide an independent assessment by a third party, an Accredited Independent Entity (AIE), of a proposed project activity. The assessment involves the evaluation of the project basis and design identified in the Project Design Document (PDD) using the defined criteria outlined under the Joint Implementation (JI) mechanism. Determination is part of the JI project cycle and results in a conclusion by the executing AIE on whether or not a project activity is valid to be submitted for registration to the JI Supervisory Committee (JISC).

The ultimate decision on the registration of a proposed project activity rests with the JISC and the Parties involved.

The project activity discussed by this determination report has been submitted under the project title “Bikin Tiger Carbon Project - Permanent protection of otherwise logged Bikin Forest, in Primorye Russia”.

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of JI project activities the scope is set by:

- Ø The Kyoto Protocol, in particular § 6
- Ø Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Ø Further COP/MOP decisions with reference to the JI (e.g. decisions 9/CMP.1)
- Ø Decisions by the JI-SC published under http://ji.unfccc.int
- Ø Specific guidance by the JI-SC published under http://ji.unfccc.int
- Ø Joint Implementation Determination and Verification Manual (DVM)
- Ø Guidelines for users of the JI LULUCF PDD form
- Ø The applied approved VCS methodology(s)
- Ø The technical environment of the project (technical scope)
- Ø Internal and national standards on monitoring and QA/QC
- Ø Technical guideline and information on best practice

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

Once TÜV SÜD receives an initial PDD version, it is made publicly available on the UNFCCC JI website. In case of any request a PDD might be revised and the final PDD will form the basis for the final evaluation as presented in this report. Information on the initial and on the final PDD version is presented on page 1.

The only purpose of a Determination is its use during the registration process as part of the JI project cycle.

2 METHODOLOGY

The project assessment applies standard auditing techniques to assess the correctness of the information provided by the PPs. The assessment is based on the latest version of Joint Implementation Determination and Verification Manual. The work starts with appointment of team covering the technical scope(s), sectoral scope(s) and relevant host country experience for evaluating the JI project activity. Once the project is made public available, members of the team carry out the desk review, follow-up actions, resolution of issues identified and finally preparation of the determination report. The prepared determination report and other supporting documents then undergo an internal quality control by the CB "climate and energy" before submission to the JISC.

In order to ensure transparency, assumptions must be clear and stated explicitly and background material must also be referenced. TÜV SÜD has developed a methodology-specific protocol customized for the project. The protocol demonstrates, in a transparent manner, the project criteria (requirements), discussion on each criterion by the assessment team, and the results from determining the identified criteria.

The determination protocol serves the following purposes:

- To organize the details and provision of clarifications on the requirements of which a JI project is expected to meet
- To elucidate how a particular requirement has been determined as well as to document the results of the determination and any adjustments made to the project design document.

The determination protocol consists of three tables. The different columns in these tables are described in the figure below. The completed determination protocol is enclosed in Annex 1 to this report.

Determination Protocol Table 1: Conformity of Project activity and PDD				
Checklist Question	**Reference**	**Comments**	**Draft Conclusion**	**Final Conclusion**
The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further sub-divided. The lowest level constitutes a checklist question / criterion.	*Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.*	*The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any* ***Request*** *has to be substantiated within this column.*	*Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (þ)****,*** *or a* ***Corrective Action Request (CAR)*** *due to non-compliance with the checklist question (see below).* ***Clarification Request (CR)*** *is used when the determination team has identified a need for further clarification.* ***Forward action request*** *to highlight issues related to project implementation that require review during the first verification.*	*Conclusions are presented in the same manner based on the assessment of the final PDD version and further documents including assumptions presented in the documentation.*

Determination Protocol Table 2: Resolution of Corrective Action and Clarification Requests			
Clarifications and corrective action requests	**Ref. to table 1**	**Summary of project owner response**	**Determination team conclusion**
If the conclusions from table 1 are either a Corrective Action, a Clarification or a Forward action Request, these should be listed in this section.	*Reference to the checklist question number in Table 1 where the issue is explained.*	*The responses given by the client or other project participants during the communications with the determination team should be summarised in this section.*	*This section should summarise the discussion on and revision to project documentation together with the determination team's responses and final conclusions. The conclusions should be reflected in Table 1, under "Final Conclusion".*

In case a Forward Action Request (FAR) is raised, it is listed in table 3. FARs highlight issues related to project implementation that require review during the first verification.

Determination Protocol Table 3: Forward action request		
Forward action request **Id. of FAR 1**	**Ref. to table 1**	**Explanation**
Request has to be substantiated within this column	*Reference to the checklist question number in Table 1 where the issue is explained.*	*If necessary this section should present a detail explanation.*

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body "climate and energy". The composition of an assessment team has to be approved by the Certification Body (CB) ensuring that the required skills are covered by the team. The CB TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Ø Assessment Team Leader (ATL)
- Ø Greenhouse Gas Auditor (GHG-A): Determiner/ Verifier
- Ø Greenhouse Gas Auditor Trainee (T)
- Ø Experts (E)

It is required that the sectoral scope and technical area linked to the methodology as well as host country expertise are covered by the assessment team.

The Determination team was consisting of the following experts:

Name	Qualification	Coverage of technical scope	Coverage of technical area	Host country experience
Olena Maslova	ATL	-	-	þ
Igor Kachan	GHG-A	-	-	þ
Sebastian Hetsch	E	þ	þ	

Olena Maslova is auditor in the “Carbon Management Service” department of TÜV SÜD Industrie Service GmbH in Munich, Germany. She is chemical engineer and host country expert for projects in Ukraine and Commonwealth of Independent States. Due to her further master degree at the university of applied science in the Federal Republic of Germany she is also familiar with Germany’s environmental legislation. Being GHG auditor and assessment team leader for JI projects Olena Maslova has already been involved in several JI activities with a special focus on projects in the sector of chemical industries and waste handling and disposal. In this project she functioned as lead auditor and project manager.

Igor Kachan is an employee of TÜV SÜD Ukraine. He has Ph.D. in chemistry and he was appointed as GHG Determiner of the Carbon Management Service Department of TÜD SÜD Industry Service GmbH. He had successfully completed IRCA registered Lead Auditor Training Courses: Environmental Management Systems and Quality Management Systems. He worked as a lecturer (for 5 years) and research engineer/scientist (for 5 years). He was involved in determinations/verifications of more than thirty JI projects pertaining to various sectoral scopes: 1, 2, 3, 4, 5, 8, 9, 13 and 14.

Sebastian Hetsch is appointed as Expert for Scope 14 (forestry) under JI and appointed Assessment Team Leader and GHG-Validator/verifier for CDM by the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH in Munich, Germany. Mr Hetsch holds a university degree in forest science. He passed extensive training on auditing of GHG projects. Before joining TÜV SÜD he worked for several years in the field of international forest policy and management.

Technical Reviewer: Robert Mitterwallner and Martin Seitz covering the scope and technical area as respective expert.

Appointment certificates are found at the end of the document.

2.2 Review of Documents

A first version of the PDD was submitted to the AIE January 2012; the PDD was subsequently submitted for publishing in January 2012 and the GSP started on 01 February 2012. The PDD and additional background documents related to the project design and baseline were reviewed to verify the correctness, credibility and interpretation of the presented information, furthermore a cross-check between information provided and information from other sources have been done as initial step of the determination process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.

2.3 Follow-up Interviews

On 01-05 February 2012 TÜV SÜD performed interviews and physical site inspection with project stakeholders to confirm relevant information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in this context.

Name	Organisation
Martin Burian	PDD Consultant, GFA ENVEST
Evgeny Lepeshkin	Project Coordinator, WWF Russia, Amur Branch
Guenola Kahlert	Project Coordinator, WWF Germany
Evgeny Chernov	Aforestation inspector, Federal State Unitary Enterprise "ROSLESINFORG"
Yuriy Pavlov	Head of forest management department, Federal State Unitary Enterprise "ROSLESINFORG"
Sergey Ponamarenko	Deputy Head of Federal State Unitary Enterprise "ROSLESINFORG"
Alexander Alexeenko	Deputy Head on scientific research of Federal budgetary institution "Far Eastern Forestry Research Institute"
Vladimir Shirko	Head of the TCT
Aleksey Uza	Head of Krasny Yar village (Mayor)
Ivan Rogov	Project Coordinator, WWF Russia, Amur Branch
Anatoliy Kabanets	Project Coordinator, WWF Russia, Amur Branch
Vladimir Sinitsin	Head of Pozharskiy state administration
Rita Tsvetkova	President of social ecological organization "Pervotsvet"
Nikolay Gnatko	Assistant of forester, forest department of Pozharskiy district
Ludmila Litvinova	Lead specialist of Pozharskiy state administration
Lubov Golokha	Head of economic and social development department of Pozharskiy state administration
Tatyana Kravchenko	Secretary of council of Pozharskiy state administration
Viktor Kirpichev	Chairman of council of Pozharskiy state administration
Tatyana Birukova	Deputy head of Pozharskiy state administration
Sergey Pstiga	Deputy head of forest management department of Primorskiy region
Evgeniya Rosenberg	Lead consultant of the department for preparation of international events of the division of international cooperation and tourism of Primorskiy region
Evgeny Chuvasov	Assistant of climate projects, WWF Russia, Amur Branch
Denis Smirnov	Head of forest program, WWF Russia, Amur Branch
Sergei Aramilev	Coordinator biodiversity, WWF Russia, Amur Branch
Andrey Porckhovsky	Coordinator forest project, WWF Russia, Amur Branch

2.4 Cross-check

During the determination process, the team has made reference to the available information related to similar projects or technologies as the proposed JI Track-2 project activity. Project documentation has also been reviewed against the approved methodology applied to confirm the appropriateness of formulae and correctness of calculations.

2.5 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to resolve the requests for corrective actions, clarifications, and any other outstanding issues which need to be clarified for TÜV SÜD`s conclusion on the project design. The CARs and CRs raised by TÜV SÜD are resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the determination process, the concerns raised and responses that have been given are documented in more detail in the determination protocol in Annex 1.

The final PDD version submitted on 26 October 2012 serves as the basis for the final assessment presented.

2.6 Internal Quality Control

Internal quality control is the final step of the determination process and is conducted by the CB “climate and energy” who checks the final documentation, which includes the determination report and annexes. The completion of the quality control indicates that each report submitted has been approved either by the head of the CB or the deputy. In projects where either the Head of the CB or his/her deputy is part of the assessment team, the approval is given by the one not serving on the project team.

After confirmation by the PP, the determination opinion and relevant documents are submitted to the JISC through the UNFCCC web-platform.

3 SUMMARY

The assessment work and the main results are described below in accordance with the latest DVM reporting requirements. The reference documents indicated in this section and Annex 1 are stated in Annex 2.

3.1 Approval

The project participants are the Tribal Commune Tiger and CF Partners (UK) LLP. The host Party Russia meets the requirements to participate in the JI.

The DFP of Russia as host party has issued a Letter of Approval (LoA) on 18 June 2012 and authorized the project participant “Tribal Commune Tiger” in this letter. The letter is unconditional. TÜV SÜD has received those Letters of Approval from the project participants and considers the provided letters as authentic.

On 04 October 2012, the DFP of France has issued Letters of Approval (LoA) in order to authorize “CF Partners (UK) LLP”. The letter is unconditional. TÜV SÜD has received those Letters of Approval from the project participants and considers the provided letters as authentic.

3.2 Participation

The DFP of Russia issued a LoA on 18 June 2012, the DFP of France has issued LoA on 04 October 2012. The means of determination used are the same as described in section 3.1, specifically in regard to the approval process of the project activity.

3.3 Project design document

The PDD is compliant with relevant form and guidance as provided by the UNFCCC JISC.

TÜV SÜD concludes that the guidelines for the completion of the PDD in their most recent version have been followed. Relevant information has been provided by the participants in the applying PDD sections. Completeness was assessed through the checklist included to Annex 1.

3.4 Project description

The following description of the project as per PDD could be verified during the on-site mission:

The project consists of changes in forest management on 450,374 ha. Effectively, the project activity foresees to conduct no harvest on this project area. Compared to the baseline scenario, which involves logging, a total of 560,569 t CO_2-e GHG emissions is expected to be reduced in the period between 03 Jun 2009 to 31 Dec 2012.

In order to implement the project, the Project Participant "Tribal Commune Tiger" acquired the concession lease for the project area. The baseline emissions are quantified by applying a JI project specific methodological approach. The methodological approach for baseline setting and monitoring applied in this project activity is in accordance with appendix B of the JI guidelines. The methodological approach is based on the methodology VM 0011 version 01 of the Verified Carbon Standard (VCS). This VCS methodology has been approved by two certification companies and subsequently been adopted as a VCS methodology for "improved forest management".

The baseline emissions (i.e. the legal harvest) are confirmed by the forest administration of Primorsky Krai, the entity to approve the timber harvest in the region. Further, the project participants conducted a common practice analysis to confirm the credibility of the baseline scenario and respective emissions.

The information presented in the PDD on the design of the project activity is consistent with the actual planning and implementation of the project activity as confirmed by:

- Review of data and information (see annex 2) using sectoral knowledge and expertise of the assessment team, cross check the same with other sources available in the respective technical literature, official publications, etc.
- The on-site visit has been performed and relevant stakeholders and personnel with knowledge of the project were interviewed, in case of doubt further cross checks through additional interviews have been done.
- Finally information related to similar projects as the JI project activity have been used to confirm the accuracy and completeness of the project description.

In light of the above, TÜV SÜD confirms that the project description as included to the PDD is sufficiently accurate and complete in order to comply with the requirements of the JI Track-2.

The **crediting period** of the project is in line with DVM §34:

- The start date of the project is on 03 June 2009 (IRL 20), which is the date on which the implementation of the project began, as the PPs leased the concession area.
- The operational lifetime and length of the crediting period is stated in the PDD in line with DVM 34 and confirmed by the audit team.

3.5 Baseline and monitoring methodology

3.5.1 Applicability of the selected methodology

A methodology for baseline setting and monitoring developed in accordance with appendix B of the JI guidelines (hereinafter referred to as JI specific approach) is used, as forest management is not applicable as CDM project activity and therefore no CDM methodologies exist that can be applied for this project . The JI approach is based on a methodological approach developed under the Verified Carbon Standard (VCS): the VCS approved methodology VM0011, version 1.0 (IRL 5). As part of the VCS methodology approval process, the methodology was assessed by two certification companies: Rainforest Alliance Inc, and Bureau Veritas Certification Holding SAS.

In the process of this determination, TÜV SÜD assessed the applicability of the methodology for this proposed JI project activity and the compliance of the methodology with JI requirements.

The VCS methodology is not fully applicable to the proposed JI project activity. The VSC methodology should only be applied in tropical forests, since it lists several default values in its annex B for tropical forests. The PP provided however relevant and adequate parameters based on scientific literature and studies, wherever the default values of the methodology were not applicable. Therefore, TÜV SÜD considers the methodological approach with the respective deviations adequate for the quantification of GHG emission reductions in this proposed JI project activity.

The assessment of the applicability criteria of the VCS methodology was carried out for each applicability criterion and included, among others, the compliance check of the local project setting with the applicability conditions in regard to baseline setting and eligible project measures.

TÜV SÜD also assessed the compliance of the methodological approach applied in the proposed project activity with JI requirements for LULUCF, and confirms that the approach applied is fully in line with JI requirements DVM § 59.

The methodology-specific protocol, included in Annex 1, documents the assessment process. The results of the compliance check as well as relevant evidence are detailed in the protocol and the information reference list.

TÜV SÜD confirms that the chosen baseline and monitoring methodology is applicable to the project activity.

Emission sources, not addressed by the applied methodology and expected to contribute more than 1% of the overall expected average annual emission reductions, have not been identified.

3.5.2 Project boundary

The project boundary was assessed in line with DVM §60, considering information gathered from the physical site inspection, interviews, and secondary evidence received on the design of the project.

The **geographical project boundary** set in PDD is in accordance with JI LULUCF requirements (DVM §60a), which are also in line with the applied VCS methodology: The project boundary is the physical boundary of the forest compartment, which form the project area. It totals to 450,374 ha. Each discrete area has a unique geographical identification, as documented in the digital geographical boundary files (IRL 4). The boundary does not include area in between the parcels.

The boundary as defined in the field was found to be consistent with the indications in the PDD. In the field, the boundary delineation was cross-checked by the audit team with GPS.

The most relevant documents assessed in order to confirm the project boundary are the following:

- Digital boundary files in a Geographic Information System (GIS) (IRL 4).
- Field sheets including coordinates obtained from GPS point documenting the assessment of the audit team during the onsite visits.
- Overview maps of the location of the project area and boundaries are also included to the final PDD (IRL 2).

The boundaries were validated during the determination process using standard audit techniques, details of all observations are presented in the Annex 1. TÜV SÜD confirms that the identified boundaries as documented in the PDD and attached documents are adequately defined for the project activity.

In regard to **control over the project area**, it was confirmed that the project participant "Tribal Commune Tiger" has acquired the lease for the project area (IRL 20). The corresponding documentation and contracts were reviewed and found established according to the legal system of the host country. Thus, control over the project area by the PP is considered to be established.

Hence, TÜV SÜD confirms that the identified boundary documented in the PDD is adequately defined for the project activity.

The **emissions sources** and removals by sinks in this project activity were selected and considered to be in line with the JI LULUCF requirements DVM §60 b and also in line with the applied VCS methodology. All emissions by sources and removals by sinks are under control of the PP (IRL 20), reasonable attributable to the project and significant.

The **carbon pools** were selected and considered to be in line with the JI LULUCF requirements (DVM §60 c) and also in line with the applied VCS methodology.

The carbon pools "above ground biomass" and "dead wood" is included in the project activity. "Belowground biomass", "litter" and "soil organic carbon" (SOC) is conservatively excluded from accounting. Not accounting for these carbon pools is justified by the PP based on scientific studies and reasoning (IRL 42, 51-55). Belowground biomass is expected to decrease in the baseline scenario compared to the project scenario, as harvest of aboveground biomass, leads also to subsequent loss of belowground biomass. Also SOC and litter is expected to decrease in the baseline scenario due to the logging operations, which is further sustained by scientific literature (IRL 42).

"Harvested wood products" is mentioned as carbon pool in the VCS methodology; however it is not considered a carbon pool in JI LULUCF projects. Therefore in this project activity it is not listed as a carbon pool. Still, the emissions from tree harvesting in the baseline scenario are not accounted as direct emissions, but it is conservatively assumed that the emissions will be delayed due to the fact that a certain amount harvested wood will be stored for a period of time in wood products, before oxidizing to the atmosphere. Respective values are calculated based on IPCC values (IRL 11) and in line with the VCS methodology.

In regard to **eligibility of lands**, the project area complies with respective requirements of JI (DVM §58). The project area is classified as "forest" under the definition of the Host Country (Russia). Among others, the assessment of the compliance was based on the official forest inventory carried out by Federal Forest Agency (IRL 19), as well as through physical site inspections of the audit team during the onsite visit.

In summary, TÜV SÜD confirms that the project boundary defined in the PDD encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are under the control of the project participants, reasonably attributable to the project; and significant.

TÜV SÜD also confirms that the identified project boundary, the selected sources, and gases as documented in the PDD are justified for the project activity and are fully in line with the requirements for JI specific baseline approach.

3.5.3 Baseline identification

The baseline is identified in accordance to the procedure for JI LULUCF projects (DVM §23 and §59) and also in line with the VCS methodology. TÜV SÜD confirms that a detailed theoretical description in a complete and transparent manner of the baseline is provided in the PDD:

- Plausible future scenarios on the basis of conservative assumptions are included in the PDD the most plausible baseline scenario was selected. This was done by applying the AR-CDM tool for demonstrating additionality.
- When selecting potential baseline scenarios, relevant national and/or sectoral policies and circumstances were taken into account.
- The baseline is established in a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors;
- The baseline is established taking into account of uncertainties and using conservativeness assumptions
- The baseline is established in such a way that emission reduction units (ERUs) cannot be earned for decreases in activity levels outside the project activity or due to force majeure
- The baseline is established By drawing on the list of standard variables contained in appendix B to “Guidance on criteria for baseline setting and monitoring”, as appropriate

The list of plausible alternative scenarios to the project activity is complete and no reasonable alternative scenarios have been excluded. The following baseline scenario has been defined in the PDD (see section B.4, as the PP have not presented this information in section B.1): Logging Operation classified as “selective commercial” as well as “intermediate logging including selective sanitary logging”. The baseline scenario is found to be reasonable under the current regulative framework.

Transparent and documented evidences were provided to the assessment team within on-site visit in particular the written confirmation from the Federal Forest Agency, respective interviews onsite and further references listed in the section on common practice. Based on conservative interpretation of collected audit evidences, TÜV SÜD considers that the identified baseline scenario is reasonable until the end of the first commitment period. The validity of JI project status after 2012 has to be determined according to relevant agreement under the UNFCCC and is subject to approval of the host country.

TÜV SÜD confirms that all relevant JI requirements, including relevant national and / or sectoral policies and circumstances, have been identified correctly taken into account in the definition of the baseline scenario.

A verifiable description of the baseline scenario has been included to the PDD.

In conclusion TÜV SÜD confirms that:

1. All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
2. All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
3. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
4. Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD;
5. The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed JI project activity.

3.5.4 Algorithm and/or formulae used to determine emission reductions

TÜV SÜD has assessed the calculations of project emissions, baseline emissions and emission reductions, as well as emissions from leakage. Corresponding calculations were carried out based on calculation spreadsheets as presented via emissions reductions calculation sheet (IRL 3).

The assumptions and data used to determine the emission reductions are listed in the PDD and all the sources have been checked and confirmed.

Based on the information reviewed it can be confirmed that the sources used are correctly quoted and interpreted in the PDD. The values presented in the PDD are considered reasonable based on the documentation and references reviewed, as well as, the result of the interviews. Detailed information on the verification of the parameters used in the equations can be found in Annex 1. The algorithms for the determination of the baseline, project, and leakage are discussed in the following sections.

Emission reductions in this project activity are estimated in line with DVM §42 a. The ex ante estimate of emissions of the project scenario, leakage, emissions and net removals from the baseline scenario and overall emission reduction adjusted by leakage are provided in the PDD as described in the sections below (3.5.4.1 - 3.5.4.4) and in line with DVM § 43. Estimates provided by the PP are in compliance with DVM §45 and §46 (see IRL 2, 3)

3.5.4.1 Baseline Emissions

The baseline emissions estimated in the PDD are calculated based on the emissions related to the logging operations in the baseline scenario.

Calculation of baseline emissions are quantified based on the applied VSC methodology VM0011 version 1, and are fully in line with JI LULUCF requirements and good practice in the field of forestry.

The baseline emissions and stock changes in carbon pools are composed of the following components:

- Carbon stock changes in above ground biomass are mainly related to decrease in carbon stock due to harvest of trees:

  a) Merchantable timber (stem wood) harvested is processed to wood products ("Harvested Wood Products" - HWP). Based on lumber recovery factor, part of the wood (and respectively carbon) is stored for a certain time in "long-term" HWP, part

in "short-term" HWP. Both will lead to CO_2 emission after a certain time, once the HWPs oxidize. The emission from the oxidization is determined in the PDD based on good practice as defined in IPCC (IRL 3, 11, 14, 29). It is considered conservative to account for the time the carbon is stored in HWPs and not consider it as immediate emissions in the baseline scenario.

b) Timber harvested and not transformed in wood products is accounted as immediate emissions (lumber recovery factor), IRL 29

c) Increase of the "dead wood" carbon pool due to harvest residues in the forest (all non-stem wood, classified as "branches and trimming" in the VCS methodology); emissions are calculated from the subsequent decay from the "dead wood" carbon pool (IRL 27)

d) Increase of the "dead wood" carbon pool due to damage of the residual stand (death of trees after harvest operations); emissions are calculated from the subsequent decay from the "dead wood" carbon pool (IRL 27)

e) Not an emission, but taken into consideration when calculating the above ground biomass carbon pool, is the potential re-growth of the stand after harvesting (classified as "regrowth after selective logging" in the VCS methodology). This leads to an increase in the baseline carbon stock and is conservatively estimated. Respective studies (IRL 30) were taken as basis and found to be appropriate by the audit team.

- Natural disturbance (e.g. fire) occurring in the baseline leads to decrease in above ground biomass, but also to non-CO_2 emissions, which are considered in the baseline scenario (IRL 16)
- Fossil fuel consumption during the harvesting operations (only log hauling)
- Other baseline emissions listed as options in the VCS methodology are conservatively neglected (including "emissions due to onsite preparation", "log transport", "timber processing", "log distribution"

3.5.4.2 Project emissions

The project scenario consists of "avoiding any kind of logging" (scenario A). No significant project emissions are expected; nevertheless the following emissions are considered:

- Emissions due to natural disturbances, in particular forest fires. Ex-ante the emissions are estimated based on data available from the Russian Far East Forestry Research Institute (IRL 16)
- Emission due to illegal timber harvest (which de facto leads to decrease in carbon pool, but it is defined as emissions in this project activity). Ex-ante estimations are based on data from WWF
- Other project emissions listed as options in the VCS methodology are not considered, due to the following reason:

  a) Emissions due to project planning (administration and travel): these are emissions occurring outside of the project boundary, thus it could only be considered as leakage. The PPs further showed that the emissions are not significant, by applying the AR-CDM "tool for testing significance of GHG emissions in AR CDM project activities". Further, it is not common practice to consider these emissions in GHG

LULUCF projects (e.g. AR-CDM projects do also not consider these kind of emissions or leakage).

b) Emissions due to project design (flight and ground transport): these are emissions occurring mostly outside of the project boundary, thus it would have to be partly considered as leakage. The PPs further showed that the emissions are not significant, by applying the AR-CDM "tool for testing significance of GHG emissions in AR CDM project activities". Further, it is not common practice to consider these emissions in GHG LULUCF projects (e.g. AR-CDM projects do also not consider these kind of emissions or leakage).

c) Emissions due to monitoring (flight and ground transport): these are emissions occurring partly outside of the project boundary, thus it would have to be partly considered as leakage. The PPs further showed that the emissions are not significant, by applying the AR-CDM "tool for testing significance of GHG emissions in AR CDM project activities". Further, it is not common practice to consider these emissions in GHG LULUCF projects (e.g. AR-CDM projects do also not consider these kind of emissions or leakage).

The project emissions considered will be monitored ex-post.

3.5.4.3 Leakage

In line with DVM §40, the PDD appropriately describes the assessment of the potential leakage of the project and appropriately explains which sources of leakage are to be calculated, and which can be neglected. The procedure for an ex ante estimate of leakage is explaine din the PDD and mainly based on the VCS procedure for leakage.

Two different kind of leakage can be considered in LULUCF projects: leakage due to activity shifting and market leakage.

Leakage due to direct activity shifting is not applicable in this project activity, since none of the PPs are involved in logging operations. Baseline activities would be implemented by other market actors, therefore leakage can only be considered as market leakage (which is also in line with the applied VCS methodology). Since no approved leakage tool to determine market leakage are provided by UNFCCC, the PP applied the VCS approach to determine market leakage, and further supported the approach with scientific literature and studies.

Based on the VCS approach 20% market leakage is determined, respective reasoning is assessed by the audit team and found in compliance with the applied VCS requirements. Further, it was sustained, that up to 85% of the wood harvested in the region is exported, while at the same time the majority of forest areas in the region are already under harvest concessions. Therefore, the likelihood of international leakage is high, which is however not considered under JI and VCS requirements.

In summary, TÜV SÜD considers the approach chosen by the PP to determine leakage to be in line with JI requirements DVM §40 adequate and conservative for the proposed JI LULUCF project activity. According to DVM §63, the project activity takes into account only the increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary.

3.5.4.4 Emission Reductions

Chapter E.5 of the final PDD demonstrates emission reductions ERs calculated based on

1. Baseline carbon stock changes and emissions as discussed in section 3.5.4.1 of this report, and section B.3 of the PDD. Decreases in carbon stocks and emissions in the baseline are related to harvest operations.

2. Project emission carbon stock changes and emissions as discussed in section 3.5.4.2 of this report, and section B.3 of the PDD. Project emissions are expected to be limited, mainly emissions due to natural disturbances or illegal harvest is expected.

3. GHG emissions from leakage as discussed in section 3.5.4.3.

In summary, the calculation of the baseline emissions, project emissions, and the emission reductions, respectively, can be considered as correct. The baseline and project emissions are calculated in the PDD in transparent manner.

The PDD also shows emission reductions for the years beyond 2012. An extended crediting period beyond the first commitment period is subject to the host country approval and has to be evaluated on the regulative framework under UNFCCC existing post 2012.

3.6 Additionality

The additionality of the project was presented in the PDD using following approach: Additionality tool for AR-CDM using a simple cost analysis, in line with DVM §28 c. It was shown that that there is no economical benefit for the PP to obtain the licence for the forest concession than the JI revenues.

The approach used in the PDD has been assessed based on a document review and interviews on-site with plant representatives. Furthermore some documents have been reviewed on-site (for details see annex 2). All audit evidences have been checked using sectoral knowledge and expertise as well as public available information published in the internet and scientific literature.

Furthermore, the additionality analysis was discussed onsite with the project participants, as well as with the consultants involved in PDD development. Interviews on this topic were also carried out with stakeholders during the onsite visit (IRL 1). The data, rationale, assumptions, justifications and documentation provided were checked using local knowledge and sectoral and financial expertise.

Based on the aforementioned approach, TÜV SÜD confirms that the documentation provided is appropriate for this project in line with DVM §27-30. Further analysis of the additionality is summarized in the sections below (3.6.1 – 3.6.4).

3.6.1 Start date and prior consideration of carbon finance / JI

The project started on 03 June 2009 (IRL 20). The starting date of the project activity is determined by the start date of the lease of the concession.

The consideration of carbon finance prior to project start is documented in the PDD and respective documents were assessed by the audit team. The evidences provided indicate that continuing and real actions were taken to secure JI status for the project in parallel with its implementation. TÜV SÜD confirms that JI / carbon finance was a decisive factor in the decision to proceed

with the project, as no revenues are expected from the project activities other than JI finances (IRL 3).

TÜV SÜD confirms that real and continuing actions was taken by the PP to secure the JI status of the project activity during the period between the project starting date and when the determination started. The audit team validated this by a review of the following documents:

Date	Activity by the Project Participant	Reference	Audit team conclusion
2009	Feasibility Study commissioned by WWF Germany and WWF Russia was done by Baker McKenzie.	IRL 24	The study was reviewed by TÜV SÜD. It was finalized in June 2009, the study was commissioned before project start.
Feb 2009	The consultancy Ecosecurity was hired to conduct a feasibility study of the project as a carbon project	IRL 22	The final study and contract with Ecosecurity was reviewed by the audit team.
01 Jun 2009	Start of project activity	IRL 20	Document reviewed by TÜV SÜD and found in compliance with the JI requirements.
2009	Call for tenders for consultancy for PDD development for the project activity	IRL 23	The audit team reviewed the document and confirmed its authenticity
09 Mar 2010	Contract with GFA Envest was signed for elaborating the PDD of this JI project	IRL 43	The contract was reviewed by TÜV SÜD.
11 Mar 2011	Request for proposal for the determination of the JI project activity	IRL 25	WWF Germany requested a proposal from TÜV SÜD. The contract was signed on 16 May 2011.
02 Feb 2012	Start of GSP		Start of the determination. Evidence on UNFCCC webpage.

3.6.2 Identifications of alternatives

In line with the applied AR-CDM additionality tool, which is also in line with the JI requirements (DVM §28c)and the VCS methodology three alternatives are identified in the PDD:

a) "avoiding any type of logging" (without carbon finance)

b) "intermediate logging and selective sanitary logging, based on the issuance of annual felling tickets"

c) "long-term concession or annual felling tickets"

The presented alternatives include all plausible scenarios taking into account local and sectoral circumstances. Hence the list of alternatives is considered to be complete.

Based on the evidence provided and the discussion held with the project participants during the onsite visit, it was confirmed that scenario B or C is considered the most likely scenario in the absence of the project activity.

3.6.3 Investment analysis

The PP used a simple cost analysis to demonstrate additionality. In summary the PP demonstrated that the project does not generate any financial returns other than carbon revenues to the PPs, which would not be generated in the baseline scenarios.

The costs for implementing the project activity are foremost the lease of the project (IRL 20). As per the lease contract, the lease fee is based on collection of non-timber forest products (NTFPs) and the lease only allows this particular use. As per legislation (IRL 6, 37) a lease for timber harvest such as commercial, intermediate or selective sanitary logging in the same area is not possible, as this would conflict with the agreed collection of NTFPs in the lease area. However, even without the lease the PP (TCT) would be entitled to collection of NTFPs, as indigenous communities have this right as per forest code (IRL 37). Therefore the revenues from NTFP collection are not connected to the lease contract per se. Hence, the audit teams considers the approach to demonstrate additionality through a simple costs analysis adequate, as the revenues from NTFPs would also be available to the PP in the baseline scenario, while the protection through the lease leads to costs that do not generate additional income apart from carbon revenues.

The audit team confirmed the respective reasoning through the revenue of the lease contract (IRL 19), review of respective legislation (IRL 6, 37), onsite interviews with the Russian Forest Service (IRL 1), as well as through interviews with the PPs and relevant other stakeholder and community and government officials (IRL 1).

3.6.4 Common practice analysis

The region for the common practice analysis was defined as the geographical area of the province “Primorsky Krai” in the Russian Far East. The assessment team reviewed the approach presented in the PDD and can confirm that relevant parameters such as location, ecological conditions, economical situation, and development were taken into account in order to define the region. The chosen region has unique characteristics in regard to forest structure, population structure and ethnic minorities. Therefore, the presented approach can be considered appropriate for the common practice analysis.

The PP made an analysis of the region and found that most areas, which are not classified as protected area (e.g. nature reserves, etc), are under lease for commercial use (IRL 49). Further, it was shown that logging companies on average cut their allowable volume in the respective concessions. In addition it can be assumed that a certain percent of illegally cut timber would increase the harvest potentially even above the legal level (IRL 28).

Therefore, it can be confirmed that the proposed JI project activity is not a common practice in the defined region, while considering the specific project design.

3.7 Monitoring plan

The project activity follows a JI project specific approach for the monitoring, which is however based on the approved VCS methodology VM0011 version 1 (IRL 5).

The assessment team has checked all parameters presented in the MP against the requirements of JI LULUCF project, good practice for forest monitoring and the applied VCS methodology. The monitoring plan (MP) presented in the PDD complies with JI requirements and good practice, as well as with the basic parameters of the VCS methodology.

The main parameters to be monitored are:

- Area of natural disturbance (A_{ND})
- Fraction of natural disturbance (f_{ND})
- Volume of illegal logging ($V_{illegal\text{-}harvest}$)

The respective procedures for monitoring the parameters are listed in the PDD and quality control and assurance procedures are listed. The monitoring procedures as well as the data management, quality assurance and quality control procedures were reviewed and discussed with the PPs and respective experts and stakeholders during the onsite visit of the audit team. TÜV SÜD concludes that the procedures are in line with good practice.

The PP did not include a forest inventory with permanent sample plots in the monitoring plan of this project activity, as suggested by the VCS methodology (section 7.1 of the VCS methodology VM0011 version 01), which is not considered to be necessary, as appropriate procedures were defined for monitoring of the area with remote sensing; In case of disturbance a sample design with line transects will be applied, as outlined in PDD section D.1.1 (IRL 44, 45)

The assessment team concludes that the proposed MP is feasible within the project design. All the audit evidences proving the appropriateness of monitoring provisions undertaken by the PPs were provided to the AIE and have been considered as sufficient.

TÜV SÜD confirms that the Monitoring Plan is in compliance with DVM § 36.

3.8 Environmental impacts and local stakeholder consultation

No environmental impact assessment is required for the proposed project activity, as confirmed by the audit team based on relevant legislation (IRL 38, 47, 48).

However, environmental studies were carried out in the project area underlining the ecological importance of the area (IRL 26, 46). Since the project foresees to protect the area from logging, no negative impacts are expected. Therefore the AIE concludes that the procedures of the host country Russia are applied correctly. The audit team concludes that the project activity complies with DVM §48.

A local stakeholder process was carried out on a voluntary basis. Several meetings were held in the local community of Krasny Yar, as well as meetings in the municipal district of Luchegorsk and at regional level.

A list of stakeholder is provided in the PDD, as well as a summary of the comments and how they were addressed. The audit team found the stakeholder assessment in line with DVM requirement § 49.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGO$_S$

TÜV SÜD published the project documents on the UNFCCC website and invited comments by the Parties, stakeholders and non-governmental organisations during a period of 30 days in line with DVM §10-14.

The following table presents all key information on this process:

Webpage: http://ji.unfccc.int/JI_Projects/DB/ULD19J1NDCZQ6A5GRW1ZC5C2A17CE0/PublicPDD/52ZLCD3NWXK59AC6KTL9VCDF3Z240O/view.html	
Starting date of the global stakeholder consultation process: 01 Feb 12	
Comment submitted by: No comments were submitted	**Issues raised:** -
Response by TÜV SÜD: -	

5 DETERMINATION OPINION

TÜV SÜD has performed a determination of the following proposed JI project activity “Bikin Tiger Carbon Project - Permanent protection of otherwise logged Bikin Forest, in Primorye Russia”

Standard auditing techniques have been used for the determination of the project. A methodology-specific protocol for the project has been prepared to conduct the audit in a transparent and comprehensive manner.

The review of the project design documentation, subsequent follow-up interviews, and further verification references have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol, provided the host party Russia and Germany will give their unconditional approval to the project. In our opinion, the project meets all relevant UNFCCC requirements for the JI for approving projects under JI – Track 2. Hence, TÜV SÜD recommends the project for registration under JI Track 2, considering the approval from the host party Russia and France.

An analysis, as provided by the applied methodology, demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

The determination is based on the information made available to TÜV SÜD, as well as the engagement conditions detailed in this report. The determination has been performed following the latest version of the JI DVM. The single purpose of this report is its use during the registration process as part of the JI Track 2 project cycle.

Munich, 30 October 2012

Thomas Kleiser

Certification Body “climate and energy”
TÜV SÜD Industrie Service GmbH

Munich, 30 October 2012

Olena Maslova

Assessment Team Leader
TÜV SÜD Industrie Service GmbH

ANNEX 1: DETERMINATION PROTOCOL

Table 1: JI LULUCF Determination Protocol - Requirements Checklist

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
A. General description of the LULUCF project				
A.1 Title of the LULUCF project:				
Does the used project title clearly enable to identify the unique JI activity?	2	The title "Bikin Tiger Carbon Project - Permanent protection of otherwise logged Bikin Forest, in Primorye Russia" is indicated in the PDD. The project is a forest management activity, applicable in scope 14.	þ	þ
Are there any indication concerning the revision number and the date of the revision? Is this consistent with the time line of the project's history?	2	Revision number is included, and the time line consistent.	þ	þ
A.2 Description of the LULUCF project				
Does the description include: a) Situation existing prior to the starting date of the LULUCF project; b) Baseline scenario; and c) Project scenario (expected outcome, including a technical description).	2	A detailed description is provided in the PDD, including the starting date, a description of the baseline and project scenario	þ	þ
A.3 Project participants				
Is the form required for the indication of project participants correctly applied? Are the contact details in consistence with Annex 1?	2	Three PPs are listed: Tribal Commune Tiger, WWF Amur Branch and WWF Germany. Russia is indicated as host party involved (but no PP). (see section A.5 for further comments) In the final version of the PDD Tribal Commune Tiger and the investor CF Partners (UK) LLP are listed as PP. **Clarification Request 1.** Clarify the correct name of the project participants in section A.3 and Annex 1.	CR	þ
A.4. Technical description of the LULUCF project				
A.4.1 Has the location of the project including Host Party (A.4.1.1.), Region/State/Province (A.4.1.2.) and City/town/community (A.4.1.3.) been defined?	2, 4	The location including host party, region, state and community is included in the PDD	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
A.4.1.4. Has an appropriately detailed geographic delineation of the project boundary including a unique identifier been included?	2, 4	The PDD identifies the forest compartments belonging to the project As per PDD the project appears to be one discrete project area. GIS files are provided, identifying two areas. Unique identification is provided based on the GIS data. **Clarification Request 2.** Clarify the actual project boundary and provide updated GIS files indicating the actual project boundary to the audit team.	CR	þ
A.4.2. Conformity with the definitions of LULUCF activities Is it specified, how the LULUCF project conforms to the definitions of LULUCF activities included in paragraph 1 of the annex to decision 16/CMP.1, applying the good practice guidance for land use, land-use change and forestry as decided by the COP/MOP, as appropriate? In the case of afforestation, reforestation and/or forest management projects, have project participants applied the definition of "forest" selected by the host Party, which specifies: - A single minimum tree crown cover value between 10 and 30 per cent; and - A single minimum land area value between 0.05 and 1 hectare; and - A single minimum tree height value between 2 and 5 metres.	2	The Russian forest definition as per is 18% minimum crown cover, 1 ha minim area and 5 meter minimum size. A forest inventory was used to classify the land cover. The forest inventory was carried out by the Forest Inventory Department of the Russian Forest Service in 2009. The forest inventory was based on the previous official forest inventory from 1992 and updated based on satellite images. Within the concession of the nut harvesting zone and the riparian zone, several areas were identified as non-forest (e.g. water bodies, wetlands and settlements). These areas were excluded from the actual project boundary. **Clarification Request 3.** Clarify if the Russian forest definition used is still valid.	CR	þ
A.4.3. Are technology(ies) to be employed, or measures, operations or actions to be implemented by the LULUCF project described?	2	Technology to be employed is "improved forest management". No particular technologies need to be applied. The scope of the project is 14, which includes improved forest management.	þ	þ
A.4.4. Is a brief explanation provided of how the net anthropogenic removals by sinks are to be enhanced by the proposed JI LULUCF project, including why these enhancements would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances?	2	A brief explanation is provided in the PDD regarding net anthropogenic removals by sink and emission reductions. A summary on emission reductions and expected project emissions is provided in the PDD.	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
A.4.4.1. Are the enhancements of net anthropogenic removals by sinks over the crediting period estimated appropriately, and presented following the PDD guidance?	2	A summary of net anthropogenic removals / emission reduction in the project scenario is provided in the PDD. **Corrective Action Request No 1.** Update the summary of net anthropogenic removals / emission reduction in the project scenario in line with the requests in later sections of the checklist	CAR	þ
A.5. Project approval by the Parties involved				
Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: - A written project approval by a Party involved, explicitly indicating the name of the legal entity? Or - Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	2	The Letter of Approval from the host party's DFP was issued on 18 June 2012, the DFP of France has issued LoA on 04 October 2012	þ	þ
• Have the DFPs of all parties listed as involved in the PDD provided written project approvals? • Has the DFP of the host Party issued a written project approval? • Are all the written project approvals by Parties involved unconditional?	2	The host party has provided their unconditional written approval in the LoA from 18 June 2012. The PP "CF Partners (UK) LLP" has received unconditional approval from the DFP of France.	þ	þ
• Does the PDD identify at least the host Party as a "Party involved"?	2	Russia is identified as host party.	þ	þ
SECTION B. Baseline				
B.1. Description and justification of the baseline chose				
Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? • JI specific approach • Approved CDM methodology approach	2	The project applies a JI specific approach to calculate the emission reductions. Basis for the methodological approach is a methodology which was approved under the "Verified Carbon Standard" (VCS), methodology VM 00011 version 1.0 "Methodology for Improved Forest management – Logged to Protected Forest: Calculating GHG Benefits from Preventing Planned Degradation".	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		Clarification Request 4. Clarify if the cited VCS methodology VM 00011 version 1.0 will be fully applied.		
Does the PDD provide a detailed theoretical description in a complete and transparent manner?	2, 5	The PDD provides a details methodological description, and further the steps of the methodology are presented in the methodology published on the VCS webpage: http://www.v-c-s.org/methodologies/VM0011	þ	þ
JI specific approach Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one? (b) Taking into account relevant national and/or sectoral policies and circumstance? • Are key factors that affect a baseline taken into account? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (d) Taking into account of uncertainties and using conservative assumptions? (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project activity or due to force majeure? (f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate	2	The baseline is identified based on the "Guidance on criteria for baseline setting and monitoring", the VCS methodology VM00011 version 1.0 and the AR-CDM additionality tool. Respective information on the baseline is provided in section B.4 of the PDD.	þ	þ
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 the above?	2	As the project uses a methodology based on the VCS methodology VM0011, the applicability criteria of this methodology are presented and assessed by the audit team.	þ	þ
Criteria: Project Type	2, 19	The main part of the project qualifies as "logged to protected forest". See also respective discussion and evidence in the sections on baseline setting.	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		During the onsite visit the audit team found patches of logging operation ongoing under the project scenario. **Clarification Request 5.** Clarify if the methodology can be applied considering planned logging operations under the project scenario.		
Criteria: Condition of the forest	2, 17, 19	A forest inventory was conducted in 2009 showing that the land classifies as forest. See also section A.4.2 for further comments. (including the VCS requirements for providing information on forest cover 10 years prior to project start. **Clarification Request 6.** Clarify why the forest is classified as “intact”, considering also previously logged parcels in the project area.	CR	þ
Criteria: Type of Forest	2, 19	The methodology only allows for tropical forest. The project area is however not considered tropical. Hence the applicability criteria is not met. However, based on the assessment of the audit team, the methodology can be applied, as this applicability criteria is only relevant for the default values that are listed in the annex of the methodology. The PP provided adequate input parameters and the audit team assessed each and considers all values and parameters applied applicable for this methodology. Considering that it PPs opted for a JI project specific approach, the audit team accepts the use of the methodology, despite this applicability criteria not being met, based on the above reasoning.	*(þ)*	þ
Criteria: Forest Product type	2	Harvested Wood Products are considered in the project activity.	þ	þ
Criteria: Driver of degradation	2	Legally sanctioned timber harvest, as discussed in the section on baseline scenario	þ	þ
Criteria: Baseline Activity to be displaced	2	Legally sanctioned logging can be displaced, which is discussed in the section on leakage	þ	þ
Criteria: Project Area	2, 4	The project area is confirmed by the Russian forest service, since the project participants are leaseholders for the project area. The lease included information on the exact project area.	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		The audit team assessed the lease contract and interviewed the forest service regarding the leases.		
Criteria: Carbon Pools	2	In line with the methodology below-ground biomass, soil and litter is not considered. Above ground biomass is considered (See also B.2 below)	þ	þ
If a multi-project emission factor is used, does the PDD provide appropriate justification?	2	Not applicable	NA	þ
Baseline setting - in addition to the above - does the PDD provide an explanation how the baseline chosen: • Takes into account the good practice guidance for LULUCF, developed by the IPCC? • Ensures conformity with the definitions, accounting rules, modalities and guidelines under Article 3, paragraphs 3 and 4, of the Kyoto Protocol?	2	The PDD takes good practice guidance for LULUCF and refers to IPCC guidance. Conformity with the definitions, accounting rules, modalities and guidelines under Article 3, paragraphs 3 and 4, of the Kyoto Protocol is given. (*see sections below*)	þ	þ
LULUCF PDD guidance: Is the baseline chosen in accordance with appendix B of the JI guidelines and the "Guidance on criteria for baseline setting and monitoring", using the respective step-wise approach? Step 1. Indication and description of the approach chosen regarding baseline setting Step 2. Application of the approach chosen	2	The stepwise approach is followed. The baseline setting approach is described and applied (*see sections below*)	þ	þ
B.2. Carbon pools selected				
Does the project boundary account for all changes in the following carbon pools: • Above-ground biomass; • Below-ground biomass; • Litter; • Dead wood; and • Soil organic carbon? Does the PDD provide: (i) The information of which carbon pools are selected? (ii) If one or more carbon pools are not selected, transparent	2, 42, 51-55	The project accounts for the carbon pool of Above-ground biomass and dead wood. It does not account for below-ground biomass, litter and soil organic carbon. Inclusion of HWP as carbon pool can be considered conservative, as this delays emission in the baseline scenario, however HWP are not listed as a carbon pool in the JI guidance. In the context of the JI project HWP are not considered as carbon pool, but as a part of baseline (and project) emissions. Dead wood is included in the methodology as carbon pool to be considered, however it is not included in the calculation of the project activity.	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
and verifiable information that indicates, based on conservative assumptions, that the pool is not a source?		As harvest operations can create additional dead wood, it needs to be clarified why it is conservative to not include the pool of dead wood **Clarification Request 7.** • Clarify and provide evidence why the carbon pool of below-ground biomass, litter and SOC can be neglected. • Clarify if Harvested Wood Products (HWP) can be included as a carbon pool in line with JI requirements • Clarify and provide evidence why the carbon pool of dead wood can be conservatively neglected.		
B.3. Specification of the greenhouse gas sources whose emissions will be part of the LULUCF project				
Does the project boundary encompass all anthropogenic emissions by sources and removals by sinks of GHGs which are: (i) Under the control of the project participants; (ii) Reasonably attributable to the project; and (iii) Significant?	2	The VCS methodology allows accounting for certain emissions in the baseline scenario. However it is conservative to neglect them, in particular as they are insignificant compared to the overall project emission reductions. The PDD does only consider the following baseline emissions: • Forest degradation (harvest of wood) • Stand damage related to harvest As project emission the VCS methodology suggest various sources. The VCS methodology allows for inclusion of emissions which are not under the control of the project participants and outside of the project boundary, such as emission for wood processing in saw mills in the baseline scenario and wood transport in the baseline scenario **Corrective Action Request No 2.** Include only emissions sources in compliance with JI requirements.	CAR	þ
Baseline emissions				
Forest degradation (CO_2)	2	Forest degradation is included in the baseline scenario; although this is no emission but stock change in a carbon pool	þ	þ
Fossil fuel use in machinery	2	Included in the baseline scenario	þ	þ
Electricity consumption	2	Included in the baseline scenario. See CAR 2 above	CAR	þ
Forest fires	2	Neglected in the baseline scenario. This is considered conservative as it decreases baseline emissions.	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Commercially harvested fuelwood	2	Included in the baseline scenario.	þ	þ
Fuelwood gathered for domestic use	2	Neglected in the baseline scenario. This is considered conservative as it decreases baseline emissions.	þ	þ
Biomass burning in the course of land use conversion	2	Neglected in the baseline scenario. This is considered conservative as it decreases baseline emissions.	þ	þ
Harvested wood products	2	Included in the baseline scenario. The harvest wood products can be considered as delaying emission from wood harvest (in the baseline scenario), as the harvested wood is not calculated as immediate emissions, but partly still considered to be sequestered in wood products and GHG emission are only calculated after their oxidation.	þ	þ
Pestilence	2	Neglected in the baseline scenario. This is considered conservative as it decreases baseline emissions.	þ	þ
Project emissions				
Electricity consumption	2	As per VCS methodology it is suggested to apply the AR-CDM “Tool for testing significance of GHG emissions in A/R CDM project activities”. Based on this tool, the audit team confirms that the emissions are negligible in the context of this project.	þ	þ
Flights	2	As per VCS methodology it is suggested to apply the AR-CDM “Tool for testing significance of GHG emissions in A/R CDM project activities”. Based on this tool, the audit team confirms that the emissions are negligible in the context of this project.	þ	þ
Ground travel	2	As per VCS methodology it is suggested to apply the AR-CDM “Tool for testing significance of GHG emissions in A/R CDM project activities”. Based on this tool, the audit team confirms that the emissions are negligible in the context of this project.	þ	þ
Aerial surveillance	2	As per VCS methodology it is suggested to apply the AR-CDM “Tool for testing significance of GHG emissions in A/R CDM project activities”. Based on this tool, the audit team confirms that the emissions are negligible in the context of this project.	þ	þ
Natural disturbances such as forest fires	2	Emissions from natural disturbances are included as CO_2 emissions. **Corrective Action Request No 3.** Clarify why CH_4 emissions from biomass burned are not included.	CAR	þ
Are the delineation of the project boundary and the gases and sources/sinks included appropriately described and justified	2	See sources and comments above	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
in the PDD?				
Are all gases and sources/sinks included explicitly stated, and the exclusions of any sources/sinks related to the baseline or the LULUCF project appropriately justified?	2	See sources and comments above	þ	þ
B.4. Description of how the net anthropogenic removals by sinks are enhanced above those that would have occurred in the absence of the JI LULUCF project:				
Is it demonstrated that the LULUCF project provides enhancements of net anthropogenic removals by sinks that are additional to any that would otherwise occur, using the following stepwise approach?	2	A stepwise approach is applied, see details below	þ	þ
Step 1. Indication and description of the approach applied a) If a JI specific approach is used, please explicitly indicate which of the approaches to demonstrate additionality, defined in paragraph 2 of the annex I to the "Guidance on criteria for baseline setting and monitoring", is chosen, and provide a justification of its applicability, with a clear and transparent description, as well as references, as appropriate. b) If an approved CDM baseline and monitoring methodology is used in accordance with paragraph 10 of the "Guidance on criteria for baseline setting and monitoring", please provide clear references and describe why and how it is applicable.	2	A JI specific approach is applied. In compliance with paragraph 2 of the annex I to the "Guidance on criteria for baseline setting and monitoring" the additionality tool from CDM for scope 14 projects was applied, as outlined below.	þ	þ
Step 2. Application of the approach chosen Is the approach outlined in step 1 above applied in the context of the LULUCF project?	2	The approach is detailed in the section below	þ	þ
Step 3. Provision of additionality proofs Are relevant additionality proofs included or attached?	2	Relevant evidence will be supplied by the PP (see comments below)	þ	þ
Additionality (JI specific approach)	2			
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 conserva-	2	The CDM "Tool for the demonstration and Assessment of Additionality in AR CDM project Activities" has been applied by the PP to demonstrate compliance with the respective JI requirement.	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
tive assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality" (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board.				
Additionality (tool) Vers.2				
Step 0. Preliminary screening				
If the project participants claim that the afforestation or reforestation CDM project activity has a starting date after 31 December 1999 but before the date of its registration: a) Has evidence been provided that the starting date of the A/R CDM project activity was after 31 December 1999, b) and that the incentive from the planned sale of GHG emission allowances was seriously considered in the decision to proceed with the project activity (documentation that was available to third parties at, or prior to, the start of the project activity).	2, 20, 21, 22, 23, 24, 25	Project start date is indicated in the PDD as 03 June 2009, which is the date of signing the concession contract. Early carbon finance was considered and respective evidence was provided to the audit team through the following documents: • Project Proposal by WWF Germany for financing to the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Aug 2008). The proposal is made explicitly for this project and its GHG emission reduction • A feasibility study for the project by Ecosecurity finalized in May 2009 • A call for consultancies to develop a PDD from October 2009 • Contract between WWF Germany and GFA Envest to develop the PDD from March 2010 • Contract with TÜV SÜD on the determination of the project in May 2011	þ	þ
Step 1. Realistic and Credible Alternatives to the A/R project activity consistent with the current laws and regulations				
Have realistic and credible land-use alternative(s) [currently existing or that existed some time since 31 Dec. 1989] been identified (sub-step 1a), at least including:	2	Alternative land use scenarios include the following: • No logging of the project area without the project being registered as JI project (scenario A)	CR CAR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
• Continuation of the pre-project land use • AR of the land within the project boundary performed without being registered as the A/R CDM project activity If applicable, forestation of at least a part of the land within the project boundary of the proposed A/R CDM project		• intermediate logging and selective sanitary logging activities based on the issuance of annual felling tickets (scenario B) • long-term concessions or annual felling tickets (scenario C) (depending on the percentage of Korean Pine in the stand) **Clarification Request 8.** • Clarify and provide evidence whether scenario B and C are realistic and credible, considering the common practice in the area and costs for exploiting the area. (*See also comments in the common practice analysis section*) • Clarify if different scenarios should be applied, considering that parts of the project area is classified as Nut Harvesting Zone and parts and riparian area. **Corrective Action Request No 4.** As per methodological requirement, include the continuation of the current land use scenario, which includes limited logging by the TCT.		
Are the alternative(s) in compliance with all mandatory applicable legal and regulatory requirements (sub-step 1b)? If that is not the case, an alternative can only be considered if applicable legal or regulatory requirements are systematically not enforced or the non-compliance with those requirements is widespread, i.e. prevalent on at least 30% of the area of the smallest administrative unit that encompasses the project area;	2, 6-10	All scenarios are in line with current legislation and laws. Respective laws and regulations were also reviewed by the audit team.	þ	þ
Is the project scenario not the only remaining alternative?	2	No, also other scenarios are applicable	þ	þ
Step 2: Investment analysis				
Is the analysis method identified appropriately (step 2a)?	2	A simple cost analysis is applied	þ	þ
In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?	2, 20	In scenario A, no timber related incomes are generated for the forest department or the PPs. However, the forest department receives income for non-timber forest products. **Clarification Request 9.** Clarify and provide evidence if the Tribal Commune Tiger would be enti-	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		tled to collect non-timber forest products, even if the project area would be available for timber harvest (concessions or annual felling tickets), and how much revenues the forest department would received as fee for the harvest of these non-timber forest products, in case other organisations or companies would harvest timber.		
In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, payback period or cost benefit ratio which is most suitable for the project type and decision making)?	2	NA	NA	þ
In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, payback period, cost benefit ratio, or (levelized) unit cost)?	2	NA	NA	þ
In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?	2	NA	NA	þ
In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	2	NA	NA	þ
Is a sensibility analysis included? Is the outcome of the sensitivity analysis that the proposed AR project activity would unlikely be financially most attractive?	2	NA	NA	þ
Step 3: Barrier Analysis	2	Not applied	NA	þ
Step 4. Common practice analysis				
Has the region been identified adequately?	2	Annex 2.2 identifies Nut harvesting zones (NHZ) in Primoye and Khabarovsk Kraijs. Some of the NHZ are not logged. No information on harvested volume and ecological, bio-physical or socio-economic conditions are provided. No information is provided on riparian zones subject to logging. **Clarification Request 10.** Clarify how the region is defined for the common practice analysis	CR	þ
Are similar activities carried out in the region?	2	**Clarification Request 11.** Clarify which other hut harvesting zones or riparian areas are not subject	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		to logging in the region, and provide respective evidence to the audit team		
If yes, are there essential distinctions between the proposed project and other similar projects?	2	See comments above	þ	þ
29 (a) Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	2	See comments above	þ	þ
29 (b) Are additionality proofs provided?	2	Additionality proofs are provided to the audit team, in particular rhge lease contract, as well as the confirmation by the forest administration on legal timber harvest in the area	þ	þ
29 (c) Is the additionality demonstrated appropriately as a result?	2	Additionality is demonstrated adequately as outlined in the PDD and Determination Report.	þ	þ
Calculation of Primary Parameters	2	The approach to quantify the GHG emissions and removals are based on the VCS methodology as indicated above.		
Is formula 3.1 applied? $C'_{baseline,t} = C'_{degradation,t} + C'_{emissions,t}$	2	Yes, the formulae is included in the PDD and applied.	þ	þ
Is formula 3.2 applied? $C'_{degradation,t} = \left[\left(C_{DW_{decay},t} + C_{ltHWP_{oxidation},t} + C_{stHWP_{oxidation},t} + C_{growth\_foregone,t} - C_{regrowth,t} \right) \times \frac{44}{12} \right]$	2	Formula 3.2 is applied, however "short-term HWP" and "regrowth fore-gone" is missing **Clarification Request 12.** Clarify why the parameters short-term HWP" and "regrowth foregone" are omitted in the calculations.	CR	þ
Existing Inventory data pathways *(meth section 3.2.1)*				
Validation of existing forest inventory data *(meth section 3.2.1.1)*				
Is the stepwise approach for validation of existing inventory data applied? (Step1-7)	2	No information is provided in the PDD **Clarification Request 13.** Clarify whether validation of the inventory data was carried out in line with the applied methodology and provide the audit team with respective information	CR	þ
Step 1: Stratify the Project Area by following the procedure described in Section 2.2.1.1.1 and check with the existing stratification to verify whether it is similar to the Project Area stratification or not.	2	*See above*	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Step 2: If the existing stratification is not similar to the Project Area stratification, the existing inventory data must not be used. Apply the Measured Data pathway.	2	*See above*	CR	þ
Step 3: If the existing stratification is similar to the Project Area stratification, randomly establish 6 to 10 preliminary sample plots in each stratum as suggested for measuring the variance and measure the trees in the sample plots for their diameter at breast height and tree height. Guidance on the size and shape of the sample plots to be established is described in Section 7.1.2.2.	2	*See above*	CR	þ
Step 4: Estimate the carbon in the AGB for each forest product type (if specified) for each stratum using the biomass allometric method as presented in Section 3.2.1.2.	2	*See above*	CR	þ
Step 5: Calculate the carbon in the AGB per hectare and the 95 percent confidence interval for each stratum from the measured data. A 95 percent confidence interval is considered an appropriate measure for carbon stock (Pearson et al., 2005; Brown, 2002).	2	*See above*	CR	þ
Step 6: Estimate the carbon in the AGB per hectare for each forest product type (if specified) for each stratum from the existing data in the FIR or equivalent document, as stated in Section 3.2.1. The specific method chosen in Section 3.2.1 depends on the type of data presented in the FIR or equivalent document.	2	*See above*	CR	þ
Step 7: Compare the mean values between the measured and existing data	2	*See above*	CR	þ
Less detailed FIR data *(meth section 3.2.1.2)*	2, 3, 17	The approach for "less detailed FIR" was chosen, as stratified volume is only available per hectare. Wood density and BEF is applied to calculate carbon in merchantable logs and growing stocks (respective values are listed in the PDD). No information on individual tree species, DBH and height is available on sample plot level **Clarification Request 14.** Clarify which approach was applied for calculating the primary parameters in the project area (methodology section 3.2	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Carbon in merchantable logs using wood density method				
Inventory data does not distinguish between forest product types (A) Is the stepwise approach (step 1-6) applied?	2, 3, 17	**Clarification Request 15.** • Clarify if the stepwise approach of the methodology is used to calculate carbon in merchantable logs. • Step 1: Clarify which method was used to convert growing stock data to merchantable logs • Step 2: Provide information on merchantable volume per strata.	CR	þ
Step 1: Select a sustainable and commonly employed method of the host country to convert growing stock data to merchantable logs• volume to be removed.	2, 3, 17, 18	See above	CR	þ
Step 2: Apply the method selected and justified in Step 1 to strata level growing stock data, to obtain merchantable logs volume per hectare in stratum, j.	2, 3	See above	CR	þ
Step 3: Choose the most applicable wood density for a forest with corresponding climate region and ecological	2, 11, 3	Wood density information is provided in the PDD based on IPCC data **Corrective Action Request No 5.** • The wood density parameter for Larix shall be in line with the indicated literature source • Clarify if species specify data is available for other tree species (other than IPCC default data)	CAR	þ
Step 4: Choose the most applicable carbon fraction of wood from the following data sources: (i) National carbon fraction (e.g. from National GHG Inventory) (ii) Default IPCC carbon fraction of wood for a forest with corresponding climate domain	2, 3, 11	Carbon Fraction is taken from IPCC 2006	þ	þ
Step 5: Apply the following equation to convert the merchantable logs• volume to carbon per hectare in the stratum, j, using the wood density and carbon fraction	2, 3	Based on formula 3.3 of the meth the volume is calculated	þ	þ
Step 6: Convert the strata level average carbon per hectare	2, 3	Carbon per ha for the entire project area was calculated	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
to the average carbon per hectare in the merchantable logs for the entire Project Area:				
Inventory data does distinguish between forest product types (B)	2	Not applicable	NA	þ
Detailed FIR data is available *(meth section 3.2.1.3)*	2	Not applicable	NA	þ
Measured Data pathway *(meth section 3.2.2)*	2	Not applicable	NA	þ
Determination of Annual Harvest Volume and net Harvest Area *(meth section 3.2.3)*				
Does the FIR or equivalent document contains a detailed harvesting plan *(meth section 3.2.3.1)*	1, 2, 35, 36	A harvesting plan was elaborated for the concession in the nut harvesting zone and the riparian zone for intermediate and sanitary logging (in line with legal allowable harvests). The harvest was calculated by the Russian "Far Eastern Forestry Research Institute" and the Inventory department of the federal forest agency. The audit team confirmed the calculations through interviews with the Russian "Far Eastern Forestry Research Institute" and the Inventory department of the federal forest agency during the onsite visit. The harvest plan results in an annual allowable cut the project area. The harvest plan and respective calculations are approved by the head of the forest department of Primorsky Kraji (Province). The audit team confirmed the approval through interviews with the forest department during the onsite visit.	þ	þ
Does the plan provide: • detailed prescription for selective logging, • the total volume of wood to be harvested, • the annual net harvest area, as well as a • specification of the period when selective logging operations are to be carried out in the Project Area	1, 2, 35	The plan is partly included in annex 2. Further the harvest plan was reviewed and discussed extensively during the onsite visit with the PPs, the forest department, as well as the official agencies that were involved in developing the harvest plan and the underlying forest inventory Information on area, total volume, and annual allowable cut is included **Clarification Request 16.** Clarify if specification regarding the period when selective logging operations are to be carried out in the project area are included in the harvest plan	CR	þ
Is the document legally approved by the relevant authority in the host country?	1, 2, 35, 36	The document is developed by the federal forest agency / Far Eastern Forestry Research Institute. In addition a confirmation is provided by the head of department (which)	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		is confirming the figures		
Is the total volume of wood to be harvested converted to an annual harvest volume based on: • the growing stock and • the area where the selective logging occurs, i.e., the annual net harvest area	1, 2, 6, 7, 8, 9, 10	The total volume annual harvest is determined based on the inventory in the project area. The calculations were carried out in line with respective legal guidelines, including: • "Rules of timber harvesting" adopted by order of Ministry of Natural Resources dated 16.07.2007 #184 • "Rules of commercial cuttings in forest of the Far East" dated 2000, • Procedure of allowable cuts calculations, adopted by order of Ministry of Natural Resources of the Russian Federation dated 08.06.2007 # 148. • "Rules of tending", adopted by order of the Ministry of Natural Resources #185 dated July 16, 2007 • Article 29 of Forest code, • Ministry of Nature Resources of the Russian Federation order dated 08.06.2007 #148 "About procedure of allowable annual cut calculation"	þ	þ
Is the summation of the annual net harvest area at the stratum level?	2	Information is provided on stratum level Strata are determined based on species composition	þ	þ
Are these parameters used in calculating the net GHG emission reductions for the baseline scenario?	2	*See comments above*	þ	þ
If a detailed harvesting plan is not available *(meth section 3.2.3.2)* Is the stepwise approach applied?	2	Not applicable	NA	þ
Annual total carbon in merchantable logs *(meth section 3.2.4)*				
Is the annual total carbon in the merchantable logs calculated based on Equation 3-15a or Equation 3-15b?	2	3-15a is applied	þ	þ
Annual total carbon in average biomass of growing stock *(meth section 3.2.5)*				
Is the annual total carbon in average biomass of growing stock calculated based on Equation 3-16a or Equation 3-16b?	2, 12	3-16a is applied BEF values are taken from FAO's report on Forest Resources of Russian Federation	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		Clarification Request 17. Clarify if Tier 1 data is available for BEF.		
Carbon Changes due to degradation under the baseline scenario *(meth section 3.3)*				
Carbon pool from the dead wood pool *(meth section 3.3.1)*				
Are Eq 17 and 18 included?	2	Equations are included	þ	þ
Is an appropriate value for k provided?	2, 13	The decay value is taken from scientific studies (IRL 13) **Clarification Request 18.** Clarify if the k-factor of 0.075 of other species can be applied.	CR	þ
Value for the function to calculate C_{DW} decay (eq 17)?	2			
Carbon from residual stand damage (C_{RSD})	2, 28	Data for residual stand damage comes from post felling inventory data. As evident during the onsite visit, the data does not seem to be adequate for the calculation of the emission reductions in this proposed JI project activity. **Corrective Action Request No 6.** Apply adequate data for the residual stand damage in line with JI and methodological requirements	CAR	þ
Carbon in branches and trimmings (C_{Branch_trim}) Is the stepwise approach applied? (step 1-2)	2	BEF was applied, as there were no specific trimming activities, which is considered adequate by the audit team.	þ	þ
Are equations 21-24 applied correctly? Is the deadwood carbon pool determined correctly	2, 3	*See comments above*	þ	þ
Net carbon from the long-term HWP *pool* *(meth section 3.3.2)*				
Are equation 25-31 applied correctly? Is the stepwise approach applied	2	Equations are applied, however the stepwise approach is not explicitly mentioned **Clarification Request 19.** Clarify if the stepwise approach was applied for determining the long-term HWP pool/emissions	CR	þ
Lumber recovery factor (F_{lumber})	2, 14	Data for the lumber recovery factor is obtained from Primorsky 2007-2009.	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		Clarification Request 20. Provide references on the lumber recovery factor to the audit team		
Annual oxidation rate	2, 11	2% (1/30 years) based on IPCC 2006 was applied	þ	þ
Net carbon from the short-term HWP *pool* *(meth section 3.3.3)*				
Is the stepwise approach applied? Are equations 36-37 applied correctly with adequate data?	2	The final version of the PDD considers short term harvested wood products and assumes immediate oxidation (k value of 1) as suggested by the methodology and also by IPCC 2006 chapter 12.	þ	þ
Carbon in the growth forgone due to selective logging *(meth section 3.3.4)*				
Is the stepwise approach applied? Are equations 36-37 applied correctly with adequate data?	2	This source is not included in the baseline scenario by the PP. It is conservative to neglect it, therefore accepted by the audit team.	þ	þ
Re-growth after selective logging *(meth section 3.3.5)*				
Is the stepwise approach applied? Is equation 38 applied correctly with adequate data?	2, 30	The information is included in the PDD. Data for regrowth is based on a study	þ	þ
Baseline Activity Emission *(meth section 3.4)*				
Emissions due to Harvesting operations	2, 11, 31	Emissions from harvesting are included, based on a study by Klvac and Skoupy (2009) Emission factors from IPCC are used. Global warming potential for Methane and N_2O are used in line with Kyoto Protocol, which is lower (and hence more conservative) than the VCS parameter	þ	þ
Emissions due to onsite preparation	2	Emissions are not included, which is conservative and thus accepted by the audit team	þ	þ
Emissions due to log hauling	2, 11, 32	Emissions from harvesting are included, based on data from Primorsky GOK. Emission factors from IPCC are used	þ	þ
Emissions due to log transport	2, 11	Emissions from harvesting are included, based on data from Primorsky GOK. Emission factors from IPCC are used. As these emissions occur outside of the project boundary, it cannot be considered as project emissions and hence not be included as emissions. ***See CAR 2***	CAR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Emissions due to timber processing	2	Data on electricity consumption per qm wood is from Primorsky GOK Data on grid emission factor is from NPC 2007, Global Oil and Gas Study – Electricity Generation As these emissions occur outside of the project boundary, it cannot be considered as project emissions and hence not be included as emissions. ***See CAR 2***	CAR	þ
Emissions due to log distribution	2	Emissions are not included, which is conservative and thus accepted by the audit team	þ	þ
Summary of baseline emissions				
Is a summary of the baseline emission presented	2	A summary of baseline emissions and GHG removals are provided in the PDD.	þ	þ
B.5. Description of how the definition of the project boundary is applied to the LULUCF project				
Does the project boundary geographically delineate the JI LULUCF project under the control of the project participants? If the JI LULUCF project contains more than one discrete area of land: (i) Does each discrete area of land have a unique geographical identification? (ii) Is the boundary defined for each discrete area? (ii) Does the boundary not include the areas in between these discrete areas of land?	2, 4, 20, 33	The physical project boundary is determined through the forest service and its compartments. Further GIS data is provided with the digital boundary information. Only land classified as "forest" as per Russian forest definition is included in the project area. The project boundary was assessed by the audit team during the onsite visit and through respective high resolution satellite image. As per the Russian forest code, the forests in Russia belong to the state, administered by the Russia Forest Service. The Project Participants "Tribal Commune Tiger" has signed a lease agreement with the Forest Service for the project area for 49 years. The lease contracts includes the right to utilize non-tiber forest products, but does not mentioned carbon ownership and right to sell carbon credits explicitly. Further project participants WWF Germany and WWF Russia have signed Memorandum of Understandings (MoUs) **Clarification Request 21.** Provide updated GIS files with the actual project boundary	CR	þ
Does the project boundary encompass all anthropogenic emissions by sources and removals by sinks of GHGs which	2, 6, 20,	See information regarding emission sources in section B.2 As per the Russian forest code, the forests in Russia belong to the state,	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
are: (i) Under the control of the project participants; (ii) Reasonably attributable to the project; and (iii) Significant? Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria in (b) above?	33, 34	administered by the Russia Forest Service. The Project Participants "Tribal Commune Tiger" has signed a lease agreement with the Forest Service for the project area for 49 years. The lease contracts includes the right to utilize non-timber forest products, but does not mentioned carbon ownership and right to sell carbon credits explicitly. Further project participants WWF Germany and WWF Russia have signed Memorandum of Understandings (MoUs) **Clarification Request 22.** • Provide MoU between WWF Russia and TCT • Clarify if TCT has the explicit right to sell carbon credits from the project area		
B.6. Further baseline information, including the date of baseline setting and the name(s) of the person(s)/entity(ies) setting the baseline				
Is date of baseline setting provided? (DD/MM/YYYY)	2	Respective information is provided, baseline development was finalized on 4 Nov 2011.	þ	þ
Is contact information provided, and is it indicated if the person/entity is also a project participant listed in annex 1?	2	Contact information are provided.	þ	þ
SECTION C. Duration of the LULUCF project / crediting period				
C.1. Starting date of the project				
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?	2, 6	The starting date is on 03 June 2009, which is the starting date of the lease	þ	þ
C.2. Expected operational lifetime of the project	2			
Does the PDD state the expected operational lifetime of the project in years and months?	2	Expected operational lifetime is 49 years and 0 month, in line with the lease contract.	þ	þ
C.3. Length of the crediting period	2			
Does the PDD state the length of the crediting period in years and months?	2	The crediting period is 3 years and 7 month in line with Russian JI procedures (until the end of the first commitment period).	þ	þ
Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net re-	2	Yes	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
movals generated by the project?				
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?	2	Yes	þ	þ
If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval?	2	The crediting period does not extend beyond 2012	þ	þ
SECTION D. Monitoring plan				
Does the PDD explicitly indicate which of the following approaches is used? • JI specific approach • Approved CDM methodology approach	2, 5	The project applies a JI specific approach to calculate the emission reductions. Basis for the methodological approach is a methodology which was approved under the "Verified Carbon Standard" (VCS), methodology VM 00011 version 1.0 "Methodology for Improved Forest management – Logged to Protected Forest: Calculating GHG Benefits from Preventing Planned Degradation".	þ	þ
D.1. Description of monitoring plan chosen				
D.1.1. Sampling design and stratification				
Monitoring plan Does the PDD provide an appropriate description of the sampling design that will be used for the calculation of the net anthropogenic removals by sinks occurring within the project boundary in the project scenario and, in case the baseline is monitored, in the baseline scenario, including, inter alia, stratification, determination of number of plots and plot distribution etc.?	2	A brief description is provided for stratification of the area in regards to natural disturbances and illegal logging	þ	þ
Establishing the Permanent Sample Plots (PSPs) and Measurement				
Are permanent sample plots established, in case on the following applies: 1. The Measured Data pathway 2. Monitoring to obtain ex post estimations of "growth foregone" 3. Monitoring to obtain ex post estimations of emissions due to natural disturbances	2, 45, 46	In the final PDD the sample design deviates from the VCS methodology, as the project follows Russian forest inventory guidelines. The audit team considers this adequate, considering that the project is implemented as JI project and is thus following good practice of the host country. **Clarification Request 23.** • Clarify if sample plots and a sampling design is applied • Clarify if stratification of the project area is applied • Clarify what the 95% confidence interval is referring to	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Has the project area been stratified appropriately?	2	*See comment above*	CR	þ
Is the size and shape of sample plots in line with good practice?	2	*See comment above*	CR	þ
Has the number of sample plots been determined adequately? (e.g. 9 step approach of the methodology)	2	*See comment above*	CR	þ
Is the sample design in line with good practice and methodology requirements?	2	*See comment above*	CR	þ
Are adequate standard operational procedures (SOPs) defined for plot measurement?	2	*See comment above*	CR	þ
D.1.2. Monitoring of the anthropogenic emissions by sources and removals by sinks in the project and baseline scenarios	2	Not applicable	NA	þ
D.1.2.1. Data to be collected in order to monitor the changes in carbon stocks in the carbon pools within the project boundary in the project scenario, and how these data will be archived	2, 45, 46,	In the final PDD respective information on procedures for monitoring are provided. The procedures follow guidance from the host country (Russia) for forest inventory. Hence respective procedures for monitoring are considered to be in line with JI requirements and accepted by the audit team. **Corrective Action Request No 7.** Include all parameters required by the methodology in the PDD, and provide information on SOP, QA/QC, monitoring frequency and information on archiving		
Are data listed, which are needed in order to monitor the changes in carbon stocks in the carbon pools within the project boundary in the project scenario, and how these data will be archived?	2	Some data are listed which need to be monitored ***See CAR 7***	CAR	þ
Data and parameter to be monitored		Section D1		
$DBH_{n,i,s,j,t}$	2	Parameter is not included ***See CAR 7***	CAR	þ
$DBH_{tree\_nd,n,i,snd,j,t}$	2	Parameter is not included ***See CAR 7***	CAR	þ
$H_{n,i,s,j,t}$	2	Parameter is not included ***See CAR 7***	CAR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
$H_{tree\_nd,n,i,snd,j,t}$	2	Parameter is not included ***See CAR 7***	CAR	þ
Area of natural disturbance $A_{nd,j,t}$	2	Parameter is included. Information is included on how the parameter will be determined, including SOP, QA/QC, monitoring frequency and information on archiving ***See CAR 7***	CAR	þ
Fraction of forest disturbed $f_{natdisturb,j,t}$	2	Parameter is included. Information is included on how the parameter will be determined, including SOP, QA/QC, monitoring frequency and information on archiving ***See CAR 7***	CAR	þ
$V_{illegal\_harvest,t}$	2	Parameter is included. Information is included on how the parameter will be determined, including SOP, QA/QC, monitoring frequency and information on archiving ***See CAR 7***	CAR	þ
$A_{illegal\_harvest,j,t}$	2	Parameter is included. ***See CAR 7***	CAR	þ
Data and parameter not monitored		The parameters were included in the final version of the PDD and are further discussed in section B of the PDD ***See CAR 7***	CAR	þ
BCEFj	2	Included in the PDD in line with the applied methodology.	CAR	þ
BEF	2	*See comment above*	CAR	þ
Is the BEF validated in line with the methodological requirements, in case the applied parameter does not match the forest type and climatic region of the project area? (Stepwise approach of the methodology)		*See comment above*	CAR	þ
CF_{wood}	2	*See comment above*	CAR	þ
CF_{AGB}	2	Included in the PDD in line with the applied methodology.	CAR	þ
D	2	*See comment above*	CAR	þ
Di	2	*See comment above*	CAR	þ
Is wood density validated in line with the methodological requirements, in case the applied parameter does not match the forest type and climatic region of the project area? (Stepwise approach of the methodology)	2	*See comment above*	CAR	þ
$fV(DBH_{n,i,s,j,t=0}, H_{n,i,s,j,t=0})$	2	*See comment above*	CAR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
$fB\ (DBH_{n,i,s,j,t=0}, H_{n,s,i,j,t=0,Di})$	2	*See comment above*	CAR	þ
Are allometric equations validated in line with the methodological requirements, in case the applied parameter does not match the forest type and climatic region of the project area? (Stepwise approach of the methodology)		*See comment above*	CAR	þ
D.1.2.2. Data to be collected in order to monitor the greenhouse gas emissions by sources within the project boundary in the project scenario, and how these data will be archived				
Are data listed, which are needed in order to monitor the greenhouse gas emissions by sources within the project boundary in the project scenario, and how these data will be archived?	2	No parameters are listed, as it was demonstrated for most emission sources that they were negligible. However certain emission sources still have to be calculated, including, Emissions from natural disturbances (e.g. fire) (non CO_2) ***See CAR 7***	CAR	þ
Data and parameter to be monitored				
$t_{op\_equip,ee,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$KM_{plan\_flight,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$N_{plan\_flight,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$KM_{plan\_ground,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$V_{fuel\_plan\_ground,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$KM_{design\_flight,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$N_{design\_flight,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$KM_{design\_ground,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$KM_{monitoring\_flight,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$N_{monitoring\_flight,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$KM_{monitoring\_ground,y,t}$	2	Not applicable in this project (see Section E.1)	þ	þ
$A_{nd,j,t}$	2	***See CAR 7*** The parameter is included in the monitoring plan of the final PDD. Respective procedure how to measure the parameters are provided in the PDD.	CAR	þ
$f_{natdisturb,j,t}$	2	***See CAR 7*** The parameter is included in the monitoring plan of the final PDD. Respective procedure how to measure the parameters are provided in the PDD.	CAR	þ
D.1.2.3. Description of formulae and/or models used to esti-				þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
mate the changes in carbon stocks in the carbon pools within the project boundary in the project scenario				
Is a description provided of formulae and/or models used to estimate the changes in carbon stocks in the carbon pools within the project boundary in the project scenario?	2, 5	The methodology is based on the approved VCS methodology VM00011 version 01. The methodology provides a detailed description of formulae/and or models used to estimate the enhancements of net anthropogenic removals by sinks by the LULUCF project. Equations 15 – 21 are copied into the PDD reflecting the formulas for natural disturbances and illegal harvesting (inventory method for the latter) **Clarification Request 24.** Clarify how illegal harvest is detected using the inventory method.	CR	þ
D.1.2.4. Description of formulae and/or models used to estimate the greenhouse gas emissions by sources within the project boundary in the project scenario				
Is a description provided of formulae and/or models used to estimate the greenhouse gas emissions by sources within the project boundary in the project scenario?	2, 5	The methodology is based on the approved VCS methodology VM00011 version 01. The methodology provides a detailed description of formulae/and or models used to estimate the enhancements of net anthropogenic removals by sinks by the LULUCF project. No information is included. **Clarification Request 25.** Clarify how GHG emissions from fire and decay are included and estimated within the project boundary in the project scenario	CR	þ
D.1.2.5. Data necessary for determining the changes in carbon stocks in the carbon pools within the project boundary in the baseline scenario, and how these data will be collected and archived				
Are data listed, which are needed in order to determine the changes in carbon stocks in the carbon pools within the project boundary in the baseline scenario, and how these data will be collected and archived?	2	No data is presented here; most parameters are not included in this section, but discussed in section B. ***See CAR 7*** **Clarification Request 26.** Clarify if the annual allowable cut (AAC) should be included as monitoring parameter.	CAR CR	þ
Parameters to be Measured Once (Not Monitored)				
$A_{project,t=0}$	2	***See CAR 7***	CAR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
$A_{project\ ,\ j\ ,t\ =0}$	2	***See CAR 7***	CAR	þ
$A_{s,\ j\ ,t\ =0}$	2	***See CAR 7***	CAR	þ
$DBH_{n,i,s,\ j\ ,t\ =0}$	2	***See CAR 7***	CAR	þ
$H_{n,i,s,\ j\ ,t\ =0}$	2	***See CAR 7***	CAR	þ
Annual net harvest area: $A_{NHA\ \_\ annual,t}$	2	***See CAR 7***	CAR	þ
Annual net harvest area: $A_{NHA\ \_\ annual\ ,\ j,t}$	2	***See CAR 7***	CAR	þ
Data and parameter not monitored				
BCEFj	2	***See CAR 7***	CAR	þ
BEF	2	***See CAR 7***	CAR	þ
Is the BEF validated in line with the methodological requirements, in case the applied parameter does not match the forest type and climatic region of the project area? (Stepwise approach of the methodology)	2	***See CAR 7***	CAR	þ
CF_{wood}	2	***See CAR 7***	CAR	þ
CF_{AGB}	2	***See CAR 7***	CAR	þ
D	2	***See CAR 7***	CAR	þ
Di	2	***See CAR 7***	CAR	þ
Is wood density validated in line with the methodological requirements, in case the applied parameter does not match the forest type and climatic region of the project area? (Stepwise approach of the methodology)	2	***See CAR 7***	CAR	þ
$fV\ (DBH_{n,i,s,\ j,t\ =0}, H_{n,i,s,\ j,t\ =0})$	2	***See CAR 7***	CAR	þ
$fB\ (DBH_{n,i,s,\ j,t\ =0}, H_{n,s,i,\ j,t\ =0,Di})$	2	***See CAR 7***	CAR	þ
Are allometric equations validated in line with the methodological requirements, in case the applied parameter does not match the forest type and climatic region of the project area? (Stepwise approach of the methodology)		***See CAR 7***	CAR	þ
$K_{\ decay}$	2	***See CAR 7***	CAR	þ
f_{RSD}	2	***See CAR 7***	CAR	þ
$f_{branch\ \_\ trim}$	2	***See CAR 7***	CAR	þ
Is the branch-trim factor derived or validated in line with the methodological requirements, in case the applied parameter does not match the forest type and climatic region of the project area?		***See CAR 7***	CAR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
(Stepwise approach of the methodology)				
$f_{lumber\_recovery}$	2	***See CAR 7***	CAR	þ
k_{ltHWP_ox}	2, 11	***See CAR 7*** The value of IPCC 0.023 is applied	CAR	þ
k_{stHWP_ox}	2, 5, 11	In the final PDD version short term harvested wood products are taken into consideration. Immediate oxidation is assumed, which implies a k factor of 1.	NA	þ
$G_{regrowth,t}$	2	***See CAR 7*** In the final PDD information is provided and respective values are used in the calculation	CAR	þ
D.1.2.6. Data necessary for determining the greenhouse gas emissions by sources within the project boundary in the baseline scenario, and how these data will be collected and archived				þ
Are data listed, which are needed in order to determine the greenhouse gas emissions by sources within the project boundary in the baseline scenario, and how these data will be collected and archived?		No data is presented here; most parameters are not included in this section, but discussed in section B ***See CAR 7***	CAR	þ
Parameters to be Measured Once (Not Monitored)				þ
$KM_{transport,t}$	2	***See CAR 7***	CAR	þ
$KM_{distrib,t}$	2	***See CAR 7***	CAR	þ
Data and parameter not monitored				
EF_{fuel}	2	***See CAR 7***	CAR	þ
$FC_{harvest}$	2	***See CAR 7***	CAR	þ
FC_{trim_equip}	2	***See CAR 7***	CAR	þ
$FC_{hauling}$	2	***See CAR 7***	CAR	þ
Cap_{truck}	2	***See CAR 7***	CAR	þ
$Eff_{vehicle}$	2	***See CAR 7***	CAR	þ
e_{demand}	2	***See CAR 7***	CAR	þ
$EF_{electricity}$	2	***See CAR 7***	CAR	þ
$t_{generator,t}$	2	***See CAR 7***	CAR	þ
$FC_{generator}$	2	***See CAR 7***	CAR	þ
$PR_{equip,ee,t}$	2	***See CAR 7***	CAR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
$EF_{flight,y}$	2	Not applicable in this project (see Section B.1)	NA	þ
R_{CH4}	2	***See CAR 7***	CAR	þ
R_{N2O}	2	***See CAR 7***	CAR	þ
$R_{N\,IC}$	2	***See CAR 7***	CAR	þ
GWP_{CH4}	2	***See CAR 7***	CAR	þ
GWP_{N2O}	2	***See CAR 7***	CAR	þ
D.1.2.7. Description of formulae and/or models used to estimate the changes in carbon stocks in the carbon pools within the project boundary in the baseline scenario			CAR	þ
Are description provided of formulae and/or models used to estimate the changes in carbon stocks in the carbon pools within the project boundary in the baseline scenario	2, 5	The methodology is based on the approved VCS methodology VM00011 version 01. The methodology provides a detailed description of formulae/and or models used to estimate the enhancements of net anthropogenic removals by sinks by the LULUCF project. The PDD shows equations 3.2 – 3.4 and 3.15 - 3.31 and 3.38 *See respective comments in section B*	þ	þ
D.1.2.8. Description of formulae and/or models used to estimate the greenhouse gas emissions by sources within the project boundary in the baseline scenario				
Are description provided of formulae and/or models used to estimate the greenhouse gas emissions by sources within the project boundary in the baseline scenario?	2, 5	The methodology is based on the approved VCS methodology VM00011 version 01. The methodology provides a detailed description of formulae/and or models used to estimate the enhancements of net anthropogenic removals by sinks by the LULUCF project The PDD shows equations 3.39 – 3.40 and 3.43 – 3.48. *See respective comments in section B*	þ	þ
D.1.3. Treatment of leakage in the monitoring plan				
D.1.3.1. If applicable, please describe the data and information that will be collected in order to monitor leakage (for each gas, source, carbon pool, etc.; in units of CO_2 equivalent):	2, 5	Only market leakage is relevant in the project, as the PPs are not involved in nay kind of timber operations. As per VCS methodology market leakage does not need to be monitored. Instead a estimation (based on approved VCS guidelines) is applied by the project developer. The audit team considers this to be adequate also for JI requirements.	þ	þ
$V_{historical\_harvest,l,k}$	2	Not applicable, see above	NA	þ
$V_{actual\_harvest,l,t}$	2	Not applicable, see above	NA	þ
D.1.3.2. Description of formulae and/or models used to esti-	2, 5	Description on leakage is included in the PDD and VCS guidelines. The	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
mate leakage (for each gas, source, carbon pool, etc.; in units of CO_2 equivalent)		audit team considers this to be adequate also for JI requirements.		
Is leakage quantified correctly in line with the methodology and good practice?	2	Only market leakage is applied in the project. As discussed in section E this is 20%.	þ	þ
D.1.4. Description of formulae/and or models used to estimate the enhancements of net anthropogenic removals by sinks by the LULUCF project				
Is a description provided formulae/and or models used to estimate the enhancements of net anthropogenic removals by sinks by the LULUCF project?	2, 5	The methodology is based on the approved VCS methodology VM00011 version 01. The methodology provides a detailed description of formulae/and or models used to estimate the enhancements of net anthropogenic removals by sinks by the LULUCF project	þ	þ
D.1.5. Where applicable, in accordance with procedures as required by the host Party, information on the collection and archiving of information on the environmental impacts of the LULUCF project:				
Are relevant procedures defined by the host party in regards to collection and archiving of information on the environmental impacts of the LULUCF projects?	2	No respective requirements are set by the host party **Clarification Request 27.** Provide reference on requirements for environmental Impact Assessments (EIA) in Russia	CR	þ
D.2. Quality control (QC) and quality assurance (QA) procedures undertaken for data monitored				
In line with the methodology and good practice, is the QA and QC approach and Standard Operating Procedures (SOPs) described for: (i) Conducting field measurement Are principles from IPCC and the methodology followed?	2	Brief information are provided regarding QA/QC, no SOPs were provided. **Clarification Request 28.** Provide QA/QC measures and respective SOPs to the audit team.	CR	þ
(ii) Selecting literature values Are principles from IPCC (tier approach) and the methodology followed?	2	See CR above	CR	þ
(iii) Data entry, maintenance and archiving Are principles from IPCC and the methodology followed?	2	See CR above	CR	þ
(iv) Contract procurement? Are principles from the methodology followed?	2	See CR above	CR	þ
D.3. Please describe the operational and management struc-				

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
ture that the LULUCF project operator will apply in implementing the monitoring plan				
Are the operational and management structure described that the LULUCF project operator will apply in implementing the monitoring plan	2	A brief description regarding the operational and management structure is included in the PDD. WWF Amur Branch is in charge of the management	þ	þ
D.4. Name of person(s)/entity(ies) establishing the monitoring plan				
Are name of person(s)/entity(ies) establishing the monitoring plan indicated?	2	Yes, GFA and WWF are indicated with contact person and email address	þ	þ
SECTION E. Estimation of enhancements of net anthropogenic removals by sinks				
E.1. Estimated project net anthropogenic removals by sinks				
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?	2	Estimates of emissions or net removals for the project scenario and baseline scenario are estimated and documented in the PDD. Leakage is estimated and the emission reductions or enhancements of net removals are adjusted by leakage. *See comments below*	þ	þ
Actual Project Activity Emission (meth section 4)				
Is equation 4.1 applied correctly?	2	Emissions from project design are considered to be insignificant.	þ	þ
Emission due to project planning (4.1)				
Emissions due to • Administration • travel	2	As indicated in the PD the source is non-significant and therefore neglected, in line with the VCS methodology (see meth section 1.2.3 and AR-CDM guidance on significance of emission)	þ	þ
Emission due to project design (4.2)				
Emissions due to • flights • ground transport	2	Emissions from project design are considered to be insignificant.	þ	þ
Emission due to project monitoring (4.3)				
Emissions due to • flights • ground transport	2	As indicated in the PD the source is non-significant and therefore neglected, in line with the VCS methodology (see meth section 1.2.3 and AR-CDM guidance on significance of emission)	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Emission due to Natural disturbances (4.4)				
Is the stepwise approach applied?	2	The stepwise approach is not applied explicitly, as it is mainly applicable for ex-post calculations	þ	þ
Step 1: Are the naturally disturbed areas identified using satellite data and locate them at the strata level. Is a standard procedure for remote sensing analysis applied?	2	*See above*	þ	þ
Step 2: Calculate the area of natural disturbance in each stratum using satellite data and employ a field team to conduct on-ground verification of the damaged areas by measuring the area and extent of damage.	2	*See above*	þ	þ
Step 3: Obtain the growing stock per hectare for the respective stratum, j,	2	*See above*	þ	þ
Step 4: Using direct observations of the area(s) damaged, the field team must provide an estimate of the fraction of the growing stock naturally disturbed based on a comparison with an adjacent representative undisturbed forest ( ) within the stratum, then apply equation 4-16	2	*See above*	þ	þ
Step 5: After a natural disturbance, regrowth is likely to occur in the naturally disturbed area and hence, acts as a carbon sink. (Equation 4-17)	2	*See above*	þ	þ
Step 6: In the case of a natural disturbance such as fire, CH4, N2O and CO2 gases are generated. (equation 4-18)	2	*See above*	þ	þ
Step 7: Select the most current Global Warming Potentials (GWPs) for CH4 and N2O	2	*See above*	þ	þ
Step 8: Calculate the total carbon emissions due to natural disturbances by using the outputs from Equations 4-16, 4-17a and 4-19.	2	*See above*	þ	þ
Ex ante estimations for natural disturbances will be made based on the likely scenario in the Project Area. The Project Proponent must justify the likely scenario of natural disturbances using the historical data from satellite imagery or regional/local documentation from the relevant authority.	2, 16	An analysis was conducted regarding natural disturbances from the Far East Forestry Research Institute. Annually 17.7 ha were burnt in the project area, and 14.5% of the biomass was burnt. **Clarification Request 29.** Clarify if percentage of biomass burnt should be per calculated per fire	CR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		incident, or averaged over the area.		
Emission due to Illegal harvesting (section 4.5)				
Field Inventory Method (4.5.1)				
Is the stepwise approach applied (ex-post)? (step 1-3) Is equation 22 applied correctly with adequate data?	2	The amount of illegal logging is estimated ex-ante based on a study by the PP (WWF Amur Branch). Illegal harvest was conservatively assumed as immediate emission source (no delay due to HWPs). Emissions from illegal logging were however considered to be insignificant, based on the respective studies. **Clarification Request 30.** Provide study on illegal logging to the audit team and provide further information in the PDD.	CR	þ
Satellite Data (4.5.2)				
Is the stepwise approach applied? (step 1-3) Is equation 22 applied correctly with adequate data?	2	Not applied	NA	þ
E.2. Estimated baseline net anthropogenic removals by sinks				
Are baseline net anthropogenic removals by sinks calculated in line with the approach discussed in section B.1?	2	*See Section B.4 for comments*	CAR/ CR	þ
E.3. The difference between E.1. and E.2.				
Are the calculation for E.1 and E.2 carried out correctly and is a summary table provided?	2, 3	A summary table is included in the PDD. See comments in B.4 and E.1 and E.4 regarding the calculation	CAR/ CR	þ
E.4. Estimated leakage	2			
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? Does the PDD provide a procedure for an ex-ante estimate of leakage?	2	The PDD provides information on leakage based on the applied VCS methodology. See CAR 8 below	CAR	þ
Does the PDD take into account only the increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary?	2	The approach applied in the PDD takes into account the increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary. See CAR 8 below	CAR	þ
Leakage (meth section 5)				
Is leakage calculated as outlined in the methodology?	2	Leakage is estimated in the PDD in line with the requirements from the	CAR	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Is equation 5.1 applied?		VCS methodology. See CAR 8 below		
Leakage due to activity shifting (5.2)				
Is equation 5.2 applied?	2	Since none of the PPs in involved in logging operations or the timber industry, no activity shifting is expected to occur based on the PPs activities. Only market leakage is expected to occur	þ	þ
Intensification of logging operation Is the stepwise approach followed to quantify the leakage due to intensification of logging operation?	2	NA	þ	þ
Shifting of logging operation Is the stepwise approach followed to quantify the leakage due to intensification of logging operation?	2	NA	þ	þ
Market leakage (5.3)				
Is the VCS approach for market leakage followed?	2	The VCS approach is applied. See CAR 8 below	CAR	þ
Is it identified to which percentage the proposed project leads to a shift in harvests across time period?	2	The PDD argues that there is no opportunity for leakage, as the PP considers the Primorsky Kraji a "closed market", and there are no major unlogged forests which could be leased as timber concessions. A 20% leakage discount is applied **Corrective Action Request No 8.** • The PDD does not apply the most recent version of the VCS assessment for market leakage. • Clarify and provide evidence regarding potential leakage (whether there are other concession areas in the region / other parts of Russia) • Clarify where the market for the wood is? Considering that Vladivostok is a major port it is unlikely that the market can be considered as "closed". • Provide adequate reasoning for the figure of 20% leakage	CAR	þ
E.5. The difference between E.3. and E.4 representing the estimated enhancements of net anthropogenic removals by sinks				
Are respective information provided in the PDD and are the underlying calculation carried out correctly?	2	A summary table is provided in the PDD See requests in section E.1 - E.4	CAR/ CR	þ
E.6. Table providing values obtained when applying formulae				

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
above				
Are respective information provided in the PDD and are the underlying calculation carried out correctly?	2	A summary table is provided in the PDD See requests in section E.1 - E.4	CAR/ CR	þ
SECTION F. Environmental impacts				
F.1. Documentation on the analysis of the environmental impacts of the LULUCF project, including transboundary impacts, in accordance with procedures as determined by the host Party				
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?	2	No negative environmental impacts are expected through the project, as the project protects natural habitat.	þ	þ
F.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party				
If the analysis in 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?	2	No negative environmental impacts are expected through the project, as the project protects natural habitat.	þ	þ
SECTION G. Stakeholders’ comments				
G.1. Information on stakeholders’ comments on the LULUCF project, as appropriate				
Does the PDD identify: - A list of stakeholders from whom comments on the LULUCF project have been received; - Nature of the comments; and - Whether and how the comments have been addressed.	2	The following stakeholder were identified through invitations to events in Krasny Jar and Luchegorsk. Information on stakeholders is included in the PDD.	þ	þ
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 pro-	2	Stakeholder consultation was carried out in line with host party requirements. No EIA / stakeholder consultation is mandatory for this kind of project activity. Nevertheless a stakeholder consultation was carried out on a voluntary basis.	þ	þ

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
jects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?		A list of stakeholder is included in the PDD, as well as their comments and how it was addresses. The audit team reviewed the documentation and interviewed relevant stakeholder during the onsite session		
Annexes				
Annex 1 Contact information on project participants				
Is contact information on participants of the project complete?	2	Contact information are provided for all three PPs	þ	þ
Annex 2 Baseline information				
Has information additional to that required in Section C or in the approved methodology been provided (or stated as not required)?	2	The following baseline information are provided: 1. Calculation of annual allowable cut 2. Nut Harvesting zones in Primoye and Khabarovsk Kraijs 3. Confirmation of FFRI calculations	þ	þ
Annex 3 Monitoring plan				
Has the monitoring plan been included as annex 4?	2	No additional information regarding the monitoring plan is provided	þ	þ

Table 2: Summary of Requests and Responses of Project Developer and Audit Team

Draft report clarifications and corrective action requests by validation team	Ref. to PDD	Summary of project owner response	Validation team conclusion
Clarification Request 1. Clarify the correct name of the project participants in section A.3 and Annex 1.	A.3	The name of WWF Russia was amended in Section A3 and in Annex 1	The name is consistently used throughout the PDD. In the final version of the PDD Tribal Commune Tiger and the investor CF Partners (UK) LLP are listed as PP. Request closed. þ
Clarification Request 2. Clarify the actual project boundary and provide updated GIS files indicating the actual project boundary to the audit team.	A.4.	The project boundary was corrected to exclude the sub-compartments where logging is foreseen. A revised GIS file is to be delivered to the AIE.	Updated shape files are provided. It is however unclear on what basis single parcels were excluded. • Respective evidence needs to be provided to the audit team. • Information in the PDD is not consistent, e.g. figure 5 provides different information regarding project boundary then the GIS files provided. • Ensure that the GIS file is fully in English (data tables are in Russian)
		The document is provided to the AIE under reference Nr. 36, Table 5.3.3 page 70.	Evidence on exclusion of the parcels is based on the forest management plan, which is submitted to the audit team. Based on the document the boundaries can be confirmed. Request closed. þ
Clarification Request 3. Clarify if the forest definition used is still valid.	A.4.2.	Please note, the link refers to the most recent communication of the Russian Focal Point to UNFCCC. Also older communications were reviewed. The forest definition is still valid and additional references/weblinks were included	References provided by the PP were check and found adequate. Request closed þ
Corrective Action Request No 1. Update the summary of net anthropogenic removals / emission reduction in the project scenario in line with the requests in later sections of the checklist.	A.4.4	Updated.	The PDD is updated according to the updated calculation. Request closed. þ

Clarification Request 4. Clarify if the cited VCS methodology VM 00011 version 1.0 will be fully applied.	B.1	The methodology application of the methodology’s criteria was revised. The methodology is applied except for the formal deviation described in Table 11.	The applied VCS methodology is not fully applicable to the project activity, as the applicability criteria “type of forest” does not apply to this project. This has however only implications on the default parameters suggested by the methodology (as presented in appendix B and C of the methodology). As part of the determination, the AIE check all relevant parameters and confirms that adequate and conservative parameters were used. Hence, the AIE considers the application of the VCS methodology in the current manner for this JI project activity as adequate. Requests are closed. þ
Clarification Request 5. Clarify if the methodology can be applied considering planned logging operations under the project scenario.	B.1	The NTFP mgmt plan of TCT clearly identifies the sub-compartments were legal (project case) logging may occur. These sub-compartments were removed from the project area The specific steps of the removal are described in Section A.4.1.4. The list of removed sub-compartments is enclosed in the Annex. Please note, the list of excluded sub-compartments is provided in document with the reference Nr. 36. The NTFP mgmt plan, as approved by the Forest Department, foresees logging operations only for the first ten years of the project activity. The NTFP management plan foresees a low logging volume which was determined specifically in the context of a NTFP management plan.	All areas with potential removals were excluded from the project area. However the basis for exclusion of parcels needs to be provided to the audit team (see CR 2). Further, please clarify how it is ensured that no planned logging operations will occur in the project area in the lifetime of the project.
		As it turned out since 2009, TCT uses only a share of this already reduced volume. There-	No new areas will be used for logging as confirmed by the PP. The area of distur-

		fore TCT decided to stop all logging operations after the expiration of the currently valid NTFP mgmt plan. This will ensure that the project area will remain intact and shall be verified in the course of the future monitoring activities who will prove that the area is intact.	bance is also subject to monitoring. The audit team therefore accepts the approach and closes this request. þ
Clarification Request 6. Clarify why the forest is classified as “intact”, considering also previously logged parcels in the project area.	B.1	An analysis of the age classes of the project area was conducted. There are no sub-compartments included in the project area, which have an age class below 15 years. This analysis was conducted based on inventory data, per sub-compartment following a GIS approach. A summary was included in Section A.4.2.	Reply is presented in this table and the PDD. Provide explanation on database of the GIS. Clarify which columns present the age class of the forest stands.
		The ID ‘AMZ’ can be used to evaluate the age classes per sub-compartment.	Information on “age” of the forest is provided. The audit team concludes also based on the onsite visit that the project area can be classified as an “intact” forest as per VCS methodology definition. Request closed. þ
Clarification Request 7. • Clarify and provide evidence why the carbon pool of belowground biomass, litter and SOC can be neglected. • Clarify if HWP can be included as a carbon pool in line with JI requirements • Clarify and provide evidence why the carbon pool of dead wood can be conservatively neglected.	B.2	The consideration of BGB and deadwood are discussed in more detail. A literature review was conducted. Peer reviewed articles and books have been cited, showing that it is conservative to neglect SOC and litter. A summary of the findings was included in Section B2.	Neglecting dead wood as carbon pool in the project activity is considered conservative, as old-growth forest typically are assumed to have more dead wood than managed forests. Provide respective references for the statement and clarify if this is the case, considering that the methodology assumes increase of dead wood after harvesting BGB is expected to decrease in the baseline scenario, as roots of harvested trees are expected to decompose. Therefore the BGB pool can conservatively be neglected in the project scenario.

			The PP provided several scientific references concerning the effect of harvest operation on soil carbon. Based on respective review of the literature, the audit team confirms that it would be conservative to not account for the pool of soil organic carbon. Provide references mentioned to the audit team. Harvested Wood Products (HWP) is included as carbon pools in the VCS methodology. This is however not considered as a carbon pool as per current UNFCCC requirements. In the project activity HWP is considered as delayed emissions (considering that the emissions from cutting trees do not occur directly after harvest). As harvest only occurs in the baseline scenario, this is considered a conservative approach, as it decreases the calculated baseline GHG emissions). As no harvest is expected to occur in the project area, emissions from and through HWP are not relevant.
		The documentation is provided by the reference number 42. The existing argumentation in Section B2 was expanded and existing references (i.e. applied for another context) were citied to show that it is conservative to neglect DW and BGB.	Additional references have been submitted to the AIE and further justification provided in the PDD. Based on these references the audit team concludes that the respective carbon pools can be conservatively neglected. Request closed. þ
Corrective Action Request No 2. Include only emissions sources in compliance with JI requirements.	B.3	Section B3 was revised in compliance with JI requirements.	The emission sources listed are following the different emission sources presented in the VCS methodology. However several of these emission sources are not considered as emission sources under UNFCCC JI

			requirements: • Forest degradation: this is not an emission, but a carbon stock change if only considering carbon (or CO_2). However whether it is listed as carbon stock or emission, the change in carbon stocks is considered either way in this project activity. • Fossil fuel use in machinery: can be considered as emission. However, in related AR-CDM methodologies, these emissions were neglected (see EB 44 para 37). The PP shall explain why it is considered adequate to include fossil fuel emission. • Electricity consumption: Electricity consumption only occurs outside of the project area, hence it could only be considered as leakage. As these emissions mainly occur in the baseline scenario (in the sawmills), it would be positive leakage, as there are no or less sawmill activities in the project scenario. Therefore it is in line with JI requirements (and conservative) to not include these emissions. • Forest fires: It is conservative to neglect emissions from forest fire in the baseline scenario. Further no significant amount of fires occurred in the years before the project start. • Commercially Harvested Fuel wood: does actually not lead to emissions, but a stock change in the carbon pool of above ground biomass (see forest degradation) • Domestic Fuel wood: see commercial fuel wood, further it is not included in the project area.

			• Burning of biomass: not relevant in the project activity and not conservatively not considered (for the baseline) • Pestilence: although mentioned in the VCS methodology, this is neither relevant in the project activity, not considered significant in general. • Project emissions due to electricity consumption, flights, ground travel and aerial surveillance is neglected based on the AR-CDM tool for testing significance, and further the exclusion is considered adequate in line with EB 44 para 37. • Natural disturbance: are included (which is related mainly to forest fire)
		FUEL USE: CDM EB44, §37 stipulates that fuel use may be considered as insignificant. This guidance was developed for CDM Afforestation / Reforestation projects. The project type focuses on growing trees. In this context, the CDM EB does not consider fuel related emissions as relevant. The proposed project is based on commercial logging operations at large scale. Logging operations in the region are done by using heavy machinery ranging from harvesters, skippers to trucks etc. In this context fossil fuel emissions from machinery are significant and hence are included in the baseline.	Considering the differences between an AR project and the proposed JI project activity (changes in forest management), and considering that the emissions can be considered relevant, the audit team conclude that the inclusion of these emissions is relevant. Request closed. þ
Corrective Action Request No 3. Clarify why CH_4 emissions from biomass burned are not included.	B.3	CH4 and N2O emissions have been included in Table 13 and in the project model.	Emission sources from CH_4 and N_2O were included, which is in line with approved AR-CDM methodologies and also accepted by the audit team. Request is hence closed. þ
Clarification Request 8. • Clarify and provide evidence whether scenario B	B.4	The analysis of the common practice has been extended. A logging benchmark for selective commer-	Further information regarding common practice is provided. However, no information is provided whether scenario B and C

and C are realistic and credible, considering the common practice in the area and costs for exploiting the area. (*See also comments in the common practice analysis section*) • Clarify if different scenarios should be applied, considering that parts of the project area is classified as Nut Harvesting Zone and parts and riparian area.		cial logging was included. Figure 3 was included in Section A2 showing logging operations in the region, including to some extent riparian zones and NHZ. Figures 10 and 11 were included, Section E4, showing the areas leased for logging.	is realistic or credible: provide evidence if other NHZ and riparian areas in the region are subject to logging as outlined under scenario B and C (see discussion on common practice in request below) No response is provided to the second bullet point regarding differences between NHZ and riparian zones
		Regarding the credibility of scenario B and C pls refer to the PPs reply on CR11. In both, NHZs and riparian zones, selective commercial logging is eligible. This was confirmed by the Forest Department. Hence for both, the same scenarios are to be applied.	As part of the common practice analysis the PP showed that most forest area not under protection are under commercial lease. Further it was shown that logging companies utilize about 92% of the allowable cut in their concessions. Considering that often more than the allowable harvest level is cut (also shown in studies), it can be considered that the baseline scenarios are realistic and credible. Request closed. þ
Corrective Action Request No 4. As per requirement, include the continuation of the current land use scenario, which includes limited logging by the TCT.	B.4	The sub-compartments subject to TCT's logging were removed from the project area.	See also comments in CR 2. It is not clear why the current land use by TCT is not included as baseline scenario (low intensive logging for domestic use)
		The continuation of 'the current land use', i.e. prior to project start is no commercial logging. The description of Scenario A was expanded to cover NTFP and logging for domestic needs by TCT. • According to Federal Law No 82, Article 8 this use is independent from leasing the concession. • Hence, not leasing the concession and leasing the concession for NTFPs are identical scenarios with respect to logging operations and are summarized under Scenario A.	Scenario A was updated and is including use of NTFPs. Hence the current land use is included as a potential baseline scenario. Request closed. þ
Clarification Request 9.	B.4	This right is stipulated by the feral law No82, Article 8. English translation and Russian	References provided were reviewed by the audit team. The law states the right of in-

Clarify and provide evidence if the Tribal commune Tiger would be entitled to collect non-timber forest products, even if the project area would be available for timber harvest (concessions or annual felling tickets), and how much revenues the forest department would received as fee for the harvest of these non-timber forest products, in case other organisations or companies would harvest timber.		original document is provided under reference No 37a/37b.	digenous people to use NTFPs free of charge Request closed. þ
Clarification Request 10. Clarify how the region is defined for the common practice analysis	B.4	An explicit definition of reference region was included in the common practice section of Section B4.	The region is defined as Primorsky Krai, which is considered adequate given the ecological and economic condition of the neighbouring Krais. Request closed. þ
Clarification Request 11. Clarify which other nut harvesting zones or riparian areas are not subject to logging in the region, and provide respective evidence to the audit team	B.4	Additional information on selective commercial logging in NHZs and riparian zones was provided by including Figure 3, 10 and 11. Please note, this does not include intermediate logging operations. During the on-site visit it was clarified by the deputy head, that all forest areas, including NHZs and Riparian zones are subject to logging.	Figure 3, 10 and 11 provide maps developed by the PP presenting areas in the regions which are "leased", "protected" and "HCVF". However it is unclear which similar areas (e.g. NHZ and riparian areas are subject to logging and which are not – see table 57 as overview on NHZ. No information is provided on other riparian zones). Independent reference needs to be provided to sustain if the project activity is common practice in the region.
		It is not possible to develop a benchmark for NHZs and riparian zones. The required data is not available at the level of the forest department and it would require the single forest units to provide this data. But the PP argues that the actual credibility of the baseline is not bound to the status of NHZs and/or riparian zones. The credibility is bound to the evaluation of similar project's with respect to scale, environment and legal framework as stipulated by the tool applied. As shown in the PDD, baseline activity is considered as selective commercial logging and intermediate logging. This is applicable for both: NHZs and riparian zones.	As discussed in CR 8, the PP provided further explanation and references regarding common practice on logging in the region. Based on this information, the concludes that the project activity is not common practice in the area and that the baseline scenario of legal harvest can be considered common practice. Request closed. þ

		Russian Forest Code, Articles 102, 106, Order of Ministry of Agriculture of RF • 543 stipulates that selective logging is feasible in the project area. The forest department confirmed that this is legally feasible and also confirmed the AAC which is the basis of the baseline model (pls refer to Annex II of the PDD). The PP provides as part of the common practice analysis a benchmark for selective commercial logging. This benchmark shows that the AAC is actually used in the krai. Additionally the leakage argumentation compares the share of commercially viable tree species in the project area with the share of commercially viable tree species in the krai. This analysis shows that the project area features 161% of commercially viable tree species, compared to the region. Still there is evidence for logging operations in direct neighbourhood to the project area. • The Vostochnaya NHZ, bordering South, was subject to intermediate logging. The post felling inventory showed that actual logging volumes are a multiple of the allowed cut and significantly above the selective commercial logging volume, applied by the proposed project. • Figure 3 shows that the riparian zone of the Bikin, outside of the project area is leased, and is subject to commercial logging. Sources were included in the PDD. • Pozharskaya NHZ, shown in Figure	

		3, located a 10km west of the Bikin, is subject to selective commercial logging by the logging company LesExport. • The Forest Department of Primorsky Krai issued a tender for the Olginskaya NHZ*.	
Clarification Request 12. Clarify why the parameters short-term HWP" and "regrowth foregone" are omitted	B.4	stHWP were included in Section B.4. A brief explanation re growth foregone was included in Section B4 prior to equation 3-2.	Neglecting "regrowth foregone" is considered conservative and thus accepted by the audit team.
Clarification Request 13. Clarify whether validation of the inventory data was carried out in line with the applied methodology and provide the audit team with respective information	B.4	The inventory was calculated based on the measured data pathway. Steps 1-3 were described in Section B4. Please note Step 3 of the measured data pathway makes reference to Step 2-6 of the existing data pathway. Hence Steps 2-6 were clearly indicated in the existing documentation.	As the approach for the forest inventory data has changed please provide the information on the permanent sample plots (PSP), including the field measurements and DBH data from the PSPs, in line with the requirement of the methodology (see page 40) Step 1-3 (section 3.2.1.3.1 A) is applied in line with the methodology (page 36 of the meth).
		Please kindly also refer to the PPs response to CR23. Please note, as specified in Step 1, Step 2 and Step 3 (sub-step 2) the original measurement data was not provided by the State Forest Inventory Service, but the data set available provides DBH, height and merchantable volume for all 13,514 sub-compartments, per tree species. This information is available in reference document nr 17 and partly in the proposed project's emission reduction excel model.	The approach is not fully in line with the requirements of the VCS methodology. However the audit team considers this deviation acceptable, considering that this is a JI project specific approach. The proposed inventory procedures follow Russian forestry inventory guidelines, which can be considered good practice. Request closed. þ
Clarification Request 14.	***B.4***	Please kindly refer to reply to CL13.	The PDD indicates that the measured data

* Tender documents are available under http://old.primorsky.ru/departments/controls/?s=1436

Clarify which approach was applied for calculating the primary parameters in the project area (methodology section 3.2			pathway is applied. See CL 13
Clarification Request 15. • Clarify if the stepwise approach of the methodology is used to calculate carbon in merchantable logs. • Step 1: Clarify which method was used to convert growing stock data to merchantable logs • Step 2: Provide information on merchantable volume per strata.	B.4	Step 1 and Step 2 were included and the approach was described. Please note, the baseline logging is not specified for different sub-compartments of the project area. The logging volume was calculated based on the average carbon stock of all 13,514 sub-compartments. Consequently the merchantable volume per stratum equals the average merchantable volume . This additional information was included in Section B4, prior to equation 3-4.	The PDD indicates that the measured data pathway is used, following section 3.2.1.2.1 A of the methodology (which is also applicable under the measured data pathway). 1)The PDD does not describe how growing stock is converted to merchantable volume. Provide information on step 1 and 2 as required by the methodology. 2) Information on merchantable volume per strata is also requested by the methodology.
		• Adoption of the Forest Inventory Instruction'' by the Ministry of Natural Resources and Environment of the Russian Federation, §107 specifies the two formulae used for determining the volume. This document is available to the AIE, reference nr 18. • Information on the merchantable volume per strata was included on p34	Respective information was provided to the AIE. The references were reviewed and considered best practice, since they are guidance from the host country authority. Information on merchantable timber is included in the PDD. Request closed. þ
Corrective Action Request No 5. • The wood density parameter for Larix shall be in line with the indicated literature source • Clarify if species specify data is available for other tree species (other than IPCC default data)	B.4	Tier 2 density parameters were used instead of IPCC defaults. The value of Larix was corrected.	Data for wood density are updated and in line with the methodology and good practice, including IPCC. Request closed. þ
Clarification Request 16. Clarify if specification regarding the period when selective logging operations are to be carried out in the Project Area are included in the harvest plan	B.4	A box was included in Section B4, p26ff. This box provides a general background on selective commercial and a detailed background on intermediate logging.	As requested, please clarify if specification on the time period when selective logging operations are to be carried out in the Project Area are included in the harvest plan. (see methodological requirement section

		The date (25th January 2010) is not explicitly included in the calculation of the baseline logging volume, but is explicitly pointed out in the Confirmation of the Forest Department (letter from Head, Rybnikov, b).	3.2.3.1)
		Please excuse the PPs misunderstanding of CR16. The validity of the baseline AACs is stipulated in Table 6.	The harvest is specified per year, as the annual harvest plan indicates. Request closed. þ
Clarification Request 17. Clarify if Tier 1 data is available for BEF.	B.4	No site specific data could be identified. The Tier 3 data was replaced with Tier 2 (national) data which was used e.g. by FAO analyses for Russia.	Data per species group from the Russia Forest resource Assessment is considered adequate. Respective reference was reviewed by the audit team. Request closed. þ
Clarification Request 18. Clarify the k-factor of 0.075 of other species can be applied.	B.4	The formula for the wood decay applied by Yatskov et al. (source Olson, 1963) equals the formula used by the methodology applied (equation 3-21).	Scientific literature was provided to the audit team and reviewed (IRL 13). The data is considered adequate for the calculations in this project activity. Request closed. þ
Corrective Action Request No 6. Apply adequate data for the residual stand damage in line with JI and methodological requirements	B.4	f_{RSD} determination was revised based on Kovalev et al. 2011.	The study from Kovalev et al is provided to the audit team (IRL 39)
Clarification Request 19. Clarify if the stepwise approach was applied for determining the long-term HWP pool/emissions	B.4	The stepwise approach was applied and explicit reference was included in the PDD. Step 3-4 were included in the PDD.	Step 1 and 2 of section 3.3.2.1 is included in the PDD (page 44) Steps 1-4 of section 3.3.2.2 is applied on page 45-46, although not explicitly mentioned. Request closed. þ
Clarification Request 20. Provide references on the lumber recovery factor to the audit team	B.4	Data for the determination of the lumber recovery factor was provided by Primorstat. Copies of the respective data is provided to the AIE with the reference number 14.	Copies are partly not readable. Please point out the exact page for the respective source
		The information is available at page 29, 30 and 34.	Updated references were provided and reviewed. The lumber recovery factor used in the project is considered adequate. Request closed.

			þ
Clarification Request 21. Provide updated GIS files with the actual project boundary	B.5	An updated GIS file where logging sites were removed from the project area will be provided to the DOE.	Updated GIS files are provided to the audit team. Request closed. þ
Clarification Request 22. • Provide MoU between WWF Russia and TCT • Clarify if TCT has the explicit right to sell carbon credits from the project area	B.5	The MoU is to be provided to the AIE under reference nr 33. Englisch translation is provided under 33b. Additional clarification on carbon project mgmt and ownership under the Russian JI procedures was provided to the AIE.	The MoU is provided. Based on the lease contract and assuming Russia will issue a letter of approval, TCT is entitled to sell carbon credits. Request closed. þ
Clarification Request 23. • Clarify if sample plots and a sampling design is applied • Clarify if stratification of the project area is applied • Clarify what the 95% confidence interval is referring to	D.1.1	The monitoring section D1.1 was revised, Related, additional information was included in the description of the measured data pathway (p35) and in Section D1.1a. The sample plot approach was described in D1.2 and the reference of the 95% confidence interval was included in D2.	1) Clarify where the sample design is described in line with methodology section 7.1.2. The sample design for f_{ND} is explained in D.1.1 b) 2) Provide information on stratification (see original request) – no response is provided. 3) Concerning the 95% CI: - As the parameter "illegal harvest" is measured based on "all tree stumps", please clarify how a confidence interval can be determined For f_{ND} the 95% CI is clarified.
		Ad1) The methodology proposes the establishment of PSPs. The inventory of the proposed project activity was developed based on transects, not PSPs as stipulated by the Russian Forest Regulation and hence was also applied by the State Forest Inventory Service, who conducted the inventory on behalf of the PP. The PP argues that this does not affect the quality of the determination of emission re-	The approach to the sample design is updated and now considered to be in line with good practice. Request closed. þ

		ductions. Ad2) The stratification was included on p35. Please note, as the proposed project's inventory is based on transects, not on PSPs, the PP argues that the stratification is not of relevance for the monitoring of the project activity. This information was included in Section D1.1a. Ad3) The description of the 95%CI for illegal logging was an error. The determination of CI is not reasonable, if 100% of the data is collected. The related description was removed from Section D1 –Step2b and from Section D2.	
Corrective Action Request No 7. Include all parameters required by the methodology, and provide information on SOP, QA/QC, monitoring frequency and information on archiving	D.1.2.	SOP; QAQC; frequency and archiving was included in Section D1.2	Parameters are included in the PDD. 1. Ensure to include the values for the parameters available at determination (or refer to where the values are listed) SOPs and QA/QC are provided in descriptive way in section D.1.1 and D.1.2. Area of Natural disturbance: 2. Clarify how the area of natural disturbances is calculated. Provide respective technical description that enable to assess if respective measurements will be carried out correctly
		Ad1 The full name of parameters as well as the applied value were included in Sections D.1.2.1, D.1.2.2, D.1.2.5 and D.12.6. Ad2: The information in Section D1, p74 was expanded. The monitoring will be as stipulated by: *Guideline for the Design, Organization and Management of Forest Pathology Monitoring*" by Rosleskhoz dated 29.12.2007, No 523	The values of parameters available at determination are included to the PDD, and found to be complete. Reference for calculating the area of natural disturbances is provided to the AIE. Considering that these are guidelines from the host country, the audit team considers it sufficient for this JI project activity. Request closed.

		This document is provided as reference nr 43.	þ
Clarification Request 24. Clarify how illegal harvest is detected using the inventory method	D.1.2.	Additional information on the detection of illegal logging was included.	Information on the parameter $V_{illegal\text{-}harvest}$ is provided in the PDD section D.1, which is sufficient to comply with requirements of the methodology. Request closed. þ
Clarification Request 25. Clarify how GHG emissions from fire and decay are included and estimated within the project boundary in the project scenario	D.1.2.	Additional information on the detection and of forest fires was included. The emissions will be quantified following the methodology as described in Section B4, equations 4-15 to 4-19 and in Section E1.	Respective information on emissions from fire and decay are now included in the PDD and calculations. Request closed. þ
Clarification Request 26. Clarify if the annual allowable cut (AAC) should be included as monitoring parameter	D.1.2.	Monitoring of AAC was included in Section D1, d) but not as a parameter per se. The monitoring methodology proposes to get a confirmation from independent forestry research institution or the forest department that the AAC is still valid. If it is not valid, the AAC calculation shall be updated.	The AAC is included in the monitoring plan, whic is considered adequate and in line with the methodology. Request closed. þ
Clarification Request 27. Provide reference on requirements for environmental impact assessments (EIAs) in Russia	D.1.5	Federal Law No 232 FZ, Article 11 stipulates, when ‘environmental expertise’ is required, when not. The project type is not referent to in the context the federal level nor the regional level. It is concluded, that no environmental expertise is required.	Respective information is provided and the documents were reviewed by the audit team. No EIA is required in Russia for the proposed project activity. Request closed. þ
Clarification Request 28. Provide QA/QC measures and respective SOPs to the audit team.	D.2	QAQCs and Sops were included in Section D1	Information on QA/QC were provided and in line with the requirements. Request closed (see however CAR 7). þ
Clarification Request 29.	E.1.	Additional information included in Section E1.	A summary of emissions is presented in section E.1.

Clarify if percentage of biomass burnt should be calculated per fire incident, or averaged over the area.			Clarify and refer to in the PDD how emissions were calculated. The original request was not replied to.
		Additional information on the determination of fND and AND was included prior to Table 37. The PP determined fND weighted by volume which is deemed to be the correct approach. An approach per fire incident would result in an average fND of 28.13%. This ratio would result in a burnt volume of 7.923m3 over seven years. But the burnt volume amounts to 4,092m3 over seven years. Hence this approach seems not to be correct.	Respective information is now provided in the PDD. The audit team reviewed the information and considers the approach adequate. Request closed þ
Clarification Request 30. Provide study on illegal logging to the audit team and provide further information in the PDD.	E.1.	Data to be provided to the AIE.	Clarify which of the delivered documents is the respective study on illegal logging
		Illegal Logging, is based on two documents: Document No 40 is the post felling inventory of the Vostochnaya NHZ showing that the logging amounts to 220% of the AAC Document No 41 shows that the export volumes for specific species in Primorye is a multiple of the AAC.	Respective documents were provided to the audit team and reviewed. The audit team considers the sources credible and concludes that the approach is adequate to determine emission reductions in this project activity. Request closed. þ
Corrective Action Request No 8. • The PDD does not apply the most recent version of the VCS assessment for market leakage. • Clarify and provide evidence regarding potential leakage (whether there are other concession areas in the region / other parts of Russia) • Clarify where the market for the wood is? Considering that Vladivostok is a major port it is unlikely that the market can be considered as "closed". • Provide adequate reasoning for the figure of 20%	E.4.	The most recent leakage tool was applied, VCS requirements. Market leakage region was specified. Evidence was included: Table 44 compares the compares commercial volumes of the project area with the primorsky krai. Figure 10+11 show limited unleased, commercially intersting areas.	The latest VCS tool for leakage in IFM projects was applied. Following the VCS tool, it is justified that the ratio between merchantable volume and total biomass is lower in areas were the harvesting might be displaced to. As per the VCS tool, this leads to a 70% leakage rate. Export of timber is 85%, respective evidence is provided to the audit team (IRL 40). Clarify how the figure was calculated,

leakage		The market for timber was clarified, the export ratio amounts to 85%. The 20% discount was substantiated.	where it is found in the references provided. Based on the above, comments (in particular considering that the VCS tool suggest 70% leakage rate, the discussion have to be updated and an adequate leakage rate shall be applied.
		Clarification on the interpretation of the VCS default was provided by VCS. The export ratio amounts to 85.8%. This was marked in p87 of the reference document nr 40.	VCS clarified that a 20% leakage rate would be adequate based on their guidance. Considering that further references support a low market leakage (in particular potential international leakage), the audit team considers a market leakage of 20% adequate und closes the request. þ

ANNEX 2: INFORMATION REFERENCE LIST

<table>
<tr><th>Ref. No.</th><th>Author/Editor/ Issuer</th><th>Title of Document</th><th>Date</th></tr>
<tr><td>1</td><td></td><td>Persons interviewed during the on-site audits (Name, Institution, Position)
<table>
<tr><th>Name</th><th>Organisation</th></tr>
<tr><td>Martin Burian</td><td>PDD Consultant, GFA ENVEST</td></tr>
<tr><td>Evgeny Lepeshkin</td><td>Project Coordinator, WWF Russia, Amur Branch</td></tr>
<tr><td>Guenola Kahlert</td><td>Project Coordinator, WWF Germany</td></tr>
<tr><td>Evgeny Chernov</td><td>Aforestation inspector, Federal State Unitary Enterprise "ROSLESINFORG"</td></tr>
<tr><td>Yuriy Pavlov</td><td>Head of forest management department, Federal State Unitary Enterprise "ROSLESINFORG"</td></tr>
<tr><td>Sergey Ponamarenko</td><td>Deputy Head of Federal State Unitary Enterprise "ROSLESINFORG"</td></tr>
<tr><td>Alexander Alexeenko</td><td>Deputy Head on scientific research of Federal budgetary institution "Far Eastern Forestry Research Institute"</td></tr>
<tr><td>Vladimir Shirko</td><td>Head of the TCT</td></tr>
<tr><td>Aleksey Uza</td><td>Head of Krasny Yar village (Mayor)</td></tr>
<tr><td>Ivan Rogov</td><td>Project Coordinator, WWF Russia, Amur Branch</td></tr>
<tr><td>Anatoliy Kabanets</td><td>Project Coordinator, WWF Russia, Amur Branch</td></tr>
<tr><td>Vladimir Sinitsin</td><td>Head of Pozharskiy state administration</td></tr>
<tr><td>Rita Tsvetkova</td><td>President of social ecological organization "Pervotsvet"</td></tr>
<tr><td>Nikolay Gnatko</td><td>Assistant of forester, forest department of Pozharskiy district</td></tr>
<tr><td>Ludmila Litvinova</td><td>Lead specialist of Pozharskiy state administration</td></tr>
<tr><td>Lubov Golokha</td><td>Head of economic and social development department of Pozharskiy state administration</td></tr>
<tr><td>Tatyana Kravchenko</td><td>Secretary of council of Pozharskiy state administration</td></tr>
<tr><td>Viktor Kirpichev</td><td>Chairman of council of Pozharskiy state administration</td></tr>
<tr><td>Tatyana Birukova</td><td>Deputy head of Pozharskiy state administration</td></tr>
<tr><td>Sergey Pstiga</td><td>Deputy head of forest management department of Primorskiy region</td></tr>
<tr><td>Evgeniya Rosenberg</td><td>Lead consultant of the department for preparation of international events of the division of international cooperation and tourism of Primorskiy region</td></tr>
<tr><td>Evgeny Chuvasov</td><td>Assistant of climate projects, WWF Russia, Amur Branch</td></tr>
<tr><td>Denis Smirnov</td><td>Head of forest program, WWF Russia, Amur Branch</td></tr>
<tr><td>Sergei Aramilev</td><td>Coordinator biodiversity, WWF Russia, Amur Branch</td></tr>
<tr><td>Andrey Porckhovsky</td><td>Coordinator forest project, WWF Russia, Amur Branch</td></tr>
</table></td><td>Feb 2012</td></tr>
</table>

Ref. No.	Author/Editor/ Issuer	Title of Document	Date
2	Project Participants	Project Design Document (PDD), GSP Version: Version 01, final version 1.5	26 Oct 2012
3	Project Participants	Project and Baseline Emission calculation: Bikin Model 2012-04-26.xlsx (final version)	26 Apr 2012
4	Project Participants	GIS files of project area at strata level (project_area.shp)	21 Mar 2012
5	VCS	VCS Methodology: VM 00011 version 1.0 "Methodology for Improved Forest management – Logged to Protected Forest: Calculating GHG Benefits from Preventing Planned Degradation": http://www.v-c-s.org/methodologies/VM0011	
6	Russian Federation	Forest code of the Russian Federation	Nov 2006
7	State Forest Agency	Rules of Use of Forest with different protective Status	2010
8	State Forest Agency	Rules of Wood Harvesting	2007
9	Ministry of Agriculture	Order of Ministry of Agriculture of RF # 543	06 Nov 2009
10	State Forest Agency	Order of State Forest Agency (Rosleskhoz) # 485	14 Dec 2010
11	IPCC	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Prepared by the National Greenhouse Gas Inventories Programme, Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds). Published: IGES, Japan	2006
12	FAO	Forest Resource Assessment Russian Federation	2005
13	Mikhail Yatskov, Mark E. Harmon and Olga N. Krankina	A Chronosequence of Wood Decomposition in the Boreal Forests of Russia, Canadian Journal of Forest Resources, Vol. 33.	2003
14	Primorskstat	Numbers on lumber recovery	2010
15	A.A. Dorofeeva	"Fragments of reforestation dynamics in Korean pine stands after industrial logging", Collection work of the Far East Forestry Research Institute, edition 12, Khabarovsk,	1974
16	Far East Forestry Research Insititute	Study on natural disturbances	

Ref. No.	Author/Editor/ Issuer	Title of Document	Date
17	State Forest Inventory Service Team (Khabarovsk)	Original inventory data (txt) (forest inventory of the project area)	Finished June 2010
18	Ministry of Natural Resources and Environment of the Russian Federation	Adoption of the Forest Inventory Instruction' (class 2 inventory)	2008
19		Forest Inventory of the Bikin NHZ from 1992	1992
20		Lease contract (from TCT for the Bikin NHZ)	2009
21	WWF Germany	WWF proposal of Bikin project to ICI	
22	Ecosecurity	Improved Forest Management in Russia. An Assessment of the Carbon Finance Potential of the Amur Tiger Forest Carbon Project	May 2009
23	WWF Germany	Invitation for Expression of Interest for Consulting Services for Mitigating impacts of climate change through the protection of large-scale virgin forests as carbon storage in the Bikin River area of the Russian Far East (RFE)	Aug 2009
24	Baker McKenzie Russia	Possible structures for implementing the JI project "Reduction of climate change by means of protection of large virgin forests in the territory of the river Bikin in the Russian Far East" in Russia	June 2009
25	TÜV SÜD /WWF Germany	Validation Contract with TÜV SÜD for the JI Determination of the project "Bikin Tiger Carbon Project - Permanent protection of otherwise logged Bikin Forest, in Primorye Russia"	16 May 2011
26	Eugene A. Simonov and Thomas D. Dahmer (Eds), WWF Ecosystem limited	Amur Heilong River Basin Reader	Feb 2008
27		Study on k-values: Chronosequenses of composition of boreal forests in Russia...	
28		Post felling inventory analysis NHZ Vostochnya	
29	Primorskstat	Lumber recovery factor	2010
30	A.A. Dorofeeva	Fragments of reforestation dynamics in Korean pine stands after industrial logging" by A.A. Dorofeeva, Collection work of the Far East Forestry Research Institute, edition 12, Khabarovsk,	1974
31	Klvac and Skoupy	Harvest emissions	2009
32		Letter on fuel wood consumption at hauling operations	
33	WWF Russia / TCT	Agreement of Intent on the closure of the Bikin Forest Carbon Project	Sept 2011
34	WWF Germany / WWF	Agreement between WWF Germany and WWF Russia	

Ref. No.	Author/Editor/ Issuer	Title of Document	Date
	Russia		
35	Federal Forestry Agency Far Eastern filial agency of forest inventory filial agency of Federal State Unitary Enterprise "ROSLESINFORG" "DALLESPROEKT" Federal budgetary institution "Far Eastern Forestry Research Institute"	Determination of allowable annual cut for all cuttings types on territory of Verhne-Perevalninskii forest district, Sobolinskii subdivision (compartments 68, 107-117), Krasnoyarovskii subdivision (compartments 118-308, 326-337, 342-407, 409, 413, 417), Ohotnichie subdivision (compartments 309-325, 338-341, 408, 410-412, 414-416, 418-523, 525-530, 537-543, 549-563, 571-575, 589, 590, 593, 594, 598-603, 611-620, 626, 627, 632-656, 663-666, 701-713, 715-717, 719) of Primorski	
36	Head of forest department Primorsky Kraji	Approval of harvest plan	27 Oct 2011
37	Russian Federation	Federal law # 82-FZ form 30 April 1999 - About guarantee of indigenous people rights in Russian Federation	30 Apr 1999
38	Russian Federation	Federal Law of 18.12.2006 No. 232-FZ 'About Ecological Expertise' Amending Federal Law of 23.11.1995 No.178-FZ, 'About Ecological Expertise'	18 Dec 2006
39		New data basis for determination of fRSD	2011
40		Ratio for Export of timber from Primorye to other countries	
41	WWF Russia	Comparison of allowable cuts per species with export/tax data	
42	Caroll and Milakovsky	Managing Carbon Sequestration in Temperate and Boreal Forests', published in Forests and Carbon: A Synthesis of Science, Management, and Policy for Carbon Sequestration in Forests (2010) by Tyrrell, Ashton, Spalding, and Gentry, (Eds).	2010
44	WWF Germany / GFA Envest	Contract between WWF Germany and GFA Envest on consultancy for PDD development	09 Mar 2010
45	Rosleskhoz	"Guideline for the Design, Organization and Management of Forest Pathology Monitoring" No 523	29 Dec 2007
46		Far Eastern Forest inventory handbook	1973
47	Aksenov, D. E., Dubinin, M. Yu., M. L. Karpachevskiy, M., L., Liksakova, N., S., Skvortsov,	Mapping High Conservation Value Forests of Primorsky Kray, Russian Far East, International Social Ecological Union & World Resources Institute, Moscow – Vladivostok, Russia.	2006

Ref. No.	Author/Editor/ Issuer	Title of Document	Date
	V., E., Smirnov, D., Y., Yanitskaya, T., O.		
48	Russian Federation	Russian Federation Federal Law no.7 of 10.01.2002 (Chapter VI, VII "Environmental Impact As-sessment and Ecological Endorsement")	10 Jan 2002
49	Russian Federation	A decree of Russian State Ecology Committee of 16.05.2000 no.372, registered at Russian Department of Justice on 04.07.2000, registration no.2302	16 May 2000
50	Global Forest Watch Rus-sia, WWF	Mapping High Conservation Value Forests of Primorsky Kray, Russian Far East	2004 / 2006
51	Jandl, R., Linder, M.,Vesterdal, L., Bauwens, B. Baritz, R.,Hagedorn, F., Johnson,D.W., Minkkinen, K., Byrne, K.A.,	How strongly can forest management influence soil carbon sequestration? Geoderma 137, 253-268.	2007
52	Concilio, A., Ma, S.Y., Li, Q.L., LeMoine, J., Chen, J.Q., North, M., Moorhead, D., Jensen, R.,	Soil respiration response to prescribed burning and thinning in mixed-conifer and hardwood forests. Canadian Journal of Forest Research 35, 1581- 1591.	2005
53	Nilsen, P., Stand, L.T.,	Thinning intensity effects on carbon and nitrogen stores and fluxes in a Norway spruce (Picea abies (L.) Karst.) stand after 33 years. Forest Ecology and Management. 256, 201-208.	2008
54	Dannenmann, M., Gasche, R., Ledebuhr, A., Holst, T.,Mayer, H., Papen, H.,	The effect of forest management on trace gas exchange at the pedosphere-atmosphere interface in beech (Fagus sylvatica L.) forests stocking on calcareous soils. European Journal of Forest Research 126, 331-346.	2007
55	Kim, C., Son, Y., Lee,W., Jeong, J., & Noh, N.	Influences of forest tending works on carbon distribution and cycling in a Pinus densiflora S. et Z. stand in Korea. Forest Ecology and Management (257), 1420-1426.	2009
56	IPCC	Intergovernmental Panel on Climate Change. Good Practice Guidance for Land Use, Land-Use Change and For-estry	2003
57	DFP of Russia	Host country Approval and Letter of Approval for "Tribal Commune Tiger"	18 Jun 2012
58	DFP of France	Letter of Approval, authorizing "CF Partners (UK) LLP"	04 Oct 2012

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CERTIFICATE OF APPOINTMENT

Industrie Service

Ms Olena Maslova, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date		01.03.12				

Qualification as						
Status	Trainee	Determiner	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		01.03.12	01.03.12	01.03.12		

Other qualification						
Country Expertise						
Region	1	2	3	4	5	Other
Date	01.03.12					
Further countries	Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Svalbard, Tajikistan, Turkmenistan, Ukraine, Uzbekistan					
Financial Expertise						
Date	01.03.12					

Qualification in technical areas	
Technical Area	**Date**

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Date	Signature
01.03.12	Thomas Klein

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Industrie Service

Mr Igor Kachan, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date		01.03.12				

Qualification as						
Status	Trainee	Determiner	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		01.03.12	23.05.12			

Other qualification						
Country Expertise						
Region	1	2	3	4	5	Other
Date	01.03.12					
Further countries	Russia, Ukraine					
Financial Expertise						
Date						

Qualification in technical areas	
Technical Area	**Date**

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Date	Signature
01.03.12	Thomas Kleiser
23.05.12	Thomas Kleiser

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TÜV SÜD Industrie Service

Mr Sebastian Hetsch, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date		01.03.12				

Qualification as						
Status	Trainee	Determiner	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		01.03.12	01.03.12	01.03.12		01.03.12

Other qualification						
Country Expertise						
Region	1	2	3	4	5	Other
Date	01.03.12					
Further countries						
Financial Expertise						
Date	01.03.12					

Qualification in technical areas	
Technical Area	**Date**
14.1_Forestry	01.03.12

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01.03.12	

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Industrie Service

Mr Robert Mitterwallner, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date		01.03.12				

Qualification as						
Status	Trainee	Determiner	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		01.03.12	01.03.12	01.03.12	01.03.12	

Other qualification						
Country Expertise						
Region	1	2	3	4	5	Other
Date	01.03.12		01.03.12			
Further countries						
Financial Expertise						
Date						

Qualification in technical areas	
Technical Area	**Date**
1.2_Energy generation from renewable energy source	01.03.12
4.1_Cement sector	01.03.12
4.3_Iron and steel sector	01.03.12
13.1_Waste handling and disposal	01.03.12

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Mr Martin Seitz, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date		01.03.12				

Qualification as						
Status	Trainee	Determiner	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date						01.03.12

Other qualification						
Country Expertise						
Region	1	2	3	4	5	Other
Date	01.03.12					
Further countries						
Financial Expertise						
Date						

Qualification in technical areas	
Technical Area	**Date**
14.1_Forestry	01.03.12

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