Parex Resources (Colombia) AG Sucursal y Verano Energy (Switzerland) AG Sucursal

Independent practitioner's limited assurance report on the Greenhouse Gas (GHG) Statement for the period ended December 31, 2023

Independent practitioner's reasonable assurance report on Parex Resources (Colombia) AG Sucursal and Verano Energy (Switzerland) AG Sucursal's Greenhouse Gas (GHG) statement

To the Board of Directors and Management of Parex Resources Inc. and its Subsidiaries

Report on GHG Statement

We have undertaken a reasonable assurance engagement of the accompanying Greenhouse Gas Inventory Report 2023 of Parex Resources (Colombia) AG Sucursal and Verano Energy (Switzerland) AG Sucursal, (hereinafter the "Companies") for the year ended on December 31, 2023, comprising the Greenhouse Gas Emissions Inventory, the Ozone Precursor Gases Inventory and the Explanatory Notes (hereinafter the "GHG Statement"). This engagement was conducted by a multidisciplinary team including assurance practitioners, engineers, and environmental experts.

Companies' responsibility for the GHG statement

Parex Resources (Colombia) AG Sucursal and Verano Energy (Switzerland) AG Sucursal are responsible for the preparation of the GHG statement in accordance with the criteria included on Annex I (Reasonable assurance criteria regarding the Greenhouse Gas Emissions (GEI) and Ozone Precursor Gases), applied as explained in Note "F" to the GHG statement. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of a GHG statement that is free from material misstatement, whether due to fraud or error.

As discussed in Note "P" to the GHG statement, GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

Our independence and quality management

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

PwC Contadores y Auditores S.A.S., Calle 100 No. 11A-35, Bogotá, Colombia Tel: (60-1) 7431111, www.pwc.com/co

Parex Resources (Colombia) AG Sucursal and Verano Energy (Switzerland) AG Sucursal

Independent practitioner's limited assurance report on the Greenhouse Gas (GHG) Statement for the period ended December 31, 2023

Our responsibility

Our responsibility is to express an opinion on the GHG statement based on the evidence we have obtained. We conducted our reasonable assurance engagement in accordance with International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements ('ISAE 3410'), issued by the International Auditing and Assurance Standards Board. That standard requires that we plan and perform this engagement to obtain reasonable assurance about whether the GHG statement is free from material misstatement.

A reasonable assurance engagement in accordance with ISAE 3410 involves performing procedures to obtain evidence about the quantification of emissions and related information in the GHG Statement. The nature, timing and extent of procedures selected depend on the practitioner's judgment, including the assessment of the risk of material misstatement, whether due to fraud or error, in the GHG statement. In making those risk assessments, we considered internal control relevant to the companies' preparation of the GHG Statement. A reasonable assurance engagement also includes:

- Assessing the suitability in the circumstances of the companies' use of the criteria included in Annex I (Reasonable assurance criteria regarding the Greenhouse Gas Emissions (GEI) and Ozone Precursor Gases), applied as explained in Note "F" of the GHG Statement, as the basis for preparing the GHG Statement.

- Evaluating the appropriateness of quantification methods and reporting policies used, and the reasonableness of estimates made by the companies; and

- Evaluating the overall presentation of the GHG Statement.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the GHG statement for the year ended on December 31,2023 is prepared, in all material respects, in accordance with the criteria included on Annex I (Reasonable assurance criteria regarding the Greenhouse Gas Emissions (GEI) and Ozone Precursor Gases), attached to this report applied as explained in Note "F" to the GHG Statement.

Parex Resources (Colombia) AG Sucursal and Verano Energy (Switzerland) AG Sucursal

Independent practitioner's limited assurance report on the Greenhouse Gas (GHG) Statement for the period ended December 31, 2023

Restriction on distribution and use

Our report has been prepared solely for the Board of Directors and management of Parex Resources Inc. and its Subsidiaries for its presentation by the Management of Parex Resources (Colombia) AG Sucursal and Verano Energy (Switzerland) AG Sucursal and is not to be used for any other purpose or to be distributed to any other parties. We permit the disclosure of this report within the Greenhouse Gas Emissions Inventory Report 2023, to enable the directors to demonstrate they have discharged their governance responsibilities by commissioning an independent assurance report in connection with the Greenhouse Gas Emissions Inventory Report 2023. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors as a body of governance and the Management of Parex Resources Inc. for our work or this report save where terms are expressly agreed and with our prior consent in writing.

Judith Chica M.
Accountant
Professional License No. 47884-T
PwC Contadores y Auditores S. A. S.
June 27, 2024

Note: The maintenance and integrity of the Parex Resources Inc. website (www.parexresources.com) repository of the Greenhouse Gas Emissions Inventory Report 2023, is the responsibility of the Company's Administration. The work carried out by PwC does not involve the consideration of these matters and, accordingly, PwC accepts no responsibility for any differences between the information presented on the website and in the Greenhouse Gas Emissions Inventory Report 2023 issued by the Companies on which said assurance was made and the conclusion was issued.

Annex I

Reasonable assurance criteria regarding the Greenhouse Gas Emissions (GEI) and Ozone Precursor Gases

Indicators subject to reasonable assurance	Criteria
Direct GHG emissions - Scope 1	The Company's Management includes in its Greenhouse Gas Inventory 2023 (hereinafter Inventory), the result of the quantification of its GHG Scope 1 emissions generated within the framework of its activities, for the period from January 1 to December 31, 2023 (hereinafter, the year under review or the year under assurance), for the companies Parex Resources Colombia AG Sucursal and VERANO ENERGY (SWITZERLAND) AG SUCURSAL (hereinafter the reporting companies), according to the GHG emissions estimation methodology of the IPCC (2006) and under the guidelines of the Colombian Technical Standard ISO 14064-1, as follows: Inventory Scope 1 refers to the direct emissions generated by the facilities' production and administrative activities within the organizational boundaries of the companies, reporting information on the operational areas (extraction blocks) and offices, in which activities associated with the emission of Greenhouse Gases (GHG) Scope 1 of the reporting companies during the year under review are carried out, as follows: ● Barrancabermeja Office ● Bogotá Office ● Saravena Office ● Tame Office ● Tauramena Office ● Yopal Office ● Aguas Blancas ● Arauca Block ● Boranda Block ● Cabrestero Block ● Capachos Block ● Fortuna Block ● Llanos Blocks: 16, 26, 30, 32, 40 and 81 ● Los Ocarros Block ● VIM Blocks: 43 and 1 Block This value is obtained by calculating the total direct GHG emissions, generated by the reporting companies, of the gases Carbon Dioxide (CO2), Methane (CH4), Nitrous Oxide (N2O) and Hydrofluorocarbons (HFC), including R-22, R-410A and R-422D, as established in the document "Informe Inventario GEI 2023 Parex.pdf", provided by the Sustainability Area of Parex. To calculate the emissions associated with each gas, the method based on emission factors is used, which consists of combining the information on the extent to which a human activity takes place (called activity data or AD) with the coefficients that quantify the emissions or removals per unit

activity, called emission factors (EF). All emissions are expressed in tons of carbon dioxide equivalent [tCO2e] which are calculated for each gas from its respective Global Warming Potential [GWP]. Therefore, the basic equation is:

Emissions = AD * EF * GWP

In accordance with the above, Scope 1 emissions are calculated according to the following formula:

Direct GHG emissions (Scope 1) in tCO2e = *tCO2e from fuel combustion activities + tCO2e from emissions associated with flaring + tCO2e from emissions associated with venting + tCO2e from other fugitive emissions associated with leaks in valves and connection points + tCO2e from fugitive emissions from refrigeration systems, stationary air conditioning and fire extinguishers + tCO2e from fugitive emissions from transporting crude oil and gas in flow lines + tCO2e from fugitive emissions associated with the transport of crude oil and gas in flow lines.*

The elements included in the above formula are detailed below:

- ● **Ton of CO2 equivalent emissions by fuel burning activities:** corresponds to the fuel consumption (Diesel, crude oil, LPG and natural gas) used in the aforementioned operating areas, during the period under review, multiplied by the density, calorific value and emission factors included in Tables 2 and 4 presented in this criterion. These values have been defined by the Intergovernmental Panel on Climate Change (hereinafter IPCC, 2006) and the Colombian Fuel Emission Factors FECOC (2016) for each type of fuel. Emission factors are expressed in mass units per volumetric unit and are converted using the International Metric System and the references of the metrology unit of the Superintendence of Industry and Tourism of Colombia. The above information is established as presented in the documents "Informe Inventario GEI 2023 Parex.pdf" and "Cálculos Inventario GEI 2023 Parex.xlsx", both managed by the Sustainability Area.

    - Bogotá Office (Personnel transportation)
    - Aguas Blancas Block
    - Arauca Block
    - Boranda Block
    - Cabrestero Block
    - Capachos Block
    - Fortuna Block
    - Llanos Blocks: 26, 30, 32, 40 and 81
    - Los Ocarros Block
    - VIM: 43 and 1 Blocks

    For the consolidation of emissions from fuel combustion activities for power generation in tCO2e, the following formula is applied:

	*Tons of CO2 equivalent emissions= Ton CO_2 + (Ton CH_4*GWP) + (Ton N_2O*GWP)* ● **Ton of CO2 equivalent emissions due to fugitive emissions from refrigeration, air conditioning and fire extinguishing systems:** corresponds to the values of leaks in refrigeration, air conditioning and fire extinguishing equipment used in production activities in the blocks concessioned to the reporting companies, which are as follows: ● Barrancabermeja Office ● Saravena Office ● Tame Office ● Yopal Office ● Arauca Block ● Cabrestero Block ● Capachos Block ● Llanos Blocks: 16, 26, 30, 32, 40 and 81 ● Los Ocarros Block ● VIM: 1 Block For the estimation of emissions associated with refrigeration and air conditioning equipment, the average leakage of refrigerant gas reported by equipment manufacturers is considered, which corresponds to about 3% per year in commercial equipment with a capacity between 0.5 and 100 kilograms of refrigerant, according to the IPCC 2006 guidelines. The calculation of emissions includes the number of equipment used in the aforementioned operational areas and corresponds to the leakage of each gas multiplied by the global warming potentials of each gas, as reported by the IPCC 2007, Dupont 2022 and the GHG Protocol, included in Table 4 presented in this criterion. For the consolidation of emissions in tons of CO2 equivalent, the following formula is applied: *Tons of CO2 equivalent emissions= Ton CO_2 + (Ton HFC R-22*GWP) + (Ton HFC R-410A*PCG) + (Ton HFC R-422D*GWP)* ● **Ton of CO2 equivalent emissions associated with flaring:** corresponds to the values of emissions from the flaring of the gas generated (in cubic feet - SCF) in the extraction of crude oil, recorded in the COREX platform in the following blocks: ● Aguas Blancas Block ● Arauca Block ● Boranda Block ● Capachos Block ● Fortuna Block ● Llanos Blocks: 26, 30, 32, 40 and 81

	● VIM: 1 Block The calculation of emissions corresponds to the amount of gas burned multiplied by the emissions factor determined for each gas, included in Table 3, provided by the IPCC (2006) for the categories associated with fugitive emissions, as established in the documents "Informe Inventario GEI 2023 Parex.pdf" and "Calculos Inventario GEI 2023 Parex.xlsx", both managed by the Sustainability Area. For the consolidation in tons of CO2 equivalent, the following formula is applied, using the global warming potentials established by the IPCC 2007, Dupont 2022 and the GHG Protocol, included in Table 4 presented in this criterion *Tons of CO2 equivalent emissions = Ton CO_2 + (Ton CH_4*GWP) + (Ton N_2O*GWP)* ● **Ton of CO2 equivalent emissions associated with venting:** refers to the values of gas (m3) released into the atmosphere in the following blocks of operation: ● Aguas Blancas Block ● Arauca Block ● Boranda Block ● Cabrestero Block ● Capachos Block ● Fortuna Block ● Llanos Blocks: 26, 30, 32, 40 and 81 ● Los Ocarros Block ● VIM: 1 Block The calculation of venting emissions corresponds to the annual values of natural gas released in the aforementioned operating areas during the period under review. Its estimation was made based on the records associated with a factor calculated from the volume of emissions estimated by the inspection campaign with OGI-QOGI technology and crude oil production for the year 2022. Under these methodologies, only methane (CH4) emissions are considered as they are the most significant in quantity. The above is established in the documents "Informe Inventario GEI 2023 Parex.pdf" and "Calculos Inventario GEI 2023 Parex.xlsx" managed by the Sustainability Area. For the consolidation in tons of CO2 equivalent, the following formula is applied, using the global warming potentials established by the IPCC 2007, Dupont 2022 and the GHG Protocol, included in Table 4 presented in this criterion. *Tons of CO2 equivalent emissions = (Ton CH_4*GWP)*

	• **Tons of CO2 equivalent emissions associated with leaks in valves and connection points (other fugitive process emissions):** these refer to leaks that occur in equipment, valves and seals during the production of gas and crude oil. The calculation corresponds to the amount of gas and crude oil produced (without counting the amounts consumed and/or flared) that pass through the different production processes and plants of the company, multiplied by the emissions factor determined for each gas, included in Table 3, as established in the documents "Informe Inventario GEI 2023 Parex.pdf" and "Calculos Inventario GEI 2023 Parex.xlsx", both managed by the Sustainability Area. The blocks included in the calculation were as follows**:**l • Aguas Blancas Block • Arauca Block • Boranda Block • Capachos Block • Fortuna Block • Llanos Blocks: 26, 30, 32, 40 y 81 • Los Ocarros Block • VIM:1 Block The production leakage estimate was made using a factor calculated from the volume of emissions estimated by the inspection campaign with OGI-QOGI technology and the crude oil production for the year 2022. Under these methodologies, only methane (CH4) emissions are considered as they are the most significant in quantity. The above is established in the documents "Informe Inventario GEI 2023 Parex.pdf" and "Calculos Inventario GEI 2023 Parex.xlsx", managed by the Sustainability Area. For the consolidation in tons of CO2 equivalent, the following formula is applied, using the global warming potentials established by the IPCC 2007, Dupont 2022 and the GHG Protocol, included in Table 4 presented in this criterion. *Tons of CO2 equivalent emissions = (Ton CH_4*GWP)* • **Ton of CO2 equivalent emissions associated with the transportation of crude oil and gas in flow lines:** refers to the values of leaks that occur in vehicles during the transportation of gas and crude oil from the production activities of the reporting companies. In the estimation of fugitive emissions, the IPCC (2006) emission factors were used for the gases associated with fugitive emissions, which are presented in Table 3 of this criterion. The blocks included in the calculation are presented as follows: • Aguas Blancas Block • Cabrestero Block • Capachos Block • Llanos: 32 Block • Los Ocarros Block • Bloues VIM: 1 Block

The calculation of fugitive emissions generated in the transportation of crude oil and gas in flow lines corresponds to the multiplication of the determined emissions factor by the amount of gas [m^3] or crude oil [barrels] transported. For the consolidation in tons of CO_2 equivalent, the following formula is applied, using the global warming potentials established by the IPCC 2007, Dupont 2022 and the GHG Protocol, included in Table 4 presented in this criterion.

*Tons of CO_2 equivalent emissions = Ton CO_2 + (Ton CH_4*GWP)*

Considering all of the emission sources described above, the gases included in the calculation correspond to:

Emission source	CO_2	CH_4	N_2O	Refrigerant gases *
Fuel burning	✓	✓	✓	
Flaring of flared gas	✓	✓	✓	
Emissions associated with venting		✓		
Fugitive emissions associated with leaking valves and connection points.		✓		
Fugitive emissions from transport of crude oil and gas in flowlines	✓	✓		
Fugitive emissions from stationary refrigeration and air-conditioning systems				✓

Table 1. Greenhouse gases included in the calculations by source.
* Refrigerant gases correspond to HFC MO29 (R-422D), R-22 and R-410A.

The emission factors, global warming potentials and conversion factors used in the calculations are as follows:

Fuel type	Density	Net calorific value	EF CO_2	EF CH_4	EF N_2O
Crude Oil of Castile (Crude)	0.9414 kg/liter	40,670.46 kJ/kg	11.282 kg/gal	0.030 g/gal	0.006 g/gal
Stationary Diesel	0.86 kg/liter	42,149.66 kJ/kg	10.277 kg/gal	0.010 g/gal	0.06 g/gal
Generic Natural Gas (Gas)	0.78 kg/m^3	39.4987 MJ/m^3	1.98 kg/m^3	0.036 g/m^3	0.004 g/m^3
Generic LPG (LPG)	0.54 kg/liter	45.4145 MJ/kg	3.051 kg/kg	0.000005 g/kg	0.000001 g/kg

Tabla 2. Factores de emisión, densidad y poder calorífico por combustible para fuentes estacionarias.

Category	EF CH_4	EF CO_2	EF N_2O	Unit
Pipeline transportation of crude oil	0.0000054	0.00000049	N/A	Gg per 1,000 m^3 of oil transported by pipeline
Pipeline transport of gas	0.0000166	0.00000088	N/A	Gg per 1,000,000 m^3 of marketable gas
Gas flaring (flaring)	0.012	2	0.000023	Gg per 1,000,000 m^3 of flared gas

Table 3. Emission factors for fugitive emissions associated with the transportation of crude oil and gas and emissions associated with flaring**.**

Gas	Global warming potential
CO_2	1 (IPCC, 2007)
CH_4	25 (IPCC, 2007)
N_2O	298 (IPCC, 2007)
HFC: R-410A	2.088 (IPCC, 2007)
HCFC: R-22	1.810 (IPCC, 2007)
2729	2.230 (IPCC, 2007)

Table 4. Global warming potentials due to greenhouse gases.

Units	Conversion
Gallon to liter	3.78541
KPC to m^3	28.31685
Barrel to gallon	42
SPC to m^3	0.02831685
Barril to m^3	0.1589873

Table 5. Unit conversion factors used in calculations.

Additionally, the reporting of biogenic CO_2 emissions corresponds to the tons of CO_2 equivalent from the combustion of biofuels. These emissions are also reported separately from the gross value of emissions (in addition to being included in the total), as established by the IPCC (2006), and biogenic emissions of other types of GHGs (such as CH_4 and N_2O) are excluded. In this case, diesel and gasoline are marketed in Colombia with an approximate 10% biofuel content, so the calculation of biogenic emissions corresponds to the total emissions from burning CO_2 in fuels for power generation, multiplied by 10% as established in the documents "Informe Inventario GEI 2023 Parex.pdf" and "Calculos Inventario GEI 2023 Parex.xlsx", both managed by the Sustainability Area.

The base year for the calculation is 2019, a decision made by the company in order to have a reference year for the future. In addition, it is understood that there were no significant changes that imply new calculations of the base year emissions.

The reporting company considers operational control as an approach to consolidate emissions. Such operational limits are defined in the table below, and are related to the sources of emissions described above, as established in the document "Informe Inventario GEI 2023 Parex.pdf", managed by the Sustainability Area.

Organization activities	Associated emission source
Administrative activities	Air conditioning and fire extinguishers
	Natural gas consumption
	Ground transportation of personnel
Oil and gas production	Stationary and mobile diesel consumption
	Gas consumption
	Crude oil consumption
	LPG consumption
	Flaring
	Venting
	Fugitive emissions gas and crude oil transportation

Table 6. Activities and emission sources associated with the organization's direct, or Scope 1, emissions.

Finally, in relation to the calculation of the uncertainty associated with the source, the methodology, or good practices, of the IPCC 2006 according to the Conceptual Basis for Uncertainty Analysis and the uncertainties associated with the values reported for each of the default data (data generated in other investigations) that were used were used. The total uncertainty for the total inventory was estimated according to the following equation (IPIECA 2011):

$$t = \frac{\sqrt{(A \times a)^2 + (B \times b)^2 + \ldots + (N \times n)^2}}{T}$$

	Where: t: Total uncertainty T: Total greenhouse gas emissions. A= category A emissions, a=uncertainty of category A emissions B= category B emissions, b=uncertainty of category B emissions, … N= category N emissions, n=uncertainty of category N emissions. The scope of the assurance work is limited to the cross-checking of the information reported in the GHG Inventory, in relation to the sources mentioned in the criterion, provided by the Sustainability Area (which consolidates this information from the records and reports of the other areas of the companies); to the validation, on a sample basis, of the existence of source data for the calculation; and to the recalculation of the final values according to the formulas established in the criterion and based on the information included in said sources, for the selected samples; and the recalculation of the final values according to the formulas established in the criterion and based on the information included in said sources, for the selected samples; and does not include the evaluation of the reasonableness or suitability of the sources, emission factors, calorific values, densities and global warming potentials mentioned in the criterion, the evaluation of the integrity of the information sources used for the calculation in the year under review, nor the evaluation of the occurrence of the events that gave rise to the report.
Indirect GHG emissions - Scope 2	The Company's Management includes in its Greenhouse Gas Inventory 2023 (hereinafter Inventory), the result of the quantification of its Scope 2 GHG emissions generated within the framework of its activities, for the period from January 1 to December 31, 2023 (hereinafter, the year under review or the year under assurance), for the Companies Parex Resources Colombia AG Branch, Parex Verano Limited Branch and Parex Resources Inc.), according to the IPCC (2006) GHG emissions estimation methodology, under the guidelines of the Colombian Technical Standard ISO 14064-1, and complemented with the definitions established by management, as presented below: Scope 2 of the inventory refers to indirect emissions from the external generation of electrical energy that is consumed within the organization, as part of the operational and administrative activities of the facilities within the boundaries of the reporting companies. The following emission sources are identified: ● **National Interconnected System of Colombia:** corresponds to energy consumption in kWh from the electrical grid, which is generated mainly in hydroelectric and thermoelectric plants, for the following locations in Colombian territory. Emissions due to energy losses in the electric power transmission network are not included. a) Barrancabermeja Office b) Bogotá Office c) Saravena Office d) Tame Office e) Tauramena Office f) Yopal Office

g) Aguas Blancas Block
h) Arauca Block
i) Cabrestero Block
j) Capachos Block

- **National Energy System of Canada:** corresponds to energy consumption in kWh from the electricity grid, which is generated mainly in thermoelectric plants, for the following locations in the city of Calgary. Emissions from energy losses in the power transmission grid are not included..
  a) Oficina Calgary

The total value of the GHG Scope 2 emissions corresponds to the sum of the total indirect GHG emissions calculated for each emission source through the application of the following formula:

Indirect GHG emissions (Scope 2) in tons of CO_2e = *tons of CO_2 equivalent emissions from electricity consumption of the National Interconnected System of Colombia + tons of CO_2 equivalent emissions from electricity consumption of the National Energy System of Canada.*

The gases included in the calculation of direct GHG emissions are: Carbon Dioxide (CO_2) and, additionally, for the case of Canada, Methane (CH_4) and Nitrous Oxide (N_2O). In the GHG estimation, the emission factors provided by the entities responsible for such information were used. In the case of Colombia, the emission factor corresponds to that reported by the Mining and Energy Planning Unit (UPME per its Spanish acronym) in 2023 for the National Interconnected System. In the case of the Calgary office, the emission factors correspond to those reported by the Canadian Government in the National Greenhouse Gas report. This information is presented in the following table:

	CO_2 emission factor	CH_4 emission factor	N_2O emission factor
Colombian National Interconnected System (UPME)	0.1728 kg CO_2/kWh	-	-
Canadian National Energy System (Canadian Government)	540 g CO_2/kWh	0.01 g CH_4/kWh	0.003 g N_2O/kWh

Table 7. Emission factors associated with electric power consumption by country used in calculations.

The calculation of the emissions generated corresponds, then, to the multiplication of the emissions factor determined for each gas by the value of electric energy consumption. For the consolidation in tons of CO_2 equivalent, the emissions generated for each gas are added once each of these is multiplied by the Global Warming Potential (GWP) of the gas. The potentials for each gas are presented in Table 4 of this document.

	The reporting company considers operational control as an approach to consolidate emissions. The above is presented in accordance with the Greenhouse Gas Inventory 2023 of the reporting companies, which can be found in the document "Informe Inventario GEI 2023 Parex.pdf", as well as the detail of the calculations presented in the file "Calculos Inventario GEI 2023 Parex.xlsx", where the Emission Factors (EF), Global Warming Potentials and consumption data and other data used to estimate emissions can be found. Both documents are managed by the Sustainability Area. The scope of the assurance work is limited to the cross-checking of the information reported in the Inventory against the sources mentioned in the criterion, provided by the Sustainability Area, to the validation and recalculation of the formulas established in the criterion based on the information included in those sources, and does not include the evaluation of the reasonableness of the recalculation of the sources mentioned in the criterion, nor the evaluation of the occurrence of the events that gave rise to the report..
Other indirect GHG emissions - Scope 3	The Company's Management includes in its Greenhouse Gas Inventory 2023 (hereinafter Inventory), the result of the quantification of its Scope 3 GHG emissions generated within the framework of its activities, for the period from January 1 to December 31, 2023 (hereinafter, the year under review or the year under assurance), for the Companies Parex Resources Colombia AG Branch, Parex Verano Limited Branch and Parex Resources Inc. in accordance with the GHG emissions estimation methodology of the IPCC (2006) and under the guidelines of the Colombian Technical Standard ISO 14064-1, as presented below: Scope 3 of the inventory refers to other indirect emissions included based on the needs of the reporting companies and are directly related to their operations in the areas of production, drilling, civil works, facilities, seismic, environmental impact studies, workover-completion (WO/CO), marketing, transportation and administrative offices in Colombia and Canada. These locations are detailed below: ● Barrancabermeja Office ● Bogotá Office ● Calgary Office ● Saravena Office ● Tame Office ● Tauramena Office ● Yopal Office ● Aguas Blancas Block ● Arauca Block ● Boranda Block ● Cabrestero Block ● Capachos Block ● Cerrero Block ● CPO4 Block ● Fortuna Block ● Llanos Blocks: 16, 17, 26, 30, 32, 38, 40, 81, 94, 95, 111 and 122 ● Los Ocarros Block ● VIM Blocks: 43 and 1 ● VSM Blocks: 13,14 and 37

The total value of GHG Scope 3 emissions corresponds to the sum of the total of other indirect GHG emissions calculated for each emission source through the application of the following formula:

Other indirect GHG emissions (Scope 3) in tCO_2e = *tCO_2e from third-party fuel combustion activities + tCO_2e from fugitive emissions from third-party refrigeration and air conditioning systems + tCO_2e from fuel transportation + tCO_2e from air transportation of personnel + tCO_2e ground transportation of personnel + tCO_2e from transport of machinery + tCO_2e from paper use + tCO_2e from wastewater treatment and disposal + tCO_2e from solid waste handling and treatment + tCO_2e from fugitive emissions associated with crude oil transportation + tCO_2e from fugitive emissions associated with gas transportation + tCO_2e from Refining the crude oil produced + tCO_2e from the use of the products sold.*

The elements included in the above formula are as follows:

I. **Third party fuel combustion:** corresponds to the consumption of fuel (diesel) used in Workover/Completion (WO/CO) activities, Facilities, drilling and administrative offices belonging to the reporting companies during the period under review, the detail of these facilities is presented below:

- Drilling:
  - Arauca Block
  - Cabrestero Block
  - Llanos: 26 and 81 Blocks
  - VIM: 43 Block
- Administrative:
  - Calgary (Gas) Office
- WO/CO
  - Aguas Blancas Block
  - Boranda Block
  - Cabrestero Block
  - Capachos Block
  - Fortuna Block
  - Llanos Blocks: 26, 30, 32, 40 and 81
  - Los Ocarros Block
  - VIM Blocks: 43 and 1
- Seismic

The gases included in the calculation of indirect GHG emissions from fuel combustion are: Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O). In the estimation CO_2 emission factors, density and caloric values provided by IPCC (2006) and fuel emission factors FECOC (2016) for each type of fuel were used as a basis for calculation.

The calculation of the value of indirect emissions from the combustion of third party fuels corresponds to the multiplication of the emissions factor determined for each gas by the fuel consumption value. For the consolidation in tons of CO2 equivalent, the emissions generated for each gas are added once each of these is multiplied by the Global Warming Potential (GWP) of the gas. The factors and potentials used are included in Tables 2 and 4 presented in the Scope 1 indicator criteria.

II. **Fugitive emissions from refrigeration and air conditioning systems and discharge of third party fire extinguishers:** refers to the values of leaks in refrigeration and air conditioning equipment used in drilling activities belonging to the reporting companies during the period under review, as well as the discharge of Carbon Gas type fire extinguishers. The detail of such facilities is presented below:

- **Drilling:**
  a) Arauca Block
  b) Cabrestero Block

The gases included in the calculation of indirect GHG emissions associated with refrigeration and air conditioning equipment are hydrofluorocarbons (HFCs) and hydrochlorofluorocarbons (HCFCs), including refrigerants R-22, R-410a and R-422d. To estimate emissions, the average leakage of refrigerant gas reported by equipment manufacturers was considered, where it is averaged that about 3% of the gas is lost each year in commercial equipment with capacity between 0.5 and 100 kilograms of refrigerant. The number of equipment and type of gas used in the aforementioned activities during the period under review is considered. Emissions associated with the discharge of fire extinguishers were quantified based on the capacity of the extinguisher and the agent used (carbon dioxide gas). For the calculation, corresponding to the multiplication of the factor determined for each gas by the amount of leakage to obtain the CO_2e, value, the global warming potential data included in Table 4 of the Scope 1 indicator criteria were used.

III. **Fuel transportation (crude oil and gas):** refers to the fuel consumption of vehicles used by third parties to transport crude oil and gas produced by the reporting companies during the period under review, calculated based on the performance values according to the type of vehicle and kilometers traveled. The areas that report and are included in the calculation are as follows:

- Production:
  a) Cabrestero Block
  b) Capachos Block
  c) Fortuna Block
  d) Llanos 26 Block
  e) Llanos 30 Block
  f) Llanos 32 Block
  g) Llanos 40 Block
  h) Llanos 81 Block
  i) Los Ocarros Block
  j) VIM 1 Block

The gases included in the calculation of indirect GHG emissions associated with fuel transportation are: Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O). To estimate emissions CO_2, emission factors, density and calorific values from FECOC (2016) for diesel and natural gas were used. Methane and nitrous oxide emission factors were taken from IPCC (2006) for diesel and aviation fuel, which are presented in the following table:

Fuel type	Density [Kg/l]	Net calorific value	EF CO_2	EF CH_4	EF N_2O
Diesel B10 / mobile (light vehicle)	0.86	42,149.66 kJ/kg	10.277 kg/gal	0.037 g/gal	0.037 g/gal
Diesel B10 / mobile (heavy vehicle)	0.86	42,149.66 kJ/kg	10.277 kg/gal	0.037 g/gal	0.037 g/gal
Gasolina / mobile (light vehicle)	0.74	40,659.33 kJ/kg	8.808 kg/gal	0.293 g/gal	0.028 g/gal
Gasolina / mobile (heavy vehicle)	0.74	0.000045329 TJ/kg	8,808 kg/gal	0.293 g/gal	0.028 g/gal
Fuel JET A1 / mobile	0.83	3.55769E-05 TJ/kg	9.84 kg/gal	0.5 kg/TJ	2 kg/TJ
Natural gas vehicles	Not indicated	Not indicated	1.98 kg/m^3	3.28 g/m^3	0.107 g/m^3

Table 8. Emission factors, density and calorific value by fuel for mobile sources.

For consolidation in tons of CO_2 equivalent, the emissions generated for each gas are summed after multiplying each of these by the Global Warming Potential (GWP) of the gas. The potentials for Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O) are previously mentioned in Table 4 presented in the Scope 1 indicator criteria.

IV. **IV. Air and ground transportation of personnel:** refers to fuel consumption of vehicles used for ground and air transportation of personnel of the reporting companies during the period under review. Emissions from private or public ground transportation of employees in Bogotá were not calculated. The values reported are grouped under the following categories, as follows:

- Ground transportation associated with mobilizations to carry out environmental feasibility activities in the blocks.:
  a) Aguas Blancas Block
  b) Arauca Block
  c) Boranda Block
  d) Cabrestero Block

e) Capachos Block
f) Cerrero Block
g) Llanos: 16, 17, 26, 30, 32, 38, 40, 81, 94, 95, 111 and 122 Blocks
h) Los Ocarros Block
i) VIM: 43 and 1 Blocks

- Consolidated domestic air transportation under the Bogotá office (commercial and private charter and helicopter flights).
- Consolidated international air transportation under the Calgary office

The gases included in the calculation of indirect GHG emissions associated with the transportation of personnel by land and air are: Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O). To estimate emissions CO2 emission factors, density and caloric values from FECOC (2016) were used. The methane and nitrous oxide emission factors were taken from IPCC (2006) for each type of fuel (diesel and aviation fuel), which are presented in Table 8 of numeral III of this criterion.

Specifically, in the case of emissions associated with flights attributed to the Calgary and Bogotá offices, we consider the consumption of gallons of jet fuel attributable to Parex passengers, calculated as the number of gallons consumed in the flight (based on the flight kilometers traveled, divided by an efficiency of 2.92 km/gal) multiplied by the proportion of passengers on the flight belonging to the company.

The calculation of the value of indirect GHG emissions from the transportation of personnel took into account the record of kilometers flown, flight hours and airline tickets purchased (origin and destination) and the associated fuel gallon consumption. For the consolidation in tons of CO_2 equivalent, the emissions generated for each gas are added once each of these is multiplied by the Global Warming Potential (GWP) of the gas. The potentials for Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O) are previously mentioned in Table 4 presented in the Scope 1 indicator criteria.

V. Transportation of machinery: refers to the fuel consumption of vehicles used in the transportation of machinery during the period under review. The areas and facilities that report and are included in the calculation are as follows:

- Civil works:

a) Arauca Block
b) Boranda Block
c) Cabrestero Block
d) Capachos Block
e) Llanos: 26, 30, 32, 81, 94, and 122 Block
f) VIM: 1 Block

- Civil works:

a) Arauca Block
b) Boranda Block
c) Cabrestero Block
d) Capachos Block

	e) Llanos: 26, 40,and 81 Block f) VIM: 1 Block ■ WO/CO: a) Boranda Block b) Cabrestero Block c) Capachos Block d) Llanos: 26, 30, 32, 40 and 81 Block e) Los Ocarros Block f) VIM: 43 and 1 Block ■ Environmental viability: a) Arauca Block b) Cabrestero Block c) Capachos Block d) Llanos Blocks: 38, 81, 111 and 122 e) VIM Blocks: 43 y 1 f) VSM Blocks: 13,14 and 37 ■ Operations (Consolidated by vehicle type): a) Aguas Blancas Block b) Arauca Block c) Boranda Block d) Cabrestero Block e) Capachos Block f) Fortuna Block g) Llanos Block: 16, 26, 30, 32, 40 and 81 h) Los Ocarros Block i) VIM Blocks: 43 and 1 j) Yopal Office

The gases included in the calculation of indirect GHG emissions associated with transportation are: Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O). CO_2 emission factors, density and caloric values from FECOC (2016) were used to estimate emissions. Methane and nitrous oxide emission factors were taken from IPCC (2006) for diesel fuel, which are presented in Table 8 in Section III of this criterion.

The calculation of the value of indirect GHG emissions from the transportation of machinery takes into account the performance values according to the type of vehicle and the kilometers traveled to obtain the gallons of fuel used. or the consolidation in tons of CO_2 equivalent, the emissions generated for each gas are added once each of these is multiplied by the Global Warming Potential (GWP) of the gas. The potentials for Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O) are previously mentioned in Table 4 presented in the Scope 1 indicator criteria

The fuel efficiencies of different vehicles included in the calculation correspond to:

Vehicle type	Efficiency [km/gallon]
Pickup	35
Truck	11
Tanker	7
Bus	17.7
Commercial aircraft (A320)	4.13
Loader	14.5
Crane	14.5

Table 9. Vehicle fuel efficiency.

VI. **Use of paper:** refers to the values of paper (in kilograms) used for the administrative activities of the reporting companies during the period under review, the facilities included in the calculation are presented below:

- Bogotá Office
- Calgary Office

The GHG estimate for paper use was calculated with the records of paper purchases made during the period considered in this inventory. In this case, the Bogotá office is the one that consolidates the total paper consumption for the different offices located in the country.

The emission factor used in the calculation of indirect GHG emissions from the use of paper is 1.05 t CO_2e per-ton of paper. This value corresponds to the EF reported for a paper production industry that is supplied from forests planted for this purpose (Silva et al, 2015). The calculation of the emissions value associated with the use of paper corresponds to the multiplication of the emissions factor indicated by the total amount of paper purchased in the administrative offices during the period under review.

VII. **Wastewater treatment and disposal:** refers to the total volume of wastewater generated in the production areas, administrative activities, drilling, WO/CO, facilities and civil works of the reporting companies during the period under review.

To estimate the total volume of wastewater (industrial and domestic) produced, the wastewater delivery record (barrels) for treatment and final disposal in the fields that have such records is considered. In the other fields and administrative offices, the volume of wastewater generated is calculated based on the number of workers in each area, the number of days worked and the average daily protein consumption and generation of degradable organic matter reported by the IDEAM (2015) for the population of Colombia.

Details of these facilities are presented below:

- Administrative:
    a) Bogota Office
- Drilling:
    a) Arauca Block
    b) Cabrestero Block
    c) Llanos Blocks: 26, 81 and 122
    d) VIM Blocks: 43
- Facilities:
    a) Arauca Block
    b) Cabrestero Block
    c) Capachos Block
    d) Llanos Block: 26 and 40
    e) VIM Blocks: 1
- Civil Works:
    a) Arauca Block
    b) Cabrestero Block

c) Capachos Block
d) Fortuna Block
e) Llanos Blocks: 26, 81 and 122

- Operations

a) Aguas Blancas Block
b) Arauca Block
c) Boranda Block
d) Cabrestero Block
e) Capachos Block
f) Fortuna Block
g) Llanos Blocks: 26, 30, 32, 40 and 81
h) Los Ocarros Block
i) VIM Blocks:1

- WO/CO:

a) Aguas Blancas Block
b) Boranda Block
c) Cabrestero Block
d) Capachos Block
e) Llanos Blocks: 26, 30, 32, 40 and 81
f) Los Ocarros Block
g) VIM Blocks:1

For the calculation of GHG associated with the discharge of water into the sewage system and wastewater treatment in WWTPs, the amount of methane (CH_4) and nitrous oxide (N_2O) produced as a result of the degradation of organic matter present in the wastewater is initially estimated.

In the case of water discharged to sewage, data on the amount of nitrogen in protein (0.16 kg nitrogen/kg protein) and the approximate amount of protein consumed by a Colombian (23.36 kg/person/year; IDEAM, 2015) are used to estimate nitrous oxide emissions. This information was multiplied by the emission factor 0.005 kg N_2O-N/kg N.For methane, averages of degradable organic matter - Biochemical Oxygen Demand (BOD) (38.4 g/person/day) were used (IDEAM, 2015). Considering the receiving body of these waters, a methane correction factor of 0.3 (MCF) was used (IPCC, 2006 Considering the receiving body of these waters, a methane correction factor of 0.3 (MCF) was used (IPCC, 2006). The maximum methane production factor 0.6 kg CH4/ kg BOD (IPCC, 2006) was considered and an additional factor was included for the discharge of waste with protein coming from different locations' casinos (1.25).

The following variables and emission factors were used to estimate the emissions associated with the wastewater treatment plants: 3 kg COD/m3 (chemical oxygen demand/m3), 0.25 kg CH4/kg COD (maximum methane production capacity) and a correction factor of 0.05 (MCF) associated with the treatment system (WWTP).

The calculation of the value of indirect GHG emissions from wastewater treatment corresponds to the multiplication of the emission factor determined for each gas by the total volume of wastewater generated. For consolidation in tons of CO2 equivalent, the emissions generated for each gas are added once each of these is multiplied by the Global Warming Potential (GWP) of the gas. The potentials for Methane (CH_4) and Nitrous Oxide (N_2O) are previously mentioned in Table 4 presented in the Scope 1 indicator criteria.

VIII. **Management and treatment of solid waste:** refers to the total volume of solid waste generated in the production, drilling, WO/CO, seismic, facilities and civil works areas, as well as in the administrative headquarters of the reporting companies during the period under review. Details of these areas and facilities are presented below:

- Administrative:
  a) Bogotá Office
- Drilling:
  a) Boranda Block
  b) Capachos Block
  c) Llanos Block: 26, 81 and 122
  d) VIM Blocks: 43
- Facilities:
  a) Arauca Block
  b) Cabrestero Block
  c) Capachos Block
  d) Llanos Block: 26, 40 and 81
  e) VIM Blocks: 1
- Civil Works:
  a) Aguas Blancas Block
  b) Arauca Block
  c) Cabrestero Block
  d) CPO4 Block
  e) Fortuna Block

f) Llanos Block: 26, 32, 40, 94 and 122

- Operations

a) Aguas Blancas Block
b) Arauca Block
c) Boranda Block
d) Cabrestero Block
e) Capachos Block
f) Fortuna Block
g) Llanos Block: 26, 30, 32 and 40
h) Los Ocarros Block
i) VIM Blocks:1

- WO/CO:

a) Aguas Blancas Block
b) Arauca Block
c) Boranda Block
d) Cabrestero Block
e) Capachos Block
f) Llanos Blocks: 26, 30, 32 and 40
g) Los Ocarros Block
h) VIM Blocks:1

To estimate the total volume of waste generated in offices, facilities and civil works in Bogota, the number of workers and days worked at each site were used, as well as national statistics on waste generation and its composition provided by the Superintendence of Public Utilities of Colombia (2015).

Regarding solid waste from production areas and work camps, the records of kilograms of waste delivered to third parties for treatment and final disposal were used. Glass, metal and plastic waste is separated and reenters the value chain of the different products. Emissions associated with the decomposition of paper, cardboard, textiles and organic waste are estimated from the weight records of each of these wastes collected at the work camps.

Two disposal methods are considered for GHG estimation

- Solid waste disposal in landfills:

  A first order decomposition model is used (IPCC, 2006) and a decomposition time of 100 years in accordance with the provisions of ISO 14064-1. The physical composition of solid waste with degradation potential was taken from the report of the Superintendence Utilities Services of Colombia reported by IDEAM (2015) and corresponds to the following: Cardboard 3.92%, Paper 3.7%, Textiles 3.17%, Organic 56.44%, Leather 0.53% and Rubber 0.32.

- Solid waste disposal by incineration:
  Data on percentages of dry matter content of wet weight, total carbon content of dry weight and fossil carbon fraction of total carbon are used for each waste material, as presented in the table below (IPCC, 2006):

Contaminated material	Dry matter content as a % of wet weight	Total carbon content as a % of dry weight	Fossil carbon fraction as a % of total carbon
Paper/Cardboard	0.9	0.46	0.01
Wood	0.85	0.5	0
Plastic	1	0.75	1
Textiles	0.8	0.5	0.2
Rubber/Leather	0.84	0.67	0.2

Table 10. Percentages of dry matter content of wet weight, total carbon content of dry weight and fossil carbon fraction of total carbon.

  The oxidation factor used for contaminated industrial waste is 1. The methane and nitrous oxide emission factors for incinerated waste were 0.2 kg CH4/ton of waste and 100 g N2O/ton of waste (IPCC, 2006).

The calculation of the value of indirect GHG emissions from the management and treatment of solid waste corresponds to the multiplication of the emission factor determined for each gas by the total volume of waste generated. For the consolidation in tons of CO2 equivalent, the emissions generated for each gas are added once each of these is multiplied by the Global Warming Potential (GWP) of the gas. The potentials for Methane (CH_4) and Nitrous Oxide (N_2O) are previously mentioned in Table 4 presented in the Scope 1 indicator criteria.

IX. Fugitive emissions associated with the transportation of fuel (crude oil and gas): refers to the values of leaks that occur in vehicles during the transportation of gas and crude oil from the production activities of the reporting companies.

The IPCC (2006) emission factors for gases associated with fugitive emissions were used to estimate fugitive emissions, as shown in the table below

Category	CH_4 EF	CO_2 EF	N_2O EF	Unit
Transport of crude oil in tractor-trailer	0.000025	0.0000023	N/A	Gg per 1,000 m3 of oil production transported in tractor-trailer trucks
Gas transportation in tractor-trailer	0.0011	0.000051	N/A	Gg per 1,000,000 m3 distributed (sales)

Table 11. Emission factors for fugitive emissions associated with the transport of hydrocarbons in vehicles.

The calculation of fugitive emissions generated in the transportation of crude oil and gas corresponds to the multiplication of the emissions factor determined by the amount of gas (m3) or crude oil (barrels) transported. For the consolidation in tons of CO_2 equivalent, the emissions generated for each gas are added once each of these is multiplied by the Global Warming Potential (GWP) of the gas. The potentials for Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O) are previously mentioned in Table 4 presented in the Scope 1 indicator criteria. The blocks included in the calculation are as follows:

- Cabrestero Block
- Capachos Block
- Fortuna Block
- Llanos Blocks: 26, 30, 32, 40 and 81
- Los Ocarros Block
- VIM1 Block

X. Oil refining: refers to the amount of emissions estimated for activities related to the processing of crude oil production from the blocks concessioned to the reporting companies during the period analyzed. Such facilities are mentioned below

- Production of the blocks:

  a) Aguas Blancas Block
  b) Boranda Block
  c) Cabrestero Block
  d) Capachos Block
  e) Fortuna Block
  f) Llanos Blocks: 26, 30, 32, 40 and 81
  g) Los Ocarros Blocks
  h) VIM Blocks: 1

The calculation was based on the emission factors (in units of kg/barrel loaded at the refinery) indicated in Ecopetrol's sustainability report for the year 2021 (Ecopetrol, 2021), as shown in the following table

Type of fuel	CO_2e EF
Crude	39.9

Table 12. Emission factors associated with the refining of crude oil loaded at refineries.

To estimate the GHG emissions associated with crude oil refining, the amount of barrels of crude oil marketed for domestic and international refining was taken into account. The calculation corresponds to the multiplication of the emissions factor determined by the amount of gas produced. For the consolidation in tons of CO_2 equivalent, the emissions generated for each gas are added once each of these is multiplied by the Global Warming Potential (GWP) of the gas. The potentials for Carbon Dioxide (CO_2), Methane (CH_4 and Nitrous Oxide (N_2O) are previously mentioned in Table 4 presented in the Scope 1 indicator criteria.

XI. **Use of products sold (crude oil, LPG, Compressed Natural Gas, Vehicular Natural Gas):** refers to the amount of estimated emissions associated with the consumption/use of the products sold by the reporting companies during the period under review. The areas where the product is generated are mentioned below:

- Sale of production from sales blocks based on specific use:

  a) Aguas Blancas Block
  b) Boranda Block
  c) Cabrestero Block
  d) Capachos Block
  e) Fortuna Block
  f) Llanos Blocks: 26, 30, 32, 40 and 81
  g) Los Ocarros Block
  h) VIM Blocks: 1

The calculation was based on the CO_2, CH_4 y N_2O emission factors indicated in Ecopetrol's sustainability report for the year 2021 (Ecopetrol, 2021), as well as the density and caloric values for each type of fuel marketed, as shown in the following table:

Fuel type	Density	Net calorific value	CO_2 EF	CH_4 EF	N_2O EF
Oil	0.9414 kg/liter	40,670.46 kJ/kg	11.282 kg/gal	0.030 g/gal	0.006 g/gal
Compressed Natural Gas	0.78 kg/m^3	39.4987 MJ/m^3	1.98 kg/m^3	0.036 g/m^3	0.004 g/m^3
Vehicular Natural Gas	0.78 kg/m^3	39.4987 MJ/m^3	1.98 kg/m^3	3.28 g/m^3	0.107 g/m^3
Generic LPG	0.54 kg/liter	45.4145 MJ/kg	3.051 kg/kg	0.000005 g/kg	0.000001 g/kg

Table 13. Emission factors associated with the combustion of the products sold.

To estimate emissions, the quantities of products sold were used, such as barrels of crude oil for power generation; the amount of MBTU of compressed natural gas for generation (CNG); kg of residential LPG and MBTU of natural gas for vehicles and CNG for industrial consumption.

Additionally, taking into account that the barrels of crude oil that were sold for refining will result in the production of a wide variety of products and will be used in multiple ways, the mass balance principle was used to calculate the potential emissions associated with their use. In this way, it is understood that all the carbon that enters the refinery will eventually be released into the atmosphere, so it can be estimated that the resulting emissions correspond to the stationary burning of all the crude oil produced and sent to refining.

The calculation of indirect emissions from the use of the products sold corresponds to the multiplication of the emissions factor determined by the amount of gas (m3) or crude oil (barrels) transported. For the consolidation in tons of CO_2 equivalent, the emissions generated for each gas are added once each of these is multiplied by the Global Warming Potential (GWP) of the gas. The potentials for Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O) are previously mentioned in Table 4 presented in the Scope 1 indicator criteria.

The above is presented in accordance with the Greenhouse Gas Inventory 2023 of the reporting companies, which can be found in the document "Informe Inventario GEI 2023 Parex.pdf", as well as the detail of the calculations presented in the file "Calculos Inventario GEI 2023 Parex.xlsx", where the Emission Factors (EF), Global Warming Potentials and consumption data, leaks, kilometers traveled and other data used to estimate emissions can be found. Both documents are managed by the Sustainability Area.

The scope of the assurance work is limited to the cross-checking of the information reported in the GHG Inventory, in relation to the sources mentioned in the criterion, provided by the Sustainability Area (which consolidates this information from the records and reports of the other areas of the companies); to the validation, on a sample basis, of the existence of source data for the calculation; and to the recalculation of the final values according to the formulas established in the criterion and based on the information included in said sources for the selected samples; and does not include the evaluation of the reasonableness or suitability of the sources, emission factors, calorific values, densities and global warming potentials mentioned in the criterion, the evaluation of the integrity of the information sources used for the calculation in the year under review, nor the evaluation of the occurrence of the events that gave rise to the report.

	.
Ozone Precursor Gases (SOx, NOx and Volatile Organic Compounds Other Than Methane COVDMs, per its initials in Spanish) - Other Gases	The Company's Management includes in its Greenhouse Gas Inventory 2023 (hereinafter Inventory), the result of the quantification of its emissions of Ozone precursor gases (Sulfur Oxides - SOx, Nitrogen Oxides - NOx and Volatile Organic Compounds Other than Methane - COVDMs, hereinafter Other Gases) generated as part of their activities, for the period from January 1 to December 31, 2023 (hereinafter, the year under review or the year under insurance), for the companies Parex Resources Colombia AG Sucursal, Parex Verano Limited Sucursal y Parex Resources Inc.), in accordance with the EMEP/ CORINAIR (2005) emissions estimation methodology, and complemented with the definitions established by management. Based on Parex's emissions inventory for 2023, the following emission sources are identified:

Activity	Fuel combustion in transportation and stationary sources	Venting and flaring	Leaks during transportation of gas and crude oil, or during drilling of wells	Solid waste	Wastewater
DRILLING	NOx, SOx, COVDM	NOx, SOx, COVDM	COVDM	NOx, SOx, COVDM	COVDM
OPERATIONS	NOx, SOx, COVDM	NOx, SOx, COVDM	COVDM	NOx, SOx, COVDM	COVDM
CIVIL WORKS	NOx, SOx, COVDM	NOx, SOx, COVDM		NOx, SOx, COVDM	COVDM
WO_CO	NOx, SOx, COVDM			NOx, SOx, COVDM	COVDM
FACILITIES	NOx, SOx, COVDM			NOx, SOx, COVDM	COVDM
SEISMIC	NOx, Sox, COVDM			Nox, Sox, COVDM	COVDM
FUGITIVE			COVDM		
PERSONAL TRANSPORTATION	NOx, SOx, COVDM				
NET TRANSPORTATION	NOx, SOx, COVDM				
CALGARY OFFICE	NOx, SOx, COVDM			COVDM	
BOGOTA OFFICE	NOx, SOx, COVDM			COVDM	

	Table 14. Emission factors associated with power consumption by country used in calculations. The calculation of the emissions generated corresponds, then, to the multiplication of the emissions factor determined for each gas by the value of each activity data, as explained in the document "Informe Inventario GEI 2023 Parex.pdf", as well as the detail of the calculations presented in the file "Calculos Inventario GEI 2023 Parex.xlsx", where the Emission Factors (EF) and data used for the estimation of emissions are found. Both documents are managed by the Sustainability Area. The scope of the assurance work is limited to the cross-checking of the information reported in the Inventory against the sources mentioned in the criteria, provided by the Sustainability Area, to the validation and recalculation of the formulas established in the criteria based on the information included in those sources, and does not include the evaluation of the reasonableness of the recalculation of the sources mentioned in the criteria, nor the evaluation of the occurrence of the events that gave rise to the report.