



Welcome to your CDP Climate Change Questionnaire 2020

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Parex Resources Inc. (“Parex” or the “Company”) is a Calgary based international oil and gas company engaged in crude oil exploration, development and production in Colombia. The Company holds, through its foreign subsidiaries, interests in several onshore exploration and production blocks in the Lower Magdalena and Llanos Basins of Colombia, where all reserves and production are located. Established in 2009, Parex’ common shares trade on the Toronto Stock Exchange (“TSX”) under the symbol PXT.

The Company’s strategy is to leverage South American and Western Canadian experience and capability in South America to create shareholder value. Parex targets jurisdictions that have stable fiscal regimes coupled with oil-prone hydrocarbon-rich basins in under-explored areas. The Company applies proven technology used in the Western Canada Sedimentary Basin in basins with large oil-in-place potential. Parex focuses on short cycle time from discovery to bring new reserves on-stream and uses a portfolio approach to manage surface, subsurface and commercial risks.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1, 2019	December 31, 2019	Yes	2 years



C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

- Canada
- Colombia

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

- USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

- Operational control

C-OG0.7

(C-OG0.7) Which part of the oil and gas value chain and other areas does your organization operate in?

Row 1

Oil and gas value chain

Upstream

Other divisions



C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	<p>Parex' Board of Directors has the responsibility to ensure that Management identifies the principal risks of the Company and undertakes steps to implement appropriate systems to monitor and manage these risks with a view to the long-term viability of the corporation and its assets, that it conducts an annual review of the associated risks.</p> <p>Environmental, Social and Governance (“ESG”) risks and opportunities, including those related to climate-related issues are evaluated, prioritized and managed by the executive leadership team, and these risks and corresponding mitigation actions are reported to the Board of Directors.</p> <p>The Board delegates to committees the responsibility to review and assess the identification and management of Enterprise Risk Management pertaining to the applicable committees. The Board has assigned the Health, Safety and Environment and Reserves Committee the role of assisting the Board in fulfilling its oversight responsibility related to health, safety and environmental (“HSE”) practices and compliance with the applicable regulations.</p>

C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<p>The Health, Safety and Environment and Reserves Committee assists the Board of Directors in fulfilling its oversight responsibility related to health, safety and environmental (“HSE”) practices and compliance with the applicable regulations.</p> <p>The Committee reviews and monitors, among other things, the adequacy of the Company's HSE policies and plans, including their content, implementation and performance, the adequacy of the resources dedicated by Parex' management to the training and supervision of employees, consultants and contractors, and the adequacy of procedures for reporting HS&E information associated with oil and gas exploration and production activities. The Health, Safety and Environment and Reserves Committee will also review and monitor (i) any legal issues related to HSE matters; (ii) any reports and recommendations issued by management or any external advisors or consultants relating to HSE issues and compliance together with management's response thereto; and (iii) any reports and recommendations issued by Management or any external environmental consultant or contractor relating to environmental issues and compliance; together with Management's response thereto. The Health, Safety & Environment and Reserves Committee reviews and assesses the identification of enterprise risk management matters pertaining to the committee. The Health, Safety and Environment and Reserves Committee reports to the Board of Directors following each meeting of the Health, Safety and Environment and Reserves Committee.</p> <p>Bi-annually the Board of Directors monitors the enterprise risk of climate change disclosure and emissions. Additionally, the Board reviews and sets annual plans for climate and</p>



		disclosure actions that are embedded into the annual budget and performance objectives that impact executive pay.
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C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Operating Officer (COO)	Other, please specify The COO has the responsibility for assessing and managing HSE matters, which include climate-related risks and opportunities	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Parex' management is responsible for reviewing the Company's HSE strategies and policies, including the Company's emergency response plan. Management reports to the Board of Directors through the Health, Safety & Environment and Reserves Committee of the Board of Directors on a quarterly basis with respect to HSE matters, including: (i) compliance with all applicable laws, regulations and policies with respect to HSE; (ii) on emerging trends, issues and regulations that are relevant to the Company; (iii) the findings of any significant report by regulatory agencies, external health, safety and environmental consultants or auditors concerning performance in HSE; (iv) any necessary corrective measures taken to address issues and risks with regards to the Company's performance in the areas of HSE that have been identified by Management, external auditors or by regulatory agencies; (v) the results of any review with management, outside accountants, external consultants and legal advisors of the implications of major corporate undertakings such as the acquisition or expansion of facilities or ongoing drilling and testing operations, or decommissioning of facilities; and (vi) all incidents and near misses with respect to the Company's operations, including corrective actions taken as a result thereof.

On behalf of Management, the Chief Operating Officer ("COO") is the key Management contact and liaison with the Board's HSE and Reserves Committee; the COO provides regular updates on operations, reserves and environmental, health and safety performance and issues. He is a member of the Parex' executive team and directly reports to the CEO. The COO is the head of operations with the responsibility to implement, oversee and



drive accountability for work culture, processes and systems that effectively, and in the best interests of Parex’ business plans and activities, deal with political and security risk, regulatory issues, community relations and sustainability demands as well as operational, engineering and commercial requirements and challenges. He is responsible for (a) the identification of the principal operational risks of the business; (b) ensuring the implementation of appropriate systems to manage risks; (c) managing environmental issues, including climate-related issues; and (d) reporting quarterly to the Board’s HSE and Reserves Committee on HSE performance and issues during the operational and enterprise risk management quarterly updates. The COO ensures that operations are conducted in accordance with all legal and regulatory requirements, including those related to HSE.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	The corporation’s annual incentive plan is based on a balanced scorecard and applies to all employees. For the CEO and the executive team, the target incentive bonus is 90% and 60% of base salary respectively. For all non-executive employees, the annual incentive is approximately 15% or higher of base salary. Included in the 2019 annual scorecard was a requirement to increase, with a relevant sustainability ratings provider, Parex’ ESG scores by 10% year-over-year as a result of increasing corporate disclosure of environmental, governance, and social KPIs and/or GRI indicators, consequently, improve transparency. For 2020, Parex’ goals include undertaking certain emission reducing projec

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
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Corporate executive team	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	<p>The corporation's annual incentive plan is based on a balanced scorecard and applies to all employees. For the CEO and the executive team, the target incentive bonus is 90% and 60% of base salary respectively. For all non-executive employees, the annual incentive is approximately 15% or higher of base salary.</p> <p>Included in the 2019 annual scorecard was a requirement to increase, with a relevant sustainability ratings provider, Parex' ESG scores by 10% year-over-year as a result of increasing corporate disclosure of environmental, governance, and social KPIs and/or GRI indicators, consequently, improve transparency. For 2020, Parex' goals include undertaking certain emission reducing projects.</p>
Chief Financial Officer (CFO)	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	<p>The corporation's The corporation's annual incentive plan is based on a balanced scorecard and applies to all employees. For the CEO and the executive team, the target incentive bonus is 90% and 60% of base salary respectively. For all non-executive employees, the annual incentive is approximately 15% or higher of base salary.</p> <p>Included in the 2019 annual scorecard was a requirement to increase, with a relevant sustainability ratings provider, Parex' ESG scores by 10% year-over-year as a result of increasing corporate disclosure of environmental, governance, and social KPIs and/or GRI indicators, consequently, improve transparency. For 2020, Parex' goals include undertaking certain emission reducing projects.</p>
Chief Operating Officer (COO)	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	<p>The corporation's annual incentive plan is based on a balanced scorecard and applies to all employees. For the CEO and the executive team, the target incentive bonus is 90% and 60% of base salary respectively. For all non-executive employees, the annual incentive is approximately 15% or higher of base salary.</p> <p>Included in the 2019 annual scorecard was a requirement to increase, with a relevant sustainability ratings provider, Parex' ESG scores by 10% year-over-year as a result of increasing corporate disclosure of environmental, governance, and social KPIs and/or GRI indicators, consequently, improve transparency.</p>



			For 2020, Parex' goals include undertaking certain emission reducing projects. 2018 results.
Other C-Suite Officer	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	<p>The corporation's annual incentive plan is based on a balanced scorecard and applies to all employees. For the CEO and the executive team, the target incentive bonus is 90% and 60% of base salary respectively. For all non-executive employees, the annual incentive is approximately 15% or higher of base salary.</p> <p>Included in the 2019 annual scorecard was a requirement to increase, with a relevant sustainability ratings provider, Parex' ESG scores by 10% year-over-year as a result of increasing corporate disclosure of environmental, governance, and social KPIs and/or GRI indicators, consequently, improve transparency. For 2020, Parex' goals include undertaking certain emission reducing projects.</p>
President	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	<p>The corporation's annual incentive plan is based on a balanced scorecard and applies to all employees. For the CEO and the executive team, the target incentive bonus is 90% and 60% of base salary respectively. For all non-executive employees, the annual incentive is approximately 15% or higher of base salary.</p> <p>Included in the 2019 annual scorecard was a requirement to increase, with a relevant sustainability ratings provider, Parex' ESG scores by 10% year-over-year as a result of increasing corporate disclosure of environmental, governance, and social KPIs and/or GRI indicators, consequently, improve transparency. For 2020, Parex' goals include undertaking certain emission reducing projects.</p>
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	<p>The corporation's annual incentive plan is based on a balanced scorecard and applies to all employees. For the CEO and the executive team, the target incentive bonus is 90% and 60% of base salary respectively. For all non-executive employees, the annual incentive is approximately 15% or higher of base salary.</p> <p>Included in the 2019 annual scorecard was a requirement to increase, with a relevant sustainability ratings provider, Parex' ESG scores by 10% year-over-year as a result of increasing corporate disclosure of</p>



			environmental, governance, and social KPIs and/or GRI indicators, consequently, improve transparency. For 2020, Parex' goals include undertaking certain emission reducing projects.
All employees	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	The corporation's annual incentive plan is based on a balanced scorecard and applies to all employees. For the CEO and the executive team, the target incentive bonus is 90% and 60% of base salary respectively. For all non-executive employees, the annual incentive is approximately 15% or higher of base salary. Included in the 2019 annual scorecard was a requirement to increase, with a relevant sustainability ratings provider, Parex' ESG scores by 10% year-over-year as a result of increasing corporate disclosure of environmental, governance, and social KPIs and/or GRI indicators, consequently, improve transparency. For 2020, Parex' goals include undertaking certain emission reducing projects.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

No

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	2	Parex' Enterprise Risk Management ("ERM") process, approved by the Board of Directors, outlines the Company's risk management principles and expectations, as well as the roles and responsibilities of all staff. The ERM process includes a Risk Management Framework and Risk Assessment Tools, including a Risk Matrix. Parex' Risk Management Framework contains the key attributes recommended by the International Standards Organization ("ISO") in its ISO 31000 – Risk

			Management Guidelines (2017). The results of the Company’s ERM program are documented in a semi-annual summary presented to the Board of Directors as well as through regular updates.
Medium-term	2	4	Parex’ Enterprise Risk Management (“ERM”) process, approved by the Board of Directors, outlines the Company’s risk management principles and expectations, as well as the roles and responsibilities of all staff. The ERM process includes a Risk Management Framework and Risk Assessment Tools, including a Risk Matrix. Parex’ Risk Management Framework contains the key attributes recommended by the International Standards Organization (“ISO”) in its ISO 31000 – Risk Management Guidelines (2017). The results of the Company’s ERM program are documented in a semi-annual summary presented to the Board of Directors as well as through regular updates.
Long-term	4	10	Parex’ Enterprise Risk Management (“ERM”) process, approved by the Board of Directors, outlines the Company’s risk management principles and expectations, as well as the roles and responsibilities of all staff. The ERM process includes a Risk Management Framework and Risk Assessment Tools, including a Risk Matrix. Parex’ Risk Management Framework contains the key attributes recommended by the International Standards Organization (“ISO”) in its ISO 31000 – Risk Management Guidelines (2017). The results of the Company’s ERM program are documented in a semi-annual summary presented to the Board of Directors as well as through regular updates.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Through the ERM process, Parex evaluates the severity of a risk’s impact and the likelihood of occurrence of such risk. Severity is ranked from minor or 1 (<\$10 million financial impact) to severe or 4 (>\$500 million) considering other factors such access to asset & continued operations, community support, impact on reputation, etc. The probability of the risk’s occurrence is also ranked from rare or 1(<10% probability of occurrence) to almost certain or 4 (>80% probability of occurrence). Risks ranked as likely probable (3) with major impact (>\$100 million financial impact) may be defined as having substantive or strategic impact on the business (prevent Parex from achieving strategic priorities). Such risks are monitored by Management and reported quarterly to the Board’s Committees with oversight, which in turn submit to the Board for a full review.

C2.2g

(C2.2g) Why does your organization not have a process in place for identifying, assessing, and responding to climate-related risks and opportunities, and do you plan to introduce such a process in the future?

	Primary reason	Please explain
Row 1	We are planning to introduce a climate-related risk management process in the next two years	<p>There is no formal process in place for identifying, assessing, and managing climate-related risks. However, Parex' Enterprise Risks Management ("ERM") process as well as the Annual Information Form identify a number of risks, some of which are climate-related. On a bi-annual basis, Management updates the ERM risk register and reassesses the risk scores and mitigation strategies. Management reports to the Board's committees the risks for which the committees have oversight; the committees in turn review the tops risks and submit them to the Board of Directors for a full review. For the top 4 risks, which include potential HS&E events, Management outlines responses and action plans. At the annual Strategy Session, the Board reviews the business plan and risks & opportunities as part of the capital plans and social license ability. Further ongoing business considerations drive Parex to review the Company's field operations to minimize emissions and maximize efficiency.</p> <p>In 2018, we undertook a baseline study of the Company's 2017 GHG emissions as the first step in assessing the potential impact of climate change on Parex' operations. With the subsequent years GHG emissions inventory, we have started to evaluate the potential climate-related risks and opportunities within the Company's portfolio and plan, subsequently, to identify the risks and opportunities to introduce through the ERM process over the next two years.</p>

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

No

C2.3b

(C2.3b) Why do you not consider your organization to be exposed to climate-related risks with the potential to have a substantive financial or strategic impact on your business?



	Primary reason	Please explain
Row 1	Evaluation in process	Having established a baseline study of our GHG emissions in 2018, Parex continues to assess its carbon footprint in order to establish a strong base from which to evaluate the Company's exposure (physical, financial, regulatory, etc.).

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

No

C2.4b

(C2.4b) Why do you not consider your organization to have climate-related opportunities?

	Primary reason	Please explain
Row 1	Evaluation in progress	Parex is in the process of identifying the key sources of climate-related opportunities and developing strategies to mitigate potential financial and/or strategic impacts. The Company has invested in several emission reduction initiatives over the last 2 years. For example, Parex completed, in May 2019, a 42-km flowline connecting our largest asset, Block Llanos 34, to the regional pipeline. This project displaced oil transport trucks; consequently, the Company avoided the release of 8,615 tCO ₂ e of direct GHG emissions into the atmosphere. Also, Parex initiated the construction of the gas plants at Capachos and Aguas Blancas in order to reduce gas flaring.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

No



C3.1g

(C3.1g) Why have climate-related risks and opportunities not influenced your strategy and/or financial planning?

To date climate-related risks and opportunities, although relevant, have not influenced Parex’ strategy and financial planning because the Company is in the early stages of understanding the threats and opportunities related to climate issues in its business environment. Parex does however strictly comply with applicable laws in relation to the environment. The Company continues to work on understanding and formally identifying climate-related issues that could impact the Company’s operations. In 2018, we commissioned a baseline study of our GHG emissions as an important first step in understanding the Company’s climate-related risks and opportunities. Since then, we have completed an annual GHG emissions inventory, in the process of evaluating the corporate carbon footprint. As climate-related issues with potential impact on Parex are identified, those deemed critical to Parex’ long-term financial and operational viability will be integrated into the Company’s strategy and financial planning. For example, we continue to analyze the environmental and business impact of introducing increased natural gas production into our energy production mix and how the natural gas distribution and sale locally may displace other higher carbon intensity sources (wood, deforestation, coal, oil). We are also reusing materials from abandoned locations to make new and build flow lines to reduce diesel consumption from oil truck transportation.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

No target

C4.1c

(C4.1c) Explain why you did not have an emissions target, and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	We are planning to introduce a	Our near-term objective is to create reliable baselines, such that we can build a forward plan. We do not have a five-year forecast yet	Parex’ near-term objective Parex’ near-term objective is to reduce transportation emissions on a per unit basis. The strategy is to decrease oil transportation trucking by implementing (accessing) flowlines/pipelines and by increasing oil



	target in the next two years	and only have internal intensity emission reduction goal for 2020.	<p>production in regions located closer to export hubs. We also plan to focus on reducing the amount of carbon flaring and fugitive emissions through the construction of gas plants in fields with high gas production.</p> <p>Other projects include the use of solar panels in some fields replacing the use of diesel or gas as fuel.</p>
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C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

No other climate-related targets

C-OG4.2c

(C-OG4.2c) Indicate which targets reported in C4.1a/b incorporate methane emissions, or if you do not have a methane-specific emissions reduction target for your oil and gas activities, please explain why not and forecast how your methane emissions will change over the next five years.

Parex does not have specific methane reduction goals; however, the conservation of energy and maximization of resources has led the Company in the past to optimize power generation fuels and reduce methane emissions (specifically through flaring). The Company set specific projects to accomplish: i) in 2018, the Company initiated the construction of the gas plant in the Capachos field in order to reduce flaring to a minimum (target is 85% reduction); ii) the set-up of Aguas Blancas gas plant with the same goal of Capachos gas plant, iii) the construction of a pipeline in order to decrease oil transportation trucking and by increasing oil production in regions located closer to export hubs; this project was completed in 2020, IV) the set-up of additional solar panels in other fields in order to avoid carbon emission (no fuels will be used) and V) installation of a medium voltage line in Bacano field to avoid diesel as fuel for power generation as well as VI) the installation of a medium voltage line and the construction of a flowline between Capachos and Andina. VII) Also, VII) Parex will implement a project related to gas trucking changing the trailers' fuel from diesel to gas.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	6	
To be implemented*	6	
Implementation commenced*	3	57,922
Implemented*	3	1,902
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy generation

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

1.8

Scope(s)

Scope 1

Voluntary/Mandatory



Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

250,000

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

21-30 years

Comment

Use of solar panels in several oilfields

Initiative category & Initiative type

Non-energy industrial process emissions reductions

Other, please specify

New equipment

Estimated annual CO2e savings (metric tonnes CO2e)

1,590.67

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

3,000,000

Investment required (unit currency – as specified in C0.4)

2,700,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Set up a gas pipeline Llanos-32 to Llanos-34, reducing the trucking of Gas.

Initiative category & Initiative type

Non-energy industrial process emissions reductions
Process material efficiency

Estimated annual CO2e savings (metric tonnes CO2e)

309.03

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

887,000



Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

<1 year

Comment

The Company reuses material from abandoned well locations (Zamuro) to build a new one (Azogue), thereby reducing trucking as well.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	<p>In 2020, Parex is initiating a new project with a dedicated budget in order to minimize CO2e emissions in an innovative way. This project, related to geothermal energy, is one of the voluntary initiatives through which Parex focuses on alternative energy. Parex will purchase two geothermal generators to be installed in two fields around its operations where the production of water is high to provide this fluid as fuel of such equipment. An estimated of 1 MM will be invested.</p> <p>Also, the construction of 2 flowlines and 2 electrical lines in various Parex' fields will lead to significant GHG emissions reduction by avoiding the use of fossil fuels to generate energy and to transport oil and gas.</p>
Dedicated budget for other emissions reduction activities	<p>In 2020, Parex is initiating a new project with a dedicated budget in order to minimize CO2e emissions in an innovative way. This project, related to geothermal energy, is one of the voluntary initiatives through which Parex focuses on alternative energy. Parex will purchase two geothermal generators to be installed in two fields around its operations where the production of water is high to provide this fluid as fuel of such equipment. An estimated of 1 MM will be invested.</p>



	<p>Also, the construction of 2 flowlines and 2 electrical lines in various Parex' fields will lead to significant GHG emissions reduction by avoiding the use of fossil fuels to generate energy and to transport oil and gas</p>
<p>Financial optimization calculations</p>	<p>In 2020, Parex is initiating a new project with a dedicated budget in order to minimize CO2e emissions in an innovative way. This project, related to geothermal energy, is one of the voluntary initiatives through which Parex focuses on alternative energy. Parex will purchase two geothermal generators to be installed in two fields around its operations where the production of water is high to provide this fluid as fuel of such equipment. An estimated of 1 MM will be invested.</p> <p>Also, the construction of 2 flowlines and 2 electrical lines in various Parex' fields will lead to significant GHG emissions reduction by avoiding the use of fossil fuels to generate energy and to transport oil and gas</p>
<p>Internal incentives/recognition programs</p>	<p>In 2020, Parex is initiating a new project with a dedicated budget in order to minimize CO2e emissions in an innovative way. This project, related to geothermal energy, is one of the voluntary initiatives through which Parex focuses on alternative energy. Parex will purchase two geothermal generators to be installed in two fields around its operations where the production of water is high to provide this fluid as fuel of such equipment. An estimated of 1 MM will be invested.</p> <p>Also, the construction of 2 flowlines and 2 electrical lines in various Parex' fields will lead to significant GHG emissions reduction by avoiding the use of fossil fuels to generate energy and to transport oil and gas</p>

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

No

C-OG4.6

(C-OG4.6) Describe your organization's efforts to reduce methane emissions from your activities.

Parex has several initiatives to reduce methane emissions. Methane emission reduction activities are described below:

- Installation of several solar panels in some fields to avoid the use of diesel fuel. In 2019, this initiative led to 1.8 tCO₂e in methane emission reduction.
- Over the years, Parex has utilized reused dragged materials for the construction of new locations and roads. This practice resulted in a reduction of 309.09 tCO₂e in 2019.
- 1,590.67 tCO₂e emission reduction using the gas pipeline (LLA-32) built in 2018 to avoid the use of trucks (with diesel as fuel) to transport gas.
- 1,093.71 tCO₂e emission reduction using a pipeline (LLA32-LLA34) constructed in 2019; emissions from oil transport were reduced by avoiding the use of diesel fuel in the trucks which previously transported the oil.
- Completed the construction of two gas plants, Capachos and Aguas Blancas, which is expected to reduce significantly methane emissions by avoiding flaring. In 2019, the operation of such plants was reducing 8,651.08 tCO₂e of emissions starting in Q3.

As disclosed in previous responses to CDP, Parex has implemented vapor recovery units in certain fields where gas is emitted into the atmosphere. These units are installed after the oil and water separation process in the Gun-barrel (tank included in the production process). The purpose of the units is to gather low-pressure gas in order to obtain liquids by gas expansion, keeping this gas in condition to be used for power generation. For example, facilities at the Rumba and Las Maracas fields have vapor recovery units. This process reduces the gas emitted into the atmosphere to be used as a fuel in power generation.

In 2019, we implemented a Vapor Recovery Unit at the Capachos field; and in 2020, we plan to install a new unit in the current fields (Las Maracas, Rumba, etc.) in operation.

It is important to emphasize Parex continues to actively work to reduce methane emissions. In the current year, some projects are “to be implemented” and others are under evaluation to be implemented. These projects include but are not limited to the use of new fuels, the construction of new infrastructure in several oil fields to reduce the use of fossil fuels, and a geothermal project

C-OG4.7

(C-OG4.7) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from oil and gas production activities?

Yes

C-OG4.7a

(C-OG4.7a) Describe the protocol through which methane leak detection and repair or other leak detection methods, are conducted for oil and gas production activities, including predominant frequency of inspections, estimates of assets covered, and methodologies employed.

As stated in the prior year's response, Parex has a protocol at the production facilities where natural gas is handled, for treatment or for consumption, using methane detectors installed through the lines to detect any leakage; these detectors are calibrated and inspected every six months. Also, at oil facilities, the protocol includes several inspections from production staff who conduct regular gas detections with portable equipment to detect possible leakage; these detectors also are calibrated and inspected every six months.

C-OG4.8

(C-OG4.8) If flaring is relevant to your oil and gas production activities, describe your organization's efforts to reduce flaring, including any flaring reduction targets.

In 2019, Parex completed two projects in order to reduce flaring in the fields Capachos and Aguas Blancas: the construction of two gas plants. These infrastructures reduce flaring to a minimum as produced gas is used to produce liquids to be sold to different consumers and to take advantage in different applications of the gas to generate energy and recover liquid. At Aguas Blancas, in October 2019, flaring was reduced to approximately 35% (the gas plant was initially commissioned in October of 2019; however, Parex plans to upgrade this infrastructure in order to further reduce flaring and is expecting to sign contracts to sell produced gas). Regarding the Capachos gas plant, the reduction of flaring was 85% from August of 2019 generating a big milestone during 2019.

Both projects avoided 8,651 tCO₂e of scope 1 emissions being released to the atmosphere in 2019.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

190,410

Comment

- Gas Flares
- Fugitive Emissions (Vented Emissions of Atmospheric Tanks, Production Gas Emissions and Production Oil Emissions)
- Emissions due to Air Conditioning in Production Facilities
- Oil / Gas consumption for steam generation (own equipment).
- Fuel consumption for power generation (using rental power generators in Parex facilities).

Scope 2 (location-based)

Base year start

January 1, 2019

Base year end

December 31, 2019



Base year emissions (metric tons CO2e)

82.85

Comment

National Interconnected System for Office and Field.

Scope 2 (market-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

No market-based scope 2 emissions

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

ISO 14064-1

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?



Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

190,410

Start date

January 1, 2019

End date

December 31, 2019

Comment

Direct Sources. Burning fuel (diesel, gas, crude) for power generation, Flared Gas, Refrigeration emissions, and fugitive emissions.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

125,352

Start date

January 1, 2018

End date

December 31, 2018

Comment

• Gas Flares • Fugitive Emissions (Vented Emissions of Atmospheric Tanks, Production Gas Emissions and Production Oil Emissions) • Emissions due to Air Conditioning in Production Facilities • Oil / Gas consumption for steam generation (own equipment). • Fuel consumption for power generation (using rental power generators in Parex facilities)

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

80,781

Start date

January 1, 2017

End date

December 31, 2017

Comment

Direct Sources. Burning fuel (diesel, gas, crude) for power generation, flared gas, refrigeration emissions, and fugitive emissions.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

Energy acquired by Parex is taken from the national interconnected system for Facilities (Kona, Capachos Centro and Aguas Blancas) and for Offices (Bogota, Tauramena, Yopal, Tame and Calgary).

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?



Reporting year

Scope 2, location-based

82.85

Start date

January 1, 2019

End date

December 31, 2019

Comment

Scope 2, location-based: 82.85

Energy acquired by Parex is taken from the national interconnected system for Facilities (Kona, Capachos Centro and Aguas Blancas) & Offices in Colombia (Bogota, Tauramena, Yopal, Tame and Calgary) and Canadian power grid system for the Calgary office .

Past year 1

Scope 2, location-based

95.38

Start date

January 1, 2018

End date

December 31, 2018

Comment

Scope 2, location-based: 95.38

Past year 2

Scope 2, location-based

102.52

Start date

January 1, 2017

End date

December 31, 2017

Comment

Scope 2, location-based: 102.52

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

14

Emissions calculation methodology

GHG emissions from use of paper products were calculated using an emission factor (EF) of 1.05 tCO₂e per ton of paper. This is the EF value reported for the pulp and paper manufacturing industry harvesting from managed timberlands (Silva et al, 2015). GHG emissions from cooling

and air-conditioning systems were estimated based on global warming potentials (GWP) for each gas reported in IPCC guidelines representing the factors by which the amount of gas leak is multiplied to obtain CO₂e values.

Emission from air conditioning and the use of paper in the activities of the value chain of the Company except production.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Capital goods

Evaluation status

Not evaluated

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

20,012

Emissions calculation methodology



The operational methodology was used. Emissions calculation includes information from trucking of Oil and Gas. Fuel consumption and fugitives are included as well.

GHG emissions associated with fuel burning were calculated based on emission factors for CO₂, density and caloric values provided by FECOC (Emission Factors for Colombian Fuels) (2016). Emission factors for methane and nitrous oxide were based on IPCC (2006) data for each type of fuel. International metric system and metrology unit standards from Colombia's Industry and Tourism Superintendence were used for unit conversion. Fugitives emissions were estimated using IPCC (2006) emission factors.

Include emission from fuel consumed in activities related to mobilization, transportation, operation of equipment, construction, etc.: Seismic, drilling, civil works, construction of facilities, completion and workover are included in this category as well.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

50

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

12,531

Emissions calculation methodology

The operational methodology was used. Emissions calculation includes information from trucking of Oil and Gas. Fuel consumption and fugitives are included as well. GHG emissions associated with fuel burning were calculated based on emission factors for CO₂, density and caloric values provided by FECOC (Emission Factors for Colombian Fuels) (2016). Emission factors for methane and nitrous oxide were based on IPCC (2006) data for each type of fuel. International metric system and metrology unit standards from Colombia's Industry and Tourism

Superintendence were used for unit conversion. Fugitives emissions were estimated using IPCC (2006) emission factors. Emissions related to operated Parex' activities, including oil and gas transportation.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Waste generated in operations

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

1,056

Emissions calculation methodology

In the process of estimating GHG emissions by treatment of solid waste of organic origin, emission factors were used for methane (4 g of CH4 / Kg of treated organic waste) and nitrous oxide (0.3 g of N2O / Kg of organic waste) reported by the IPCC (2006).

For the elimination and treatment of wastewater, factors provided by the IPCC (2006) were used (Methane: 0.6 kg CH4 / kg BOD, Nitrogen: 0.005 Kg N2O-N / Kg N.) and averages of degradable organic matter - (Biochemical demand of Oxygen - BOD) (38.4 g / person / day) established for Colombia and reported in the national GHG inventory published by the IDEAM et al. (2015). A methane correction factor (MFC: 0.1) corresponding to systems not treated and eliminated in rivers, provided by the IPCC (2006)

Emissions from water and solid residues generated in operations which are sent to third party companies for disposed.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

50

Please explain



Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

4,581

Emissions calculation methodology

In the process for the estimation of GHG emissions from fuel combustion, factors of CO2 emissions, density and caloric values of the FECOC (2016) (emission factors of Colombian fuels) were used. Methane and nitrous oxide emission factors were taken from the IPCC (2006) for each type of fuel (gasoline, diesel and aviation fuel)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Employee commuting

Evaluation status

Not evaluated

Please explain



Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Upstream leased assets

Evaluation status

Not evaluated

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Downstream transportation and distribution

Evaluation status

Not evaluated

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control

Processing of sold products

Evaluation status

Not evaluated

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Use of sold products

Evaluation status

Not evaluated

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

End of life treatment of sold products

Evaluation status

Not evaluated

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Downstream leased assets

Evaluation status

Not evaluated

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Franchises

Evaluation status

Not evaluated

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Parex does not have any franchise.

Investments

Evaluation status

Not evaluated

Please explain

Parex' focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Other (upstream)

Evaluation status

Not evaluated

Please explain



Parex’ focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

Other (downstream)

Evaluation status

Not evaluated

Please explain

Parex’ focus is to reduce transportation emissions and gas flaring on a per-unit basis . The strategy is to reduce oil trucking by implementing flowlines/pipelines and flaring emissions by building gas plants (e.g. Capachos and Aguas Blancas). The Company focuses on managing emissions at facilities that are within its operational control.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	4,144.53	Carbon dioxide emissions from biogenic carbon are calculated as a 10% of the diesel consumed in the operations. This 10% of the diesel components is biofuel (B-10).

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.03

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

190,492

Metric denominator

barrel of oil equivalent (BOE)

Metric denominator: Unit total

6,347,565.95

Scope 2 figure used

Location-based

% change from previous year

7

Direction of change

Increased

Reason for change

GHG emissions intensity increased due to higher gas production which was flared into the atmosphere.



Intensity figure

0.000171

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

190,492

Metric denominator

unit total revenue

Metric denominator: Unit total

1,113,622,248

Scope 2 figure used

Location-based

% change from previous year

15

Direction of change

Increased

Reason for change

GHG emissions intensity increased due to higher gas production which was flared into the atmosphere.

Intensity figure

561.923

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

190,492

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

339

Scope 2 figure used

Location-based

% change from previous year

7

Direction of change

Increased

Reason for change

GHG emissions intensity increased due to higher gas production which was flared into the atmosphere.

C-OG6.12

(C-OG6.12) Provide the intensity figures for Scope 1 emissions (metric tons CO₂e) per unit of hydrocarbon category.

Unit of hydrocarbon category (denominator)

Thousand barrels of crude oil/ condensate

Metric tons CO₂e from hydrocarbon category per unit specified

32.03

% change from previous year

10

Direction of change

Increased

Reason for change

Year over year, scope 1 emission increased by 52% as a result of higher flaring and oil production increased by due to higher activities.

Comment

In 2018, the value was 0.01132 Ton CO₂e/Gal Oil.

Unit of hydrocarbon category (denominator)

Million cubic feet of natural gas

Metric tons CO₂e from hydrocarbon category per unit specified

38.43

% change from previous year

56

Direction of change

Decreased

Reason for change

Year over year, scope 1 emission decreased 52% as a result of higher flaring and gas production increased.

Comment

In 2018, the reported value was 0.00006 Ton CO₂e/SCF.

C-OG6.13

(C-OG6.13) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.



Oil and gas business division

Upstream

Estimated total methane emitted expressed as % of natural gas production or throughput at given division

30.86

Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division

4

Comment

The difference from last year is due to production increase.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	166,654	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	23,332	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	424	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	0	IPCC Fifth Assessment Report (AR5 – 100 year)

C-OG7.1b

(C-OG7.1b) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type.

Emissions category

Combustion (excluding flaring)

Value chain

Upstream

Product

Oil

Gross Scope 1 CO2 emissions (metric tons CO2)

83,063

Gross Scope 1 methane emissions (metric tons CH4)

3

Total gross Scope 1 emissions (metric tons CO2e)

83,276

Comment

Including CO2, CH4, N2 and HFC.

Emissions category

Flaring

Value chain

Upstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

83,473

Gross Scope 1 methane emissions (metric tons CH4)

506

Total gross Scope 1 emissions (metric tons CO2e)

96,410

Comment

Including CO2, CH4, N2 and HFC.

Emissions category

Venting

Value chain

Upstream

Product

Oil

Gross Scope 1 CO2 emissions (metric tons CO2)

107

Gross Scope 1 methane emissions (metric tons CH4)

347

Total gross Scope 1 emissions (metric tons CO2e)

8,790

Comment

Including CO2, CH4, N2 and HFC.

Emissions category

Fugitives

Value chain

Upstream

Product

Oil

Gross Scope 1 CO2 emissions (metric tons CO2)

2

Gross Scope 1 methane emissions (metric tons CH4)

77

Total gross Scope 1 emissions (metric tons CO2e)

1,925

Comment

Including CO2, CH4, N2 and HFC.



C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Colombia	190,410

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By facility

By activity

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Adalia	1,601	5.128743	-71.096349
Begonia	4,256	5.788396	-71.388413
Carmentea	1,341	4.572707	-72.61621
Kananaskis	769	4.519647	-72.609949
Kitaro/Akira	26,346	4.342332	-72.715742
Rumba	8,352	4.867884	-72.419899
Las Maracas	12,417	5.360983	-71.978597
LLA-32: Gas Plant	22,336	4.534299	-72.622293
Capachos	26,838	6.570293	-71.754997



Aguas Blancas	14,108	6.834932	-73.772107
Kona	11,421	5.609489	-71.864236
Andina	54,419	6.601167	-71.746827
Bacano Oeste	4,882	4.358598	-72.759871
Fortuna	152	8.160782	-73.58952
Azogue	92	4.506048	-72.665456
Ponyo	165	4.34791	-72.734809
Boranda	914	7.672808	-73.562465

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Production of oil and gas	190,410

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Oil and gas production activities (upstream)	190,410	Net working interest scope 1 emissions: 139,191 100% of activities are in oil and gas.
Oil and gas production activities (midstream)	0	No midstream operations
Oil and gas production activities (downstream)	0	No downstream operations

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Colombia 💬 ₁	56.81	0	345.6	241.51
Canada	26.04	0	184.5	0

💬₁ Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh): 241.51 (69.88% hydropower)

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility

By activity

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Kona	3.97	0
Tauramena office	1.76	0
Bogotá office	20.68	0
Yopal office	12.51	0



Tame office	3.1	0
Calgary office	26.04	0
Capachos Centro	11.32	0
Aguas Blancas	3.48	0

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
oil and gas production activities	82.85	0

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Oil and gas production activities (upstream)	82.85	0	Energy acquired by Parex is taken from the national interconnected system for Facilities (Kona, Capachos Centro and Aguas Blancas) & Offices (Bogota, Tauramena, Yopal, Tame and Calgary) and from the Canadian power grid for the Calgary Office.
Oil and gas production activities (midstream)	0	0	No midstream operations
Oil and gas production activities (downstream)	0	0	No downstream operations



C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	Not observed
Other emissions reduction activities	0	No change	0	Not observed
Divestment	0	No change	0	No divestment activity in 2019.
Acquisitions	0	No change	0	No emissions generated from acquired assets in 2019.
Mergers	0	No change	0	No mergers occurred in 2019.
Change in output	65,058	Increased	51.9	During 2019, Parex produced more oil and gas compared to 2018 , resulting in greater consumption of fuel in operations and increased of scope 1 emission.
Change in methodology	0	No change		No change in methodology observed in 2019.
Change in boundary	0	No change		Maintained operating control boundary.
Change in physical operating conditions	0	No change		No change in physical operating conditions observed.

Unidentified	0	No change		None
Other	12	Decreased	12.8	Less consumption of energy in Bogota office due to optimization.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 20% but less than or equal to 25%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes



C8.2a

(C8.2a) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	399,455	399,455
Consumption of purchased or acquired electricity		530	0	530
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		530	399,455	399,985

C8.2b

(C8.2b) Select the applications of your organization’s consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Crude Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

36,554

MWh fuel consumed for self-generation of electricity

36,554

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

10,246

Emission factor

77.956

Unit

kg CO2 per GJ

Emissions factor source

FECOC – Factor emissions of Colombian fuels – Colombia Ministry of Mines and Energy

Comment

Crude Oil

Fuels (excluding feedstocks)

Biodiesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

15,978

MWh fuel consumed for self-generation of electricity

15,978

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Emission factor

74.831

Unit

kg CO2 per GJ

Emissions factor source

FECOC – Factor emissions of Colombian fuels – Colombia Ministry of Mines and Energy

Comment

Biodiesel

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

346,923

MWh fuel consumed for self-generation of electricity

346,923

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Emission factor

55.539

Unit

kg CO2 per GJ

Emissions factor source

FECOC – Factor emissions of Colombian fuels – Colombia Ministry of Mines and Energy

Comment

Natural Gas

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	397,636	397,636	0	0
Heat	0	0	0	0
Steam	20,832	20,832	0	0
Cooling	0	0	0	0

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Energy usage

Metric value

16.05

Metric numerator

101,877,586

Metric denominator (intensity metric only)

6,347,566 barrels of oil equivalent

% change from previous year

3.7



Direction of change

Decreased

Please explain

Energy intensity (kwhr/ BOE) has decreased compared to 2018 due to higher oil and gas production (metric denominator). Also, Parex is working to have more efficient power generation systems (for example new power generator with better capacity to produce energy using less fuel) in order to reduce the intensity further.

Description

Other, please specify
water intensity

Metric value

1.17

Metric numerator

7,435,837

Metric denominator (intensity metric only)

6,347,566

% change from previous year

Direction of change

Please explain

First year this metric is reported. Water intensity is calculated as follows: total water withdrawals (barrels during year) / total BOE.

C-OG9.2a

(C-OG9.2a) Disclose your net liquid and gas hydrocarbon production (total of subsidiaries and equity-accounted entities).

	In-year net production	Comment
Crude oil and condensate, million barrels	18.87	Based on average daily production of 51,708 barrels of oil per day
Natural gas liquids, million barrels	0	No LNG operations
Oil sands, million barrels (includes bitumen and synthetic crude)	0	No oil sands operations
Natural gas, billion cubic feet	0	0.00214 bcf; based on 2019 average daily production of 5,874 mcf/d

C-OG9.2b

(C-OG9.2b) Explain which listing requirements or other methodologies you use to report reserves data. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries, please explain this.

Parex' reserves evaluation is prepared by GLJ Petroleum Consultants Ltd ("GLJ") and done so in accordance with procedures and standards contained in the Canadian Oil and Gas Evaluation (COGE) Handbook. All reserves definitions used to prepare Parex' reserves are those contained in the Canadian Oil and Gas Evaluation (COGE) Handbook, as well as the Canadian Securities Administrators National Instrument 51-101 - *Standards of Disclosure for Oil and Gas Activities* (NI 51-101). Additional information regarding the Company's reserves, for the year ending December 31, 2019, is available in the Company's Annual Information Form dated April 1, 2020 at www.parexresources.com.

Note that 2P and 3P reserve values reported in C-OG9.2c or other sections of the CDP questionnaire are Parex' net working interest reserves before royalties

C-OG9.2c

(C-OG9.2c) Disclose your estimated total net reserves and resource base (million boe), including the total associated with subsidiaries and equity-accounted entities.

	Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)	Comment
Row 1	198.42	261.1	261.1	As per the independent reserve report prepared by GLJ. effective December 31, 2019

C-OG9.2d

(C-OG9.2d) Provide an indicative percentage split for 2P, 3P reserves, and total resource base by hydrocarbon categories.

	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Crude oil/ condensate/ natural gas liquids	98	98	98	Parex' working interest before royalties, as per the independent reserve report prepared by GLJ Petroleum Consultants effective Dec. 31, 2019
Natural gas	2	2	2	Parex' working interest before royalties, as per the independent reserve report prepared by GLJ Petroleum Consultants effective Dec. 31, 2019
Oil sands (includes bitumen and synthetic crude)	0	0	0	Parex' working interest before royalties, as per the independent reserve report prepared by GLJ Petroleum Consultants effective Dec. 31, 2019

C-OG9.2e

(C-OG9.2e) Provide an indicative percentage split for production, 1P, 2P, 3P reserves, and total resource base by development types.

Development type

Onshore

In-year net production (%)

100

Net proved reserves (1P) (%)

100

Net proved + probable reserves (2P) (%)

100

Net proved + probable + possible reserves (3P) (%)

100

Net total resource base (%)

100

Comment

All properties are onshore, located in Colombia's Llanos, Lower Magdalena, Middle Magdalena, and Upper Magdalena Basins



C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	No	To date, Parex has not invested in research and development of low-carbon products or services related to the organization's sector activities

C-OG9.7

(C-OG9.7) Disclose the breakeven price (US\$/BOE) required for cash neutrality during the reporting year, i.e. where cash flow from operations covers CAPEX and dividends paid/ share buybacks.

52.5

☞ Brent oil price

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place

Scope 3

Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Limited Assurance Report on the GHG Inventory Report Parex Resources 2019 - 200820JNSingProt.pdf

Page/ section reference

See page 3 and Appendix 1 - pg. 1 to 8

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Limited Assurance Report on the GHG Inventory Report Parex Resources 2019 - 200820JNSingProt.pdf

Page/ section reference

See page 3 and Appendix 1 - pg. 9 to 11

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Limited Assurance Report on the GHG Inventory Report Parex Resources 2019 - 200820JNSingProt.pdf

Page/section reference

see Appendix 1, page 12-19

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Limited Assurance Report on the GHG Inventory Report Parex Resources 2019 - 200820JNSingProt.pdf

Page/section reference

See Appendix 1, pg 12-19

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Upstream transportation and distribution

Verification or assurance cycle in place



Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Limited Assurance Report on the GHG Inventory Report Parex Resources 2019 - 200820JNSingProt.pdf

Page/section reference

See Appendix 1, pg 12-19

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Waste generated in operations

Verification or assurance cycle in place

Status in the current reporting year

Type of verification or assurance

Limited assurance

Attach the statement

 Limited Assurance Report on the GHG Inventory Report Parex Resources 2019 - 200820JNSingProt.pdf

Page/section reference

See Appendix 1, pg 12-19

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Limited Assurance Report on the GHG Inventory Report Parex Resources 2019 - 200820JNSingProt.pdf

Page/section reference

See Appendix 1, pg 12-19

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

No, we do not engage

C12.1e

(C12.1e) Why do you not engage with any elements of your value chain on climate-related issues, and what are your plans to do so in the future?

In 2018, we made some policy changes and took several actions, which once implemented, will allow the Company to engage with the elements of its value chain on climate-related issues in the future. Parex updated our HSEQ Integral Policy to include climate change management as a commitment. Using the GHG inventory for 2017 as a baseline, Parex began to engage with third parties along its value chain to achieve collective impacts and joint mitigation efforts in managing climate-related issues. The first step was to start tracing all fuels sources in order to identify possible improvements and the sources with highest impact for the calculation of the carbon footprint. Going forward, the Company plans to include an additional evaluation metric within the contracting processes.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

No

C12.3g

(C12.3g) Why do you not engage with policy makers on climate-related issues?

There are no established processes as Parex' climate change strategy is currently being formulated and is still under evaluation. Once the Company consolidates its knowledge and internal management of GHG emissions, we may establish processes to guide engagement with policy makers on climate-related matters.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In voluntary sustainability report

Status

Complete

Attach the document

 IS2019.bpdf.pdf

 Limited Assurance Report on the GHG Inventory Report Parex Resources 2019 - 200820JNSingProt.pdf

Page/Section reference

See full report

Content elements

Governance

Emissions figures

Other metrics

Comment

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Our responses may be subject to forward-looking statements, which involve significant risk factors and assumptions; and have been fully described in the Company's continuous disclosure reports, which are available on the Company's website at www.parexresources.com and on SEDAR.

GHG Emissions Information

GHG emissions and emissions savings estimates that are provided herein have been calculated with a third party's assistance, as is further described below. These measures do not have standardized meanings or standard methods of calculation and therefore such measures may not be comparable to similar measures used by other companies and should not be used to make comparisons. Parex quantifies and reports its greenhouse gas (GHG) emissions using the operational control approach. Its organizational boundary includes the Company's Calgary & Bogota offices and all operated oil & gas exploration and production facilities. Parex has elected to report scope 1, 2 and 3 GHG emissions. For the purposes of the Company's GHG emissions reporting:

- Scope 1 emissions are defined as direct emissions from GHG sources that it owns or controls;
- Scope 2 emissions are defined as indirect GHG emissions that result from Parex' consumption of energy in the form of purchased electricity from the Colombian national grid and Canadian power grid; and
- Scope 3 emissions are defined as Parex' indirect emissions other than those covered in Scope 2. They are from sources not owned or controlled by Parex, but which occur as a result of the Company's activities. Particularly, Parex' drilling and completion activities conducted by third parties are deemed to be Scope 3.

Parex used a third party to help quantify its GHG emissions. For the 2019 reporting year, Parex retained Conservación & Carbono S.A.S to evaluate GHG emissions from all operated facilities located in Colombia in accordance with IPCC (2006) Guidelines for National Greenhouse Gas Inventories and Colombia's Technical Standard ISO 14064-1 ("NTC ISO 14064-1"). Verification of Scope 1, 2 & 3 GHG emissions was conducted by



PricewaterhouseCoopers in Colombia in accordance with International Standard on Assurance Engagement 3410, Assurance on Greenhouse Gas Statements ("ISAE3410") issued by the International Auditing and Assurance Standards Board.

Oil & Gas Matters Advisory

Boe: The term "Boe" means a barrel of oil equivalent on the basis of 6 Mcf of natural gas to 1 barrel of oil ("bbl"). BOEs may be misleading, particularly if used in isolation. A boe conversion ratio of 6 Mcf: 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion ratio at 6:1 may be misleading as an indication of value.

Reserves Advisory

The recovery and reserve estimates of crude oil reserves provided in this survey are estimates only, and there is no guarantee that the estimated reserves will be recovered. Actual crude oil reserves may eventually prove to be greater than, or less than, the estimates provided herein. All December 31, 2019 reserves presented are based on GLJ's forecast pricing effective January 1, 2020. The 2019 GLJ Report was prepared in accordance with the definitions, standards and procedures contained in the Canadian Oil and Gas Evaluation Handbook and National Instrument 51-101 - Standards of Disclosure for Oil and Gas Activities.

- Proved" or "1P" reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.
- "Probable" reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable" reserves.
- "Possible" reserves are those additional reserves that are less certain to be recovered than probable reserves. There is a 10 percent probability that the quantities actually recovered will equal or exceed the sum of proved plus probable plus possible reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated proved plus probable plus possible reserves. "2P" means Proved Plus Probable reserves. "3P" means Proved Plus Probable Plus Possible reserves.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Operating Officer	Chief Operating Officer (COO)



Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please confirm below

I have read and accept the applicable Terms