

Climate project methodology № 0001

**RECOVERY OF GAS FROM OIL WELLS THAT WOULD OTHERWISE BE VENTED OR  
FLARED AND ITS USE IN HEAT AND/OR POWER GENERATION ON SITE**

Developer: Yu. A. Izrael Institute of Global Climate and Ecology

Version 2.0

18 June 2023

**TABLE OF CONTENTS**

- I. TERMS AND DEFINITIONS.....3**
- II. SCOPE AND APPLICABILITY .....3**
- III. BASELINE METHODOLOGY .....8**
- IV. PROJECT CREDITING PERIOD.....10**
- V. ADDITIONALITY .....10**
- VI. MONITORING PLAN REQUIREMENTS.....11**
- VII. PROJECT SCENARIO .....13**
  - Project emissions from the generating heat and/or electricity on site for fields own needs ..... 13**
  - Project emissions from flaring..... 13**
  - Project emissions from the generating electricity required to operate the associated gas treatment plant (if applicable)..... 14**
    - Scenario 1* ..... 14
    - Scenario 2* ..... 14
  - Emission reductions ..... 15**
  - Project risk assessment..... 15**
- VIII. LEAKAGE ASSESSMENT.....16**
- IX. NON-PERMANENCE RISK ANALYSIS .....16**
- X. METHODS TO PREVENT DOUBLE COUNTING, NEGATIVE IMPACTS ON THE ENVIRONMENT AND SOCIETY.....16**
- XI. UPDATE OF THE BASELINE AT THE RENEWAL OF THE CREDITING PERIOD .....17**
- XII. NORMATIVE REFERENCES.....17**

## I. TERMS AND DEFINITIONS

For the purpose of this methodology, the following definitions apply:

**Associated gas** – natural gas found in association with the oil, either dissolved in the oil or as a cap of free gas above the oil.

**Associated gas treatment plant** – a plant designed to remove oil, moisture, mechanical impurities and condensate.

**Crediting period** – the period in which verified and certified GHG emission reductions or increases in net anthropogenic GHG removals by sinks attributable to a climate project activity, as applicable, can result in the issuance of carbon units. The time period that applies to a crediting period for a climate project activity, and whether the crediting period is renewable or fixed, is determined in accordance with Section 4. Project crediting period of this methodology.

**Field** – an oil, oil and gas or oil and gas condensate field.

**Gas pipeline** – the pipeline with capacity to transport more than 1 million m<sup>3</sup> of natural gas per day.

**Gas-lift** – an artificial lift method for oil wells exploitation in which gas is injected into the production tubing to reduce the hydrostatic pressure of the fluid column. The resulting reduction in bottomhole pressure allows the reservoir liquids to enter the wellbore at a higher flow rate.

**Gas-lift gas** – high-pressure gas used for gas-lift in the oil wells.

**Processed gas** – the gas that is produced in an associated gas treatment plant.

## II. SCOPE AND APPLICABILITY

The methodology is applicable to project activities that recover associated gas from oil wells that would otherwise be flared or vented. A new associated gas treatment plant is installed in which the associated gas is processed. The processed gas is supplied to the heat and/or power generation facility on-site to meet on-site heat and/or power demands.

The methodology is applicable under the following conditions:

- All recovered associated gas comes from existing oil wells that are in operation and are producing oil at the time of the recovery of the associated gas.
- The project oil wells have the records of flaring or venting of the associated gas for at least three years. These records should be presented to a legal entity or an individual entrepreneur accredited in the national accreditation system as a greenhouse gas validation and verification body and which is not affiliated with the project executor during the validation. If the field has

been in operation for less than three years and, as a result, 3 years of associated petroleum gas flaring or venting data are not available, one of the alternative approaches described in Section «III. Baseline methodology».

- Data (quantity and fraction of carbon) are accessible on the associated gas.
- If the project oil wells include gas-lift systems, the gas-lift gas has to be associated gas from the oil wells within the project boundary.

This methodology cannot be used for project activities that result in the transportation of associated gas through the gas pipeline and the replacement of fossil fuels with associated gas at other facilities.

Finally, this methodology is only applicable if the application of the procedure to identify the baseline scenario and demonstrate additionality performed using Project Activity Additionality Demonstration Guidelines № 001 results in the venting and/or flaring of the associated gas and/or gas-lift gas at the oil production facility as the most plausible baseline scenario.

In case of changes in the GHG regulatory legal framework of the Russian Federation, this methodology is subject to revision in order to take into account the relevant changes.

### **Project boundary**

The project boundary encompasses:

- The project field and wells where the associated gas and/or gas-lift gas is collected.
- The site where the associated gas and/or gas-lift gas would have been flared or vented in the absence of the project activity.
- The gas recovery, pre-treatment and utilization infrastructure.
- The source of gas-lift gas.

The greenhouse gases included in or excluded from the project boundary are shown in Table 1.

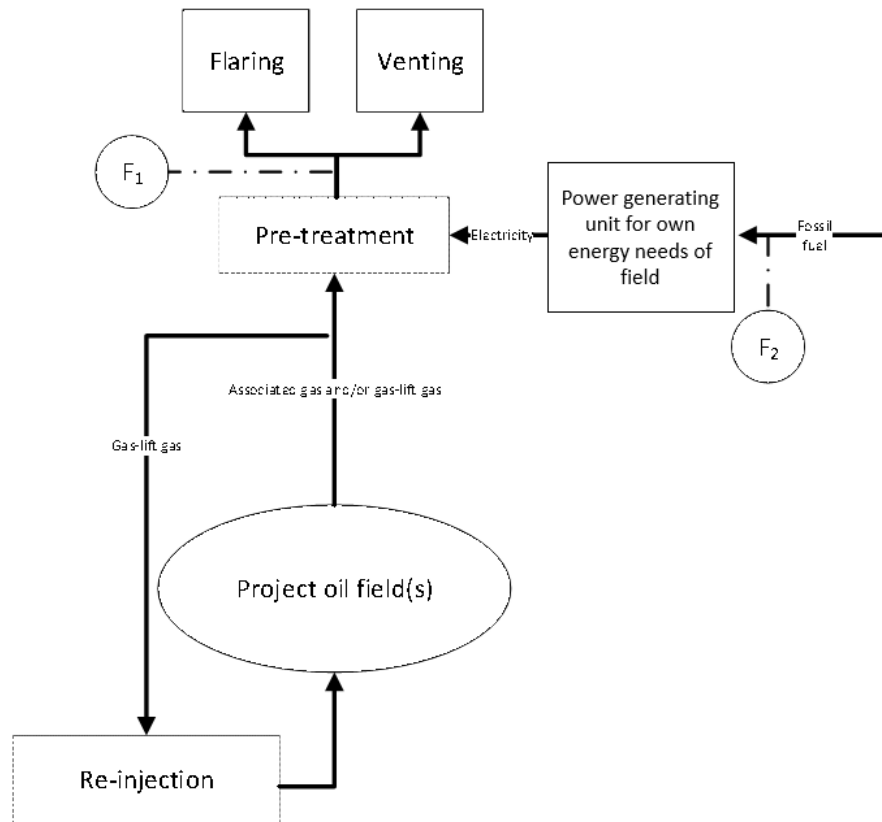
**Table 1: Emissions sources included in or excluded from the project boundary**

	Source	Gas	Included ?	Justification / Explanation
<b>Baseline</b>	Venting of associated gas	CO <sub>2</sub>	Yes	For conservativeness it is assumed that the associated gas was flared in the baseline scenario even if it was actually vented prior to the start of the project activity

		CH <sub>4</sub>	Yes	For conservativeness it is assumed that the associated gas was flared in the baseline scenario even if it was actually vented prior to the start of the project activity
		N <sub>2</sub> O	No	Assumed negligible
	Flaring of associated gas	CO <sub>2</sub>	Yes	Main source of emissions in the baseline
		CH <sub>4</sub>	Yes	It is assumed that flaring leads to incomplete oxidation of carbon in associated gas
		N <sub>2</sub> O	No	Assumed negligible
	Energy use for recovery, pre-treatment, transportation of associated gas	CO <sub>2</sub>	Yes	Energy is produced from the fossil fuel (if the power generating unit does not receive power from the grid)
		CH <sub>4</sub>	No	Assumed negligible
		N <sub>2</sub> O	No	Assumed negligible
	<b>Project Activity</b>	Flaring of associated gas	CO <sub>2</sub>	Yes
CH <sub>4</sub>			Yes	It is assumed that flaring leads to incomplete oxidation of carbon in associated gas
N <sub>2</sub> O			No	Assumed negligible
Fugitive emissions during treatment and transportation of the associated gas or processed gas		CO <sub>2</sub>	No	Assumed negligible
		CH <sub>4</sub>	Yes	Assumed negligible
		N <sub>2</sub> O	No	Assumed negligible
Energy use for recovery, pre-treatment, transportation of associated gas and heat and/or power generation facility		CO <sub>2</sub>	Yes	Energy is produced from the processed gas (if the power generating unit does not receive power from the grid)
		CH <sub>4</sub>	No	Assumed negligible
		N <sub>2</sub> O	No	Assumed negligible

If the facilities within the project boundary as specified in this methodology are owned by different legal entities (or are under the operational management of different legal entities), then the project documentation should include a description of procedures for eliminating the possibility of double counting in GHG emission reductions potentially achieved as a result of project activities, enshrined in contractual agreements

**Figure 1. Schematic illustration of the baseline activity**

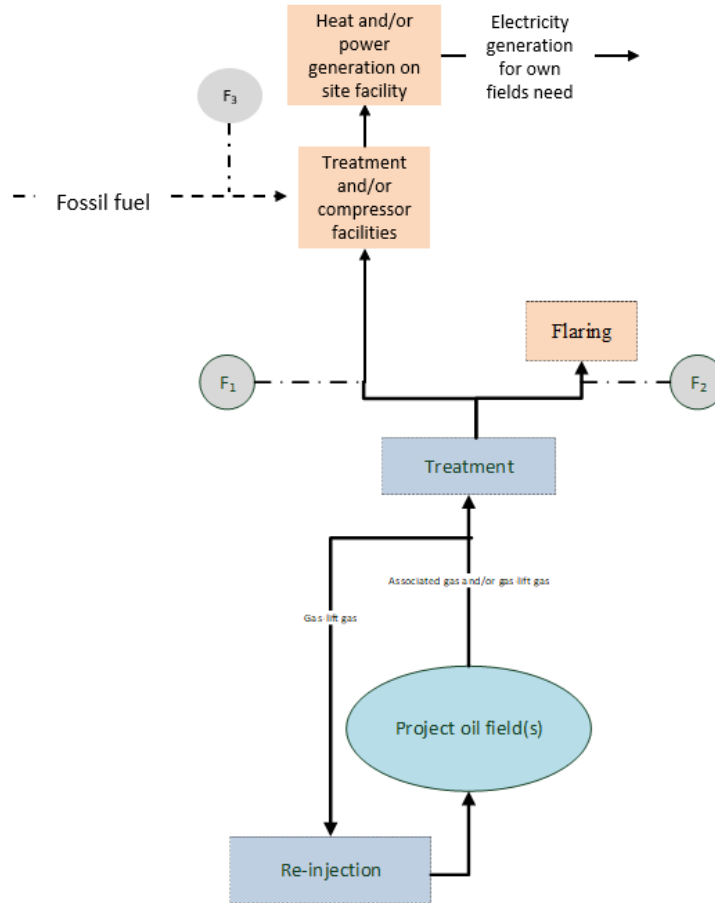


The points in Figure correspond to the following:

Point F<sub>1</sub> – Measurement point of recovered associated gas.

Point F<sub>2</sub> – Measurement point of fossil fuel at the inlet to the power generating unit (if the power generating unit does not receive power from the grid).

**Figure 2. Schematic illustration of the project activity**



The points in Figure correspond to the following:

Point F<sub>1</sub> – Measurement point at the inlet of the on-site heat and/or power generation facility using the associated gas.

Point F<sub>2</sub> – Measurement point of the associated gas sent for flaring when the pumps are released and purged.

Point F<sub>3</sub> – Measurement point of fossil fuel used to generate the electricity required to operate the associated gas treatment plant (if the power generating unit does not receive power from the grid or as a result of associated gas utilization).

### **III. BASELINE METHODOLOGY**

The baseline<sup>1</sup> is set conservatively<sup>2</sup> for a business-as-usual activity, taking into account all existing policies and measures, but not considering additional project activities (Business-as-usual model).

The project developer may use one of the following approaches to determine the baseline with justification for the appropriateness of the choices<sup>3</sup>:

1) best available technologies that represent an economically feasible and environmentally sound course of action;

2) an ambitious benchmark approach where the baseline is set at least at the average emission level of the 20% best performing comparable activities providing similar outputs and services in a defined scope in similar social, economic, environmental and technological circumstances;

3) an approach based on existing actual or historical emissions, adjusted downwards by at least 5%, unless otherwise specified in the project methodology.

The approaches above provide a framework for general understanding of the ways in which baselines can be defined. A detailed approach to determining the baseline for this type of project is provided in Section 3

#### **Baseline emissions**

The baseline shall be determined taking into account the projected level of production activities and information on actual greenhouse gas emissions and removals for a period of at least 3 (three) years prior to project implementation.

It is assumed that all associated gas is flared (and not vented) in the baseline scenario and carbon is converted into carbon dioxide. It is assumed that flaring leads to incomplete oxidation of carbon in associated gas.

---

<sup>1</sup> Greenhouse gas baseline, GHG baseline - quantitative reference(s) of GHG emissions and/or GHG removals that would have occurred in the absence of a GHG project and provides the baseline scenario for comparison with project GHG emissions and/or GHG removals (ISO 14064-2:2019 Greenhouse gases - Part 2)

<sup>2</sup> Calculation of the baseline is considered conservative if the final estimate of emission reductions resulting from project activities will not be overestimated. If there is any doubt, the project developer should better understate the baseline projection.

<sup>3</sup> Approaches to determining baselines are given in Action taken by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its third session (FCCC/PA/CMA/2021/10/Add.1, Article 6, paragraph 4, p. 34, para. 36). URL: [https://unfccc.int/sites/default/files/resource/cma2021\\_10a01E.pdf](https://unfccc.int/sites/default/files/resource/cma2021_10a01E.pdf).



Also, the baseline takes into account the emissions from generating energy and/or heat on the power generating unit on site, in case the electricity supply for own needs of the field is not from the grid.

The baseline emissions are calculated as follows:

$$BE_y = BE_{CO_2,CH_4,flaring,y} + BE_{generating,y} \quad (1)$$

Where:

- $BE_y$  = Baseline emissions in year  $y$  (tCO<sub>2</sub>/year)
- $BE_{CO_2,CH_4,flaring,y}$  = CO<sub>2</sub> and CH<sub>4</sub> emissions from flaring of associated gas in year  $y$  (tCO<sub>2</sub>e/year).
- $BE_{generating,y}$  = CO<sub>2</sub> emissions due to fossil fuel combustion for generating electricity on-site in year  $y$  (if the power generating unit does not receive power from the grid) (tCO<sub>2</sub>/year).

### Baseline emissions from flaring

$$BE_{CO_2,CH_4,flaring,y} = \sum_{j=1}^n (FC_{j,y} \times EF_{i,j,y}) \quad (2)$$

Where:

- $BE_{CO_2,CH_4,flaring,y}$  = CO<sub>2</sub> and CH<sub>4</sub> emissions from flaring of associated gas in year  $y$  (tCO<sub>2</sub>e/year).
- $FC_{j,y}$  = Volume of the of  $j$ -hydrocarbon mixture measured at point F<sub>1</sub> in Figure 1 in period  $y$  (thousand m<sup>3</sup>).
- $EF_{i,j,y}$  =  $i$ -GHG emission factor from combustion of  $j$ -hydrocarbon mixture at a flare plant for period  $y$  (t/thousand m<sup>3</sup>).
- $i$  = CO<sub>2</sub>, CH<sub>4</sub>.
- $j$  = type of hydrocarbon mixture.
- $n$  = the number of types of hydrocarbon mixtures combusted in the flare unit.

GHG emission factors from combustion of  $j$ -hydrocarbon mixture at a flare plant are calculated in accordance with Part 2 of Appendix No. 2 to the methodology for quantifying greenhouse gas emissions, approved by Order of the Ministry of Natural Resources of Russia dated May 27, 2022 № 371.

### Baseline emissions from the generating on site for fields own needs

$$BE_{generating,y} = \sum_{j=1}^n (FC_{j,y} \times EF_{CO_2,j,y} \times OF_{j,y}) \quad (3)$$

Where:

$BE_{generating, y}$	=	CO <sub>2</sub> emissions due to fossil fuel combustion for generating electricity on-site in year $y$ (if the power generating unit does not receive power from the grid) (tCO <sub>2</sub> /year).
$FC_{j,y}$	=	Volume of the of $j$ -hydrocarbon mixture measured at point $F_2$ in Figure 1 in period $y$ (thousand m <sup>3</sup> ).
$EF_{CO_2,j,y}$	=	CO <sub>2</sub> emission factor from combustion of $j$ -hydrocarbon mixture for period $y$ (t/thousand m <sup>3</sup> ).
$OF_{j,y}$	=	oxidation factor for fuel $j$ (fraction).
$j$	=	type of fuel used for combustion.
$n$	=	number of fuels used during the period $y$ .

Factors are taken in accordance with Part 1 of Appendix No. 2 to the methodology for quantifying greenhouse gas emissions, approved by Order of the Ministry of Natural Resources of Russia dated May 27, 2022 № 371.

#### **IV. PROJECT CREDITING PERIOD**

The starting date of project activities is not regulated.

A crediting period for emission reduction projects is a maximum of 5 years renewable a maximum of twice, or a maximum of 10 years with no option of renewal.

The crediting period begins no earlier than 5 years prior to applying for validation for projects validated until December 31, 2025, and no earlier than 2 years prior to applying for validation for projects validated after January 1, 2026.

The additionality and baseline shall be evaluated at the beginning of the crediting period and confirmed or reevaluated at the beginning of the next 5-year phase if the project is conducted 3 times 5 years each.

#### **V. ADDITIONALITY**

Additionality shall be demonstrated using Guidelines №1 Demonstration of the additionality of the project activity.

It is also necessary to take into account the following factors:

- The value of the indicator of venting or flaring of associated gas should not exceed 5%. The exception is cases of development of subsoil plots with the degree of depletion of oil reserves in the subsoil plot less than or equal to 0.01, as well as within 3 years from the moment the specified indicator is exceeded or until the degree of depletion of oil reserves in the subsoil plot is equal to 0.05, if this will come earlier. If before the project activity the associated gas flaring indicator was more than 5% of associated petroleum gas production, and after the implementation of the project activity it will be less than 5% of associated petroleum gas

production, then in calculating the base emissions from flaring, that is  $FC_{j,y}$  according to formula 2, the volume of flaring associated gas must be taken as 5% of the volume of associated gas produced (according to the above decree).

- The volume of greenhouse gas emissions per ton of associated gas under the project scenario should not be less than a similar indicator of the volume of emissions of the top 20% of comparable activities implemented in accordance with the applicable best available technologies (Table 5.4 and Table 5.5 of the Best Available Technologies reference document 28-2021 «Oil Production»).

## VI. MONITORING PLAN REQUIREMENTS

All data collected as part of monitoring should be archived electronically and be kept at least for two years after the end of the last crediting period. One hundred per cent of the data should be monitored if not indicated otherwise in the tables below. All measurements should be conducted with calibrated measurement equipment according to relevant industry standards.

In addition, the monitoring provisions in the tools referred to in this methodology apply.

**Table 2 – Data and parameters of j-hydrocarbon mixture volume monitoring**

<b>Data / Parameter:</b>	$FC_{j,y}$
Data unit:	m <sup>3</sup>
Description:	Volume of the of j-hydrocarbon mixture measured at points during the period y: – F <sub>1</sub> in Figure 1; – F <sub>2</sub> in Figure 1 (if applicable); – F <sub>1</sub> in Figure 2; – F <sub>2</sub> in Figure 2; – F <sub>3</sub> in Figure 2 (if applicable);
Source of data:	Flow meter
Measurement procedures (if any):	The metering system shall be designed, installed and maintained to the requirements of the relevant metering technology reference standards. Metering instrumentation shall be calibrated at an appropriate frequency to ensure performance is maintained within design accuracy.
Monitoring frequency:	Continuously
QA/QC procedures:	Calibration and maintenance of metering instrumentation will be carried out to manufacturer and reference standard requirements. Internal audit of metering system calibrations prior to each monitoring report

**Table 3 – Data and parameters for monitoring the chemical composition of j-hydrocarbon mixture**

<b>Data / Parameter:</b>	Chemical composition of gas
<b>Data unit:</b>	Volume fraction, %
<b>Description:</b>	Average content of components in the j-hydrocarbon mixture at points during the period y: <ul style="list-style-type: none"> <li>– F<sub>1</sub> in Figure 1;</li> <li>– F<sub>2</sub> in Figure 1 (if applicable);</li> <li>– F<sub>1</sub> in Figure 2;</li> <li>– F<sub>2</sub> in Figure 2;</li> <li>– F<sub>3</sub> in Figure 2 (if applicable);</li> </ul>
<b>Source of data</b>	Analysis by either on-line analyser or by manual sample extraction and laboratory analysis using laboratory analyser.
<b>Measurement procedures (if any):</b>	Sampling equipment, sampling procedure, gas analyser and analysis procedures shall comply with appropriate reference standards and where laboratory analysis is used the laboratory shall comply with national accreditation standards. Calibration
<b>Monitoring frequency:</b>	Monthly
<b>QA/QC procedures:</b>	Calibration and maintenance of analyser shall be carried out to manufacturer and reference standard requirements. Internal audit of analyser calibrations shall be carried out prior to each monitoring report

## VII. PROJECT SCENARIO

The following sources of project emissions are accounted for in this methodology:

- CO<sub>2</sub> emissions due to processed gas combustion for generating heat and/or electricity on-site.
- CO<sub>2</sub>, CH<sub>4</sub> emissions from flaring of processed gas during release and blowdown of heat and/or power generating facility pumps.
- CO<sub>2</sub> emissions from combustion of fossil fuels to generate electricity required to operate the associated gas treatment plant (if the plant is not drawing electricity from the grid or associated gas utilization).

Project emissions are calculated as follows:

$$PE_y = PE_{generating, y} + PE_{CO_2, CH_4, flaring, y} + PE_{treatment\ plant, y} \quad (4)$$

Where:

- $PE_y$  = Project emissions in year  $y$  (tCO<sub>2</sub>/year).  
 $PE_{generating, y}$  = CO<sub>2</sub> emissions due to processed gas combustion for generating heat and/or electricity on-site in year  $y$  (tCO<sub>2</sub>/year).  
 $PE_{CO_2, CH_4, flaring, y}$  = CO<sub>2</sub> and CH<sub>4</sub> emissions from flaring of processed gas during release and blowdown of heat and/or power generating facility pumps in year  $y$  (tCO<sub>2e</sub>/year).  
 $PE_{treatment\ plant, y}$  = CO<sub>2</sub> emissions due to fossil fuel combustion to generate electricity required to operate the associated gas treatment plant in year  $y$  (tCO<sub>2</sub>/year).

### Project emissions from the generating heat and/or electricity on site for fields own needs

$$PE_{generating, y} = \sum_{j=1}^n (FC_{j, y} \times EF_{CO_2, j, y} \times OF_{j, y}) \quad (5)$$

Where:

- $PE_{generating, y}$  = CO<sub>2</sub> emissions due to processed gas combustion for generating heat and/or electricity on-site in year  $y$  (tCO<sub>2</sub>/year).  
 $FC_{j, y}$  = Volume of the of  $j$ -hydrocarbon mixture measured at point F<sub>1</sub> in Figure 2 in period  $y$  (thousand m<sup>3</sup>).  
 $EF_{CO_2, j, y}$  = CO<sub>2</sub> emission factor from combustion of  $j$ -hydrocarbon mixture for period  $y$  (t/thousand m<sup>3</sup>).  
 $OF_{j, y}$  = oxidation factor for fuel  $j$  (fraction).  
 $j$  = type of fuel used for combustion.  
 $n$  = number of fuels used during the period  $y$ .

Factors are taken in accordance with Part 1 of Appendix No. 2 to the methodology for quantifying greenhouse gas emissions, approved by Order of the Ministry of Natural Resources of Russia dated May 27, 2022 № 371.

### Project emissions from flaring

$$PE_{CO_2,CH_4,flaring,y} = \sum_{j=1}^n (FC_{j,y} \times EF_{i,j,y}) \quad (6)$$

Where:

- $PE_{CO_2,CH_4,flaring,y}$  = CO<sub>2</sub> and CH<sub>4</sub> emissions from flaring of associated gas during release and blowdown of heat and/or power generating facility pumps in year y (tCO<sub>2</sub>e/year).
- $FC_{j,y}$  = Volume of the of j-hydrocarbon mixture measured at point F<sub>2</sub> in Figure 2 in period y (thousand m<sup>3</sup>).
- $EF_{i,j,y}$  = i-GHG emission factor from combustion of j-hydrocarbon mixture at a flare plant for period y (t/thousand m<sup>3</sup>).
- $i$  = CO<sub>2</sub>, CH<sub>4</sub>.
- $j$  = type of hydrocarbon mixture.
- $n$  = the number of types of hydrocarbon mixtures combusted in the flare unit.

GHG emission factors from combustion of j-hydrocarbon mixture at a flare plant are calculated in accordance with Part 2 of Appendix No. 2 to the methodology for quantifying greenhouse gas emissions, approved by Order of the Ministry of Natural Resources of Russia dated May 27, 2022 № 371.

### **Project emissions from the generating electricity required to operate the associated gas treatment plant (if applicable)**

#### ***Scenario 1***

If electricity, required to operate the associated gas treatment plant for need is produced from fuel on-site.

$$PE_{treatment\ plant,y} = \sum_{j=1}^n (FC_{j,y} \times EF_{CO_2,j,y} \times OF_{j,y}) \quad (7)$$

Where:

- $PE_{treatment\ plant,y}$  = CO<sub>2</sub> emissions due to fossil fuel combustion to generate electricity required to operate the associated gas treatment plant in year y (tCO<sub>2</sub>/year).
- $FC_{j,y}$  = Volume of the of j-hydrocarbon mixture measured at point F<sub>3</sub> in Figure 2 in period y (thousand m<sup>3</sup>).
- $EF_{CO_2,j,y}$  = CO<sub>2</sub> emission factor from combustion of j-hydrocarbon mixture for period y (t/thousand m<sup>3</sup>).
- $OF_{j,y}$  = oxidation factor for fuel j (fraction).
- $j$  = type of fuel used for combustion.
- $n$  = number of fuels used during the period y.

Factors are taken in accordance with Part 1 of Appendix No. 2 to the methodology for quantifying greenhouse gas emissions, approved by Order of the Ministry of Natural Resources of Russia dated May 27, 2022 № 371.

#### ***Scenario 2***

If electricity, required to operate the associated gas treatment plant is imported from electricity grid, emissions could be accounted with methodology provided in Order of the Ministry of Natural Resources and Ecology of the Russian Federation dated June 29, 2017 N330 "On approval of methodological guidelines for quantifying the volume of indirect energy emissions of greenhouse gases" or emissions could be accounted from other relevant national data.

### Emission reductions

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

Where:

- ER<sub>y</sub> = Emission reductions in year y (t CO<sub>2</sub>e/year)
- BE<sub>y</sub> = Baseline emissions in year y (t CO<sub>2</sub>e/year)
- PE<sub>y</sub> = Project emissions in year y (t CO<sub>2</sub>/year)

### Project risk assessment

As part of the project implementation, it is recommended to develop a risk assessment system with a description of the most likely risks that may arise at all stages of the climate project. For such an assessment, the project developer should develop a detailed matrix with the following information, as a minimum:

1. The main stages of the implementation of the climate project.
2. Description of the risks that may arise at each stage of the climate project.
3. Description of the probability of occurrence of risks. For this, the rating options "low, medium, high" or any other understandable numerical scales can be used.
4. Description of the impact of each risk on the results of the entire project. This can also be done using "low, medium, high" or any other understandable numerical scale.
5. Description of the period of influence of each risk on the entire climate project.
6. Development of measures to minimize or avoid each type of risks
7. The time for the implementation of each measure that reduces or prevents the occurrence of risks is indicated.

**Table 4 – Risk assessment matrix**

Stage of project implementation	Description of risks	Probability of occurrence	Impact on the project	Impact period	Risk minimization methods	Implementation period
		Low Medium High	Low Medium High (scale from 1	Preparation period 1-2 years after the implementation	Detailed description of mitigation measures for each risk	Description of the time frame for the implementation of these activities

		(scale from 1 to 5 or others)	to 5 or others)	The entire period of the climate project		
--	--	-------------------------------	-----------------	--	--	--

**VIII. LEAKAGE ASSESSMENT**

According to the Order of the Ministry of Economic Development of Russia dated May 11, 2022 N 248 project activities should not lead to an aggregate increase in greenhouse gas emissions or reduce their absorption levels outside the scope of such activities.

At the same time it is necessary to consider and fully account for if project leaks exist in accordance with the methodology below.

Project developer must independently determine the most relevant methods will be applied to estimate leakage, document and justify the applied algorithms for the validation and verification body, including the approaches applied at the international level.

Leakage due to transfer of equipment. If the project activity involves the replacement of equipment, it is necessary to justify and document the absence of leakage due to the possible reuse of the replaced equipment in another activity. The scrapping of replaced equipment must be documented.

The project developer shall indicate in the PDD which leakage sources are included. If emission sources are not considered, the project developer shall provide proper justification in the PDD.

**IX. NON-PERMANENCE RISK ANALYSIS**

Not applicable to the project activity.

**X. METHODS TO PREVENT DOUBLE COUNTING, NEGATIVE IMPACTS ON THE ENVIRONMENT AND SOCIETY**

Climate project should demonstrate its compliance with all legal requirements in the jurisdiction where it is located. Project developer should question whether there is a risk that their project might result in negative impacts for local communities, biodiversity and the environment. Such projects should not cause an increase in atmosphere, soil, surface and ground water pollution as well as lead to any community conflicts, land tenure issues, forceful evictions, human rights violations, or worsened health and wellbeing due to restricted access to a forest or nature area.

Efforts should be made to avoid double counting between project areas (project boundaries), between company reporting and reporting on the project, between the reporting of different companies, between the subjects of the Russian Federation and different countries in the case of



international transfer of carbon credits. In the latter case, it is necessary to demonstrate that the carbon credits transferred at the international level are excluded from the accounting of the quantitative goals of the defined at the national level contribution of the Russian Federation.

In order to increase the social factor and the importance of the climate project for the local population, it is recommended to allocate 10-15% of the benefits derived from the implementation of carbon credits to the budgets of municipalities within whose boundaries the climate project is implemented.

## **XI. UPDATE OF THE BASELINE AT THE RENEWAL OF THE CREDITING PERIOD**

At the renewal of crediting period the project is subject to verification with elements of validation and a technical assessment by a validation and verification body to determine necessary updates to the baseline, the additionality and the quantification of emission reductions.

In order to update the baseline the approach to its definition, the main parameters and assumptions used in the analysis are revised and updated. The baseline shall be representative of the conditions for the beginning of a new crediting period and be valid for that period.

The additionality at the renewal of the crediting period is checked for compliance to the criteria under Guidelines №001 at the date of the beginning of the new crediting period.

## **XII. NORMATIVE REFERENCES**

1 AM0077: Recovery of gas from oil wells that would otherwise be vented or flared and its delivery to specific end-users --- Version 1.0. CDM Methodology.

2 Order of the Ministry of Economic Development of Russia dated May 11, 2022 № 248 "On approval of the criteria and procedure for classifying projects implemented by legal entities, individual entrepreneurs or individuals, as climate projects, the form and procedure for reporting on the implementation of a climate project" (Registered with the Ministry of Justice of Russia on May 30, 2022 № 68642).

3 GOST R ISO 14064-1-2021. National Standard of the Russian Federation. Greenhouse gases. Part 1. Requirements and Guidance for Quantification and Reporting of Greenhouse Gas Emissions and Absorption at the Organization Level (approved and enacted by Rosstandart Order No. 1029-st dated 30.09.2021).

4 GOST R ISO 14064-2-2021. National Standard of the Russian Federation. Greenhouse gases. Part 2. Requirements and Guidelines for Quantification, Monitoring and Reporting Documents

for Projects to Reduce Greenhouse Gas Emissions or Increase Their Absorption at the Project Level (approved and enacted by Order No. 1030-st of Rosstandart dated September 30, 2021).

5 GOST R ISO 14064-3-2021. National Standard of the Russian Federation. Greenhouse gases. Part 3. Requirements and Guidance for Validation and Verification of Greenhouse Gas Statements (approved and enacted by Rosstandart Order No. 1031-st of 30.09.2021).

6 GOST R ISO 14065-2014 National Standard of the Russian Federation. Greenhouse gases. Requirements for greenhouse gas validation and verification bodies for their application in accreditation or other forms of recognition (approved and enacted by Order of Rosstandart of 26.11.2014 № 1869-st).

7 GOST R ISO 14066-2013. National Standard of the Russian Federation. Greenhouse gases. Requirements for competence of greenhouse gas validation and verification groups (approved and enacted by Order of Rosstandart of 17.12.2013 № 2274-st).

8 GOST R ISO 14080-2021. National Standard of the Russian Federation. Greenhouse Gas Management and Related Activities. System of approaches and methodological support for the implementation of climate projects (approved and enacted by Order of Rosstandart No. 1033-st dated 30.09.2021).

9 Order of the Ministry of Natural Resources of Russia dated May 27, 2022 № 371 "On approval of methods for quantitative determination of greenhouse gas emissions and greenhouse gas removals" (from March 1, 2023, except for certain provisions, coming into force on March 1, 2024).

10 Order of the Ministry of Natural Resources of the Russian Federation dated June 30, 2015 №300 "On approval of methodological guidelines and guidelines for quantitative determination of greenhouse gas emissions by organizations engaged in economic and other activities in the Russian Federation" (until March 1, 2023).

11 Order of the Ministry of Natural Resources and Environment of Russia dated June 29, 2017 "On approval of methodological guidelines for quantification of indirect energy emissions of greenhouse gases"

12 IPCC 2006. Guidelines for National Greenhouse Gas Inventories of the Intergovernmental Panel on Climate Change, 2006 / Edited by S. Iggleston, L. Buendia, K. Miwa, T. Ngara and K. Tanabe. // T.1-5. - IGES// Hayyam. 2006.

13 Decree of the Government of the Russian Federation of 08.11.2012 № 1148 "On peculiarities of the calculation of payment for emissions of pollutants generated by flaring and (or)

dispersion of associated petroleum gas" (As amended by the Government of the Russian Federation of 17.12.2016 № 1381, from 28.12.2017 № 1676, from 13.12.2019 № 1667).