CANACOL ENERGY

2022 TCFD

Task Force on Climate-Related Financial Disclosures

Report

Contents

Introduction

Message from our CEO

As the largest independent natural gas exploration and production company in Colombia, Canacol is committed to taking ownership and accountability for understanding the impacts that climate-related risks and opportunities have on the environment, the communities where we operate, and our operations. As highlighted in our 2021 ESG Report, we made the decision to align our climate strategy with the latest Task Force on Climate-Related Financial Disclosures (TCFD) recommendations. We have incorporated climate related risks and opportunities into our governance and risk management processes. Therefore, we are pleased to present our inaugural TCFD Report aimed at enhancing our corporate climate disclosures in line with regulatory requirements and best practices. This report is a significant milestone in our journey towards integrating climate considerations throughout our business.

We have focused our business model to invest for a cleaner energy future and are committed to supporting the Colombian Government's pledge to the 2015 Paris Agreement. As part of this promise we are replacing carbon-intensive operations with low or no emission alternatives. Our ambition is to supply the increasing energy demands of the countries where we operate while simultaneously improving air quality and stimulating economic growth and development.

Last year was a landmark for Canacol in which we created a comprehensive and resilient decarbonization plan considering climate-related risks and opportunities. The plan acknowledges the challenges we face and outlines how we will take a leadership role for the energy sector's adaptation to the energy matrix transition. It also aligns our ESG strategy with our corporate values and business vision. Together these principles frame and direct our actions for the benefit of all our stakeholders.

We have established a Climate Governance Structure to prioritize and implement the decarbonization plan in which Canacol's Board of Directors actively engages with management on climate issues. This emphasizes the prioritization, integration, and coordination of emissions reduction, capture, and mitigation projects within our business strategies and risk-management processes. As a result, all business units now have greenhouse gas (GHG) emissions accountability defined as a Key Performance Indicator (KPI). Alignment with emission reductions has been further strengthened by linking board, executive, and management variable compensation to climate performance targets as we seek to foster a culture of compliance and innovative solutions.

As implementation of our decarbonization plan progresses, we look forward to realizing significant reductions in our direct and value chain GHG emissions as well as to taking a leadership role in the successful energy matrix transition.

Charle Gamba
President, CEO and Director of Canacol Energy Ltd.

TCFD Recommendations Overview

TCFD Section	Recommendations
Governance	Describe Board's oversight of climate-related risks and opportunities. Describe management's role in assessing and managing climate-related risks and opportunities.
Strategy	Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term. Describe the impact of identified climate-related risks and opportunities on the organisation's business, strategy, and financial planning.
Risk Management	Describe Canacol's corporate processes for identifying and assessing climate-related risks. Describe Canacol's processes for managing climate-related risks. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.
Metrics and Targets	Disclose the metrics used to assess climate-related risks and opportunities in line with Canacol's strategy and risk management process. Disclose Scope 1, 2 and, 3 greenhouse gas (GHG) emissions, and the related risks. Describe the targets used by Canacol to manage climate-related risks and opportunities.

Governance

Canacol's Climate Governance Structure

Canacol's Climate Governance Structure

Canacol Energy is an independent natural gas exploration and production company in Colombia, with a business model and sustainability strategy centered on advancing a cleaner energy future through the utilization of natural gas as a transitional energy resource.

Since 2021, Canacol has been aligning its sustainability strategy, with a particular focus on elements related to climate management, in accordance with the guidelines established in the Task Force on Climate-Related Financial Disclosures (TCFD). Consequently, our initial TCFD report has been publicly disclosed, presenting detailed developments in the areas of governance, strategy, climate risk management, and metrics. This report also showcases Canacol's progress in achieving its greenhouse gas emissions reduction targets.

The Board of Directors (the Board) recognizes the significance of climate change and has ultimate oversight over all climate-related risks and opportunities. Canacol's ESG (Environmental, Social & Governance) Committee (the "Committee") guarantees that sustainability strategy, the management of climate-related risks, and the corporation's emissions reduction road map are integrated into the business plan, long-term strategic decision making, and financial planning.

Board oversight of climate-related risks and opportunities

Canacol's ESG Committee is its governing body for climate issues.The Committee is responsible for ensuring that climate-related risks, opportunities, and targets are incorporated into the corporate-wide strategy and that the company has in effect adequate policies and procedures to identify and manage the principal climate-related risks. The ESG Committee continually evaluates the evolving landscape of climate-related risks and opportunities, and bi-annually reports findings to the Board for consideration and integration into wider business planning. The progress of these plans is monitored at the Board level to ensure accountability is maintained and that key challenges are addressed. The Committee meets as frequently as required but not less than twice per year. For the calendar year 2022, the Committee met four times to discuss ESG strategy, climate goals and to develop and review the company's Net-Zero commitment and plan.

Canacol's Board of Directors, serving as the highest authority in corporate governance, has established the ESG Committee. This committee is comprised of four independent members from the Board of Directors who convene on a quarterly basis to fulfill their responsibilities related to managing climate-related risks, encompassing both physical and transitional aspects. Furthermore, the committee oversees the continuous improvement of ESG performance through Canacol's active engagement in assessments, initiatives, and frameworks provided by independent entities that issue guidance, concepts, or ratings on the company's ESG performance. Among these, some of the most noteworthy are CDP, the global S&P CSA, and the TCFD framework.

Within this framework, Canacol's ESG Committee delegates responsibilities to the CEO, who, in turn, relies on the organizational structure. This structure involves the allocation of responsibilities to various business unit, a dedicated risk management and environmental team of experts, as well as ESG management throughout the Company.

Management's role in assessing and managing climate-related risks and opportunities

To ensure the effective implementation of its sustainability strategy, which encompasses critical sustainability issues such as climate management, risk management, and the establishment of definitive roadmap to reduce emissions in both operational and financial planning.

The climate strategy is integrated throughout Canacol's organizational structure and processes to ensure the effective management of climate-related risks and opportunities. The Executive team updates and incorporates risks and opportunities into annual strategic and operational objectives and strategies.

One of the four strategic pillars of Canacol's 2022 Business Plan was "Navigating the Energy Transition" aimed to lead Colombia's energy transition, supported by 5 corporate objectives:

1. Build a carbon neutrality plan for the short, medium, and long-terms.
2. Identify and include climate-related risks and opportunities of the natural gas business.
3. Foster an ESG culture built on transparency.
4. Leverage strategic partnerships to strengthen best practices and achieve carbon neutrality.
5. Improve ESG performance.

Management's review of climate-related risks and opportunities includes an assessment of any significant changes that could affect the current risk landscape. This process also identifies new opportunities and resources, evaluates progress toward goals, and advises the ESG and operational teams on climate strategy implementation.

As a Board member, **Canacol's CEO** is a key link between management and the Board. The CEO keeps the ESG Committee fully informed of the climate strategy progress, achievements, and upcoming plans. The CEO also provides feedback to the executive management team and ensures alignment of annual operational objectives and strategies with climate considerations.

The **General Manager Colombia (GM)** plays an essential role in the implementation and updating of Canacol's six-year ESG strategy and chairs the company's Climate Management Committee enabling effective execution of a climate plan.

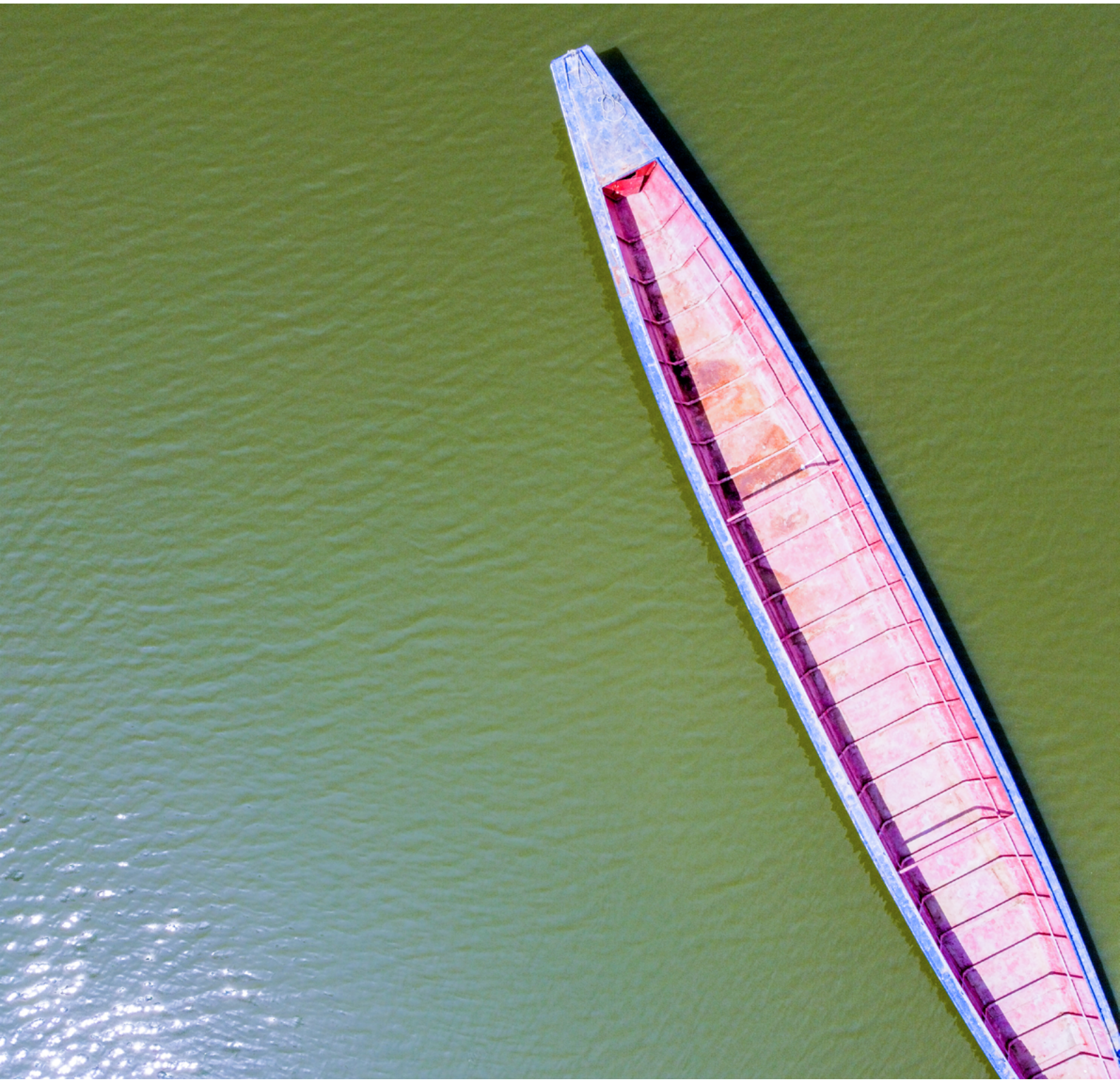
The **Climate Management Committee** was established in 2021 and consists of five executives (General Manager Colombia, Operations Vice President, Finance Vice President, Legal Affairs Vice President, and Sustainability Vice President) and managers that proactively integrate climate matters into all operational activities, corporate processes, and objectives. The Committee meets regularly to follow up on the progress that is subsequently reported to the ESG Committee Board.

The Company is presently in the process of deploying and implementing a carbon neutrality plan with a target set for 2050. This plan encompasses precise short, medium, and long term goals, along with well-defined processes and procedures designed for the comprehensive management and assessment of climate-related risks and opportunities within the natural gas sector. Furthermore, the plan includes strategic partnership initiatives aimed at realizing the predetermined objectives and goals.

Strategy

❯ Canacol's Climate Strategy

❯ Spotlight on Physical & Transition Risk Assessment



Canacol's Climate Strategy

We integrate climate risks and opportunities into our overall business strategy and have most notably implemented actions to reduce our direct greenhouse gas (GHG) emissions and impact we have on the environment in all our areas of operation.

Climate-related risks and opportunities the company has identified over the short, medium, and long term

Having an efficient supply of clean energy is crucial for society's development and progress. Our ambition is to improve the quality of life for millions of people through the exploration, production, and supply of conventional natural gas under the highest operational and environmental standards and to lead Colombia's energy matrix transition. Canacol is committed to supporting this transition and considers the impact of climate-related risks both today and in the future.

We firmly believe in the critical role of natural gas in the energy transition, and we fully support global plans to meet the goals of the Paris Agreement. We have focused on 1) strengthening carbon accountability and 2) defining a resilient low carbon strategy that considers climate-related risks and opportunities to respond effectively to energy transition challenges.

We consider each climate-related risk and opportunity by its short, medium, and long-term impacts. In 2022, we actively integrated climate-related risks into the wider risk management strategy to fully understand and to begin quantifying the financial impacts for each time horizon. Through our Corporate Enterprise Risk Matrix, we assess, classify, and prioritize risks and opportunities by using measures of likelihood and impact.

Impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning

We have identified physical and transition climate-related risks through Board and Senior Leadership level discussions and risk management workshops. Decarbonization opportunities are aligned with the organization's businesses, strategy, and financial planning.

Throughout 2022, Canacol built capabilities to utilize scenario analysis to further identify potential climate-related risks and opportunities. We performed qualitative analysis to better understand the energy transition and carbon neutrality opportunities and we plan to continue modelling both transition and physical risk to further advance the organization's strategy.

We aim to leverage both physical scenario analysis and the latest climate science to robustly model the impacts of climate change on our operations, assets, and supply chain. Future physical and transition modelling scenarios will incorporate multiple climate warming pathways.

In the short term, we will look to further enhance resilience across our operations, leveraging ongoing work to quantify the potential climate-related risks and opportunities. This may include mitigation measures that improve the risk exposure to our sites, as well as employee health and safety or measures that reduce the impact we have on the environment and climate.

Spotlight on Physical & Transition Risk Assessment

Canacol has identified and assessed the climate-related physical and transition risks at the group level and below we outline critical mitigating actions to address these. Canacol undertook a group-level exercise involving of Directors and heads of the ESG team and business units to assess the impact and likelihood of both physical and transition risks. This climate-related risk assessment involved leveraging the latest climate science and in the context of Colombia's climate landscape, to review the implications and mitigating actions. Below we present three key physical and transition risks that we have identified as priorities.

Physical risks relate to the more frequent extremes of climate change, such as increased catastrophe risk, extreme rain, severe flooding, and the associated damage of these risks to Canacol's operations and assets.

Risk	Implications	Mitigating actions
Extreme rainfall	Increased intensity of extreme rainfall may impact Canacol's construction of infrastructure works (flow lines, access roads, treatment facilities and civil platforms) and hinder operations and drilling at primary sites.	The level of vulnerability of existing infrastructure to extreme rainfall is periodically reviewed. Canacol continuously monitors climate variables to anticipate periods of extreme rain and has developed contingency plans and budgets to mitigate the impact of a prolonged period of rain.
Abundance of water	Increased annual rainfall leads to more energy supply from major hydroelectric power plants which reduces demand for natural gas over time.	The annual sales forecast includes the decrease in supply due to the rainy season. Additionally, Canacol is diversifying its customer portfolio within the internal Colombian market.
Water scarcity	Long periods of water scarcity limit the amount of water that Canacol can use in its operations. Furthermore, gas demand from the power generation sector increases significantly if rainfall is below normal conditions for hydropower, putting Canacol's supply capacity under stress to meet increased demand.	Control and monitoring of climatic variables will ensure Canacol is able to respond to market fluctuations. Canacol is also diversifying water sources through different contracts and technologies.

Transition risks include policy, legal, financial, and reputational risks that face Canacol amidst the global transition to a low-carbon economy

Risk	Implications	Mitigating actions
Gas supply constraints	Loss of Colombian self-sufficient gas market due to public restrictions on its supply (denial of permits to exploit new fields, limitation in the exploitation of existing fields etc.).	Canacol sales contracts are covered by current E&P contracts with the ANH (Agencia Nacional de Hidrocarburos), which are long term commitments between Canacol and the ANH for exploration and production of Canacol reserves. In the future, Canacol will continue to work for Colombia's energy self-sufficiency by executing its current contracts, participating in new auctions of E&P contracts and by working together with government agencies and communities.
Increased regulations	Increasing restricting regulation of climate, for example increasing taxes or tariffs on carbon intensive products alongside new reporting requirements.	Constant review and updating of processes as new legislation occurs. Canacol has incorporated regulatory adjustment clauses into contracts and proactively anticipates and plans for new regulatory requirements.
Advances in technology	The cost of implementing new low-carbon technologies too early when they are not cost efficient or the loss of competitiveness by implementing too late.	Canacol is exploring innovative ways to reduce carbon emissions. We are continuously evaluating projects to reduce the carbon footprint of our own operations and seeking the latest technological advancements available for implementation.

Risk Management

Canacol's Risk Management Strategy

Canacol's Risk Management Strategy

As part of Canacol's core risk management processes, we are implementing a more robust methodology for identifying, quantifying, managing, and mitigating climate-related risks across our global operations. This ensures that climate considerations are fully embedded in our organizational culture, decision making, and that responsibilities and accountabilities are assigned for all key climate-related risks and opportunities.

The general framework for managing risks and opportunities at Canacol adheres to the ISO 31000 international standard and the Risk and Opportunity Management Policy. This policy, which has been in effect since 2022, outlines Canacol's commitments and forms the foundation for steering the strategic direction of the risk planning and analysis process. It accounts for a spectrum of risks, including those of an internal, external, strategic, and emerging nature.

Processes for identifying and assessing climate-related risks

Canacol's ESG Committee and senior management regularly perform climate-related risk assessments that consider the impact of physical and transition risks across all business areas to identify and prioritize mitigating actions. The Corporate Enterprise Risk Management (ERM) framework is regularly updated and is the primary mechanism to assess and prioritize climate-related risks and opportunities by business unit, using a common measure of likelihood and impact, considering financial, regulatory, reputational, environmental and safety impacts. Senior leadership teams regularly perform workshops and group discussions to assess climate-related risks in terms of likelihood and impact to ensure awareness and accountability are maintained. We aim to be able to effectively assess climate-related risks in parallel as our operations grow and evolve.

Climate-related risks are incorporated within the category of strategic risks at Canacol. The evaluation of strategic risks within the Company encompasses the ongoing identification, analysis, and assessment of these risks, conducted periodically and transversally across the Company. For each specific risk, a set of controls and indicators has been established to gauge their effectiveness. Additionally, designated individuals are responsible for managing these risks, and an action plan has been formulated, which is subject to continuous monitoring and verification. The results of these efforts are reported to Canacol's CEO, as well as to the ESG and Audit Committees.

In 2023, we will continue to establish Key Performance Indicators (KPIs) and annually review our climate-related risk management processes, including those for developing and implementing risk maps, controls, and risk ownership. Our objective is to conduct scenario analysis as part of strategic planning and enterprise risk management, to identify options for increasing business resiliency to plausible climate related risks and opportunities through adjustments to strategic and financial plans.

Processes for managing climate-risks

Climate-related risks are managed through periodic evaluation processes. Canacol has a defined monitoring system to track ESG strategic goals and indicators. This has provided real-time qualitative and quantitative information about ESG key performance, including climate-related risks, allowing better and timelier decision-making for risk management decisions.

Canacol has established document registers, including the format for risk and opportunity management, to facilitate document management within the organization. Additionally, the Company has equipped itself with analytical tools that are grounded in statistical methods, incorporating techniques to harness expert judgment and data analytics. These tools are instrumental in assessing the likelihood of occurrence of various events and gauging the magnitude of their potential consequences. This systematic approach aids in prioritizing and categorizing risks, including those associated with climate change.

These analytical tools have graphic outputs, such as 5x5 matrices (representing five levels of probability of occurrence and five levels of impact) for risks and 3x3 (comprising three levels of probability and three levels of impact) for opportunities. Within the context of specific parameters like the stakeholders affected by the risks (including people, the environment, operational privileges, reputational value, and potential financial losses - depending on risk appetite), these tools enable the determination of risk levels, spanning from low to very high, and the evaluation of opportunity value, ranging from low to high.

Processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management

Currently, climate risks are reported to the Executive Committee and to the Board of Directors' Audit Committee for review and assurance. Canacol will continue to embed this process throughout the wider organization. A 2023 focus will be to establish stronger processes for implementing climate-related risk management into the overall risk management framework.

Canacol has in place the PPLN-01 process for planning the management of risks and opportunities, which is currently in effect with its latest version dated December 2022. This document outlines the objectives, scope, activities related to risk management, criteria, communication strategies, procedure for evaluation and analysis, assessment methods, treatment strategies, as well as actions for follow-up and monitoring, and the documentation of risk acceptance minutes. It also encompasses the use of indicators, audits, and classification procedures, concluding with steps to formalize responsibilities for risk treatment.

Among the various types of risks identified by Canacol, the following categories are noteworthy: environmental, climate, financial, market, reputational, operational or process, and legal or compliance risks.

Climate risks, within the multidisciplinary implementation process, are specifically defined as follows: "Risks resulting from climate change with financial impact (revenue, cash flow, balance sheet, loss of asset value, increase in insurance, and access to capital and financing) on organizations. Climate risks can be Physical (extreme weather-related events, such as droughts or floods; and/or progressive changes in weather patterns, such as an increase in average temperature) or Transition (change in the regulatory and legal framework, technological innovations, changes in market preferences, reputational risks)."

To enhance preparedness for extremem weather events and natural disasters, Canacol has formulated a Disaster Risk Management Plan (PGRD). This plan, designed to ensure business continuity, encompasses measures for risk analysis aligned with current processes (Chapter 4). It takes into consideration triggering events of environmental (including climate), technological, operational, socio-political, or cultural nature. Furthermore, the plan involves an evaluation of asset vulnerabilities within the Company's management, along with criteria for risk assessment, including measures for preventing and mitigating fugitive methane emissions.

Canacol remains committed to advancing the analysis of physical and transition risks associated with climate change, along with climate scenario analysis, with a particular focus on critical business assets such as gas treatment and compression stations, including the liquefied natural gas (LNG) processing unit adjacent to the El Jobo station.

Canacol's Risk Management Process and implementation guidelines

1. Risk Identification
2. Risk Analysis (causes, consequences and responsible)
3. Risk Evaluation
4. Risk Response (Action plan)
5. Risk Monitoring

Approach to risks associated with climate change

Canacol has undertaken an analysis of both physical and transition risks associated with climate change, aligning with the recommendations outlined by the TCFD. This analysis places a strong emphasis on prioritizing assets that are not only crucial for the business but also essential for the Company's operational continuity. These vital assets include gas processing and compression facilities managed by Canacol.

The prioritized facilities that were considered in the analysis were: i) Jobo, this station also houses a unique small-scale liquefied natural gas (LNG) plant, in Colombia, ii) Betania, iii) Clarinete, iv) Pandereta and v) Níspero. The analysis of each asset was conducted in accordance with a designated priority order. The analysis utilized a 2022 baseline and projected potential scenarios for the short, medium and long term time horizons, corresponding to the years 2030, 2040, and 2050, respectively. In this assessment, the climate scenarios utilized included SSP1-2.6; SSP3-7.0 and SSP5-8.5 for evaluating physical risks, as well as scenarios from the International Energy Agency (IEA), including STEPS, APS, and NZE, to assess transition risks.

Physical risks associated with climate change

The main objective of Canacol's physical climate risk analysis was to determine, for each of the prioritized assets, their susceptibility to one or more climate-related hazards and to collect data on the extent of this vulnerability. It is important to emphasize that the level of exposure to climate risks is contingent not only on climate data and its projections, but also on the characteristics and type of asset evaluated.

This type of analysis provides the basis for disclosing pertinent information in accordance with frameworks such as TCFD, Carbon Disclosure Project (CDP), and standards such as those established by the Sustainability Accounting Standards Board (SASB), among others. These frameworks and standards recommend the evaluation and disclosure of the most relevant climate-related hazards that impact the group of assets prioritized by Canacol.

The data sourced and processed in this analysis subsequently serve as input for further assessments, including the quantification of financial impacts, enhancing the quantitative precision of the physical risk assessment. The process of risk analysis and assessment commenced with the selection of the climatic hazards deemed relevant for the Company's operations, which include the following:

Table 1 Climate hazards considered by Canacol for the analysis of physical risks associated with climate change.

Climate hazards relevant to the selected operations for the climate risk analysis	Climate indicators selected for the climate risk analysis
Extreme heat	Index of duration of hot periods (days)
Extreme cold	Index of Extreme cold periods (days)
Water stress and drought	Number of days (days)
Rainfall-induced landslides	Index of rainfall-induced landslides (Number of days with a potential possibility of a landslide event)
Wildfires	Wildfire danger index (Number of days with weather conditions that allow fire)
River flooding	Number of days (days)

Each of the selected climate hazards correspond to potential impacts on each of the prioritized assets. The baseline data utilized in this analysis draws on the CMIP 6 (Coupled Model Intercomparison Project Phase 6), which extracts data from ISIMIP, a resource aimed at enhancing the spatial resolution of global climate models and reducing uncertainties in the analysis.

After the selection of climate hazards for the analysis, as previously mentioned, Canacol opted to use climate scenarios known as Shared Socioeconomic Pathways (SSP) to assess projected changes in climate hazards over time for each of the prioritized assets. selected scenarios are as follows:

Table 2 Presentation of the scenarios considered for the analysis of scenarios and physical climate risks used by Canacol.

Climate scenarios selected in Canacol's climate risk analysis	Brief description of the selected scenarios	Justification for selection criteria
SSP1-2.6 **Scenario type: 2°C or below 2°C of temperature increase**	• It is a sustainability-focused, low emissions scenario aiming to limit global warming to well below 2 degrees Celsius above pre-industrial levels by the end of the century. • It assumes a low carbon emissions scenario resulting in an average global temperature warming of 1.8°C. • It also assumes that the challenges of implementing climate change mitigation and adaptation measures are minor; and that, in general terms, the global trend has been set on a course consistent with sustainable development.	This optimistic scenario is applied to identify the minimum magnitude of the impacts of each of the climate hazards considered and which are the cause of risks for the assets prioritized by Canacol.
SSP3-7.0 **Scenario type: Above 2°C of temperature increase.**	• It is a scenario characterized by high emissions and limited international cooperation, leading to higher levels of global warming. • It is a scenario of high greenhouse gas (GHG) emissions that results in a global average increase of 3.6°C. • It poses challenges that are overcome in terms of mitigation and adaptation to climate change. • Regional conflicts push countries to focus increasingly on domestic or, at best, regional issues. Low international priority to address environmental concerns leads to severe environmental degradation in some regions.	Unlike the other scenarios considered, it is not intended to be a "stress test", without modeling possible mitigation and adaptation solutions, but also provides a reliable basis for understanding the relevance of climate change and its impacts on the business, its infrastructure, and its supply chains, among others

Climate scenarios selected in Canacol's climate risk analysis	Brief description of the selected scenarios	Justification for selection criteria
SSP3-7.0 **Scenario type: Above 2°C of temperature increase.**	• Regional conflicts push countries to increasingly focus on domestic or, at most, regional issues. A low international priority for addressing environmental concerns leads to strong environmental degradation in some regions.	Unlike the other scenarios considered, it is not intended to be a "stress test", without modeling possible mitigation and adaptation solutions, but also provides a reliable basis for understanding the relevance of climate change and its impacts on the business, its infrastructure, and its supply chains, among others
SSP5-8.5 **Scenario type: Above 2°C of temperature increase.**	• It is considered a scenario in which a "business as usual" trend prevails, and development is based on the massive use of fossil energy. • This is the scenario with the highest carbon emissions, which would result in an average warming of 4.4°C. • It poses great challenges for mitigation and low challenges for adaptation. • The drive for economic and social development is accompanied by the exploitation of abundant fossil fuel resources and the adoption of resource and energy-intensive lifestyles worldwide	This scenario represents a pessimistic outlook, serving as a scientific basis to underscore the environmental, social, and economic cost of inaction – the consequences of not taking decisive action to safeguard the climate from fossil fuel operations. It enables us to identify the most extreme extent of potential impacts for each climate threat under consideration, illustrating the root causes of risks to Canacol's prioritized assets.

Transition risks associated with climate change

Canacol's analysis of transition risks and opportunities related to climate change is in alignment with the Company's risk management planning process. The initial phase involved the identification and analysis of risks, all within the framework of three distinct climate scenarios defined by the IEA: STEPS, APS, and NZE for transition risks.

The following is a brief overview of the scenarios adopted by Canacol for the analysis of transition risks associated with climate change:

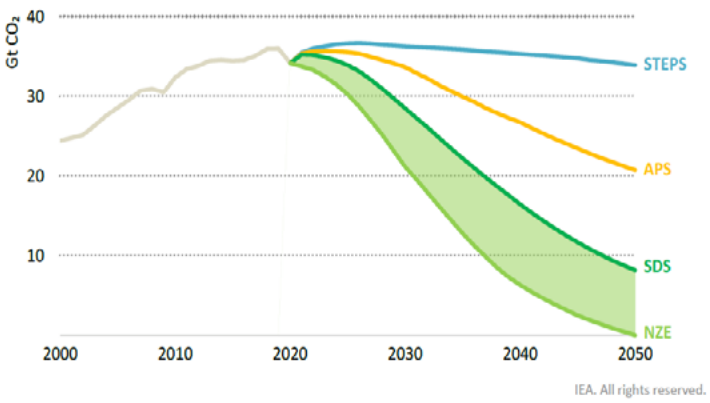
Table 3. Presentation of the scenarios considered for the analysis of transition climate scenarios and risks used by Canacol.

Climate scenarios selected in Canacol's climate risk analysis	Brief description of the selected scenarios	Justification for selection criteria
STEPS - Stated Policies Scenario **Scenario type: Above 2°C of temperature increase.**	• The reliability percentage of this scenario is between 33 and 67% and suggests a global temperature increase of between 1.4-1.6°C by 2030, between 1.8-2.1°C by 2050, and between 2.4-2.8°C by 2100. • STEPS provides a conservative benchmark for the future because it does not assume that governments will achieve all announced reduction targets. Instead, a more granular, sector-by-sector look at what has been implemented to achieve these and other energy-related targets is needed, accounting not only for existing policies and measures but also those under development. STEPS explores where the energy system could go without significant additional guidance from policymakers. Like APS, it is not designed to achieve a particular outcome. The expected temperature increase in this scenario is 2.6 °C by 2100.	Considering the relevance of public policy within the framework of the legislation that has been adopted and is rigorously enforced to reduce GHG emissions, to comply with the voluntary commitments made by governments, it implies a regulatory landscape that directly impacts activities related to fossil fuel exploration and production.
APS - Announced Pledges Scenario **Scenario type: 2°C or below 2°C of temperature increase.**	• The reliability percentage of this scenario is between 33% and 67% and suggests a global temperature increase of between 1.4 and 1.6°C by 2030, between 1.7-2.0°C by 2050, and between 1.9-2.3°C by 2100	It implies the entry into force of regulations and a slower energy transition. It Contemplates regulatory aspects in the framework of public policy and legislation to comply with the voluntary reduction goals adopted by Colombia and other countries.

Climate scenarios selected in Canacol's climate risk analysis	Brief description of the selected scenarios	Justification for selection criteria
STEPS - Stated Policies Scenario **Scenario type: Above 2°C of temperature increase.**	• The Announced Commitments Scenario (APS) will reduce emissions, but not until after 2030; the SDS goes further and faster to align with the Paris Agreement; the Net Zero Emissions scenario achieves zero net emissions by 2050. • APS is a scenario that assumes that all climate commitments made by the governments around the world, including Nationally Determined Contributions (NDCs) and long-term net zero targets, as well as electricity and clean energy access targets will be met on time.	It implies the entry into force of regulations and a slower energy transition. It Contemplates regulatory aspects in the framework of public policy and legislation to comply with the voluntary reduction goals adopted by Colombia and other countries.
NZE - Net Zero Emissions by 2050 Scenario. **Scenario type: 2°C or below 2°C temperature increase**	• The reliability percentage of this scenario is between 33 and 67% and suggests a global temperature increase of between 1.4-1.6°C by 2030, between 1.4-1.7°C by 2050, and between 1.3-1.5°C by 2100. • A scenario that sets out a pathway for the global energy sector to achieve zero net CO2 emissions by 2050. It does not rely on emissions reductions external to the power sector to achieve its targets. Universal access to electricity and clean energy will be achieved by 2030.	This is the most optimistic scenario modeled by the IEA and contemplates the achievement of net zero GHG emission targets with combined public and private sector participation. The reduction targets and mitigation measures are the most demanding, but the most reasonable for a gas focused producer such as Canacol.

According to the IEA, the increase in emissions will exhibit behavior measured according to the following projections:

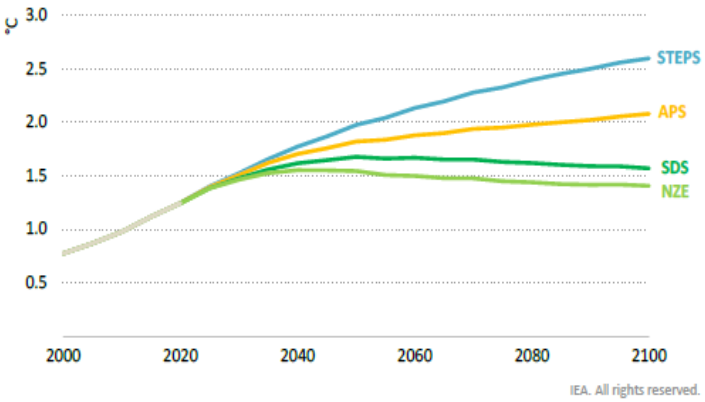
Figure 1. CO2 emissions from IEA climate scenarios over time.



These projections served as guiding factors in the selection of climate scenarios for the analysis of Canacol's transition risks and opportunities associated with climate change. The aim was to consider scenarios that represent the least conservative and most challenging contexts, thereby facilitating the development of future

climate risk mitigation and treatment measures that are robust and responsive to a wide range of potential challenges.

Figure 2. Increase in average global land surface temperature over time as projected by the IEA.



In line with Canacol's adopted risk management planning processes, following the identification and analysis of risks within the framework of climate scenarios, Canacol performs the assessment and formulation of risk treatment measures.

The scenarios selected by Canacol for its climate risk analysis are grounded in scientific foundations and represent the most widely accepted and utilized scenarios by decision-makers worldwide.

These selected scenarios strike a balance between the most likely outcomes, a conservative perspective, and catastrophic scenario. This approach is aimed at enriching the risk analysis by focusing on extremes, effectively serving as a stress test. It enables Canacol to consider a spectrum of consequences stemming from physical risks attributed to climate hazards, as projected by the scenarios.

An important aspect to emphasize is that the SSP scenarios, being the most current and up to date, consider not only thermal dynamics on the Earth's surface, but also encompass elements related to energy transition, population dynamics, economic stability, and the evolution of public policy, among other critical factors. This holistic approach ensures a comprehensive and realistic assessment of the potential impacts of climate change on Canacol's operations and strategic planning.

As a result of the risk assessment, considering the potential consequences of the impacts identified for Canacol's prioritized assets, the Company has determined that the present and future risks that have the potential to significantly affect business operations, expenses, and revenue include:

- Extreme heat as the main climatic threat in the analysis of physical risks across all prioritized assets.
- The probability of increased storm days, especially in the vicinity of Canacol's Clarinete station, with potential implications for civil work plans related to natural gas and other hydrocarbon extraction.
- The imposition of tax and other contractual requirements. These include tax obligations and contractual stipulations related to service availability and continuity, which may be tied to economic sanctions affecting the supply of natural gas in Canacol's commercial relationships customers.
- The progressive rise in the value of carbon credits, serving as a carbon pricing mechanism in the Colombian regulated market. Additionally, the imposition of mandatory requirements related to the generation, capture, recovery, and/or use of fugitive and vented emissions as outlined in Resolution 40317 of 2023 and Title III of Law 2169 of 2021. These requirements are further influenced by the National Program of Tradable Quotas (PNCT) created by Law 1931 of 2018, which will necessitate emissions reduction and the integration of an internal carbon pricing mechanism as a mandatory operational measure.
- The methods envisaged by Canacol for the management of these risks encompass technical, technological, and operational interventions to manage fugitive emissions and natural gas venting across all its assets. Additionally, the Company plans to adopt internal carbon pricing mechanisms as a criterion in decision-making

processes related to planning, CAPEX, OPEX, and new investments associated with its various business operations.

- Based on the analysis of climate scenarios to assess the physical risks of extreme heat in Canacol's operations, the prioritized assets show estimated projections of days with extreme heat. In 2030, there is a projected increase of 29% in the number of days with extreme heat compared to the baseline year of 2022. This percentage variation is the lowest and is associated with Station Clarinete under the SSP1-2.6 scenario, representing a relatively optimistic climate projection. In contrast, by 2050, there is a substantial estimated increase of 293% in the number of days with extreme heat compared to 2022. This represents the highest percentage variation and is linked to Station Níspero under the SSP5-8.5 scenario, representing a more pessimistic and extreme climate projection. The potential financial implication of this physical risk is significant for Canacol, potentially ranging between USD $270,000 and USD $390,000 in the absence of proactive measures to address the risk, leading to potential business interruption.
- According to Canacol's valuation scales for assessing the consequences of physical risks, preliminary estimates suggest potential financial losses of up to USD$390,000. This categorizes the risk with a rating of four, signifying a high-risk level. It is important to note that this estimate is based on a scenario where the business and operations continue without implementing tackling any concrete actions to fulfill carbon neutrality commitments. Furthermore, these commitments are deemed insufficient within the broader international context, particularly in aligning with the imperative sustainability goals related to climate change response. To fully align with sustainability initiatives and address climate change effectively, it is essential to align with net-zero objectives.

Adaptation to physical climatic risks

Canacol Energy Ltda. Maintains a robust operations management structure that emphasizes preventive maintenance plans to ensure operational continuity. This department also plays a pivotal role in the technical implementation of mitigation measures as part of the Company's carbon neutrality plan.

In the context of preventive and corrective maintenance plans, which are executed regularly and frequently, equipment monitoring, and control data are utilized to enable continuous tracking of operations. Critical equipment vital to Canacol's business is prioritized for attention. Additionally, ground, and aerial visual inspections and surveys are conducted to identify environmental conditions that may pose risks, including those associated with climate change. This proactive approach ensures timely response and communication with relevant authorities in case of any identified issues.

The control devices in place record specific parameters directly related to climate variables, such as temperature, humidity, and general weather conditions, including dry weather conditions with a higher probability of fires and rainfall intensity. These parameters are carefully monitored to detect conditions that could potentially compromise the continuous and proper functioning of equipment, as well as backup and redundancy equipment.

The review of parameters and variables configured in the control devices incorporates the results of the physical climate risk analysis conducted by the Company, with a deepening of this analysis in 2023. These insights inform maintenance plans that Canacol considers as technological and operational adaptation measures to enhance equipment resilience and ensure business continuity.

Additionally, the departments leading programs and initiatives in occupational health and safety at Canacol recognize extreme heat as a risk with occupational health implications. As a measure of adaptation to climate change, the Company plans to include measures for surveillance and the establishment of safe working conditions for its entire workforce. To mitigate the risks associated with extreme heat, Canacol can consider implementing various actions, including:

- Changes in working conditions through adjustments such as implementing work rotation schedules and restricting outdoor work during specific times of the day when heat levels are at their peak. The Company can also develop occupational health and safety programs that monitor signs of heat-related issues, such as body temperature or blood pressure, especially in personnel engaged in high-risk activities. Providing on-site and

programs to promote the prevention of heat-related illnesses, including hyponatremia, heat stroke, and dehydration can be valuable measures. The review of the specifications of personal protective equipment (PPE) is another measure that can be taken.

- There are records of some union organizations that have modified and included climate exposure as a factor in working conditions. These have acted as a negotiation point in collective bargaining agreements. If relevant, it is recommended to pay attention to risk management with respect to labor practices and work with the union organizations to address extreme heat risks.
- The Company can make operational adjustments, such as conducting maintenance routines more frequently, introducing control measures for temperature regulation using support equipment, and innovation in noise control within its infrastructure.
- A review and control of meteorological variables that can affect natural gas treatment processes should be considered by the Company. Extreme heat can impact the efficiency and effectiveness of various operational processes, so monitoring and control measures are essential in this regard.
- Canacol make incur some OPEX expenses related to extreme heat risks. These expenses could have financial implications, and it is recommended that the Company calculates and manages these potential costs if access to relevant information is available.

Furthermore, various civil works related to hydrocarbon production and operation, such as platform and road construction, incorporate hydrometeorological variables with return times of 100 years into the planning and decision-making process for adaptation to climate change. Canacol recognizes that extreme weather events can disrupt work schedules and impact road accessibility, which is crucial for operations. As a result, measures for adaptation to acute physical risks are integrated into the design and implementation of these infrastructure projects.

While adaptation measures are implemented across various aspects of the Company, including personnel, assets, operations, and infrastructure, there is currently no consolidated strategic adaptation plan for climate change based on the analysis of physical risks, transition risks, and climate scenarios. However, Canacol is committed to continuing its efforts to construct a climate change adaptation plan tailored to the context of its current and future operations.

Opportunities Arising from Climate Change

According to the analysis of risks, opportunities, and climate scenarios conducted by Canacol in 2023, the following opportunities associated with climate change have been identified:

- Production of liquefied natural gas (LNG) at the plant located near the Jobo substation. This facility currently has the capacity to process up to 46 tons per day of natural gas into a liquid state. This operation, which is unique in Colombia, not only diversifies the company's offerings within the gas value chain but also holds the potential to avoid greenhouse gas emissions. LNG can serve as a substitute energy source for liquid fuels, offering cost-effectiveness and cleaner combustion compared to gasoline or diesel. Canacol intends to further develop this operation and expand the LNG market in the coming years.
- Formulation and implementation of a carbon neutrality strategy roadmap with a perspective covering the short, medium, and long term. The Company is committed to achieving reduction goals, including the target of achieving zero methane emissions by 2026 and reducing scope 1 and 2 emissions by 50% by 2030. The ultimate goal is to attain carbon neutrality by 2048.
- Diversification of the energy matrix for operations. This includes considering the use of non-conventional alternative energy sources, such as solar farms.

Financial opportunities associated with identified climate risks

As part of Canacol's analysis of physical risks, opportunities, and climate scenarios, the Company has selected elements from its carbon neutrality plan, which is in effected and projected to 2050. This plan anticipates the elimination of fugitive methane emissions and venting, diversification of the operational energy matrix, incorporating non-conventional renewable energy from solar farms, as well as measures to increase energy efficiency. Canacol also plans to achieve the OGMP Gold standard certification for reporting on methane emissions by 2026 and formulate emission reduction targets for scope 1 and 2 emissions.

These opportunities represent avoided emissions that, if traded as carbon offsets, could have potential financial opportunities that align with a carbon neutral process and contribute to broader goals of achieving net zero.

The analysis of climate scenarios for climate-related transition risks (IEA SDS scenarios) also suggests the potential to enhance the Company's reputational value among customers, the broader market, and investors who prioritize ESG and sustainability criteria. While This opportunity is intangible and has not been quantified by Canacol, it can have a significant impact on the Company's brand and relationships with its stakeholders.

From a financial perspective, Canacol has estimated positive implications in this context. Focusing on the elimination of fugitive emissions, which accounted for 27% of total Scope 1 emissions in 2022, the avoidance of these emissions could lead to cost saving. Canacol has quantified that avoiding fugitive emissions (estimated at 22,472 tons of CO_2e in 2022) could result in accumulated avoided costs of USD$ 1,438,208 by 2026 and up to USD$ 5,573.056 by 2050. These projections are based on the Global Change Assessment Model (GCAM), which estimates carbon price projections under the SDS scenario of the IEA's World Energy Outlook. In regions with regulated carbon markets, the price of carbon credits is anticipated to reach USD$15 per ton of CO_2e by 2030 and up to USD$30 per ton of CO_2e by 2050.

Additionally, the diversification of the energy matrix, specifically the introduction of solar parks with an installed capacity of 1.8MW by 2030 and an accumulated 153.8MW by 2049, has the potential to partially replace the demand for natural gas for electricity generation in our operations. This transition to renewable energy sources could avoid emissions, estimated at 22.56 tons of CO_2e in 2022 (Scope 2 emissions), resulting in potential cost savings of up to USD $308,250 by 2049, according to the projections based on the GCAM model.

These initiatives not only align with Canacol's sustainability goals but also offer financial benefits and contribute to the Company's long term resilience in the face of climate-related challenges.

Metrics and Targets

Canacol's Metric and Target Disclosures

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We have defined metrics and targets that ensure business objectives relating to climate change and the energy transition are realized. Carbon accounting and management are defined as key performance indicators for all our business units. We followed the GHG Protocol's Corporate Standard to calculate and disclose carbon emissions and, through a third-party expert, we quantified 100% of the most recent direct and indirect GHG inventory (FY 2021). We use Wood Mackenzie's Emissions Benchmarking Tool to enhance transparency and provide a more comprehensive assessment of emissions-related risks and opportunities at the corporate level and across our value chain.

Metrics used by Canacol to assess climate-related risks and opportunities as part of its strategy and risk management process

Robust and high-quality data is critical for accurate tracking of operational metrics relating to resources consumption. Canacol continues to identify metrics to establish targets and track progress. We have defined multiple environmental and operational risks metrics involving energy and water consumption, as well as GHG emissions and land use.

- Since 2020 we have been implementing an energy transformation process in our operations to minimize the use of other fossil fuels and to optimize the efficiency of our own-produced natural gas.
- We have increased the use of solar energy in our operations by 140% and 32% in 2020 and 2021 respectively.
- We quantified the company's indirect 2021 GHG emissions, including emissions associated with the use of energy products sold by Canacol. We are in the process of assessing significant data- driven opportunities that will influence our GHG reductions and enhance our climate strategy across our value chain for the upcoming years.

We recognized there is a long road ahead and we are committed to continue improving the implementation of physical and transition risk specific metrics. Our objective is to include metrics on climate in 2023 aligned with responsible management roles.

Canacol's 2021 Scope I, II and III GHG emissions

Scope 1 + 2 emissions

Risk	Gas	Crude Oil t CO2e	Total	
Stationary comb. (Compression & Generation)	41,706	13,023	54,729	64.36%
Estimated fugitive emissions	18,154	4,318	22,472	26.42%
Flared gas	6,386	1,032	7,418	8,72%
Mobile combustion	159	-	159	0.18%
Purchased electricity *(Scope 2)*	22,56	-	22,56	0.02%
HFC from air conditioning and refrigeration use	203,9	26,60	229,50	0.26%
Total	**66,631**	**18,399**	**85,030**	

Scope 3 (indirect emissions)

Categories	t CO2e	
Use of sold products	3,390.520	98.40%
Purchased goods and services	31,273	0.91%
Downstream transportation and distribution	10,718	0.31%
Capital goods	8,772	0.25%
Employee commuting	681	0.02%
Other fuel-and energy-related activities	74,28	0.00%
Business travel	207	0.01%
Upstream transportation and distribution	544	0.02%
Waste generated in operations	126	0.00%
Total	**3,442,859.31**	

As part of Canacol's decarbonization strategies to progressively reduce greenhouse gas emissions and eliminate fugitive emissions and other air pollutants we have set metrics to ensure targets are achieved.

Our decarbonization roadmap encompasses short, medium, and long-term actions including leak detection and repair to eliminate fugitive emissions, flare efficiency and reduction, and the expansion of renewable energy projects, among others.

At Canacol Energy, we are committed to taking actions for a cleaner energy future and accelerated global transition. To that end, we have taken actions to meet the demand of natural gas in Colombia to enable millions of people to switch to cleaner fuels. We have also created a comprehensive and resilient decarbonization plan, which will be publicly communicated in 2023 with a firm pledge of achieving Net-Zero Scope 1 and 2 GHG emissions before 2050