JI DETERMINATION
PDD REPORT

CARBONTRUST LIMITED

"UTILIZATION OF ASSOCIATED PETROLEUM GAS AT THE FIELDS OF COMPANIES OF TNK-BP GROUP, WESTERN SIBERIA."

Report No: 8000408215 / 2012-263

Date: 2012-05-10

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Client: CARBONTRUST LIMITED	Client ref.: Jolanta Narmontaite
Summary:	☒ positive determination opinion ☐ negative determination opinion

TÜV NORD JI/CDM Certification Program (CP) was commissioned to carry out determination PDD of the project: "*Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia*" with regard to the relevant requirements of the UNFCCC for JI project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords.

In the course of the pre-determination 6 Corrective Action Requests (CARs) and 0 Clarification Requests (CLs) were raised and successfully closed except for CAR A1. As the approval of the Host country will only be issued upon a positive determination opinion, this CAR will automatically be closed upon issuance of host country approval.

The review of the project design documentation and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The project is in line with all relevant host country criteria Russian Federation and all relevant UNFCCC requirements for JI. Project activity approval from DFP of Russian Federation will only be issued after final determination opinion. Therefore CAR A1 connote be closed at this stage.
- The project additionality is sufficiently justified in the PDD.
- The monitoring plan is transparent and adequate.
- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of 61,816,593 tCO2e are most likely to be achieved in the period from 2008-01-01 to 2012-12-31.

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the determination PDD.

Report No.: 8000408215	Subject Group: Climate Protection	
Report title: "Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia"		
Work carried out by: Mr. Evgeni Sud Mr. Ulrich Walter Mr. Anton Yarushin Ms. Kamysheva		
Final technical review by: Sergej Friesen Rainer Winter	Local technical review by	
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Indexing terms

Kyoto Protocol
JI Determination PDD

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Abbreviations

BAU	Business as usual
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
ERU	Emission Reduction Unit
CO_2	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
CP	Certification Program
CL	Clarification Request
DFP	Designated Focal Point
FAR	Forward Action Request
EIA	Environmental Impact Assessment
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
NCV	Net Calorific Value of Fuel
PDD	Project Design Document
PP	Project participant
QC/QA	Quality control/Quality assurance
UNFCCC	United Nations Framework Convention on Climate Change

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1 OBJECTIVE / SCOPE

TÜV NORD JI/CDM Certification Program (CP) has carried out a determination PDD of the project

"Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia"

with regard to the relevant requirements for JI project activities.

The determination is a requirement for all JI projects. The purpose is to have an independent third party assessment of the project design and in particular, the project's baseline, the monitoring plan (MP), the project's compliance with relevant UNFCCC JI Track 1 and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Determination is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emission reduction units (ERUs).

UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords.

2 GHG PROJECT DESCRIPTION

2.1 Project Characteristics

Essential data of the project is presented in the following Table 2-1.

Table 2-1: Project Characteristics

Item	Data		
Project title	*"Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia."*		
Project size	☒ Large Scale ☐ Small Scale		
JI Procedure	☒ Track 1 ☐ Track 2 ☐ PoA		
Project Scope	☐	1	Energy Industries (renewable- /non-renewable sources)
	☐	2	Energy distribution
	☐	3	Energy demand
	☐	4	Manufacturing industries
	☐	5	Chemical industry
	☐	6	Construction
	☐	7	Transport
	☐	8	Mining/Mineral production
	☐	9	Metal production
	☒	10	Fugitive emissions from fuels (solid, oil and gas)
	☐	11	Fugitive emissions from production and consumption of halocarbons and hexafluoride
	☐	12	Solvents use
	☐	13	Waste handling and disposal
	☐	14	Land –use, land-use change and forestry
	☐	15	Agriculture

Item	Data
Applied Methodology	*JI Specific*
Technical Area(s)	J (Distribution and treatment Gas)
Crediting period	*5 years*
Start of crediting period	*2008-01-01*

2.2 Involved Parties and Project Participants

The following parties to the Kyoto Protocol and project participants are involved in this project activity (Table 2-2).

Table 2-2: Project Parties and project participants

Characteristic	Party	Project Participant
Host party	Russian Federation	"OJSC "TNK-BP Management"
Other involved party	-	-

2.3 Project Location

The details of the project location are given in table 2-3:

Table 2-3: Project Location

No.	Project Location
Host Country	Russian Federation
Region:	Khanty-Mansiyskiy Autonomous Okrug (KhMAO) Tyumen oblast

The project is implemented at the fields located at various oilfields of Khanty-Mansiyskiy Autonomous Okrug, which are under operation of the following oil-producing companies associated with TNK-BP Group including:

#	Company (affiliated companies of the TNK-BP group)	Field/License Area
1.	JSC "Samotlorneftegaz" (SNG)	Samotlorskiy
2.	JSC"Varyoganneftegaz" (VNG)	North Var'yoganskiy
		Bakhilovskiy
		Verkne-Kolik-Yeganskiy
		Norh-Khokhryakovskiy
3.	JSC "TNK-Nyagan"	Talinskiy
		Yem-Yegovskiy
		Kamennyy
4.	LLC SP Van'yeganskiy (VN)	I-Yeganskiy
		Van-Yeganskiy

2.4 Technical Project Description

The project involves construction and operation of the facilities for collection, transportation and utilization of APG, which otherwise would have been burnt at the flares of the field included in the project (Project fields). This includes the following project activities/measures:

- Introduction of units of additional separation (UADs);
- Construction of new gas pipelines and rehabilitation of old ones;
- Introduction of compression stations (CS) and vacuum compressor stations (VCS);
- Introduction of gas metering and reducing units etc.

The particular project measures implemented on individual oil field are presented in a detailed manner in the PDD section A.4.2.

3 METHODOLOGY AND DETERMINATION PDD SEQUENCE

3.1 Determination PDD Steps

The determination of the project consisted of the following steps:

- Contract review
- Appointment of team members and technical reviewers
- Publication of the project design document (PDD)
- A desk review of the PDD/PDD/ submitted by the client and additional supporting documents
- Determination planning,
- On-Site assessment,
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Draft determination reporting
- Resolution of corrective actions (if any)
- Final determination reporting
- Technical review
- Final approval of the determination.

The sequence of the determination is given in the table 3.1 below:

Table 3.1: Determination PDD sequence

Topic	Time
Assignment of determination	2012-04-06
Submission of PDD for global stakeholder commenting process	N/A[1]
On-site visit	From 2012-05-02 – 2012-05-07
Draft reporting finalised	2012-05-07
Final reporting finalised	2012-05-10
Technical review on final reporting finalised	2012-05-08

[1] Not required according tot he Track 1 procedure oft he Host Country

3.2 Contract review

To assure that

- the project falls within the scopes for which accreditation is held,
- the necessary competences to carry out the determination PDD can be provided,
- Impartiality issues are clear and in line with the JI accreditation requirements

a contract review was carried out before the contract was signed.

3.3 Appointment of team members and technical reviewers

On the basis of a competence analysis and individual availabilities a determination team, consistent of one team leader and 2 additional team members, were appointed. Furthermore also the personnel for the technical review and the final approval were determined.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the table 3-2 below.

Table 3-2: Involved Personnel

	Name	Company	Function [1]	Qualification Status [2]	Scheme competence [3]	Technical competence [4]	Verification competence [5]	Host country Competence
☒ Mr. ☐ Ms.	Evgeni Sud	TÜV Nord Germany	TL[A]	LA	☒		☐	☒
☒ Mr. ☐ Ms.	Anton Yarushin	ETE (Anton Yarushin)	-	ETE	☐		☐	☒
☐ Mr. ☒ Ms.	Olga Kamysheva	ETE (Olga Kamysheva)	-	ETE	☐	J	☐	☒
☒ Mr. ☐ Ms.	Ulrich Walter	TÜV Nord Germany	TM[A]	LA	☒	J	☐	☐
☒ Mr. ☐ Ms.	Sergej Friesen	TÜV Nord Germany	TR[B]	LA	☒		☐	☒
☒ Mr. ☐ Ms.	Rainer Winter	TÜV Nord Germany	TR[B] FA[B]	SA	☒	J	☐	☐

[1] TL: Team Leader; TM: Team Member, TR: Technical review; FA: Final approval

[2] GHG Auditor Status: A: Assessor; E: Expert; SA: Senior Assessor; T: Trainee; TE: Technical Expert

[3] No team member

[4] As per S01-MU03 or S01-VA070 A2 (such as A, B, C.....)

3.4 Consideration of Public Stakeholder Comments

Acc. to the modalities and procedures the draft PDD, as received from the project participants, has been made publicly available on the dedicated UNFCCC JI website prior to the determination activity commenced. Stakeholders have been invited to comment on the PDD within the 30 days public commenting period.

In case comments were received, they are taken into account during the determination process. The comments and the discussion of the same are documented in annex 5 of this report.

3.5 Determination PDD Protocol

In order to ensure consideration of all relevant assessment criteria, a determination protocol is used. The protocol shows, in a transparent manner, criteria and requirements, means of determination and the results of the pre-determination the identified criteria. The determination protocol reflects the generic JI requirements each JI project has to meet as well as project specific issues as applicable. The determination protocol serves the following purposes:

- It organises, details and clarifies the requirements that a JI project is expected to meet;
- It ensures a transparent determination PDD process where the independent entity will document how a particular requirement has been validated and the result of the determination.

The determination protocol as described in Figure 1.

Determination Protocol Table A-1: Requirement checklist						
No.	***DVM[2] paragraph / Checklist Item*** *(incl. guidance for the determination team)*	***Initial Finding*** *(Means and results of assessment)*	***Ref.***	***Action requested to project participant*** *(CAR, CL, FAR)*	***Review of PP´s action***	***Conclusion***
Number of the checklist item	*The section gives a reference to the relevant paragraph of the DVM. The checklist items are linked to the various requirements the project should meet. The checklist is organised in various sections. Each section is then further subdivided as per the requirements of the topic and the individual project*	*The section is used to elaborate and discuss the checklist item in detail. It includes the initial assessment of the determination team and how the assessment was carried out.*	*Gives reference to the information source on which the assessment is based on.*	*Assessment based on evidence provided if the criterion is not fulfilled a CAR, CL or FAR (details of each finding are elaborated in chapter 4) is raised otherwise no action is requested. The assessment refers to the draft determination stage.*	*Assessment based on the project participant action in response to the raised CAR, CL or FAR (details of each finding are elaborated in chapter 4). The assessment refers to the final determination stage.*	*Final assessment at the final determination stage is given.*

[2] JISC 19 Annex 4

	activity.					

Figure 1: Determination protocol tables

The completed determination protocol is enclosed in Annex 1 to this report.

3.6 Review of Documents

The published PDD (version 1) and supporting background documents related to the project design and baseline were reviewed.

Furthermore, the determination team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

3.7 Follow-up Interviews

The determination team has carried out interviews in order to assess the information included in the project documentation and to gain additional information regarding the compliance of the project with the relevant criteria applicable for JI.

The main topics of the interviews are summarized in table 3-3.

Table 3-3: Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
Project proponent 1. Projects & Operations Personnel of PP 2. Consultant, CJSC "National Carbon Sequestration Foundation"	- Chronological description of the project activity with documents of key steps of the implementation. - Current status of plant design - Technical details of the project realization, project feasibility, designing, operational life time, monitoring of the project - Host Country Approval - Approval procedures and status - Monitoring and measurement equipment and system. - Financial aspects - Crediting period - Project activity starting date - ERU allocation / ownership - Baseline study assumptions - Additionality - Monitoring - Analysis of local stakeholder consultation - Roles & responsibilities of the project participants w.r.t. project management, monitoring and reporting - National Legislation - Editorial issues of the PDD

A comprehensive list of all interviewed persons is part of section: 7 References.

3.8 Project comparison

The determination team has compared the proposed JI project activity with similar projects or technology that have similar or comparable characteristics and with similar projects in the host country in order to achieve additional information esp. regarding:

- Project technology
- Additionality issues
- Methodological issues
- Reasons for reviews, requests for reviews and rejections within the JI registration process.

3.9 Resolution of Clarification and Corrective Action Requests

3.9.1 Definition

A **Corrective Action Request (CAR)** will be established where:

- mistakes have been made in assumptions, application of the methodology or the project documentation which will have a direct influence on the project results,
- the requirements deemed relevant for determination PDD of the project with certain characteristics have not been met or
- there is a risk that the project would not be registered by the UNFCCC JISC or that emission reductions would not be able to be verified during determination ERU.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to project implementation should be reviewed during the first determination ERU.

3.9.2 Draft Determination PDD

After reviewing all relevant documents and taken all other relevant information into account, the determination team issues all findings in the course of a draft determination report and hands this report over to the project proponent in order to respond on the issues raised and to revise the project documentation accordingly.

3.9.3 Final Determination PDD

The final determination starts after issuance of the proposed corrective action (CA) of the CARs CLs and FARs by the project proponent. The project proponent has to reply on those and the requests are "closed out" by the determination team in case the response is assessed as sufficient. In case of raised FARs the project proponent has to respond on this, identifying the necessary actions to ensure that the topics raised in this finding are likely to be resolved at the latest during the first determination ERU. The determination team has to assess whether the proposed action is adequate or not.

In case the findings from CARs and CLs cannot be resolved by the project proponent or the proposed action related to the FARs raised cannot be assessed as adequate, no positive determination opinion can be issued by the determination team.

The CAR(s) / CL(s) / FAR(s) are documented in chapter 4.

3.10 Technical review

Before submission of the final determination report a technical review of the whole determination procedure is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the determination team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the determination opinion and the topic specific assessments as prepared by the determination team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

3.11 Final approval

After successful technical review of the final report an overall (esp. procedural) assessment of the complete determination will be carried out by a senior assessor located in the accredited premises of TÜV NORD.

Only after this step the request for the Host Country Approval and/or registration can be started (in case of a positive determination opinion).

4 DETERMINATION FINDINGS

In the following table the findings from the desk review of the published PDD, visits, interviews and supporting documents are summarised**:**

Table 4-1: Summary of CARs, CLs and FARs issued

Determination topic [1)]	No. of CAR	No. of CL	No. of FAR
General description of project activity (A) - Project boundaries - Participation requirements - Technology to be employed - Contribution to sustainable development	2	-	-
Project baseline (B) - Baseline Methodology - Baseline scenario determination - Additionality determination - Calculation of GHG emission reductions Project emissions Baseline emissions - Leakage	2	-	-
Duration of the Project / Crediting Period (C)	-	-	-
Monitoring Methodology (D) - Monitoring of Project emissions Baseline emissions Leakage Sustainable development indicators / environmental impacts Project management planning	2	-	-
Estimation of greenhouse gas emission reductions (E)	-	-	-
Environnemental impacts (F)	-	-	-
Stakeholder Comments (G)	-	-	-
SUM	**6**	**-**	**-**

[1)] The letters in brackets refer to the determination protocol

The following tables include all raised CARs, CLs and FARs. For an in depth evaluation of all determination items it should be referred to the determination protocols (see Annex 1).

Finding:	**A1**		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Approvals of all Parties involved are pending.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The written project approval will be received from the Parties involved after the project determination by accredited independent entity (AIE). According to the Regulations "On Realization of Article 6 of Kyoto Protocol to United Nations Framework Convention on Climate Change" approved by the Government Decree № 780 dated on 15.09.2011 the project shall be approved following the positive determination of the project by an AIE. The corresponding information is provided in the section A.3 and A.5 of the PDD.		
AIE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and AIE assessments (#2, #3, etc.) shall be added.*	This is correct because a positive determination opinion is prerequisite for applying Host Country Approval.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic determination ERU ☐ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The CAR / CL is closed, ☒ The CAR / CL could **not** be closed.		

Finding:	**B1**		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	It is unclear why other possible alternatives were not considered within the Step 1 (identification of the plausible alternatives). In particular it is unclear why the use of APG for power generation purposes was excluded from consideration.		

Finding:	B1
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	***APG use for power generation at on-site gas turbine&piston power plants.*** The power transmission lines belong to Tumenenergo, a regional monopolistic power transmission and distribution company. This circumstance makes it impossible for TNK-BP companies to deliver the surplus electricity to third-party consumers to repay investments Therefore this option is economically unviable. ***Injection of APG for reservoir pressure maintenance.*** Conditions of well stock and geology of the oilfields (poor permeability of reservoirs) do not allow injecting APG in reservoirs.
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-2. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	The completeness of the considered alternatives was assessed by crosschecking the technical options for APG utilization/recovery as reported by independent third party sources in similar cases. In addition, APG utilization options, which are suggested by the approved CDM methodology AM0009, were considered. In general, the theoretically technical feasible options are[/B-2/]*:* • *Reinjection (for disposal or enhanced oil recovery)* • *Power generation, local or regional* • *Compression for sale as dry gas* • *Processing of APG into liquefied petroleum gas (LPG – propane and butane), petrochemical feedstocks, or diesel (gas to liquids – GTL)* It was assessed that the above mentioned technical options were duly excluded from the further consideration as plausible baseline alternatives. For detailed assessment please refer to the checklist question B.3 of annex 1 of this report.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the next periodic verification ☒ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements

Finding:	B2		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	1. The PDD does not provide information about to which extent the utilization of the "APG volume utilized in the project" is required by the relevant laws/regulations and how this is reflected in the exploration licence. 2. It is unclear why the need to pay environmental payments in case of non-compliance does not create a sufficient motivation		

	to implement the project activity. 3. Please demonstrate that the described situation is plausible as compared to the observations made in similar cases (e.g. similar JI projects).
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	1. In some regions regional authorities supervising subsoil management include in license agreements to be signed with oil companies a condition of 95% APG utilization. Nevertheless this measure could not prevent flaring neither in KhMAO nor in YaNAO. For example, in 2009 seven biggest oil companies flared 19.96 bcm of APG or 64.3% of the overall APG recovery. It can be explained that the condition is not enforced, i.e. non-fulfillment of the condition cannot be resulted in cancellation of the right of use of the oil field; otherwise the APG flaring level would be at 5%. Therefore this condition is inessential and cannot be a reason to motivate TNK-BP companies to start APG utilization project. Please also refer to the further information provided in the revised PDD. 2. From economical point of view the environmental payments are incomparably low in respect of the investment cost of the project. Even the enforcement of the APG utilization requirement that was issued on 09/01/2009, which was Governmental Regulation № 7 "On measures to stimulate the reduction of air pollution products from the flaring of associated gas in flares" cannot stimulate the oil companies to make considerable investment in APG gathering and transportation system. Below is an example of calculation of how much the TNK-BP companies should pay if flaring of additional APG (that is gathered and transported for utilization under the project) would take place. As far as the enforcement becomes valid from the 01/01/2012 the calculation of environmental payments starts in 2012 and proceeds until 2020. The APG volumes that would be flared under baseline scenario are presented in the following table:

Item	Unit	2008	2009	2010	2011	2012
Volume of flared APG	mln. m^3	3 357	4 126	4 502	4 969	5 425

Under environmental legislation an enterprise is required to calculate the quantities of polluting emissions including methane, carbon oxide, nitrogen oxides etc and to make

quarterly environmental payments according to norms set by Russian Government's Decree № 344 dd 12/06/2003[3] and by partially revised Decree № 410 dd. 01/07/2005[4]. The Governmental Regulation № 7 of the 8 January 2009 "On measures to stimulate the reduction of air pollution products from the flaring of associated gas in flares"[5] introduces new rules for the calculation of the environmental payments for polluting emissions. As per Regulation the payments for polluting emissions, starting with January 1, 2012, caused by APG flaring in quantities exceeding 5% of total APG recovered will be calculated as for above-limit emissions with the application of supplementary coefficient of 4.5. Under the scenario, approximately 77800 ths.m^3 of methane a year would be emitted in the atmosphere from 2012. In this case environmental payments would be about 61 million roubles a year or 551 million roubles for the period 2012-2020, whereas the project investment cost is 17.6 billion roubles.

Calculations of environmental payments for the APG flaring at of project oilfields in case baseline

	CH_4 volume into the atmosphere as the result of the incomplete burning	Coefficient (governmental regulation № 7 8 January 2009)	Payment rate for above-limit CH_4 emissions (governmental regulation №344 12 June 2003)[6]	Share of CH_4 subject to application of coefficient and payment rate as per columns 3 and 4	Amount of environmental payments
1	*2*	*3*	*4*	*5*	*6*
Year	*ths m3*		*rubles/tonne*	*%*	*ths rub/ year*
2012	**76919**	4,5	250	95	**60574**

[3] «On norms of payments for the emissions in atmospheric air of the polluting substances by stationary and mobile sources, for discharge of polluting substances in surface and underground water objects, for disposal of production and consumption waste»

1 [4] «On alterations in annex # 1 to the Decree of the Government of Russian Federation dd 12/06/2003 # 344»
[5] http://government.ru/gov/results/6475/
[6] http://government.consultant.ru/page.aspx?8411;756042

	2013	**77990**				**61417**
	2014	**77990**				**61417**
	2015	**77990**				**61417**
	2016	**77990**				**61417**
	2017	**77990**				**61417**
	2018	**77990**				**61417**
	2019	**77990**				**61417**
	2020	**77990**				**61417**
	Total	**700835**				**551908**

3. The situation described above is plausible as is common for similar JI projects that were developed in KhMAO and YaNAO:
   - The utilization of associated petroleum gas of the Yarayner oilfield of JSC "Gazpromneft-Noyabrskneftegaz"
   - The utilization of associated petroleum gas (APG) of the Sugmut oilfield JSC "Gazpromneft - Noyabrskneftegaz" taking into account the effective use of APG of the Romanovo oilfield (approved by Decree of Ministry of Economic Development
   - Gathering of associated petroleum gas at Khokhryakovskoye field

   This argumentation was provided in PDD for those projects and was found by AIE as acceptable. These projects have obtained positive determination opinion by another AIE.

DOE Assessment #1
The assessment shall encompass all open issues in annex A-2. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.

1. In response to the finding the PP provided additional information about the laws and regulations related to the APG utilization/recovery. In doing this the PP explained why the relevant laws and regulations revealed as inefficient to enforce the oil companies to improve the recovery of APG.

   The compliance of the considered scenario with the relevant Host Country regulation was analyzed in detail in Annex 2 of

	this report. Also the inefficiency of the current regulatory framework is assessed in Annex 2 of this report. 2. Furthermore, in response to the finding the PP demonstrated that investments required for construction APG treatment, transport and utilization facilities (16.7 billion Rubel) are disproportionally high as compared to the environmental payments in case of APG flaring (551 million roubles for the period 2012-2020). In doing this the environmental payments were assumed based on the proposed regulation issued by the Ministry of Economic Development. According to this regulation the payments for polluting emissions, starting with January 1, 2012, caused by APG flaring in quantities exceeding 5% of total APG recovered will be calculated as for above-limit emissions with the application of supplementary coefficient of 4.5. The same is evident from various other sources/B-1/. The calculation was checked and the computed amount of environmental payments could be confirmed. It should be also noted that provided comparison was performed regardless operation costs, i.e. only investment costs were taken into account. This is conservative. Bearing this in mind the determination team could confirm that the need to pay environmental payments in case of non-compliance with APG utilization rates does not create a sufficient motivation to implement the project activity. 3. In response to the finding the PP indicated that the disproportion of investment costs and environmental payments is plausible as compared to similar JI projects that were developed in Khanty-Mansiysiy autonomous region Okrug (KhMao) and Yamalo-Nenetz autonomous region. The determination team has checked information provided in similar cases. It was observed that in all approved JI projects it could be duly demonstrated that environmental payments in case of APG flaring is disproportional low as compared to the investment costs of the APG recovery/utilization. Please refer to the comparison presented in the positively determined project "Gathering of associated petroleum gas at Khokhryakovskoye field". Please also refer to annex 2 of this report.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the next periodic verification ☒ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements

Finding:	D1		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The PDD does not provide a transparent justification on how the historical amount of APG was determined.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	To provide conservatism the level of APG historical volume is defined as the maximum value of APG delivered in 2000-2003, before the start of the Project in February 2004. For SNG and TNK-Nyagan these maximal values are equal to 2011 mln. m3 and 495 mln. m3 respectively; they were delivered in 2003. For VN and VNG companies TNK-BP does not dispose data of APG utilization for that period. Therefore, historical APG volumes for these companies are defined as they were in 2003, which were 574,55 mln m3 for VN and 619,07 mln m3 for VNG. Corrected/please see B1 and D The appropriate correction were made.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-2. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	In response to the finding the PP explained that the historical amount of APG for each particular sub-project is determined as the maximum amount of APG delivered by the pre-project facilities in the last 4 years prior to the project starting date.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the next periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements		

Finding:	D2		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	It is unclear why the monitoring plan in several places refers only to the "Khokhryakovskoye oilfield".		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The references to "Khokhryakovskoye oilfield" are deleted as irrelevant.		

Finding:	D2
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-2. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	The revised PDD was checked and it could be confirmed that the required corrections were done.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the next periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements

5 DETERMINATION ASSESSMENT SUMMARY

5.1 General Description of the Project Activity

5.1.1 Participation

LOA

Letter of Approval (LoA) from all Parties involved are pending. As the LoA of the Host country will only be issued upon a positive determination opinion, this CAR will automatically be closed upon issuance of host country approval.

Project Participants

Party involved is Russian Federation acting as a Host Party. Project Participant of the Host Country is "OAO "THK-BP Management".

5.1.2 PDD editorial Aspects

Project Design Document Form Version 01 – in effect as of 15 June 2006 – has been used. This is the latest version of the PDD form. Guidelines for users of the JI PDD form Version 04 have been used for completing the PDD. These Guidelines should be taken into account for all PDDs to be published from 1 January 2009.

5.1.3 Technology to be employed

The project involves construction and operation of the facilities for collection, transportation and utilization of associated petroleum gas (APG), which otherwise would have been burnt at the flares of the field included in the project (Project fields). This includes the following project activities/measures:

- Introduction of units of additional separation (UADs);
- Construction of new gas pipelines and rehabilitation of old ones;
- Introduction of compression stations (CS) and vacuum compressor stations (VCS);
- Introduction of gas metering and reducing units etc.

The particular project measures implemented on individual oil field are presented in a detailed manner in the PDD section A.4.2.

The description of the project activity is considered to be accurate, complete, presented in a detailed manner and in line with provided evidences.

The implementation of the project activity could be evidenced by various protocols and acts that traced particular stages of the project implementation and recorded milestones of the project implementation. The determination team has checked all provided evidences/CR1/ Based on this the description of the project implementation as described in the PDD could be verified.

5.1.4 Small Scale Projects

No applicable because it is a large scale project

5.2 Project Baseline, Additionality and Monitoring Plan

5.2.1 Application of the Methodology

The PDD explicitly indicates that the JI specific approach was used to identify the baseline and justify the additionality.

The PDD provides a detailed theoretical description in a complete and transparent manner. In particular it indicates that JI specific approach is based on the Guidance on criteria for baseline setting and monitoring" (Version 03) and Appendix B to Decision 9/CMP.1. The version 03 of the Guidance on criteria for baseline setting and monitoring" is the latest version that was issued within the JISC 26 meeting.

The applied approach was used in numerous JI projects in Russia[7], which involve utilization of the associated petroleum gas (APG). The proposed JI specific approach was positively determined by other accredited independent entities (AIEs) and approved by the Russian DFP within similar JI projects.

5.2.2 Project Boundary

All equipment used within the project activity has been listed in the PDD including the information about its purpose and the technical specification. The project boundary is clearly described in words and a visualisation of the physical project boundary as well as a table defining all significant GHG gases has been included in the PDD.

Within the on-site assessment the determination team was able to confirm that project was implemented as described in the PDD. The relevant equipment was installed. The technical data of the installed equipment correspond to the information provided in the PDD.

5.2.3 Baseline Identification

The procedure to arrive at the baseline scenario is in line with the applied methodology. All plausible alternatives have been identified.

Alternatives

The PDD includes an analysis of all realistic alternatives to the project scenario. The project activity without JI consideration and the continuation of the pre-project practice have been identified as plausible and realistic alternatives.

[7] Please refer to the information about the JI projects published on the official website of Sberbank http://www.sbrf.ru/moscow/ru/legal/cfinans/sozip/

Key factor analysis (Barrier analysis)

In order to identify the most plausible alternative the PP performed key factor analysis, which is similar to the barrier analysis as per the approved CDM tools/TA//CT/.

In the course of the key factor analysis the PP demonstrated that project activity faces different barriers related to the financial viability. In essence it was demonstrated that all key factors favour the continuation of the current practice. In contrast to this, the project activity faces the investment barrier (lack of financing resources) and the financial barrier (low financial attractiveness).

All project measures were included and assessed within the investment analysis. It was duly demonstrated that all project measures are financially not attractive, i.e. the finical indicator is below the benchmark valid at time of investment decision.

Taking this into account it was reasonably concluded that the project activity is less attractive as compared to the continuation of the pre-project situation.

Investment analysis

Investment analysis that was performed as a part of the key factor analysis shows that the project scenario is not the most attractive alternative or economically feasible without benefits from ERU sales. All parameters applied within the investment analysis have been assessed as plausible. Applied benchmark has been supported by evidences chosen and has been assessed as appropriate. (Please refer to annex 3).

5.2.4 Additionality Determination

Consideration of JI in decision making (if project start before determination)

The starting date is in line with JI glossary of terms. Based on provided evidences it could be concluded that JI was considered at the time of the decision making. The corresponding evidences demonstrate that without benefits out of JI the project would be not financial viable. Furthermore the impact of JI has been calculated and it could be demonstrated that benefits out of JI would make the project financial attractive. The consideration of JI has been assessed as serious.

The description of actions and the corresponding assessment of the determination team for the considered project activity is presented in the table below:

Year	Description of action provided by Project participant	Assessment by the determination team
2003 (manage-ment decision)	**Action:** Decision to go ahead with the project activity in order to reduce the volume of APG flared within the framework of JI mechanism of Kyoto protocol (Article 6 of the Kyoto Protocol).	Decision to go ahead with project measures was made in 2003. The decision to go ahead with the project is evident from the official note of the management decision, dated 03.12.2003/PTS-03/, which is signed

	Evidence: Official note of the management decision, 03.12.2003/PTS-03/, **Justification of the evidence:** That was a management decision to start the project as a JI activity.	and approved by the responsible manager. The Official note/PTS-03/ clearly states that project measures should be implemented as JI project. Based on this it could be confirmed that project participant was aware of the JI prior to the project activity start date. Provided evidence/PTS-03/ clearly shows that JI was considered within the decision making process. As explained in the section B of the PDD the project activity does not result in sufficient economic or financial benefits. The same is evident from Official note/PTS-03/ and the feasibility study. Therefore the determination team agrees that the benefits from ERUs were a decisive factor in the decision to proceed with the project. The results of the investment analysis of the APG utilization were presented to the management (November 2003) and became the basis for the management decision. The official note/PTS-03/ is prepared in a detailed manner and refers to the particular measures and technologies to be applied as well as the main technical, organizational and economic aspects of the considered project. The official note/PTS-03/ including the decision to go ahead with the project is signed by responsible manager. Therefore the provided evidence was assessed to be a reliable source. The provided evidence is in line with requirements of the "*Guidelines on the demonstration and assessment of prior consideration of the CDM"* as per EB 62 annex 13. As a result the determination team is of the opinion that it could be duly

		demonstrated that the JI was seriously considered in the decision to implement the project activity. It was concluded that justification of prior consideration is in line with the requirements of the "*Guidelines on the demonstration and assessment of prior consideration of the CDM"* as per EB 62 annex 13.
2005	**Action:** Due to Kyoto Protocol entering into force TNK-BP Company decided to actualize the estimates of emission reductions due to Project realization. It was decided that further steps on Project implementation as a JI project, including JI PDD elaboration and determination might be addressed after adoption of JI procedures in Russian Federation. **Evidence:** Protocol of the meeting of the gas stream investment commission of OJSC "TNK-BP MANAGEMENT/PTS-05/, dated 21.10.2005 **Justification of the evidences:** Keeping adherence to commitment to develop the project under JI-mechanism after KP ratification and establishment of JI approval procedure the PP proceeded with the monitoring of status of laws on adoption of these documents.	**Action** Provided *Protocol of meeting of the gas stream investment commission of OJSC "TNK-BP MANAGEMENT, 21.10.2005*/PTS-05/ was assessed as appropriate evidence to demonstrate that continuing and real actions were taken to secure JI status in accordance with EB 62 annex 13. because • The document clearly indicates that PP has analyzed the development of the carbon market and progress of the Kyoto protocol ratification, • The document clearly states that although the PP saw a slowdown of the Kyoto protocol ratification it decided to take further steps. Provided *protocol*/PTS-05/ was assessed as reliable evidence because it is prepared in a detail manner, contains the topics of discussion, the decision made and is signed by responsible personnel. It should be borne in mind that in this year the Kyoto process was still in the very early stage. Many details related to the preparation of the relevant documents as well as to the preparation of the application by the local authorities were not defined. Therefore actions indicated by PP were assessed as plausible with regards to the circumstances and

		sufficient to demonstrate that real actions were taken to secure JI status.
2007	**Action:** Decision of continuation of project implementation under the joint implementation mechanism. Monitoring of the project steps. **Evidence:** Protocol of the meeting of the gas stream investment commission of OJSC "TNK-BP MANAGEMENT[/PTS-07/], dated 14.03.2007. **Justification of the evidences:** Keeping adherence to commitment to develop the project under JI-mechanism after KP ratification and establishment of JI approval procedure the PP proceeded with the monitoring of status of laws on adoption of these documents.	Provided *Protocol of meeting of the gas stream investment commission of OJSC "TNK-BP MANAGEMENT, 14.03.2007*[/PTS-07/] was assessed as appropriate evidence to demonstrate that continuing and real actions were taken to secure JI status in accordance with EB 62 annex 13. because • The document clearly indicates that PP has analyzed the development of the carbon market and progress of the Kyoto protocol ratification, • The document clearly states that although the PP saw a slowdown of the Kyoto protocol ratification it decided to take further steps. Provided *protocol*[/PTS-07/] was assessed as reliable evidence because it is prepared in a detail manner, contains the topics of discussion, the decision made and is signed by responsible personnel. Many details related to the preparation of the relevant documents as well as to the preparation of the application by the local authorities were not defined. Therefore actions indicated by PP were assessed as plausible with regards to the circumstances and sufficient to demonstrate that real actions were taken to secure JI status. Furthermore it could be evidenced that in this year the PP decided to develop one small similar project, which also involve APG utilization and to gain experience in this field. Therefore actions indicated by PP were assessed as plausible with

		regards to the circumstances and sufficient to demonstrate that real actions were taken to secure JI status.
2009	**Action:** Organization and holding of a tender for contractors to conduct further negotiations for the sale of ERUs to be generated in 2008-2012 and elaboration under the joint implementation mechanism; **Evidence** Results of the tender as per the decision of the tender commission dated 18.12.2009/PTS-09/. **Justification of the evidences:** Creation of the short list of contractors as a intermediate result of the tender.	The PP provided documented evidences that in 2009 the PP performed a tender. The result of the tender was a short list of contractors to conduct further negotiations for the sale of ERUs to be generated in 2008-2012. This is evident from the decision to the contractual commission, dated 18.12.2009/PTS-09/. As evident from the provided documented evidences/PTS-09/ selected companies are well-known Carbon buyer and JI consultant. As explained in the interviews the main purpose of the tender was to ensure the proper PDD development and to secure the income from the generated emission reductions. The selected ERU buyer and JI consultant should be responsible for the development of all project documentation required for successful approval of the project by the Host Country. Especially this included the development of the project PDD. It should be borne in mind that regulatory framework of the JI approval process in Russia was still unclear. Therefore the intention to outsource the costs and risks related to the PDD development deemed to be plausible. Therefore it was concluded that real actions were taken to secure JI status of the project.
2011	**Action:** The consulting	In 2011 the development of the

	company informed TNK-BP about the completion of PDD development. It was decided to check data provided in PDD and to organize a determination process. **Evidence:** Official note/PTS-11/ from the general director, dated 29.11.2011 and project PDD dated 20.11.2011. **Justification of the evidences:** This is a direct real action to provide JI status of the projects as the monitoring for the project emissions was provided.	project PDD was completed. This could be evidenced by means of the PDD dated November 2011 and documented communication/PTS-11/ between the PP and JI consultant. This PDD was submitted to the responsible department of the company for further review and approval. Therefore it was concluded that real actions were taken to secure JI status of the project.
2012		In 2012 TÜV Nord was requested to submit a commercial offer for determination services for this project activity.

As a result it could be concluded that project participant was able to demonstrate that continuing and real actions were taken to secure JI status for the project in parallel with its implementation in accordance with provisions of EB 62 annex 13. The explanation of each action was supported by corresponding documented evidence. All explanations and justifications given to explain each particular action were found plausible, in line with the information given in the corresponding evidence and in line with the development of JI approval process in Russia.

As per the EB 62 annex 13 "*In validating proposed CDM project activities where there is less than 2 years of a gap between the documented evidence the DOE shall conclude that continuing and real actions were taken to secure CDM status for the project activity"*. As evident from the table above, documented evidences were provided for every two year after the management decision. Therefore the determination team concluded that continuing and real actions were taken to secure JI status for the project activity.

Application of methodology / methodological tools

The additionality was justified following the JI specific approach elaborated in the PDD.

Alternatives

The PDD provides an analysis of all realistic alternatives to the project scenario as required by the JI specific approach. The project activity without JI consideration and

the continuation of the pre-project practice have been identified as plausible and realistic alternatives.

Investment analysis

Investment analysis was carried out within the baseline identification as a part of the Key factor analysis. The project scenario is not the most attractive alternative or economically feasible option without benefits from ERU sales. The latest version of the Guidance on the Assessment of Investment Analysis was applied in the assessment. The calculation approach is correct. All parameters are assessed as plausible. The benchmark chosen is appropriate. Please refer to annex 3 of this report.

Barrier analysis

Please refer to the comment under baseline identification.

Common practice analysis

Finally, the PP performed common practice analysis. The geographical region (Russia) is appropriate. The technology excluding JI projects is not widely observed in the region.

Summary

In the course of the determination it could be concluded that the baseline scenario has been appropriately elaborated and additionality has been appropriately justified.

5.2.5 Monitoring Methodology

The monitoring plan is elaborated in detail in section D of the PDD. The PDD clearly states that JI specific approach was used to elaborate the monitoring plan. The applied approach is based on the requirements of the "Guidance on criteria for baseline and monitoring" version 03. This is the most recent version and hence appropriate.

The determination team has crosschecked the applied approach and found it appropriate Also the fixed parameters and variables were found consistent with the IPCC data and further third party sources. The applied approach was elaborated in several similar JI projects and approved by another independent entity.

5.2.6 Monitoring Plan

The monitoring plan covers all monitoring parameters given in the elaborated JI specific monitoring methodology. The monitoring plan was already successfully implemented.

5.2.7 Project Management Planning

The project management planning is appropriate for the purpose of the projects monitoring. As already noted the monitoring plan was already successfully implemented and is duly performed by PP.

It is important to note that PP established a special metrological department, which is responsible for proper operation of all measurement devices. All measurement devices are under control of this metrological division. The calibration will be performed by the independent accredited laboratories. Therefore it was concluded that PP quality control measures are duly implemented at the plant.

5.2.8 Calculation of GHG Emission Reductions

The calculation done is as per elaborated algorithm. All data not to be monitored is correct. The values for the monitoring parameters are plausible. The estimated emission reductions are plausible and conservative. It should be noted that for the years 2008-2011 the actual figures were used. For the year 2012 the estimation is based on the historical figures.

Considering a large amount of the estimated emission reductions the determination team has performed an additional analysis in order to check whether the estimation is plausible.

Within the analysis four similar JI projects[8] were considered. The selected projects involve measures related to the APG utilization, which are similar to the measures implemented in the proposed project activity. The results are presented in the section 5.2.8 of this report.

As evident from the table below the APG emission factor (tCO2/Th. m^3) assumed in the project activity (2.9 tCO_2/Th. m^3) is plausible as compared to the values reported in other projects (2.4 – 2.9 tCO_2/Th. m^3) and approved by other independent entities.

In addition the determination team considered the average annual APG amount utilized and the average annual amount of ERU generated and average ratio (ERU/ Th. m^3 of APG utilized. The calculated average annual ratio (ERU/ Th. m^3 of APG utilized) shows how many emission reduction results from utilization of Th. m^3 after deduction of project emissions and leakage.

As evident from the comparison (see section 5.2.8) the amount of ERUs generated from one Th. m^3 of utilized APG within the project activity (2.78 ERU/Th. m^3 of APG) is well within the plausible range as compared to the values reported in other projects (2.53 – 2.87 ERU/Th. m^3 of APG). Considering the above mentioned the amount of the emission reductions deemed to be plausible i.e. not overestimated. In the words, the large amount of emission reductions results solely from the large amount of the APG utilized. As already noted the APG amounts could be duly justified and evidenced based on the internal reports. In this context it should be borne in mind that in contrast to other project the considered project activity includes several oil fields. Therefore it is plausible that the amount of APG utilized is also higher.

[8] Either positively determined, registered or approved by the Host Country

Project name	Average annual emission factor (tCO_2/ Th. m3)	Average annual APG amount utilized (Th. m^3)	Average annual amount of ERU (t CO_2)	Ratio (ERU/ Th. m^3)
APG utilization at TNK BP Khochrykov oilfield	2.9	219,692	621,000	2.83
The utilization of associated petroleum gas (APG) of the Sugmut oilfield JSC "Gazpromneft - Noyabrskneftegaz" taking into account the efficient use of APG of the Romanovo oilfield"	2.9	188,637	542,192	2.87
APG utilization at varios oilfields of Lukoil West-Siberia	2.8	764,400	1,975,316	2.58
The utilization of associated petroleum gas of the Yarayner oilfield of JSC "Gazpromneft-Noyabrskneftegaz!	2.4	97,641	248.443	2.53
Proposed project activity: Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia	**2.9**	**4.475.701**	**12.363.318**	**2.78**

5.2.9 Crediting Period

The choice of the crediting period is unambiguously given in entire PDD. The crediting period starting date 2008-01-01 is appropriate.

5.2.10 Environmental Impacts

The project documentation contains an analysis of environmental impacts. An EIA is required from host country. Therefore the EIA was carried out in accordance with the requirement of host country.

5.2.11 Comments by Local Stakeholders

All relevant local stakeholders have been invited to comment on the project. The stakeholder consultation process was assessed as appropriate and in line with the Host country regulation.

6 DETERMINATION OPINION

TÜV NORD JI/CDM Certification Program (CP) was commissioned to carry out determination PDD of the project: "*Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia*" with regard to the relevant requirements of the UNFCCC for JI project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in the Marrakech Accords.

In the course of the pre-determination 6 Corrective Action Requests (CARs) and 0 Clarification Requests (CLs) were raised and successfully closed except for CAR A1. As the approval of the Host country will only be issued upon a positive determination opinion, this CAR will automatically be closed upon issuance of host country approval.

The review of the project design documentation and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The project is in line with all relevant host country criteria Russian Federation and all relevant UNFCCC requirements for JI. Project activity approval from DFP of Russian Federation will only be issued after final determination opinion. Therefore CAR A1 connote be closed at this stage.
- The project additionality is sufficiently justified in the PDD.
- The monitoring plan is transparent and adequate.
- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of 61,816,593 tCO2e are most likely to be achieved in the period from 2008-01-01 to 2012-12-31.

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the determination PDD.

Essen 2012-05-10

Evgeni Sud

TÜV NORD JI/CDM CP

Determination Team Leader

Essen 2012-05-10

Rainer Winter

TÜV NORD JI/CDM CP

Final Approval

7 REFERENCES

Table 7-1: Documents provided by the project participant

Reference	Document
/**AE**/	Company internal reports that evidence the volume of APG utilized as well as the APG composition in the years 2008-2012
/**APG**/	Prognosis of APG netback prices for 2004-2022 submitted by JSC "Nizhnevartovskoye neftegazodobyvayuschee predpriyatiye" (NNP) for preparation of the investment analysis of APG gathering at Khokhryakovskoye oilfield project.
/**ATT**/	Accreditation certificates of the laboratory for carrying out calibration works including the authorization for performing calibration works
/**CR**/	Provisional Acceptance Certificates that evidence the implementation of the project measures and the progress of the works: • Acceptance Certificate for the pipeline constructed on the Samotlorskiy license that evidence the start of the construction works on 01.02.2004 • Detailed information about the made investments related to the project implementation provided by the departments of the department for the oil&gas preparation and processing of the particular target subsidiary units of TNK-BP, gas processing department upstream of the head quarter of the TNK-BP and department of capital projects of the head quarter of the TNK-BP. • Detailed information about the particular technical measures implemented in the framework of the project realization at the particular companies and the corresponding oil fields /license areas, which are included in the project: ○ Samotlorskiy ○ North Var'yoganskiy ○ Bakhilovskiy ○ Verkne-Kolik-Yeganskiy ○ Norh-Khokhryakovskiy ○ Talinskiy ○ Yem-Yegovskiy

Reference	Document
	○ Kamennyy ○ I-Yeganskiy ○ Van-Yeganskiy
/**EIA**/	Environmental impact assessments (EIA) performed for individual project measures carried out with the project implementation. The information provided with regards to the environmental impact assessments includes the following: • Date and number maximum allowable emissions of air pollutants (the same as EIA) approved by the responsible manager • Date of the development of the maximum allowable emissions of air pollutants • Information about the organisation (independent engineering consultancy) that prepared the maximum allowable emissions of air pollutants • Date and number Conclusion of the State Environmental Expertise Committee with regard to the maximum allowable emissions of air pollutants (in most cases issued by the administration of Technological and Environmental Supervision of Federal Service of Ecological, Technological and Atomic Supervision
/**EIA1**/	Regulations relevant for assessment of the environmental impacts resulted from the project activity. • Federal law of the RF "On Protection of the Environment" as of 10.01.2002 #7-FL; • Federal law of the RF "On Ecological Examinations" as of 25.11.1995 #174-FL; • Federal law of the RF "On the Sanitary and Epidemiological Safety of the Population" as of 30.03.1999 #52-FL; • Federal law of the RF "On the Protection of Atmospheric Air" as of 04.05.1999 #96-FL; • Federal law of the RF "On Production and Consumption Wastes" as of 24.06.1998 #89-FL; • Sanitary Regulations and Standards 2.2.1/2/1/1200-03 "Sanitary Protection Zones and Sanitary Classification of Companies,

Reference	Document
	Buildings and other Facilities"; • Sanitary Regulations and Standards "Instructions on the development, coordination, approval and composition of design estimate documentation"; • Regulation on the evaluation of planned commercial and other activities on the environment in the Russian Federation approved by the order of the State Committee for Environmental Protection #372 as of 16.05.2000.
/**INV**/	Investment analysis performed in the Excel calculation spreadsheet
/**FS**/	Feasibility study "*Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia*" dated 11.2003
/**License**/	Licenses for using subsoils issued to the companies of the project participant by the local authorities to the oil fields where the project takes place. In particular, • License for subsoil use # KMN 01133 at Samotlor license area dd. 31.12.1999 granted to JSC "Samotlorneftegaz" • License for subsoil use # KMN 00915 at Bakhilovskiy license area dd. 22.12.1998 granted to JSC "Varyoganneftegaz" • License for subsoil use # KMN 00916 at Severo-Varyoganskiy license area dd. 22.12.1998 granted to JSC "Varyogannefteqaz" • License for subsoil use # KMN 00913 at Severo-Khokhryakovskiy license area dd. 22.12.1998 granted to JSC "Varyogannefteqaz" • License for subsoil use # KMN 00914 at Verkhnekolik-Yeganskiy license area dd. 22.12.1998 granted to JSC "Varyogannefteqaz" • License for subsoil use # KMN 11147 at I-Yoganskiy license area dd. 17.04.2002 granted to SP "Van'yoganneft" • License for subsoil use # KMN 11146 at Van-Yoganskiy license area dd. 17.04.2002 granted to SP "Van'yoganneft" • License for subsoil use # KMN 01189 at Yem-Yegovskiy+Paliyanovskiy license areas dd. 01.04.2000 granted to JSC "TNK-Nyagan"

Reference	Document
	• License for subsoil use # KMN 01187 at Kamenniy license area dd. 01.04.2000 granted to JSC "TNK-Nyagan" • License for subsoil use # KMN 01188 at Talinskiy license area dd. 01.04.2000 granted to JSC "TNK-Nyagan"
/**PDD**/	• Project Design Document: "Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia.", version 01 dated 20.11.2011 • Project Design Document: "Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia.", version 02 dated 05.05.2012
/**PTS-03**/	Official note of the management decision, dated 03.12.2003 signed by the responsible manager.
/**PTS-05**/	Protocol of the meeting of the gas stream investment commission of OJSC "TNK-BP MANAGEMENT dated 21.10.2005.
/**PTS-07**/	Protocol of the meeting of the gas stream investment commission of OJSC "TNK-BP MANAGEMENT dated 14.03.2007
/**PTS-09**/	Results of the tender as per the decision of the tender commission dated 18.12.2009/PTS-09/.
/**PTS-11**/	• Project PDD dated 20.11.2011 • Official note from the general director, dated 29.11.2011, which evidences the contractual relationship between the PP and JI consultant.
/**Reg**/	Laws and regulations relevant in the specific context of the project activity: • Federal Law «On subsoils» # 2395 dd. 21.02. 1992. • Resolution of Supreme Council of Russian Federation # 3314.1 dd. 15.06.1992 "On procedure of introduction into operation of Regulation on subsoil licensing procedure". • Law of Khanty Mansi autonomous okrug (KhMAO) # 15.03 dd.

Reference	Document
	18.04.1996"On subsoil use". • Resolution of the Government of Russian Federation dd. 12.06.2003 # 344 "On norms of payments for polluting emissions into the atmosphere by stationary and mobile sources, for discharges of polluting substances in surface and subsurface water objects and for disposal of production and consumption wastes". • Resolution of the Government of Russian Federation dd. 01.06.2005 # 410 "On introduction of deviations in the appendix 1" of Resolution dd. 12.06.2003 # 344 ". • Resolution of the Government of Russian Federation dd. 08.01.2009 # 7 "On measures on stimulation of polluting atmosphere air reduction by products of associated petroleum gas combustion at flare stacks". • Russian Government Decree #780 dated on September 15, 2011 "On Realization of Article 6 of Kyoto Protocol to United Nations Framework Convention on Climate Change
/**XLS**/	Emission reduction (Excel) calculation spreadsheet

Table 7-2: Background investigation and assessment documents

Reference	Document
/**B-1**/	Associated Gas Utilization in Russia: Issues and Prospects annual report issue 3 KPMG Moscow 2011
/**B-2**/	Associated Petroleum Gas in Russia Reasons for non-utilization Fridtjof Nansen Institute September 2010
/**B-3**/	Pathways to an energy and carbon efficient Russia (Opportunities to increase energy efficiency and reduce greenhouse gas emissions McKinsey &Company 2009
/**B-4**/	Emission reductions in the natural gas sector through project-based mechanisms, IEA Information paper, 2003
/**B-5**/	Using Russia's Associated Gas, Prepared for the Global Gas Flaring Reduction Partnership and the World Bank, By PFC Energy, December 10 2007

Reference	Document
/**B-6**/	National Communication by Russian Federation including the Progress report submitted by Russian Federation published on the unfccc website
/**B-7**/	Briefing paper "JI Track 1 preliminary assessment Center for European Policy Studies Stockholm Environmental Institute December 2011
/**B-8**/	Problems and perspectives of the usage of Petroleum Associated Gas in Russia. Annual review of the problem within the framework of the project "Environment and Energy. International Context" World Wildlife Fund (WWF) and Institute of World Economy and International Relations Moscow 2009
/**B-9**/	Act of the Ministry of Economic Development, dated 30.04.2002 № 117 „On the wholesale price of oil (associated) gas sold by gas processing plants for further processing"
/**CPM**/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
JI-Pr	Project in the oil and gas sector reviewed to analyse approaches used in similar cases: • Gathering of associated petroleum gas at Khokhryakovskoye field • "Utilization of associated petroleum gas from the Verkhnekamsk oil fields, «Permneftegazpererabotka! • Associated Petroleum Gas Recovery for the Kharampur oil fields of "Rosneft" • Yety-Purovskoe Oil field Associated gas recovery and Utilization project • Associated Gas Recovery Project for the Komsomolskoye Oil Field • Associated petroleum gas recovery at Priobskoe oil field of Rosneft • The utilization of associated petroleum gas of the Yarayner oilfield of JSC "Gazpromneft-Noyabrskneftegaz! • Utilization of associated petroleum gas from the Verkhnekamsk oil fields, «Permneftegazpererabotka» LLC, Perm, Russian Federation
/**DVM**/	Joint Implementation determination and verification manual (Version 01), issued by the Joint Implementation Supervisory Committee
/**GBM**/	Guidance on Criteria for baseline setting and monitoring version 03
/**GCP**/	Guidelines for users of the Joint Implementation project design document form (version 03)
/**GJI**/	Guidelines for the implementation of Article 6 of the Kyoto Protocol as per 9/CMP.1
/**IPCC-GP**/	IPCC Good Practice Guidance & Uncertainty Management in National

Reference	Document
	Greenhouse Gas Inventories, 2000
/**IPPC-RM**/	Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual
/**KP**/	Kyoto Protocol (1997)
/**MA**/	Decision 3/CMP. 1 (Marrakesh – Accords & Annex to decision (17/CP.7))
/**TA**/	Tool for the demonstration and assessment of additionality (Ver. 5.2).

Table 7-3: Websites used

Reference	Link	Organisation
/**cbr**/	www.cbr.ru	Information about the Central bank discount rate
/**ipcc**/	www.ipcc-nggip.iges.or.jp	IPCC publications
/**ie**/	www.iea.org	International Energy Agency
/**ric**/	http://www.russianoilgas.ru/en/Home/	SPE Russian Oil & Gas
/**r-1**/	http://www.energyland.info/analitic-show-56947	Internet-portal TEK
/**r-2**/	http://sberbank.ru/moscow/ru/legal/cfinans/sozip/	JSC "Sberbank RF"
/**r-3**/	http://top.rbc.ru/economics/20/03/2012/642471.shtml	Rosbusinesconsulting -RBC
/**r-4**/	http://www.rb.ru/article/fakelnyy-gaz-knutom-i-pryanikom-zagonyayut-v-	Rosbusiness news. Internet-portal.

Reference	Link	Organisation
	trubu/5073727.html	
/r-5/	http://government.consultant.ru/page.aspx?756042	Government of Russian Federation
/r-6/	http://www.lenta.ru/news/2010/03/22/gas/	Lenta.ru, information agency
/r-7/	http://ru.reuters.com/article/idRUANT3298912008021 3	Reuters
/r-8/	http://gazprom.ru/interactive-reports/report2010/ru/	JSC Gazprom
/r-9/	http://www.indpg.ru/nefteservis/2008/04/20007.html http://www.ebrd.com/downloads/sector/eecc/Validation_report_Russia.pdf	Industriya_Nefteservice
/r-10/	http://www.ebrd.com/downloads/sector/eecc/Validation_report_Russia.pdf	EBRD
/unfccc/	http://cdm.unfccc.int	UNFCCC

Table 7-4: List of interviewed persons

Reference	MoI[1]		Name	Organisation / Function
/IM01/	V	☒ Mr. ☐ Ms	Anakovich Sergey	TNK-BP, OP&NB
/IM01/	V	☒ Mr. ☐ Ms	Chernov Dmitriy	JSC „Varyogannefteg az", Head of Metrology Section,
/IM01/	V	☒ Mr. ☐ Ms	Smitkin Sergey	TNK-BP, Head of OPKV&KP

Reference	MoI[1]		Name	Organisation / Function
/**IM01**/	V	☐ Mr. ☒ Ms	Ryzhikova Tatyana	TNK-BP, Manager Department of Economic Analyses
/**IM01**/	V	☒ Mr. ☐ Ms	Chernov Evgeniy	TNK-BP, Head of Department of Planning and Investment Analysis
/**IM01**/	V	☒ Mr. ☐ Ms	Sharapov Evgeniy	JCS „SNG", vice-head of Metrological Department
/**IM01**/	V	☒ Mr. ☐ Ms	Rudoy Valentin	JSC „SNG", vice-head of POpoTIGK
/**IM01**/	V	☒ Mr. ☐ Ms	Dudnik Oleg	JSC „SNG", vice-head of POpoTIGK
/**IM01**/	V	☒ Mr. ☐ Ms	Sergeev Yuriy	TNK-BP
/**IM01**/	V	☒ Mr. ☐ Ms	Afirkin Yuriy	JSC „Varyoganneftegaz", Head of department gas project management
/**IM01**/	V	☒ Mr. ☐ Ms	Drobchak	JSC „Varyoganneftegaz", Head of department gas project management
/**IM01**/	V	☒ Mr. ☐ Ms	A. Meskopov	TNK-BP, Project manager TNK-BP
/**IM01**/	V	☒ Mr. ☐ Ms	Marat Latypov	JI consultant / NCSF
/**IM01**/	V	☒ Mr. ☐ Ms	Timofey Besedovskiy	JI consultant / NCSF

[1] Means of Interview: (**T**elephone, **E**-Mail, **V**isit)

ANNEX

A1: Determination Protocol

A2: Assessment of Baseline Identification

A3: Assessment of Financial Parameters

A4: Assessment of Barrier analysis

A5: Outcome of the GSCP

ANNEX 1: DETERMINATION PROTOCOL

Table A-1: Requirements Checklist

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
A	***Project approvals by Parties involved***					
A.1	*DVM § 19* Have the DFPs of all Parties listed as Parties involved in the PDD provided written project approvals?	*Description:* The Party involved is Russia as the Host Country. No other Party is involved at this stage. The Host Country Approval is pending. *Means of verification:* The approval of the Host Party is pending. *Conclusion:* CAR A1 was raised in this context.	/PDD/	CAR A1	CAR A1	
A.2	*DVM § 19* Does the PDD identify at least the host Party as a Party involved?	*Description:* As per the section A.3 of the PDD Russia has been identified as the Host Country. No Investor Party was identified at this stage. *Means of verification:* This is indicated in the section A.3 of the PDD. *Conclusion:* The requirement is fulfilled.	/PDD/			OK
A.3	*DVM § 19* Has the DFP of the host Party issued a written project	*Description:* No written approval has been provided so far (see A.1). *Means of verification:* N/A	/PDD/	CAR A1	CAR A1	

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No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	approval?	*Conclusion:* See A.1.				
A.4	*DVM § 20* Are all the written project approvals by Parties involved unconditional?	*Description:* No written approval has been provided so far (see A.1). *Means of verification:* N/A *Conclusion:* See A.1.	/PDD/	CAR A1	CAR A1	
A.5	*DVM § 21* Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: ▪ A written project approval by a Party involved, explicitly indicating the name of the legal entity? or ▪ Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	*Description:* No written approval has been provided so far (see A.1). *Means of verification:* N/A *Conclusion:* See A.1.	/PDD/	CAR A1	CAR A1	

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
B	***Baseline Setting***					
B.1	*DVM § 22* Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? ▪ JI specific approach ▪ Approved CDM methodology approach	The PDD explicitly indicates that the JI specific approach was used to identify the baseline.	/PDD/			OK
	JI specific approach only					
B.2	*DVM § 23* Does the PDD provide a detailed theoretical description in a complete and transparent manner?	*Description:* The PDD explicitly indicates that the JI specific approach was used to identify the baseline and justify the additionality. The PDD provide a detailed theoretical description in a complete and transparent manner. In particular it indicates that JI specific approach is based on the Guidance on criteria for baseline setting and monitoring" (Version 03) and Appendix B to Decision 9/CMP.1. The version 03 of the Guidance on criteria for baseline setting and monitoring" is the latest version that was issued	/PDD/ /CT/	CAR B1 CAR B2	CAR B1 CAR B2	OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		within the JISC 26 meeting. *Means of determination:* The applied approach was accepted because it follows the step-wise concept of the "Combined tool to identify the baseline scenario and demonstrate additionality/CT/". In particular it provides a step-wise method to identify the baseline scenario. The applied approach is applicable in the specific context of the considered project because the potential alternatives to the proposed project activity are available to project participant (PP) and cannot be implemented in parallel to the proposed project activity. In other words the PP can either introduce measures or not. The applied JI specific approach is similar to the approaches suggested by the approved CDM tools/TA//CT/. The PP took into account the specific circumstances and technologies of the considered project activity. For example, the specific operation modes and historical data were taken into account in the context of the identification of the baseline. In doing so some conservative assumptions were used with regards to the historical amount of the APG utilized. (see comments below) Finally, it is worth to note that the applied approach is similar to the approaches used in the similar cases i.e. in JI projects that were approved by the Russian DFP and/or positively determined. For example:				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• "*Gathering of associated petroleum gas at Khokhryakovskoye field*" and • "*The utilization of associated petroleum gas of the Yarayner oilfield of JSC "Gazpromneft-Noyabrskneftegaz"* *Conclusion:* Therefore the elaborated approach was assessed to be applicable for the purpose of the baseline identification. The requirement is fulfilled.				
B.3	*DVM § 23* Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one?	*Description:* Yes, the PDD identifies and justifies baseline scenario by listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one. The following possible technical options were considered in the PDD. *Alternative scenario 1. Continuation of common practice for utilization of APG, i.e. the combustion of the extracted APG in the flare of project oilfields* *Alternative scenario 2. The project itself (without being registered as a JI activity) that is efficient utilization of APG, i.e. construction of the vacuum CS and reconstruction of sections of the old gas transportation system to increase gas capacity and further gas supply to gas main pipeline:* *Means of determination:*	/PDD/ /B-1/ /B-2/ /B-3/ /B-4/ /B-5/ /B-6/ /B-7/ /B-8/ /B-9/ /JI-Pr/	CAR B1 CAR B2	CAR B1 CAR B2	OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		The completeness of the considered alternatives was assessed by crosschecking the technical options for APG utilization/recovery as reported by independent third party sources. In addition, APG utilization options, which are suggested by the approved CDM methodology AM0009, were considered. In general, the theoretically technically feasible options are[/B-2/]*:* • *Reinjection (for disposal or enhanced oil recovery)* • *Power generation, local or regional* • *Compression for sale as dry gas* • *Processing of APG into liquefied petroleum gas (LPG – propane and butane), petrochemical feedstocks, or diesel (gas to liquids – GTL)* ***Reinjection*** In response to the finding the PP explained that reinjection of the APG is a theoretically possible technical option that can improve the oil recovery. Therefore reinjection is always considered and evaluated by the PP, i.e. by technical departments responsible for oil exploration. However this option is not technically feasible due to the geological formation. The same was confirmed within the interviews with responsible personnel during the onsite assessment.				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		The information provided by PP corresponds to the information provided by independent studies. For example the study of Norway institute/B-2/ states that *Reinjection is a somewhat uncertain option as different geological foundations to different degrees lend themselves to hold gas. It is thus, for geological reasons, not applicable in all oil fields, and in Western Siberia, the region where most of the flaring takes place, the sedimentary rock is not suited for reinjection.* It should be borne in mind that oil fields included in the considered project activity are located in Western Siberia. Therefore the information provided by PP regarding technical infeasibility is plausible as compared to the information provided by independent data source/B-2/. Furthermore reinjection is not always a profitable option. For example "*Reinjection may in certain cases also be costly, because the gas needs to be compressed before injected into the reservoir... ."*/B-2/ In addition the determination team has checked the information about the reinjection provided in similar JI projects. It was observed that the majority of the approved JI projects exclude this alternative as a plausible option due to the lack of technical feasibility. This complies with the information provided by the above mentioned study/B-2/, which also states that "*The fact that reinjected gas in itself does not produce any revenues, makes this option economically unattractive to oil companies... On the other hand, if the reinjected gas can contribute to enhance oil*				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		recovery, reinjection may be a more attractive option. In Russia however, enhanced oil recovery have generally been done by injecting water rather than gas, and the most widely applied drilling technologies (turbine drills) in Russia are based on this alternative... ." For example the injecting of water instead of APG is considered as a historically applied and commonly used option in several approved JI projects (e.g. JI project at Kharampur group of oil field of the Rosneft). ***Power generation, local or regional*** In response to the finding related to the power generation option the PP explained that APG from the first separation stage is already used for power generation for own needs at almost all oil fields. This gas is not considered in the project. This explanation deemed to be reasonable because gas from the first separation stage is typically better useful for power generation as the gas from further separation stages. The PP also explained that additional power generation and supply to the grid is not a viable option because the PP has no access to the power grid (transmission lines). The explanation provided in this context complies with the observation made within the on-site assessment. This also complies with the information reported by independent sources. For example the Norway study/B-2/, states that "*...the energy need of an oil field is also limited, and in some cases the energy needed is much less*				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		than the available power produced from APG. If there are no local consumers (industry or communities) in the vicinity that could take advantage of excess power production, local power generation is thus only a limited solution (PFC Energy 2007). Regardless of local or regional consumers, power generation also requires access to a regional power grid to dispose of surplus power." This above mentioned information confirms the explanation provided by PP and observation made during the on-site assessment. Furthermore this study/B-2/ suggests "*joint ventures between oil companies and power generating companies"* as a possible solution to overcome difficulties related to the grids access. The lack of regulatory basis for such option is evident from various data sources/B-1//B3//B-4/. In this context it is worth to note that only in 2010 the Federal law on amendments to Article 32 of the Federal Law on the Electric Power Industry was passed in order to facilitate access to the electricity grid for electricity production facilities powered by APG/B-1/. However power generation and supply to the grid is still not widely used by the oil exploration companies. Additionally, the determination team has reviewed information provided in similar cases. It was observed that large scale APG based power generation and supply to the electricity grid was excluded as a possible and plausible option in almost all JI projects approved by the Russian DFP.				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Considering the mentioned above the exclusion of this option from further consideration was assessed as appropriate because it is in line with the information provided by the independent and reliable third party data sources. The same was reported in similar cases. ***Utilization of APG for on-site production of liquefied gas*** This option was examined in several JI projects. In all cases this option was assessed as not plausible and was excluded from further consideration. For example the approved PDD for the JI project Associated Petroleum Gas Recovery for the Kharampur oil fields of "Rosneft" explains that due to high content of heavy hydrocarbons *"special installation for separation of APG into dry gas (similar to natural gas)* is needed" to produce liquefied gas from *APG.* Furthermore it is stated that "*additional investments in construction of condensation plant and shipment terminal will be required in this scenario"*. Also "*handling and shipment of cryogenic gas require special containers for low-temperature transportation*". It is furthermore stated that demand of liquefied gas is in Russia is difficult to forecast because it is still a quite new fuel. The explanation reported in similar cases complies with the				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		information provided by other well-reputed sources. For example the study of the Norway Institute/B-2/ indicates that processing the APG into Liquefied Petroleum Gas (LPG), petrochemical feedstocks, and gas-to-liquids (GTL) diesel are technically feasible alternatives available for oil companies. However APG collection and transportation infrastructure as well as the processing facilities may be highly capital intensive. Especially processing into LPG requires access to external processing facilities. As per the study/B-2/ *"There are, however, not enough gas processing facilities in Russia, and state owned Sibur owns more or less all of these, holding a de facto monopoly on gas processing. The oil companies have to negotiate with Sibur to sell their APG, and due to the monopoly, Sibur can demand more or less what it wants. These large processing facilities were built before the fall of the Soviet Union, and hence are not modern. Russian authorities have an overall strategy that Russia should be an expert in advanced gasproducts, not just dry gas, but this require a substantial modernization of the processing facilities".* In case of GTL the study/B-2/ also confirms that GTL processing *"requires access to external processing facilities".* In this context the study/B-2/ reports that *"As there are only two such facilities in Russia, it is thus necessary to bring together gas from multiple fields... It is also in most cases commercially not viable... This issue may however be overcome in the relatively*				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		near future, as technology is currently being developed for smaller scale GTL processing... An advantage of this option is that by liquefying the gas, the problem of access to Gazprom pipelines is bypassed". **Compression of APG for sale as dry gas** The chemical composition of dry gas is similar to that of natural gas. Therefore it is can be used as a fuel by power plants for heat generation in residential sector. Due to this compression of APG for sale as dry gas is often discussed as plausible option for utilizing APG. However the study of Norway institute/B-2/ mentions that "*APG has a much lower density than natural gas, and as the APG needs to be transported with the natural gas pipelines, it is necessary to compress the APG. The APG needs to go through the compression process numerous times to reach the required density to enter the pipelines*". The study/B-2/ concludes that "*This process is expensive, and for it to be economically worthwhile for the oil companies, they need to be able to sell the compressed gas at a sufficiently high price.... There is evidently also larger potential for profits if the flow of APG is substantial and stable, allowing for economies of scale.* *In remote areas such as Western Siberia, where most of the oil*				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		production in Russia takes place, the long distances makes it impossible for the oil companies to construct their own gas pipelines". The same was explained by PP and confirmed within the interviews with responsible experts. Furthermore the study/B-2/ confirms the explanation given in the PDD with regards to the lack of access to Gazprom pipelines. In this context the study/B-2/ indicates that *"Gazprom, the Russian gas monopoly, does however own an extensive grid of gas pipelines in Russia. The oil companies can either sell their gas directly to Gazprom, or rent space in the pipelines. The problem is that Gazprom has no interest in allowing other gas producers into their monopoly, and hence offer very low prices to the oil companies for the dry gas made from APG, or demand high rent for space in the pipelines. These economic terms are unacceptable to the oil companies".* The information about the lack of regulatory basis for access to the Gazprom network was checked with the information provided by third party sources and found consistent. For example the Norway study/B-2/ states that "*Laws on third party access to Gazprom pipelines have been passed, but Gazprom is only required to allow other gas producers use the pipelines if they have spare capacity and the gas is of sufficient quality. As there is no external monitoring of the Gazprom pipelines, Gazprom can effectively exclude anyone from their pipelines. In Western Siberia, Gazprom does in fact have high production volumes themselves, and thus actually have little spare capacity in their*				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		pipelines". Bearing in mind that project takes place in Western Siberia the information provided by this study supports the explanation provided by PP. *The Norway* study[/B-2/] also reports that *"Gazprom have proposed cooperative programmes with the oil companies in which the oil companies contribute financially to the construction of more pipelines, but as APG is not a prime concern to the oil companies, they do not consider such expenses worthwhile".* Considering the above mentioned it the exclusion of the option could be confirmed. As a result it could be concluded that the PP has duly identified the project activity itself as well as the continuation of the pre-project situation as possible and plausible baseline options. Furthermore, the PP has explained why there are no further plausible options by taking into account the specific circumstances of the considered project. All considered scenarios were explained in a detailed manner. The determination team has checked the listed scenarios and was able to conclude that no scenario was omitted. Please also refer to the assessment in annex 2 of this report. Following the elaborated JI specific approach all identified scenarios were checked against compliance with the relevant regulation, and afterwards the so called "key factor review" was				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		performed in order to identify the most plausible option. *Conclusion:* As evident from the mentioned above the particular requirements of the DVM §23 (a) are fulfilled.				
B.4	(b) Taking into account relevant national and/or sectoral policies and circumstance? – Are key factors that affect a baseline taken into account?	*Description:* As per the PDD the continuation of the pre-project situation is not prohibited by any law or regulation. *Means of determination:* **Compliance with relevant laws and regulations.** Compliance with relevant laws and regulations of the identified alternatives could be confirmed Please refer to annex 2 of this report. **Key factor analysis** Within the key factor analysis the following key factors were identified and analysed: • ***Sectoral reform policies and legislation;*** • ***Economic situation in oil&gas sector in terms of APG utilization;*** • ***Availability of capital (including investment barrier);*** • ***APG prices.***	/PDD/ /B-2/ /JI-Pr/ /B-1/ /B-2/ /B-3/ /B-4/ /B-5/ /B-6/ /B-7/ /B-8/ /B-9/	CAR B1 CAR B2	CAR B1 CAR B2	OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		The identified key factors duly address the requirements of the DVM §23 (b) because they best reflect the relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, legislation, the economic situation in the project sector etc. The justification of the key factors was assessed as follows: • ***Sectoral reform policies and legislation*** As per the PDD "*State sectoral policy in the field of APG utilization lacks clear balanced mechanisms allowing to implement, to monitor and to enforce APG efficient utilization requirements*". This is in line with the background investigation performed by the determination team with regards to the inefficiency of the regulatory framework. Please refer to the annex 2 of this report. Therefore it was correctly concluded that considered key factor neither enforce nor sufficiently motivate companies to reduce APG flaring. In contrary it was demonstrated that investments required for construction and operation of an APG treatment, transport and utilization facilities are disproportionally high as compared to the environmental payments in case of APG flaring. It was correctly indicated that considered key factor does not influence the implementation of Scenario 2 (project scenario).				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• ***Economic situation in the oil&gas sector in terms of APG utilization*** In the specific context of this key factor the PP demonstrated that difficulty to assess economic benefits of APG recovery is a key factor that prevents such projects from implementation. The PDD indicates that due to the uncertainty with regards to the amount and quality of APG the economic assessment of the APG utilization options are often very imprecise. This explanation is in line with information provided by various independent data sources esp. the study of Norway Institute/B-2/. Please refer to subsection B.3. above. Furthermore the PDD states that the "*APG utilization projects imply a construction of the new infrastructure for collection, treatment, and transport of the APG and require high investment costs that may bring inadequate returns for the oil companies. This is due to low APG prices for remote oil fields with long distances to the gas processing facilities or consumption markets".* Bearing in mind risks related to the uncertain amount and quality of APG sourced from an oil field it is very difficult to exactly estimate the economic attractiveness of the options for APG recovery/utilization. The difficulty to provide a well-elaborated estimation of potential economic benefits leads to a situation where measures to reduce APG flaring are considered low priority by the management. Due to this the management is				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		reluctant towards introducing such measures. The lack of exact predictability of the economic benefit deemed to be a plausible argument for management not to invest in measures to reduce APG flaring. This is found plausible because it is widely observed that management business strategies often focused on other issues and do not focused on measures related to environment protection like the reducing APG flaring. Due to this the project activity is considered low priority by management. This is also reported in other studies. For example the Norway study/B-2/ states that "*APG is not a prime concern to the oil companies, they do not consider such expenses worthwhile".* The same is explained in other positively determined JI projects/JI-Pr/. As a last argument in the context of the considered key factor the PDD states that *"the oil companies also face structural barriers such as limited access to the existing gas processing and transmission infrastructure"*. Provided justification is in line with the information provided by independent third party data sources, which explain that there is a lack of regulatory basis for access to the Gazprom network. Please refer to the assessment of the technically feasible options esp. *Compression for sale as dry gas* and *Processing of APG into liquefied petroleum gas (LPG – propane and butane), petrochemical feedstocks, or diesel (gas to liquids – GTL).*				

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		• ***Availability of capital (including investment barrier)*** In the context of this key factor the PDD states that Scenario 1 does not require substantial investments as compared to the investments (16.7 billion Rubles) that are required to implement the project scenario. The PDD states that "*In common typical investment practice the funds are available for a profitable commercial activity but not for the projects with negative NPV".* Bearing in mind the low financial profitability of the project scenario it is reasonable to assume that no financial resources will be allocated to this project activity. In this context the PP has also calculated the environmental payments to be paid by the company in case of the APG flaring and compared them with the investments. It could be plausibly demonstrated that environmental payments (551 Mio. Rub.) are disproportionally low as compared to the investments of 16.7 billion Rub. required for the implementation of the project activity. Bearing the above mentioned in mind it could be confirmed that the considered key factor affects only the Scenario 2 (project activity). Therefore the justification of this key factor was accepted. • ***APG prices*** In this context the PDD indicates that due to the low APG prices				

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		such projects are often not economically viable. This was assessed as follows: Firstly, the facilities for APG collection, transportation and processing are more complex than that of the natural gas. Due to this, the costs of APG utilization are (as a rule) higher than that of natural gas. At the same time there is a disproportion of prices, which can be illustrated as follows: The APG price assumed in the investment analysis for this project is about 566 Rub. per 1000 m^3 in the first years. The applied APG price is plausible as compared to the APG prices reported within other JI projects. Please also refer to Act from the Ministry of Economic Development, dated 30.04.2002 № 117 „On the wholesale price of oil (associated) gas sold by gas processing plants for further processing" /B-9/, which states that the wholesale price for *APG varied from 73 to 442 RUB per 1000 m3 (depending on content of the heavier hydrocarbons it)*. In addition the PP was able to support the plausibility of the assumed price based on the APG prices assumed in other registered JI projects. The expenses related to the APG collection and transportation from distant oil fields to gas processing plants may increase APG recover costs to \$30 per 1000m^3 [10]. Bearing in mind that the				

[10] This is as per the estimates of the oil companies the same is indicated in the WWF study/B-8/ and in the registered PDD (Associated Petroleum Gas Recovery for the Kharampur oil fields of "Rosneft")

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		natural gas recovery costs are approximately only $4-7 per 1000m[311] it is plausible to assume that APG recovery is (as a rule) not profitable. Therefore, projects, which involve APG utilization, are usually not financial viable especially in cases where the oil fields are a small and/or remote. Additionally it is important to note that APG price is usually not or very hard negotiable because the number of gas processing facilities in Russia is relatively low. This is due to the historical development of the oil sector in Russia beginning 1990. At this time the oil production decreased due to the economic crisis in Russia. Subsequently, the volume of APG collected and supplied to recovery plants also decreased. This was mainly because at that time the oil companies almost lacked an infrastructure for APG recovery (collection, transportation and treatment). Also, they never considered APG recovery a worthwhile/B-2/. As a result of this many APG recovery plants were closed. Later in 1995 almost all APG recovery plants were owned by the state owned company - Sibur. Today Sibur holds *"a de facto monopoly on gas processing. The oil companies have to negotiate with Sibur to sell their APG, and due to the monopoly, Sibur can demand more or less what it wants"*/B-2/. Thus the conclusion made in PDD with regards to the low profitability of the APG recovery due to the low APG prices is in line with the information provided by third party sources.				

[11] Please refer to the information provided in the WWF study/B-8/ and in the registered PDD (Associated Petroleum Gas Recovery for the Kharampur oil fields of "Rosneft")

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		As a result it could be confirmed that due to the low APG prices the APG utilization is usually not profitable. Thus the identified key factor prevents the project activity from the implementation. At the same time this key factor does not affect the alternative 1 (continuation of the current practice). *Conclusion:* As evident from the mentioned above the particular requirements of the DVM §23 (b) are fulfilled.				
B.5	(c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors?	*Description:* PDD provides justification that the baseline is established in a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors. *Means of determination:* The applied approach of the baseline identification involves the step-wise concept of the *"Combined tool to identify the baseline scenario and demonstrate additionality"*. Within the justification the company internal data was transparently presented in the PDD. The same could be verified in the course of the determination and assessed as appropriate. Most important in the context of the baseline identification is the choice of the key factors. All identified key factors were assessed as appropriate. Please also refer to the comment under B.4. *Conclusion:* The requirement is fulfilled.	/PDD/			OK
B.6	(d) Taking into account of	*Description:* Uncertainties and conservative assumptions were	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	uncertainties and using conservative assumptions?	taken into account within the baseline identification. *Means of determination:* On the one hand the PDD demonstrates that continuation of the pre-project situation is not prohibited by any law or regulation and reflects also the common practice. On the other hand the implementation of the project activity requires high initial investments and further operation costs. As a result the PDD concludes that continuation of the pre-project practice is the most plausible scenario. For detailed assessment please refer to annex 2. *Conclusion:* The requirement is fulfilled.				
B.7	(e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project activity or due to force majeure?	*Description:* The amount of ERU depends inter alia on the operation of oil company and the corresponding APG production. *Means of determination:* As evident from the PDD the APG production was on a constant level. Since the management decision no significant fluctuations were identified. The monitoring plan ensures that ERUs cannot be earned for decreases in activity levels outside the project activity or due to force majeure. The same approach was positively determined by another AIE for a similar project activity. Please refer to the assessment of the monitoring plan. *Conclusion:* The requirement is fulfilled.	/PDD/ /JI-Pr/			OK
B.8	(f) By drawing on the list of standard variables	*Description:* The requirements of the appendix B to Guidance on criteria for baseline setting and monitoring were taken into	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	contained in appendix B to . Guidance on criteria for baseline setting and monitoring., as appropriate	account within the development of the monitoring plan. The standard variables were duly elaborated in line with IPCC data. *Means of determination:* Please refer to the assessment of the monitoring plan in this annex below. *Conclusion:* The requirement is fulfilled.				
B.9	*DVM § 24* If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants in line with 23 above?	*Description:* Not applicable because a JI specific approach was elaborated and applied. *Means of determination:* N/A *Conclusion:* N/A	/PDD/			OK
B.10	*DVM § 25* If a multi-project emission factor is used, does the PDD provide appropriate justification?	*Description:* N/A *Means of determination:* N/A *Conclusion:* N/A	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
B.11	*DVM § 25* Does the PDD provide the title, reference number and version of the approved CDM methodology used?	*Description:* N/A *Means of determination:* N/A *Conclusion:* N/A	/PDD/			OK
	Approved CDM methodology approach only	*DVM §26 are not applicable because an approved CDM methodology was no used.*				
C	***Additionality***					
	JI specific approach only					
C.1	*DVM § 28* Does the PDD indicate which of the following approaches for demonstrating additionality is used? *(a)* Provision of traceable and transparent information showing the baseline was identified on the basis of	*Description:* The PDD explicitly indicates that the JI specific approach was used to justify the additionality. Furthermore the PDD clearly indicates that "*Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals"* was used.	/PDD/ /DVM/ /GBM/ /GCP/ /GJI/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the .Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board.	*Means of determination:* This is evident from the PDD. *Conclusion:* The requirement is fulfilled.				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
C.2	*DVM § 29* (a) Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	*Description:* The PDD explicitly indicates that the JI specific approach was used to justify the additionality. The PDD provide a detailed theoretical description in a complete and transparent manner. In particular it indicates that JI specific approach is based on the Guidance on criteria for baseline setting and monitoring" (Version 03) and Appendix B to Decision 9/CMP.1. The version 03 of the Guidance on criteria for baseline setting and monitoring" is the latest version that was issued within the JISC 26 meeting. *Means of determination:* The applied approach was accepted because it follows the step-wise concept of the "Combined tool to identify the baseline scenario and demonstrate additionality". The applied approach involves the major steps like the identification of the plausible alternatives, identification of the most plausible alternative by means of investment analysis and, finally, the common practice analysis. The applied approach demonstrates that the project activity is not economically viable. Finally, the PDD performs common practice analysis and shows that considered project has not already diffused in the relevant sector and geographical area. The applied JI specific approach is similar to the approaches	/PDD/ /DVM/ /GBM/ /GCP/ /GJI/ /INV/ /FS/ /B-1/ /B-2/ /JI-Pr/	CAR B1	CAR B1	OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		suggested by the approved CDM tools[/TA//CT/]. It is also worth to note that the applied approach is similar to the approach used in the similar project ("Gathering of associated petroleum gas at Khokhryakovskoye field" developed and exploited by TNK-BP) that was positively determined by another AIE. The applied approach is applicable in the specific context of the considered project because the potential alternatives to the proposed project activity are available to project participant (PP) and cannot be implemented in parallel to the proposed project activity. In other words the PP can either introduce measures or not. Furthermore it allows selection of the most plausible alternative and justification of the additionality by using conservative assumptions. The PP has also taken into account specific circumstances and technologies of the considered project activity. For example, the specific operation modes and historical data were taken into account. In particular, the justification of the additionality could be verified as follows. ***1. Identification of the alternative scenarios.*** All possible and plausible scenarios were identified and justified in the context of the baseline identification. Please refer to the assessment given in sub-section B.3 of this annex and in annex 2 of this report.				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		All identified alternatives comply with the relevant laws and regulations. Please refer to annex 2 of this report. ***2. Financial analysis*** <u>Financial indicator / Benchmark</u> The project specific methodology provides a benchmark analysis for justification of the additionality. The basic principle for additionality justification is to demonstrate that financial indicator of the project activity (IRR) is below the internal hurdle rate of the project participant. If this is the case than the project activity can be considered as additional. The selected financial indicators are the project IRR, NPV discounted payback period (DPB). The financial indicators are suitable for the project type and decision context. They are also well accepted by all approved CDM tools/CT//AT/. The method of calculation financial indicators has been assessed as appropriate. Within the financial analysis all relevant costs (including the investment cost, the operations and maintenance costs), and revenues (excluding ERU revenues) were taken into account. Please refer to the detailed assessment financial parameters in annex 3 of this report.				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		The investment analysis was presented in a transparent manner and provides all the relevant assumptions. Determination team has reproduced the calculation and the results could be confirmed. As result of the financial analysis it could be demonstrated that the NPV (-4,429,778 Th. Rubel) of the project activity is negative and, thus the project activity is economically not attractive. In addition to the NPV the PP also computed the project IRR of the considered project activity. The IRR of the project activity is 8.43%. This is below the discount rate, which can be considered as benchmark applied at the time of the investment decision. The applied discount rate is in line with the information published by the Central Bank. For detailed assessment please refer to annex 3 of this report. Finally, the PP calculated discounted payback period (DPB). The computed DPB is more than 67 years, which clearly shows that project activity is financially unattractive. As a result it could be duly justified that the considered project measure is financially not attractive and, hence would have been not implemented in absence of additional benefits from JI registration. This financial unattractiveness of the project activity could be further supported in the sensitivity analysis.				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Sensitivity analysis The included sensitivity analysis shows that the conclusion regarding the financial/economic attractiveness is robust to variations (+/- 10%) in the critical assumptions like OPEX, investments and electricity generation. Determination team has reproduced the sensitivity analysis and it could be proved that the conclusion is robust even assuming 83% lower investment cost, 21 % lower OPEX for GT or 20% higher annual APG prices. However such deviations deemed to be highly unlikely. **Feasibility study / Basis for Management Decision** The investment decision was based on the results feasibility study performed by third party engineering consultants. The input values used in the investment analysis were valid and applicable at the time of the investment decision. *Justification of evidences:* An analysis of financial viability of the project was performed within the feasibility study. The feasibility study concludes that negative NPV (-4,429,778 Th. Rubel) clearly demonstrates that the project activity is not a financially attractive alternative. It was also demonstrated that the project IRR (8.43%) is below the				

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		discount rate (12%). This further strengthens the conclusion the economic unattractiveness of the proposed project activity. All financial parameters were taken from the feasibility study. The determination team confirms that the period in time between the finalisation of the feasibility study (November 2003) and the investment decision (December 2003) is sufficiently short so that it is unlikely that input values materially changed. The feasibility study including the financial analysis was assessed as reliable and applicable data source because: • Third party engineering consultancies; like o ZAO "Tumenneftegazproject", o DZAO "Nizhnevartovsknipineft"; o ZAO "Institut prirodopolzovania"; o OOO "Scientific and engineering center "Neftegaz-1" were involved in the preparation of the feasibility study • In addition the assumed values have been reviewed by the responsible financial experts of the Project participant and crosschecked with the information as per the internal data sources. • The engineering consulting companies that were involved in the preparation of the feasibility study are well-				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		experienced in the oil&gas sector; • The feasibility study is elaborated in a detailed manner by presenting the information about the technical data, investment costs and O&M expenses as well as the estimated amounts of APG and the particular cost components; • The applied values were crosschecked with assumption applied in comparable cases and found reasonable and plausible. Please refer to Annex 3 of this report; • Based on the interviews with project managers it could be verified that the results of the feasibility study were the basis of the decision making regarding the project implementation. The determination team has crosschecked the values as per the feasibility study against the values indicated in the PDD and Excel calculation spreadsheet and confirms that values are consistent. The determination team further confirms that the applied values and the use of the feasibility study complies with the requirements of EB 55 Annex 1, § 109,112; EB 62 Annex 5, § 6. **Common practice analysis** Finally, the PP performed common practice analysis. In doing so,				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		oil&gas industry was defined as the relevant sector and Russian Federation as the geographical area. This deemed to be appropriate. Based on the information provided about the oil industry it could be verified that measures similar to the project activity were observed at the following oilfield: Samootlor and Khokhryakov. All these measures were implemented between 2000- 2008. However all these measures are either approved as JI projects or seeking approval as JI project. The results of the common practice analysis were (also) confirmed by another AIE within the determination of the "Gathering of associated petroleum gas at Khokhryakovskoye field" project. The results of the common practice analysis could be further supported by the information provided by independent data sources/B-1/B-2//B-3/. Please refer also to the information about the common practice provided in the context of the assessment of the inefficient regulatory framework for APG utilization provided in annex 2 of this report. As result it could be confirmed that considered project activity is not a common practice in the Host Country. Since the project activity is financially unattractive and does not represent the common practice in the Host Country it was correctly concluded that the proposed project activity is additional. *Conclusion:* Therefore the elaborated approach was assessed to be applicable for the purpose of the baseline identification. The				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		additionality deemed to be duly justified.				
C.3	*DVM § 29* (b) Are additionality proofs provided?	*Description:* All additionality proofs referred to in the PDD and used within the addtionality justification were provided and could be verified by the determination team. *Means of determination:* PDD and corresponding documented evidences. *Conclusion:* The requirement is fulfilled.	/PDD/ /DVM/ /GBM/ /GCP/ /GJI/ /INV/ /FS/ /B-1/ /B-2/ /JI-Pr/	CAR B1	CAR B1	OK
C.4	*DVM § 29* (c) Is the additionality demonstrated appropriately as a result?	*Description:* The determination team concluded that additionality was demonstrated appropriately as a result. *Means of determination:* Please refer to the assessment provided above. *Conclusion:* The requirement is fulfilled.	/PDD/			OK
C.5	*DVM § 30* *If the approach 28 (c) is chosen,* are all explanations,	*Description:* Not applicable because approach 28 (c) was not chosen. *Means of determination:* N/A	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	descriptions and analyses made in accordance with the selected tool or method?	*Conclusion:* N/A				
	Approved CDM methodology approach only	*As a JI specific approach was applied the DVM §31 is not relevant.*				
D	***Project boundary (applicable except for JI LULUCF projects)***					
	JI specific approach only					
D.1	*DVM § 32* Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are	*Description:* The PDD describes the project boundary, including the physical delineation of the proposed JI project activity. *Means of determination:* Based on provided evidences and corroborated by a site visit it could be determined that the delineation of the project boundary is correct and meets the requirements of the relevant JI rules – DVM and Guidance on criteria for baseline setting and monitoring. As evident from the PDD the project boundary includes GHG emission sources attributed to the project activity. In particular, the project boundary includes all oilfields and transport facilities where APG is produced and transported. As per the PDD *"It is only those sources are taken into account emissions from which are above (1%) in the overall quantity of*	/PDD/ /CR1/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		GHG emissions." This is in line with the requirements of the Guidance on criteria for baseline setting and monitoring version 03. The PDD summarizes the emission sources and GHG types in a table format. *Conclusion:* The requirement is fulfilled.				
D.2	(i) Under the control of the project participants?	*Description:* All emissions and corresponding sources are under control of project participant (PP). *Means of determination:* The project boundary includes only CO_2 and CH_4 emissions. CO_2 and CH_4 emissions in the project and in the baseline scenario depend mainly on the oil production, which is under control of PP. *Conclusion:* The requirement is fulfilled.	/PDD/			OK
D.3	(ii) Reasonably attributable to the project?	*Description:* The project boundary includes CO_2 and CH_4 emissions resulted from anode effect in the aluminium production. *Means of determination:* It is obvious that these emission sources are attributable to the project activity. *Conclusion:* The requirement is fulfilled	/PDD/			OK
D.4	(iii) Significant?	*Description:* As per the PDD *"It is only those sources are taken into account emissions from which are above (1%) in the overall quantity of GHG emissions."*	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Means of determination: This is in line with the requirements of the Guidance on criteria for baseline setting and monitoring version 03. *Conclusion:* The requirement is fulfilled				
D.5	*DVM § 32* *(b) Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?*	*Description:* The project boundary is defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above *Means of determination:* Please refer to the assessments under D.1 – D.4 above. *Conclusion:* The requirement is fulfilled	/PDD/			OK
D.6	*DVM § 32* (c) Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	*Description:* The PDD describes the project boundary by using a figure that shows the physical delineation of the proposed JI project activity. *Means of determination:* Based on provided evidences and corroborated by a site visit it could be determined that the delineation of the project boundary is correct and meets the requirements of the relevant JI rules – DVM and Guidance on criteria for baseline setting and monitoring. *Conclusion:* The requirement is fulfilled.	/PDD/			OK
D.7	*DVM § 32* (d) Are all gases and sources	*Description:* All gases and sources included are explicitly stated, and the exclusions of any sources related to the baseline or the	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	project are appropriately justified. *Means of determination:* The CO_2 and CH_4 emissions are the main emission sources. As already noted *"It is only those sources are taken into account emissions from which are above (1%) in the overall quantity of GHG emissions.*" This is in line with the requirements of the Guidance on criteria for baseline setting and monitoring version 03. *Conclusion: The requirement is fulfilled*				
	Approved CDM methodology approach only	DVM §33 is not applicable because JI specific approach was used.				
E	***Crediting period***					
E.1	*DVM § 34* (a) - Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began? - Is the starting date after the beginning of 2000?	*Description:* The project starting date is 01.02.2004– date corresponds to the start of construction work on the construction of gas pipelines, "Samootlorneftegas". *Means of determination:* As already noted on 03.12.2003 the decision to go ahead with the project activity was taken. Afterwards the responsible personnel has directly started with implementation of the measures. The implementation involved constriction various vacuum compressor stations and low pressure pipelines. As the first measures were performed by the personnel of the oilfield company there are no contracts with third parties to evidence the starting date. However the implementation of the measures directly after the	/PDD/ /CR/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		management decision could be duly evidenced by means of various internal reports. (esp. Acceptance Certificate for the pipeline constructed on the Samotlorskiy license that evidence the start of the construction works on 01.02.2004) Therefore the project starting date was assessed as appropriate. *Conclusion:* The requirement is fulfilled.				
E.2	*DVM § 34* (b) Does the PDD state the expected operational lifetime of the project in years and months?	*Description:* As per the PDD the expected operational lifetime is 30 years. *Means of determination:* The operational lifetime depends mainly on the lifetime of the equipment. The lifetime of the compressor stations and various pipelines is up to 30 years. Therefore the assumed lifetime was accepted. The applied lifetime is plausible as compared to the operational lifetime indicated in similar registered JI projects/JI-Pr/. *Conclusion:* The requirement is fulfilled.	/PDD/ /Ji-Pr/			OK
E.3	*DVM § 34* (c) Does the PDD state the length of the crediting period in years and months?	*Description:* Please refer to section C.3 of the PDD. As per the PDD the length of the first crediting period is 5 years, i.e. 60 months. In addition the PDD states that in case the second commitment period will be established under Kyoto Protocol, and further to recent Russian government recognition, emission reductions for the subsequent period will be applied. *Means of determination:*	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		The choice of the crediting period between 2008 and 2012 is appropriate because the project was operational in 2008. In addition the PDD states that in case the second commitment period will be established under Kyoto Protocol, and further to recent Russian government recognition, emission reductions for the subsequent period will be applied. The crediting period will not exceed the project operational lifetime. This is in line with Glossary of Joint Implementation Terms (Version 2).				
E.4	*DVM § 34* (c) Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	The starting date of the crediting period will be on or after the date the first emission reductions. This is in line with §34 DVM.	/PDD/			OK
E.5	*DVM § 34* (d) Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the	Please refer to E.3.	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	operational lifetime of the project?					
E.6	*DVM § 34* (d) *If the crediting period extends beyond 2012,* does the PDD state that the extension is subject to the host Party approval?	Yes, the PDD states that the extension is subject to the host Party approval. Please refer to E.3.	/PDD/			OK
E.7	Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	*Description:* The PDD provides estimates of emission reductions presented separately for those until 2012 and those after 2012. *Means of determination:* This is evident from the separate tables in PDD section A.4.3.1 and section E. *Conclusion:* The requirement is fulfilled	/PDD/			OK
F	***Monitoring plan***					
F.1	*DVM § 35* Does the PDD explicitly indicate which of the following approaches is used?	*Description:* The PDD explicitly indicates that a JI specific approach was used. *Means of determination:* This is evident from the PDD section D.1. As per the PDD the applied approach is based on the	/PDD/ /GBM/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	– JI specific approach – Approved CDM methodology approach	requirements of the "Guidance on criteria for baseline and monitoring" version 03. This is the most recent version and hence appropriate. *Conclusion:* The requirement is fulfilled				
	JI specific approach only					
F.2	*DVM § 36* (a) Does the monitoring plan describe	*Description:* The monitoring plan is elaborated in detail in section D of the PDD. *Means of determination:* As per the PDD the applied approach is based on the requirements of the "Guidance on criteria for baseline and monitoring" version 03. This is the most recent version and hence appropriate. As per the PDD the technologies and formulas for defining emissions are based on the requirements and provisions of IPCC 2006, e.g. the unburned conservative carbon factor for soot combustion of APG in flares was taken from 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The density of CH_4 and CO_2 at standard conditions is taken from reliable sources. The CH_4 emission for APG transportation is taken from IPCC 2006 v.2. All the default and fixed values are reasonably balanced and transparently presented in the PDD. The CO_2 and CH_4 emission factors used to determine emissions from APG flaring will be determined based on the chemical	/PDD/ /GBM/ /IPCC/ /CDM-P/ /iai/ /JI-Pr/	CAR D1 CAR D2	CAR D1 CAR D2	OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		composition of APG. For calculation of these factors the approaches proposed in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (Subchapter 4.2. Fugitive emissions from oil and natural gas systems) are applied. This is appropriate. Within the project activity electricity is used for operation of the gas pipeline as well as for some further internal technical needs of GPP. The emissions due to the electricity consumption supplied from the electricity grid will be based on the amount of electricity consumed and the grid emission factor. The grid emission factor is taken from the study conducted by the European Bank for Reconstruction and Development (EBRD study). In doing so the regional power system of Ural was correctly identified as the relevant power grid. The applied factors are in line with the values given in the EBRD study. The applied data source was assessed as reliable. The same data source was used by many several registered JI projects/JI-Pr/. The applied approach was assessed as appropriate because it is based on the requirements of the IPCC guidelines. In addition, it should be noted that approved CDM methodologies, which were elaborated for similar measures also explicitly refer to the IPCC guidelines. The determination team has crosschecked the applied approach with the approach included in the IPCC guidelines and found it consistent. Also the fixed parameters and				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		variables were found consistent with the IPCC data. Finally, it is worth to note that such approach was elaborated for another very similar JI project "Gathering of associated petroleum gas at Khokhryakovskoye field"*) and* positively determined by another Independent Entity. *Conclusion:* The requirement is fulfilled				
F.2.1	– *All relevant factors and key characteristics that will be monitored?*	*Description:* The monitoring plan describes all relevant factors and key characteristics that will be monitored. *Means of determination:* The main factors will be monitored: (1) Chemical composition of utilized APG at various BPS and VCS (this parameter will be measured); (2) Total volume of extracted APG directed into pipeline to GPP from project oilfields (this parameter will be measured). (3) Volume of historical APG directed into the old pipeline system from project oilfields (this parameter will be constant). (4) Specific electricity consumption coefficient at GPP during processing of project volume of APG under the project activity (provided by various Ugragasprocessing GPPs); (5) Specific losses coefficient from processing operations at project volume of APG at GPP under the project activity (provided by various Ugragasprocessing GPPs);	/PDD/ /IPCC/	CAR D1 CAR D2	CAR D1 CAR D2	OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		(6) all decisive factors for the control and reporting of project performance: ecological reporting, quality control (QC) and quality assurance (QA) procedures; the operational and management structure that will be applied in implementing the monitoring plan. All these factors are included in the monitoring plan. The key characteristics are CO_2 and CH_4 emission factors for defining emissions from APG flaring are variable parameters depending on APG chemical composition. For calculation of these factors the approaches proposed in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (Subchapter 4.2. Fugitive emissions from oil and natural gas systems) are applied. The use of IPCC data was assessed as appropriate. Also the monitoring plan for Khokhryakovskoye oilfield project[12], which was positively determined, refers to the various IPCC data. *Conclusion:* The requirement is fulfilled. Please refer to CAR D1 and CAR D2.				
F.2.2	– *The period in which they will be monitored?*	*Description:* The monitoring period depends on the monitoring parameter and is either constantly, monthly or default values. *Means of determination:* The period in which the parameters will	/PDD/ /IPCC/ /JI-Pr/			OK

[12] Gathering of associated petroleum gas at Khokhryakovskoye field

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		be monitored was assessed as appropriate. *Conclusion:* The requirement is fulfilled				
F.2.3	– *All decisive factors for the control and reporting of project performance?*	*Description:* The monitoring plan describes the monitoring procedures including all decisive factors for the control and reporting of the project performance. *Means of determination:* Within the on-site assessment it was observed that all parameters are monitored by the PP according to its internal reporting procedures and would have been monitored also in absence of the project activity. The project activity does not require monitoring of new or additional parameters. *Conclusion:* The requirement is fulfilled.	/PDD/	CAR D1	CAR D1	OK
F.3	*DVM § 36* (b) Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net	*Description:* The monitoring plan specifies the indicators, constants and variables. *Means of determination:* Most importantly are the indicators like the underburning factor and the CO_2 and CH_4 emission factors from APG flaring. For these parameters the reference data as per the 2006 IPCC guidelines will be used. The use of IPCC data was assessed as appropriate because it is	/PDD/ /IPCC/ /JI-Pr/	CAR D1	CAR D1	OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	removals to be monitored?	an internationally accepted source. Also the monitoring plan for Khokhryakovskoye oilfield project[13], which was positively determined, refers to the IPCC data. Furthermore the "maximum volume of historical utilized APG in old pipeline infrastructure at TNK-BP companies' oilfields" is of a significant importance for the baseline emissions. Please refer to CAR D1. *Conclusion:* The requirement is fulfilled.				
F.4	*DVM § 36* (b) *If default values are used*	The monitoring plan specifies the following default values: Global Warming Potential of Methane (GWP CH4) taken as 21 tCO2e/tCH4.is in line with the IPCC values Density of CO2 under standard conditions taken as 1.842 Kg/m3 is in line with the referred data source i.e. Thermal calculation of boilers (Normative method), NPO CKTI, St. Petersburg, 1998 Density of methane at standard conditions taken as 0.668 kg/m3 is in line with the referred data source Thermal calculation of boilers (Normative method), NPO CKTI, St. Petersburg, 1998 The standard conditions as well as the underlying temperature are consistently applied for all parameters. Quantity of carbon moles in a mole of a component of APG as per the table below was assessed as correct	/PDD/ /IPCC/ /JI-Pr/			OK

[13] Gathering of associated petroleum gas at Khokhryakovskoye field

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion

Carbon dioxide, CO2	1
methane, CH4	1
ethane, C2H6	2
propane, C3H8	3
i-butane, C4H10	4
n-butane, C4H10	4
i-pentane, C5H12	5
c-pentane, C5H12	5
n-pentane, C5H12	5
hexane, C6H14	6
geptane, C7H16	7
octane, C8H18	8

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Unburned carbon factor for soot combustion of APG in flare units taken as 2% is in line with IPCC values The emission factors of the electricity grid where the power is supplied from are taken from the EBRD study. The applied grid emission factors as listed below are in line with the data evident from the EBRD study. 2008-0.631 tCO2/MWh 2009-0.631 tCO2/MWh 2010-0.638 tCO2/MWh 2011-0.668 tCO2/MWh 2012-0.712 tCO2/MWh The values of the natural gas losses for the years 2008-2012 are taken from ecological reports JSC «Gazprom». As a result it could be confirmed that the applied values are in line with the IPCC values and are used in several approved JI projects (like "The utilization of associated petroleum gas (APG) of the Sugmut oilfield JSC "Gazpromneft - Noyabrskneftegaz" or "Gathering of associated petroleum gas at Khokhryakovskoye				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		field"). Therefore the default values were accepted. *Conclusion:* The requirement is fulfilled.				
F.4.1	- *Are accuracy and reasonableness carefully balanced in their selection?*	In most cases the IPCC values were applied. This is a well-reputed and internationally accepted data source. Also further data sources like the EBRD study was found as suitable and reliable. Please refer to the comment under F.4.	/PDD/ /IPCC/			OK
F.4.2	– *Do the default values originate from recognized sources?*	IPCC values are used. Please refer to the comment under F.4.	/PDD/ /IPCC/			OK
F.4.3	– *Are the default values supported by statistical analyses providing reasonable confidence levels?*	IPCC values are used that represent internationally accepted data source. Please refer to the comment under F.4.	/PDD/ /IPCC/			OK
F.4.4	– *Are the default values presented in a transparent manner?*	The PDD clearly indicate the values and the applied data source. Please refer to the comment under F.4.	/PDD/			OK
F.5	*DVM § 36*	*Description:* For values that are included in the monitoring plan and that will be monitored by PP the monitoring plan clearly	/PDD/	CAR D1	CAR D1	OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	(b) (i) For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	indicates how these values will be selected and justified. *Means of determination:* As per the PDD all monitoring parameters have to be monitored according to the requirements of the authority that is responsible of supervising the ecological aspects of the company. The monitoring of emissions is based on a special control schemes, including standards, metering, operators, control periods, measuring methods and parameters that were elaborated in line with the requirements of the Federal Service for Ecological, Technological and Atomic Supervision in accordance with the Decree № 182 of March 31, 2005. The same could be confirmed based on the information provided in the maximum allowable emissions defined by the relevant authority provided for the years 2008 – 2012. Based on this it could be confirmed that the monitoring procedure is in line with the requirements of the Host Country. In response to the finding the PP explained that the historical utilized APG volume in the baseline scenario is based on the historical values. The PP also explained that non increase of the volume of utilized APG was observed. The same could be verified based on the internal reports. The non-increasing tendency of the utilized volume of APG was taken into account. This is conservative and was accepted by the determination team.				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Within the estimation the APG amount as well as the oilfield production performance was taken from the internal reports extracted from the internal supported system. It should be noted that the estimation is based on the actual figures for the years 2008-2011 and estimate for the year 2012. Bearing in mind that the final version of the PDD was developed in 2012 the use of actual figures was accepted. Furthermore the PDD specifies for each parameter the relevant norm that regulates its monitoring method. The particular norms were checked and it could be confirmed that they are appropriate for measurements of the corresponding parameters. In particular Host Country standards referenced in the PDD were reviewed and found appropriate. *Conclusion:* The requirement is fulfilled.				
F.6	*DVM § 36* (b) (ii) For other values,	For other values IPCC and European Bank for Reconstruction and Development were used. The emission factors of the electricity grid where the power is supplied from are taken from the EBRD study. The applied grid emission factors as listed below are in line with the data evident from the EBRD study.	/PDD/ /IPCC/			OK
F.6.1	– *Does the monitoring plan clearly indicate the precise references from which*	Yes the reference to the IPCC and European Bank for Reconstruction and Development. Baseline Study. «Development of the electricity carbon emission factors for	/PDD/ /IPCC/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	these values are taken?	Russia» data specifies the chapter and page.				
F.6.2	– *Is the conservativeness of the values provided justified?*	IPCC, European Bank for Reconstruction and Development data was assessed to be reliable and suitable data sources.	/PDD/ /IPCC/			OK
F.7	*DVM § 36* (b) (iii) For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	CAR D1 and CAR D2 was raised in this context.	/PDD/	CAR D1 CAR D2	CAR D1 CAR D2	OK
F.8	*DVM § 36* (b) (iv) Are International System Unit (SI units) used?	*Description:* Within the measurements the international system units are used. *Means of determination:* The PDD was crosschecked against the Guidance on criteria for baseline setting and monitoring and it could be confirmed that international system units are used. *Conclusion:* The requirement is fulfilled.	/PDD/			OK
F.9	*DVM § 36* (b) (v) Does the monitoring	*Please refer to comments under F.1.-F.8.*	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	plan note any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring?					
F.10	*DVM § 36* (b) (v) Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	The monitoring plan was checked and it could be confirmed that parameters, coefficients, variables, etc. Are consistent between the baseline and monitoring plan.	/PDD/ /XLS/			OK
F.11	*DVM § 36* (c) Does the monitoring plan draw on the list of standard variables contained in appendix B of .Guidance on criteria for baseline setting and monitoring.?	Please refer to the comments above.	/PDD/			OK
F.12	*DVM § 36*					

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	(d) Does the monitoring plan explicitly and clearly distinguish:					
F.12.1	*(i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination?*	The main monitoring parameters are the APG volume supplied from project oilfields to GPP and APG chemical composition of those oilfields. All these factors are included in the monitoring plan. Further variables will be sourced from IPCC guidelines and various study and European Bank for Reconstruction and Development. Please refer to the comment under F.4.	/PDD/			OK
F.12.2	*(ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination?*	N/A				
F.12.3	*(iii) Data and parameters that are monitored throughout the crediting period?*	Please refer to the comment under F.1. – F.12.	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.13	*DVM § 36* (e) Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	*Description:* The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording. *Means of determination:* The monitoring plan as described in section D specifies the methods like Russian Norms. Also provisions related to monitoring frequency and recording (e.g. monthly, constantly, etc.) is specified in section D. *Conclusion:* The requirement is fulfilled.	/PDD/			OK
F.14	*DVM § 36* (f) Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?	Please refer to F.2.	/PDD/ /IPCC/			OK
F.15	*DVM § 36*	Please refer to F.2.	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	(f) (i) Is the underlying rationale for the algorithms/formulae explained?					
F.16	*DVM § 36* (f) (ii) Are consistent variables, equation formats, subscripts etc. used?	The determination team has checked the monitoring plan and was able to confirm that variables, equation formats, subscripts were consistently used.	/PDD/			OK
F.17	*DVM § 36* (f) (iii) Are all equations numbered?	As evident from the PDD all equations are numbered	/PDD/			OK
F.18	*DVM § 36* (f) (iv) Are all variables, with units indicated defined?	As evident from the PDD all variables are clearly defined. The units are specified for all variables.	/PDD/			OK
F.19	*DVM § 36* (f) (v) Is the conservativeness	Please refer to the comment under F 14	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	of the algorithms/procedures justified?					
F.20	*DVM § 36* (f) (v) To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	Please refer to the comment under F 14	/PDD/			OK
F.21	*DVM § 36* (f) (vi) Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	*Description:* Yes, the consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions of the baseline is ensured. *Means of determination:* Most important is the APG utilized volume in the baseline. This data was presented in the PDD in a detailed manner. The same could be confirmed within the determination based on the internal reports *Conclusion:* The requirement is fulfilled.	/PDD/ /IPCC/			OK
F.22	*DVM § 36* (f) (vii) Are any parts of the algorithms or formulae that are not self-evident explained?	All formulae are explained. Further explanation can be found in the IPCC guidelines.	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.23	*DVM § 36* Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	As already noted the formulae and algorithm are based on the internationally accepted IPCC guidelines and PPs own approach. The same approach was used in many similar JI projects that have received approval of independent entity.	/PDD/			OK
F.24	*DVM § 36* (f) (vii) Are references provided as necessary?	As evident from the PDD all references are provided.	/PDD/			OK
F.25	*DVM § 36* (f) (vii) Are implicit and explicit key assumptions explained in a transparent manner?	All key assumptions are explained in a transparent manner and are in line with IPCC guidelines.	/PDD/			OK
F.26	*DVM § 36* (f) (vii) Is it clearly stated which assumptions and	Please refer to the comments above.	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?					
F.27	*DVM § 36* (f) (vii) Is the uncertainty of key parameters described and, where possible, is an uncertainty range at 95% confidence level for key parameters for the calculation of emission reductions or enhancements of net removals provided?	*N/A*	/PDD/			OK
F.28	*DVM § 36* (g) Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of the	As already noted the monitoring of particular parameters will take into account the relevant national monitoring norms.	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	project?					
F.29	*Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?*	The names of the relevant Russian norms are clearly provided in the PDD.	/PDD/			OK
F.30	*DVM § 36* (h) Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	*N/A*	/PDD/			OK
F.31	*DVM § 36* (i) Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and	*Description:* The monitoring plan specifies quality assurance and quality control procedures for the main parameters. *Means of determination:* In particular, - APG volume supplied from project oilfields to GPP	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	on how records on data and/or method validity and accuracy are kept and made available upon request?	- APG chemical composition supplied from project oilfields to GPP Calibration of measuring devices is carried out by independent third party laboratories. In particular by the Corporation «IMS» Ltd. Gospoverka Gos. Standard, the city of Tyumen, as well as FGU «Tyumen center for standardization, metrology and certification». All monitoring parameters are measured automatically, so that a human error is kept to a minimum. All monitored parameters are archived in electronic and paper form. Finally it should be noted that PP has provided technical specifications of all applied measurement devices. For all measurement devices the corresponding timely calibration could be evidenced based on the calibration certificates. For calibrations that are performed by the PP's own laboratory the corresponding accreditation certificates were provided. *Conclusion:* The requirement is fulfilled.				
F.32	*DVM § 36* (j) Does the monitoring plan clearly identify the responsibilities and the authority regarding the	*Description:* The monitoring plan clearly specifies the responsibilities for the monitoring activities. *Means of determination:* The operation and management structure is described in the section D.3 of the PDD. The	/PDD/ /IM01/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	monitoring activities?	described structure could be confirmed during the on-site assessment based on the interviews with responsible personnel. The correctness of the described structure could be further verified by the names of departments and responsible personnel evident from the internal reports/approvals. It is important to note that project monitoring is a part of the PP's entire monitoring system, i.e. all parameters are monitored by the plant due to relevant laws or other obligations. Therefore the project monitoring does not require measurements of new/additional parameters. *Conclusion:* The requirement is fulfilled.				
F.33	*DVM § 36* (k) Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type?	Yes, the monitoring plan, on the whole, reflects good monitoring practices appropriate to the project type because the monitoring methods are based on the official norms of the Host country.	/PDD/			OK
F.34	*If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?*	*N/A*				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
F.35	*DVM § 36* (l) Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	*Description:* The monitoring plan provides in tabular form, a complete compilation of the data that has to be collected and measured. *Means of determination:* This is evident from the PDD. The table has been checked against the elaborated formulae and monitoring concept. It could be concluded that all required information is summarized in the relevant tables. *Conclusion:* The requirement is fulfilled.	/PDD/			OK
F.36	*DVM § 36* *(m) Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?*	As per the PDD "The data on the emission reductions achieved, and the original data will be available 2 years after the last transfer of ERUs". Therefore this requirement is fulfilled.	/PDD/			OK
F.37	*DVM § 37* *If selected elements or*	*N/A*				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?					
	Approved CDM methodology approach only	DVM § 38 is not applicable because a JI specific approach was used.				
	Applicable to both JI specific approach and approved CDM methodology approach					
F.43	*DVM § 39* *If the monitoring plan indicates overlapping monitoring periods during the crediting period,*	*N/A because an overlapping of monitoring periods is not indicated.*				
G	***Leakage***					

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	JI specific approach only					
G.1	*DVM § 40* (a) Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	*Description:* As per the PDD the following leakage emission are taken into account: GHG emissions related to the grid electricity consumption due to processing of the utilised APG at GPP, emissions due to physical leaks during APG transporting operations to GPP and emissions due to processing of APG at GPP. Other types of leaks/leakage are reasonably neglected. *Means of determination:* The CO_2 emissions from power grid and APG transport & processing operations due to project implementations were considered. This conservative and, hence, was accepted. The same approach is used in similar positively determined JI Projects. Conclusion: The requirement is fulfilled.	/PDD/			OK
G.2	*DVM § 40* (b) Does the PDD provide a procedure for an ex ante estimate of leakage?	*N/A:*				
	Approved CDM methodology approach only					
G.3	*DVM § 41*	*N/A*				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?					
H	***Estimation of emission reductions or enhancements of net removals***					
H.1	*DVM § 42* Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	*Description:* The PDD indicates that estimates are based on the assessment of emissions or net removals in the baseline scenario and in the project scenario *Means of determination:* This is evident from the PDD *Conclusion:* The requirement is fulfilled.	/PDD/			OK
H.2	*DVM § 43* *If the approach (a) in 42 is chosen,* does the PDD provide ex ante estimates of:					

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
H.2.1	(a) Emissions or net removals for the project scenario (within the project boundary)?	*Description:* PDD provides ex ante estimates of emissions for the project scenario (within the project boundary). *Means of determination:* The estimation of the project emissions is based on the formulae specified in the monitoring plan. In doing so, **APG utilized volume as well as the APG composition** are taken from the internal reports extracted from the internal supported system by TNK-BP. It should be noted that the estimation is based on the actual figures for the years 2008-2011. The values for the year 2012 are based on the historical values. Bearing in mind that the final version of the PDD was developed in 2012 the use of actual figures was accepted. It should be also noted that the values of the APG composition used within the estimation are based on the values from the selected oil fields. This was done for simplicity because particular values from individual oil fields were not available at the time of determination. The particular values will be provided within the verification. The APG chemical composition is required to determine the APG emission factor. As evident from the table provided in the section 5.2.8 the APG emission factor (tCO2/Th. m^3) assumed in the project activity (2.9 tCO_2/Th. m^3) is plausible as compared to the values reported in other projects (2.4 – 2.9 tCO_2/Th. m^3) and approved by other independent entities. Therefore the applied value was assessed as plausible and in	/PDD/ /AE/ /XLS/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		line with the values reported in similar cases. The determination team has checked the calculation as given in the Excel spreadsheet and found it correct. *Conclusion:* The requirement is fulfilled				
H.2.2	(b) Leakage, as applicable?	Leakage emissions were duly estimated based on the formulae specified in the monitoring plan.				OK
H.2.3	(c) Emissions or net removals for the baseline scenario (within the project boundary)?	*Description:* PDD provide ex ante estimates of emissions for the baseline scenario (within the project boundary). *Means of determination:* The estimation of the baseline emissions is based on the formulae specified in the monitoring plan. In doing so the APG utilized volume as well as the APG composition are taken from the internal reports extracted from the company internal monitoring system by TNK-BP. It should be noted that the estimation is based on the actual figures for the years 2008-2011. The values for the year 2012 are based on the historical values. Bearing in mind that the final version of the PDD was developed in 2012 the use of actual figures was accepted. The determination team has checked the calculation as given in the Excel spreadsheet and found it correct. *Conclusion:* The requirement is fulfilled	/PDD/ /AE/			OK
H.2.4	(d) Emission reductions or	Yes, this is evident from the PDD and the emission reduction				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	enhancements of net removals adjusted by leakage?	calculation. **Additional assessment of the plausibility of the estimated emission reductions** Considering a large amount of the estimated emission reductions the determination team has performed an additional analysis in order to check whether the estimation is plausible. Within the analysis four similar JI projects[14] were considered. The selected projects involve measures related to the APG utilization, which are similar to the measures implemented in the proposed project activity. The results are presented in the section 5.2.8 of this report. As evident from the table provided in the section 5.2.8 the APG emission factor (tCO2/Th. m^3) assumed in the project activity (2.9 tCO_2/Th. m^3) is plausible as compared to the values reported in other projects (2.4 – 2.9 tCO_2/Th. m^3) and approved by other independent entities. **In addition the determination team considered the a**verage annual APG amount utilized and the average annual amount of ERU generated and average ratio (ERU/ Th. m^3 of APG utilized. The calculated average annual ratio (ERU/ Th. m^3 of APG utilized) shows how many emission reduction results from				

[14] Either positively determined, registered or approved by the Host Country

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		utilization of Th. m^3 after deduction of project emissions and leakage. As evident from the comparison (see section 5.2.8) the amount of ERUs generated from one Th. m^3 of utilized APG within the project activity (2.78 ERU/Th. m^3 of APG) is well within the plausible range as compared to the values reported in other projects (2.53 – 2.87 ERU/Th. m^3 of APG). Considering the above mentioned the amount of the emission reductions deemed to be plausible i.e. not overestimated. In the words, the large amount of emission reductions results solely from the large amount of the APG utilized. As already noted the APG amounts could be duly justified and evidenced based on the internal reports. In this context it should be borne in mind that in contrast to other project the considered project activity includes several oil fields. Therefore it is plausible that the amount of APG utilized is also higher.				
H.3	*DVM § 44* *If the approach (b) in §42 is chosen,* does the PDD provide ex ante estimates of:	*n/a:*				
H.3.1	(a) Emission reductions or enhancements of net	*n/a:*				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	removals (within the project boundary)?					
H.3.2	(b) Leakage, as applicable?	*n/a:*				
H.3.3	(c) Emission reductions or enhancements of net removals adjusted by leakage?	*n/a:*				
H.4	*DVM § 45* *For both approaches in 42* (a) Are the estimates in 43 or 44 given:					
H.4.1	(i) On a periodic basis?	As evident from the PDD the estimates are presented on annual basis. This is appropriate.	/PDD/ /XLS/			OK
H.4.2	(ii) At least from the beginning until the end of	As evident from the PDD the estimates are from 01.01.2008 until 31.12.2012 - from the beginning until the end of the crediting	/PDD/ /XLS/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	the crediting period?	period. This is correct.				
H.4.3	(iii) On a source-by-source/sink-by-sink basis?	Yes, for each source. In fact there is only one source – APG flaring within the oil production at project oilfields.	/PDD/ /XLS/			OK
H.4.4	(iv) For each GHG?	As evident from the PDD the estimates are for each GHG- CO_2 and CH_4.	/PDD/ /XLS/			OK
H.4.5	(v) In tons of CO_2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol?	Yes, the final emission reductions are presented in tonnes of CO_2 equivalent.	/PDD/ /XLS/			OK
H.4.6	(b) Are the formula used for calculating the estimates in D section consistent throughout the PDD?	The determination team has checked the estimates by reproducing the calculation and was able to confirm that formula used for calculating the estimates in 43 or 44 are consistent throughout the PDD.	/PDD/ /XLS/			OK
H.4.7	(c) For calculating estimates in 43 or 44, are key	Yes, please refer to H.2.1 and H.2.3.	/PDD/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project taken into account, as appropriate?		/XLS/ /IPCC/ /AE/ /AL/			
H.4.8	(d) Are data sources used for calculating the estimates in 43 or 44 clearly identified,reliable and transparent?	Yes, please refer to H.2.1 and H.2.3.	/PDD/ /XLS/ /IPCC/			OK
H.4.9	(e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of	Yes, please refer to H.2.1 and H.2.3.	/PDD/ /XLS/ /IPCC/ /AE/ /AL/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	the choice?					
H.4.10	(f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner?	Yes, please refer to H.2.1 and H.2.3.	/PDD/			OK
H.4.11	(g) Are the estimates in 43 or 44 consistent throughout the PDD?	Yes, please refer to H.2.1 and H.2.3.	/PDD/			OK
H.4.12	(h) Is the annual average of estimated emission re-ductions or enhancements of net removals calculated by dividing the total estimated emission re-ductions or enhancements of net removals over the crediting period by the	Ok	/PDD/ /EIA/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	total months of the crediting period and multiplying by twelve?					
H.5	*DVM § 46* *If the calculation of the baseline emissions or net removals is to be performed ex post,* does the PDD include an illustrative ex ante emissions or net removals calculation?	The estimation of the baseline emissions is based on the actual figures for the years 2008-2011 and estimates for the year 2012.	/PDD/			OK
	Approved CDM methodology approach only	Not applicable because a JI specific approach is used.				
I	***Environmental impacts***					
I.1	*DVM § 48* (a) Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with	*Description:* As per the PDD an EIA is required by the Host Party. *Means of determination:* The PDD explains that project measures fall under the relevant regulation - "Regulations regarding the assessment of environmental impacts (planned commercial and other activities	/PDD/ /EIA/ /EIA1/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	procedures as determined by the host Party?	in the Russian Federation", approved by order of the State Commission for the Protection of the Environment of the Russian Federation № 372 of May 16, 2000. The above mentioned regulation was checked. It could be confirmed that project measures require an EIA. This is correct because according to the Federal law on environmental protection an EIA should be carried out for projects, which may directly or indirectly influence the state of the environment. Under this law the PP commissioned independent engineering consultancy, who have prepared the environmental impact assessments (EIA). The EIAs were performed for individual project measures carried out with the project implementation. These documents were submitted to the State expertise for approval and a positive conclusion was received, which confirms the compliance with the relevant environmental regulations. In particular the information about the performed environmental impact assessments and the corresponding approvals of the State expertise includes the following: • Date and number maximum allowable emissions of air pollutants (the same as EIA) approved by the responsible manager • Date of the development of the maximum allowable emissions of air pollutants				

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		• Information about the organisation (independent engineering consultancy) that prepared the maximum allowable emissions of air pollutants • Date and number Conclusion of the State Environmental Expertise Committee with regard to the maximum allowable emissions of air pollutants (in most cases issued by the administration of Technological and Environmental Supervision of Federal Service of Ecological, Technological and Atomic Supervision Based on the provided documented evidences it could be concluded that the environmental impacts were duly considered within the PDD development. *Conclusion:* The requirement is fulfilled.				
I.2	(b) *If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party,* does the PDD provide conclusion and all references to supporting documentation of an environmental impact assessment undertaken in	No negative significant impacts on the environment are expected. Please refer to the comment above.	/PDD/ /EIA/ /EIA1/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	accordance with the procedures as required by the host Party?					
J	***Stakeholder consultations***					
J.1	*DVM § 49* *If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party,* does the PDD provide:	*Description:* As explained in the PDD consultations with stakeholders on the project activity have not been carried out. As per the PDD "*No consultations with stakeholders on the project are required for the following reasons:* *1. TNK-BP companies rent the plots, where Project oilfields are located, from the local government. Before the beginning of field development company undertook the necessary consultations with the local population to discuss environmental issues that may arise in connection with the company's activity.* *2. The site of the area that hosts the project is rented out of the water protection zones, pastures and migration routes of reindeers. This site does not apply to categories of land with priority environmental management.* *3. The project improves ecological environment as it's realisation decreases pollution by toxic substances in terms of APG flaring".*	/PDD/ /EIA/			OK

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
		Means of determination: The explanation provided in the PDD deemed to be reasonable in the specific context of the project activity because as already noted in the subsection I of this annex an environmental impact assessment was performed by the PP for individual measures. The same was approved by the relevant local authority. The approval of the corresponding authority (State expertise) is an indirect confirmation that the project complies with the relevant norms and regulations (inter alia with the those related to the stakeholder consultations). *Conclusion:* The requirement is fulfilled.				
J.1.1	(a) A list of stakeholders from whom comments on the projects have been received, if any?	*Please refer to comment under J.1.*	/PDD/ /EIA/			OK
J.1.2	(b) The nature of the comments?	*Please refer to comment under J.1.*	/PDD/ /EIA/			OK
J.1.3	(c) A description on whether and how the comments have been addressed?	*Please refer to comment under J.1.*	/PDD/			OK
K	***Determination regarding small-scale projects (additional elements for assessment)***					

No.	DVM[9] paragraph / Checklist Item (incl. guidance for the determination team)	Initial Finding (Means and results of assessment)	Ref.	Action requested to PPs (CAR, CL, FAR)	Review of PP´s action	Con-clu-sion
	☐ **Applicable** ☒ **Not applicable**					
L	***Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)*** ☐ **Applicable** ☒ **Not applicable**					
M	***Determination regarding programmes of activities (additional/alternative elements for assessment)*** ☐ **Applicable** ☒ **Not applicable**					

ANNEX 2: ASSESSMENT OF BASELINE IDENTIFICATION

Table A-2: Assessment of Baseline Identification

☐	Baseline is not identified
☒	Assessment of baseline see below

Baseline Alternatives identified	In line with the Methodology?	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evi-dence used	AIE Assessment	
					Appro-priateness of elimination	Assessment of determination team (results and means of assessment)
Alternative scenario 1. Continuation of common practice for utilization of APG, i.e. the combustion of the extracted APG in the flare of TNK-BP companies in Western Siberia **(baseline scenario)**	☒	☐	Within the Step1 this alternative has been identified as a **plausible** scenario because it represents the current practice in the Host Country and is not prohibited by any national laws and/or regulation.	PDD Reg EIA	☒	**Step 1 Identification of alternatives to the project activity consistent with current laws and regulations** Within the Step 1 this alternative has been appropriately identified as a plausible scenario because it represents the current practice in the Host Country. It is important to note that the same technology was used in the pre-project situation. **Sub-step 1b) Compliance with current laws and regulations** The PDD provides a list of the relevant regulations. The laws and regulation analysed by the PP in this context are summarized below: • Federal Law «On subsoils» # 2395 dd. 21.02. 1992.

						• Resolution of Supreme Council of Russian Federation # 3314.1 dd. 15.06.1992 “On procedure of introduction into operation of Regulation on subsoil licensing procedure”. • Law of Khanty Mansi autonomous okrug (KhMAO) # 15.03 dd. 18.04.1996“On subsoil use”. • Resolution of the Government of Russian Federation dd. 12.06.2003 # 344 “On norms of payments for polluting emissions into the atmosphere by stationary and mobile sources, for discharges of polluting substances in surface and subsurface water objects and for disposal of production and consumption wastes”. • Resolution of the Government of Russian Federation dd. 01.06.2005 # 410 “On introduction of deviations in the appendix 1” of Resolution dd. 12.06.2003 # 344 ”. • Resolution of the Government of Russian Federation dd. 08.01.2009 # 7 “On measures on stimulation of polluting atmosphere air reduction by products of associated petroleum gas combustion at flare stacks”. • Russian Government Decree #780 dated on September 15, 2011 “On Realization of Article 6 of Kyoto Protocol to United Nations Framework Convention on Climate Change The determination team has checked the regulations examined by the PP against the laws, regulations and official documents reviewed by well-reputed and well-experienced third party organisations in their studies/B-1//B-2/B-3//B-4/ on the oil&gas sector in Russia. In doing this the

						determination team has reviewed both (a) the regulations valid at the time of the investment decision, and (b) actual regulations. The documents reviewed within this background analysis are summarized below: • Associated G4as Utilization in Russia: Issues and Prospects annual report issued by KPMG Moscow 2011 /B-1/ • Associated Petroleum Gas in Russia Reasons for non-utilization Fridtjof Nansen Institute September 2010 /B-2/ • Pathways to an energy and carbon efficient Russia (Opportunities to increase energy efficiency and reduce greenhouse gas emissions McKinsey &Company 2009 /B-3/ • Emisssion reductions in the natural gas sector through project-based mechanisms, IEA Information paper, 2003 /B-4/ • Using Russia's Associated Gas, Prepared for the Global Gas Flaring Reduction Partnership and the World Bank, By PFC Energy, December 10 2007 /B-5/ • National Communication by Russian Federation including the Progress report submitted by Russian Federation published on the unfccc website /B-6/ • Briefing paper "JI Track 1 preliminary assessment Center for European Policy Studies Stockholm Environmental Institute December 2011 /B-7/ • Problems and perspectives of the usage of Petroleum Associated Gas in Russia. Annual review of the problem within the framework of the project "Environment and Energy. International Context" World Wildlife Fund and Institute of World Economy

						and International Relations Moscow 2009 /B-8/ • Laws and regulations considered in approved (or positively determined) JI projects in the oil and gas sector /JI-Pr/: - Gathering of associated petroleum gas at Khokhryakovskoye field - "Utilization of associated petroleum gas from the Verkhnekamsk oil fields, «Permneftegazpererabotka! - Associated Petroleum Gas Recovery for the Kharampur oil fields of "Rosneft" - Yety-Purovskoe Oil field Associated gas recovery and Utilization project - Associated Gas Recovery Project for the Komsomolskoye Oil Field - Associated petroleum gas recovery at Priobskoe oil field of Rosneft - The utilization of associated petroleum gas of the Yarayner oilfield of JSC "Gazpromneft-Noyabrskneftegaz! - Utilization of associated petroleum gas from the Verkhnekamsk oil fields, «Permneftegazpererabotka» LLC, Perm, Russian Federation As a result of the performed background investigation it could be confirmed that PP has considered all relevant regulations. Furthermore the compliance of the considered scenario with the relevant Host Country regulation could be assessed as follows:

						Based on the review of the relevant regulatory documents the determination team was able to verify that laws and regulations valid at the time of the investment decision (2003) contain only general requirements with regards to the utilization of the APG and minimizing the gas flaring. The PP has correctly concluded that the general character of these regulations did not enforce the APG utilization. The same is evident from the licenses/License/ issued by the relevant authorities to the particular companies of the TNK-BP group that participate in the project. In this context the PP provided documented evidences//EIA/ issued by various authorities, which confirm the compliance with the relevant environmental laws and requirements. The compliance with the regulation valid at the time of investment decision could be further supported by the conclusions made within various studies provided by the independent data sources/B-4//B-5//B-6//JI-Pr/. It is important to note that the project complies not only with the regulation valid at the time of investment decision but also with actual regulation. This is because not only the former regulation[15] but also the actual laws and regulations do not enforce the utilization of APG. The Russian Government Resolution # 7 is the main valid regulatory document that is aimed at reducing APG flaring and contains provisions with regards to APG utilization. This regulation specifies as a target that from 2012 no more than 5% of APG should be flared/B-1/. According to this regulation the company has to pay environmental payments if it does not fulfil the target of APG utilization. In other words the current regulation does not prohibit APG flaring but defines the

[15] i.e. regulation, which was valid at the time of investment decision.

						environmental payments in case the target utilization rate is not met. The exploration licenses[/Licenses/] were provided. It was confirmed that the above mentioned requirements are reflected in the licenses' provisions related to the APG flaring. The conclusion regarding the compliance of the considered scenario with laws and regulations could be further supported by the information about the regulations related to APG flaring as provided by third party data sources[/B-1//B-2//B-3/]. Therefore the PP correctly concluded that the project complies with the actual regulation. As already noted compliance with the actual environmental requirements could be successfully confirmed by means of various official documents. **Ineffectiveness of the current regulation** In addition to the compliance with the relevant regulatory requirements the PDD explains why the laws and regulations introduced in the recent years were not effective to increase of the rate of APG utilization and reduction of the APG flaring. In order to check the provided information the determination has performed its own background investigation. The results are presented in the table below:

Data source	Relevant Information
KPMG Annual Report[/B-1/]	"According to the draft General Development

							program for the Oil Industry, APG output is currently 65 bcm a year, of which just 49 bcm (75,9 %) is utilized, and 16 bcm is flared."(page 27) In general, "roughly 24% of the associated gas output is flared" (page 13). The KPMG confirms in its annual report from 2011 that " little progress has been made on this issue [ineffective energy resource use] so far: the issue remains marked by a lack of transparency, […] and the government being inconsistent, not least in terms of regulatory and legal framework and the confirmed strategies and objectives for development of the oil and gas sector" (page 5). Moreover, "data on the volumes of associated gas flared by Russia´s biggest oil and gas companies in 2010 shows that some not only failed to improve their APG utilization, but, on the contrary, got worse." (page 6). The measures to encourage the reduction of atmospheric pollution with products of associated petroleum gas

							flaring remain ineffective because of the "imperfect nature of the recording system" (page 26).
						Fradtjof Nansens Institutt: Associated Petroleum Gas in Russia. Rasons for non-utilization. FNI Report 13/2010[/B-2/]	In this report it is shown that Russia is "the worst [concerning the amount of flared APG], at estimated 40 bcm [of flared APG] per year (2007)" (page 10). At the same time, there is "the general lack of interest in environmental issues in Russia. […] the Flares are "in the middle of nowhere", where no one directly affected by them. This issue is reinforced by the lack of transparency in Russia. International flaring estimates are much higher than the estimates used by the Russian authorities, and due to this, the problem seems less crucial to the Russian public than it actually is." (pages 24-25). The old-fashioned way of thinking in the oil industry slows down reforms: "The Russian government and their Russian Energy Strategy for the period until 2030 adopted on 13 November 2009 shows

							signs of increased attention to environmental and energy efficiency issues, but the oil companies […] still have a strong hold on what kind of regulations are made in their industry." (page 25). "That the law is not adhered to by the industry itself indicates that the acceptance of the APG utilization TIS [Technology Innovation System] is low there The oil industry accepts the TIS but only insofar as it does not come at an extra cost "(page 30). "However, the compliance with the regulations is not sufficiently monitored and non-compliance only to a limited extent penalized" (page 38)."flaring fines are low, and consequently do not constitute a real incentive to reduce flaring" (page 40). According to this study this problem is not treated consistently by the responsible Ministries. As per the study "At the national level, the Ministry of Natural Resources

							(MNR), Ministry of Industry (MI), Ministry of Public Health and Social Development, Ministry of Economic Development and Trade, and the Ministry of Finance have some role in the APG utilization matter. The MNR and MI are by far the most prominent of the ministries within this field, and they have very different perspectives on flaring." Furthermore this study claims that Rostekhnadzor, the federal body for ecological, technological, and atomic oversight has no efficient and effective control over the APG flaring. As per the study "Rostekhnadzor is only important when the regulations are clearly defined and strong, but at the moment, there are no strict laws for Rostekhnadzor to monitor in the APG field". According to the information provided by this study "In late 2007, Rostekhnadzor proposed

							a very strict flaring regime, but their proposal was watered down by MI and MNR. The final text, Decree no. 7 of 2009, was both in terms of transition time to the new and stricter regime and in terms of the size of fines much more liberal than the Rostekhnadzor proposal…". Moreover, the close relationship between big oil companies (for example Gazprom) and government influences on government policy making (page 39).
						McKinsey&Company: Pathways to an energy and carbon efficient Russia[/B-3/]	"For different historical reasons (low domestic gas prices, intention to limit the volume of steel used in construction) gas transmission in Russia compared to the US, burns 44% more gas for pumping per unit of gas transported" page 62).
						Russian Federation. Fourth national report, 2006[/B-6/]	In the resolution №410 from 1 July 2005 the increase of the payments for emissions of methane was set. It grew from 0,05 Rub/ton to 50 RUB/ton within the established acceptable standards, and

							from 0,2 to 250 RUM within the established emission limits (page 12). In spite of it, it remains still disadvantageous to utilize APG instead of flaring it.
						Problems and perspectives of the usage of Petroleum Associated Gas in Russia. Annual review of the problem within the framework of the project “Environment and Energy. International Context”.[/B-8/]	According to this study, the real volumes of APG extracted and flared in Russia are difficult to estimate. At the moment there are big differences in estimates of amounts between various departments. Thus, in the accounts for 2005, these data are spread from 13,1 bcm to 57,6 bcm (page 2). There are very significant differences between the official statements and results of satellite observation (page 3).The dynamics of the APG usage is much smaller than its production rate (page 2). According to the Ministry of Natural Ressources, 27 % of the yearly extracted APG (55 bcm) is flared in Russia. In 2007 Juri Turgenev, the head of the Ministry of Natural Resources, declared that in

	the segment of APG processing there is a complete standstill. Since 1980, Russia has not commissioned any new gas processing plant (page 4).
AEA . Briefing paper "JI Track 1 preliminary assessment". Study on the Integrity of the Clean Development Mechanism/B-7/.	According to this study the large scale projects with high amount of emission reductions like APG utilization projects is prioritized by the Russian government when approving JI projects.

It is important to note that laws and regulations valid and applicable at the time of the investment decision (in 2003) were even more ineffective and inefficient as the current laws. This strengthens the conclusion regarding the compliance with the applicable laws and regulations as well as the overall plausibility of the identified scenario. Additionally it should be noted that some well-reputed studies sound concerns regarding the future regulation of the APG utilization. For example the KPMG study/B-1/ states that draft resolution of the Ministry of Economic Development as of 2011 plans to introduce different provisions related to environmental payments. However, "*given the imperfect nature of the recording system, this will not help to solve the APG flaring problem, and could lead to corruption".*

Taking into account the above mentioned the determination team has gained a sufficient confidence that efforts to reduce APG flaring in Russia were done but they were to the large extent not effective. Therefore the identified alternative (continuation of APG flaring)

			Step 2 key factor review Key factor analysis shows that the continuation of the pre-project situation is not affected by the identified key factors.			deemed to be a plausible scenario, which corresponds to the current practice for APG treatment in Russia. **Key factor analysis** Within the key factor analysis the following key factors were identified and analysed: • ***Sectoral reform policies and legislation;*** • ***Economic situation in oil&gas sector in terms of APG utilization;*** • ***Availability of capital (including investment barrier);*** • ***APG prices.*** The identified key factors duly address the requirements of the DVM §23 (b) because they best reflect the relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, legislation, the economic situation in the project sector etc. The justification of the key factors is provided in section B.2 of annex 1. As a result it could be concluded that baseline was by established taking into account relevant national and/or sectoral policies (please refer to the assessment provided in this section above). Key factors as suggested by the Guidance on Criteria for baseline setting and monitoring[GBM] version 03 were duly taken into account. In particular (a) Sectoral reform policies and legislation was considered in the PDD. Please refer to the assessment of the compliance with the regulation as well as to

						analysis of the inefficiency of the regulatory framework; (b) Economic situation/growth and socio-demographic factors in the oil&gas sector were duly taken into account. Please refer to the assessment of the theoretically possible alternatives presented in the section B.3. of the annex 1. Within the elaboration of the baseline it was assumed that the same level of service as in the project scenario would be offered in the baseline scenario. This is consistent and was assessed as appropriate. The same could be further supported by the historical data. (c) Availability of capital (including investment barriers) were considered with the baseline identification and further supported by means of financial analysis performed within the additionality justification. Please refer to the comments under C.2; (d) Local availability of technologies/techniques, skills and know-how and availability of best available technologies/techniques in the future was indirectly taken into account through the demonstration that even several years after the investment decision the APG flaring is still the commonly used practice in the Host Country; (e) Fuel prices and availability were considered through demonstration that due to the low APG prices the measures for APG utilization/recovery are economically not attractive. Please refer to the assessment related to the APG prices provided in the section B.4 of annex 1; (f) National and/or subnational expansion plans for the energy sector, were taken into account through the consideration of the most recent regulatory documents published by relevant authorities. Please refer to the assessment of the compliance with regulation provided in

						this section above. As a result of the key factor analysis it could be duly demonstrated that the identified key factors do not affect the baseline scenario. In contrary, due to the lack of efficient sectoral regulation make the continuation of the pre-project scenario is a common practice and widely observed in the Host Country. The same baseline scenario was positively determined by other AIEs and approved by the DFP of the Host Country in various similar JI projects[/JI-Pr/]. At the same time it could be justified that project activity is not economically attractive alternative. Please refer to the explanation below. Therefore, Scenario 1, that is Continuation of common practice for utilization of APG, i.e. the combustion of the extracted APG in the flare of TNK-BP companies in Western Siberia is the baseline scenario. This practice is the most commonly used in Russia and is widely . Therefore there are no significant barriers, which would prevent this alternative. The same was explained within the interviews with responsible personnel. It is obvious that continuation of the current practice does not require any additional expenses as compared to the introduction of a new technology within the project scenario (see below). Therefore this alternative does not face barriers like the investment and/or financial barrier.
Alternative scenario 2. The project itself (without being registered as a JI activity) that is efficient utilization of APG, i.e. expansion of TNK-	☒	☒	Within the Step 1 this alternative was identified as a **plausible** scenario because it is the	PDD INV JI-Pr CT	☒	**Step 1 Identification of alternatives to the project activity consistent with current laws and regulations** Within the Step1 this alternative has been appropriately identified as a **plausible** scenario because it represents the project activity itself. It could be verified that this

BP gas transport system for delivery of additional APG volumes for processing (**project activity**)			project activity and is not prohibited by any national laws and/or regulation. **Step 2 key factor review** In the context of the key factor analysis the PP explained that the implementation of this alternative faces investment and financial barriers. Most important is the insufficient financial attractiveness of the project activity.	AT B-1 B-2 PTS-03		alternative is not prohibited by any national laws and regulations. **Sub-step 1b) Compliance with current laws and regulations** The project activity is in line with the relevant laws and regulation. Please refer to the explanation provided for scenario 1 above. **Step 2 Key factor analysis** The identified key factors duly address the requirements of the DVM §23 (b) because they best reflect the relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, legislation, the economic situation in the project sector etc. As per the PDD there following key factors/barriers prevent the implementation of the project activity and/or favour the continuation of the current practice (baseline scenario): • ***Sectoral reform policies and legislation;*** • ***Economic situation in oil&gas sector in terms of APG utilization;*** • ***Availability of capital (including investment barrier);*** • ***APG prices.*** The justification of the key factors is provided in section B.2 of annex 1. Most important in the context of the key factor analysis is the existence of the financial barrier. As per this barrier the economic attractiveness is below the company

						internal benchmark and this prevents the implementation of the project activity. As a result of the financial analysis it could be demonstrated that the NPV (-4,429,778 Th. Rubel) of the project activity is negative and, thus the project activity is economically not attractive. In addition to the NPV the PP also computed the project IRR of the considered project activity. The IRR of the project activity is 8.43%. This is below the discount rate, which can be considered as benchmark applied at the time of the investment decision. The applied discount rate is in line with the information published by the Central Bank. For detailed assessment please refer to annex 3 of this report. Finally, the PP calculated discounted payback period (DPB). The computed DPB is more than 67 years, which clearly shows that project activity is financially unattractive. As a result it could be duly justified that the considered project measure is financially not attractive and, hence would have been not implemented in absence of additional benefits from JI registration. Please also refer to the assessment provided in subsection C.2 of annex 1 and in annex 3 of this report. This financial unattractiveness of the project activity could be further supported in the sensitivity analysis. Since the sensitivity analysis confirms the result of the investment comparison analysis the project activity as a whole cannot be considered as financial attractive. All explanations given in the PDD were assessed as plausible. The same was confirmed within the interviews with responsible personnel during the onsite

						assessment. The low financial attractiveness of APG utilization projects measures in the oil&gas sector was reported in numerous positively determined JI projects[/JI-Pr/]. As a result the determination team confirms that the project activity faces barriers that prevent the implementation of the project activity. Most importantly is the fact that project activity is economically unattractive as compared to the continuation of the pre-project situation. Therefore this alternative is not the most plausible one and can be excluded from further consideration.

ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS

Table A-3: Assessment of Financial Parameters

☐	No financial parameters are used for additionality justification					
☒	Assessment of all financial parameters see below					
Parameter	**Value applied**	**Unit**	**Source of Information (please indicate document and page)**	**Reference**	**AIE ASSESSMENT**	
					Correctness of value applied	**Comment**
Utilization of associated petroleum gas at the fields of Companies of TNK-BP Group, Western Siberia.						
Investment cost	16,742,528	Th. roubles	Feasibility Study	FS	☒	The investment costs presented in the estimates include such cost components related to the design works, construction and installation works as well as the purchase of equipment. Estimates for the investment costs are made based on the feasibility studies elaborated by the independent third party design institutes inter alia ZAO "Tumenneftegazproject", DZAO "Nizhnevartovsknipineft"; ZAO "Institut prirodopolzovania"; OOO "Scientific and engineering center "Neftegaz-1" in 2000- 2003. The personnel who were assigned for elaboration of the studies are well-experienced experts (e.g. they hold academic degrees, i.e. Doctors of Science, PhD in Economics etc.) All documented evidences applied in this context were reviewed by the determination team. As a result it could be confirmed that the total investment costs were duly calculated.

						The feasibility studies were checked by the determination team and found as a reliable and suitable data source. Please refer to the assessment of the feasibility study provided in the section C.2 of the annex 1 of this report. The financial assumptions elaborated within the estimates are in line with the values applied in the investment analysis.
Additional annual average volume of APG to be efficiently utilized in 2003-2032	193,073	Th. m3	Feasibility Study (Business-plans for development of license subsoil areas of TNK-BP companies elaborated in 2003 and approved by the management.)	FS	☒	The additional annual average volume of APG to be utilized is based on the forecasts of APG material balances provided in the business-plans of the companies elaborated in 2003 and the analytical forecasts of TNK-BP specialists for the period of 2003-2032 approved by the management of the companies. According to internal corporate procedures adopted in TNK-BP the companies reconsider their business plans of core activities on annual basis in order to actualize main performance indicators such as oil production, costs of production, APG recovered (including APG balances) etc. The business plans are accounting documents; they are developed by specialists well-experienced in oil and gas production and approved by the management of the companies. The considered business plans hold information covering the periods of development and operation of the oil fields until full depletion. Therefore forecasts contained in the business-plans are reliable and authentic at the time of their elaboration, i.e. 2003. Therefore provided data source (feasibility study) was assessed as reliable and suitable in the specific context of the project activity. Please refer to the assessment of the feasibility study provided in the section C.2 of the annex 1 of this report. The figures provided in the feasibility study and corresponding business plans are in line with the values applied in the investment analysis.

Average netback prices of APG	As per the financial analysis performed in Excel spreadsheet	Rub/ths. m3 per year	Feasibility Study (Forecast of APG netback prices provided by the Business Unit "Gas" of Business Direction "Upstream" Prognosis of APG netback prices for 2004-2022 submitted by JSC "Nizhnevartov-skoye neftegazodobyvayu schee predpriyatiye" (NNP) for preparation of the investment analysis of APG gathering at Khokhryakovskoye oilfield project.	FS APG	☒	The determination team received the calculation of the average netback price of APG per Th. m^3. This calculation is performed based on the forecast of netback prices for the period of 2003-2032. This forecast for the years 2003-2015 is based on the estimates performed in 2003 by specialists of Business Unit "Gas" and of Business Direction "Upstream" of TNK-BP. The BU "Gas" monitors APG prices on an annual basis and uses them for the assessment of economic efficiency of investment projects. The APG netback prices are set based on negotiations with gas processing plants and subject to reconsideration. For the years 2016-2032 the APG prices were estimated based on the forecasts for the previous years and the expected inflation rate. Within on-site assessment the TNK-BP Management representatives were interviewed regarding the applied prices of APG. The APG supply agreements signed in 2003 and 2004 with the gas processing were provided. The agreements contain the netback prices valid in 2003-2004. It could be confirmed that applied estimates are in line with the documented evidences. The APG price assumed in the investment analysis for this project is about 566 Rub. per 1000 m^3 in the first years. The applied APG price is plausible as compared to the APG prices reported within official documents, third party sources and other JI projects. Please refer to Act from the Ministry of Economic Development, dated 30.04.2002 № 117 „On the wholesale price of oil (associated) gas sold by gas processing plants for further processing" /B-9/, which states that the wholesale price for *APG varied from 73 to 442 RUB per 1000 m3 (depending on content of the heavier hydrocarbons it)*. In addition the PP was able to support the plausibility of the assumed price based on the APG prices assumed in other registered JI projects/APG/. Please also refer to assessment related to APG prices provided in

						the subsection B.4 of annex 1 of this report. Therefore provided data source was assessed as reliable and suitable in the specific context of the project activity. Please refer to the assessment of the feasibility study provided in the section C.2 of the annex 1 of this report. The figures provided in the feasibility study and corresponding business plans are in line with the values applied in the investment analysis.
Annual expenses on APG recovery and transportation for utilization	As per the financial analysis performed in Excel spreadsheet	Th. Rubles per year	Feasibility Study (Business-plans for development of license subsoil areas of TNK-BP companies developed in 2003 and approved by the management)	FS	☒	The annual expenses on APG recovery and transportation for utilization are based on the forecasts of APG material balances provided in the business-plans of the companies and the analytical forecasts of TNK-BP specialists. The same was approved by the management of the companies. According to internal corporate procedures adopted in TNK-BP the individual companies reconsider their business plans of core activities on annual basis in order to actualize main performance indicators such as oil production, costs of production, APG recovered (including APG balances) etc. The business plans are accounting documents; they are developed by specialists well-experienced in oil and gas production and approved by the management of the companies. The considered business plans hold information covering the periods of development and operation of the oil fields until full depletion. Therefore forecasts contained in the business-plans are reliable and authentic on year of their elaboration, i.e. 2003. Therefore provided data source was assessed as reliable and suitable in the specific context of the project activity. Please refer to the assessment of the feasibility study provided in the section C.2 of the annex 1 of this report. The figures provided in the business plans are in line with the values applied in the investment analysis.

Revenues related to APG sales for utilization	As per the financial analysis performed in Excel spreadsheet	Ths. Rubles per year	The calculation model developed by Business Unit Gas of TNK-BP in 2003.	INV	☒	The revenues were duly calculated based on the assumed financial parameters as explained above. The obtained results are in line with the feasibility study. The calculation in the feasibility study was performed by Business Unit "Gas" in 2003 based on the additional annual volume of APG to be efficiently utilized in 2003-2032; netback prices of APG and expenses on APG recovery and transportation. The calculation model was provided by Business Unit "Gas". The personnel of the TNK-BP Management were interviewed and the applied assumption could be reasonably explained. The forecasts were elaborated by the BU "Gas" in 2003 in a detailed manner by taking into account various production data. The applied assumptions were reviewed by different experts of the BU "Gas" and finally used by the TNK-BP management within the investment decision. Therefore provided data source was assessed as reliable and suitable in the specific context of the project activity. The figures elaborated within the estimates are in line with the values applied in the investment analysis. The calculation was checked and found appropriate. Also the results of the sensitivity analysis could be confirmed.
Discount rate	12	%	Discount rate	FS cbr	☒	The "Discount rate" was used as a benchmark. According to the feasibility study the discount rate is used by the company as an internal benchmark. The applied Central bank discount rate is in line with the information published by the Central Bank. Provided documented evidence (feasibility study) was accepted because it specifies that the company internal financial benchmark is applied for all investments of the company. As already noted that project activity can only be implemented by project developers. Therefore the company internal benchmark is

						applicable parameter to assess the financial viability of the project. As a result it could be confirmed that the benchmark value is suitable for the project activity. As evident from the comparison the IRR of the considered project measure is below the company internal benchmark/discount rate. Therefore it was duly concluded that the considered project measure is financially not attractive and, hence would have been not implemented in absence of additional benefits from JI registration.
NPV (calculated)	-4 429 778	Th. rubles	Investment analysis	INV	☒	The NPV was duly calculated in Excel spreadsheet. The applied formulae were checked and the appropriateness of the calculation could be confirmed.
IRR (calculated)	8,43	%	Investment analysis	INV	☒	The IRR was duly calculated in Excel spreadsheet. The applied formulae were checked and the appropriateness of the calculation could be confirmed.
DPB (calculated)	67,93	years	Investment analysis	INV	☒	The DPB was duly calculated in Excel spreadsheet. The applied formulae were checked and the appropriateness of the calculation could be confirmed.

ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS

Table A-4: Assessment of Barrier Analysis

☒	No barrier parameters are used for additionality justification
☐	Assessment of barriers see below

Kind of Barrier (invest, tech, other)	Description of Barrier	Evidence used	Assessment of determination team	
			Appropriateness of information source	Explanation of final result
			☐	

ANNEX 5: OUTCOME OF THE GSCP

Table A-5: Outcome of the Global Stakeholder Consultation Process

☒	No comments were received during the global stakeholder consultation period
☐	Comments were received during the global stakeholder consultation period. The comments (in unedited form) and the consideration/response of the determination team are presented below:

Comment No.:	Comment by:	Inserted on:	Subject	Comment *)	Response determination team *)	Conclusion (incl. CARs CLs or FARs)

*) In case clarifications have been requested by the determination team corresponding rows shall be added