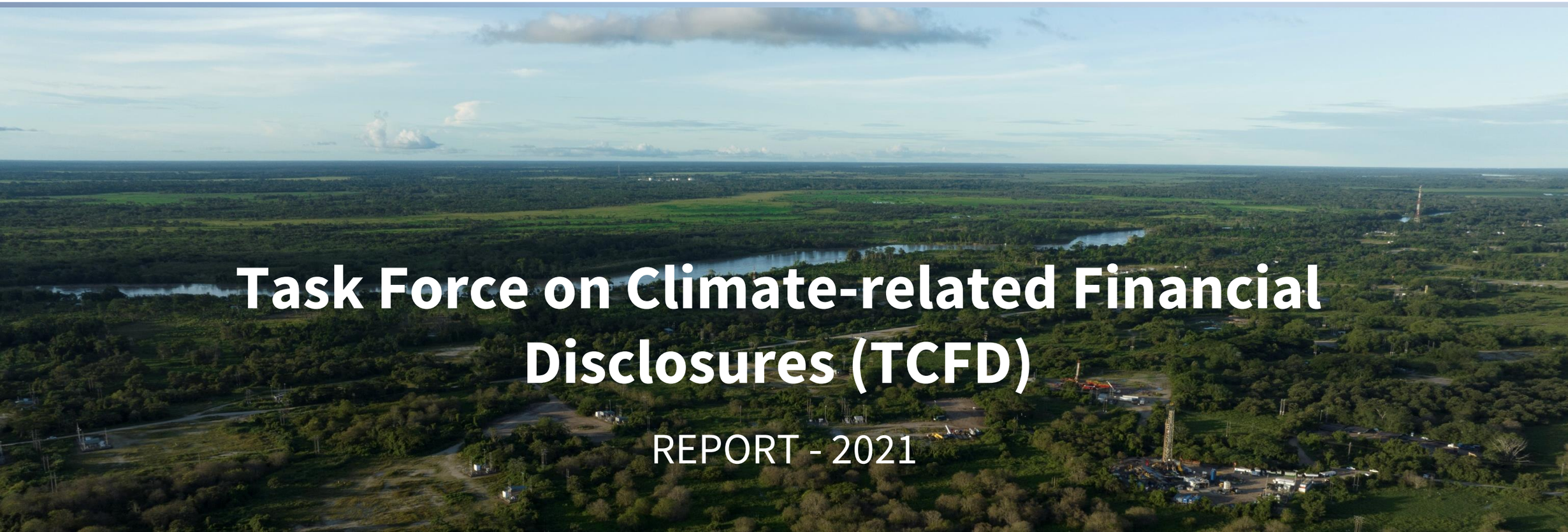

Task Force on Climate-related Financial Disclosures (TCFD)

REPORT - 2021

About this report

As part of our strategic pillar development to reduce GHG emissions, we performed a climate risks analysis considering their effects only in Caño Limón area* assets and operations due to it represents the greatest impact for the company and we did not have the management of Central Llanos operations when the analysis began.

This report consolidates the main Task Force on Climate-related Financial Disclosures (TCFD) methodology implementation findings, which includes governance, climate change strategy, physical and transition risks identification and assessment, climate-related opportunities, and climate scenario analysis.

This information ensures the company's decision-making towards a more efficient response to climate change. The report reflects performance, estimates, and assumptions based on predicting and modeling future conditions that do not represent an absolute truth. Metrics, risks and climate scenario analysis for Central Llanos operations will be included in a future report publication. For more information about assets, operations and company strategy see the SierraCol Sustainability Report.

*Caño Limón area includes Cravo Norte, Rondón, Chipirón, and Cosecha contracts.

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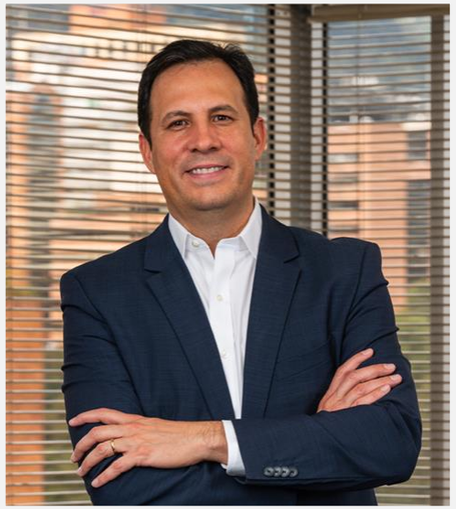
Letter from the President and CEO



As a company, we know that climate change effects are becoming more frequent and require the participation of all sectors to deal with one the greatest challenges around the world. Therefore, aware of the impact that our activity has on the environment, we have initiated a robust program to strengthen our infrastructure and positively impact neighboring communities, reduce our Greenhouse Gas emissions by up to approximately 50% by 2023, promote alternative energy sources development, and contribute to the country's energy transition.

At **SierraCol Energy** we are committed to the efforts to achieve the Paris Agreement goals, and as part of our disclosure and transparency initiatives, we have prepared this report aligned with the Task Force on Climate-related Financial Disclosures (TCFD) framework. This document shares governance, risk management processes, metrics, strategies, and actions that have been taken to address climate change issues and support a low-carbon future. We evaluate the implications of climate change impacts for our operations by considering climate change-related risks and opportunities as an integral part of our business strategy to enable sustainable growth, establish portfolio resilience and respond to expectations of investors and stakeholders.

This report represents our iterative and evolving process as we seek to understand and address the effects of climate change. Throughout this process, we remain committed to ensuring that climate-related risks and opportunities are properly identified, managed, and disclosed to our stakeholders.

We take actions to make measurable progress toward innovation and new technology investment that reduce our operation impacts and improve our adaptation capacity allowing the expansion of our business while meeting our emissions reduction goals. We will continuously manage our portfolio to assess the risks and opportunities of different climate scenarios allowing the increase of our financial impact understanding to build a better world.

Bernardo Ortiz
PRESIDENT AND CEO OF SIERRACOL ENERGY

Our Emissions Reduction Plan

SierraCol has established **four key commitments** from the 2020 baseline that have enabled us to set out an ambitious emissions reduction plan for all operations. This plan includes reducing the carbon intensity of our operations, increasing the use of renewable energy and evaluating new low-carbon technologies that aim to meet our global ambition.

ACHIEVING CARBON NEUTRALITY BY 2030

REDUCING OUR CARBON FOOTPRINT BY APPROXIMATELY 50% BY 2023

DEVELOPING ALTERNATIVE ENERGY SOURCES

TAKING ACTION TO ALIGN OUR OPERATIONS WITHIN THE TCFD FRAMEWORK

As part of our commitment to reduce GHG emissions, we performed a climate risks analysis considering their effects on Caño Limón area operations. This report consolidates the main TCFD methodology implementation findings, which includes physical and transition risks identification and assessment, the analysis of business opportunities, as well as climate scenario analysis and strategic responses. This information ensures the company's decision- making towards a more efficient response to climate change.

GLOSSARY OF ACRONYMS

ACP	Colombian Petroleum Association	NDC	Nationally Determined Contribution
AFOLU	Agriculture, Forestry and Other Land Use	PROURE	Rational and Efficient Energy Use Program
BAU	Business As Usual	TCFD	Task Force on Climate-Related Financial Disclosures
CER	Certified Emissions Reduction	UPME	Mining and Energy Planning Unit
GHG	Greenhouse Gases	VAT	Value-Added Tax
GO	Guarantee of Origin		

Governance

At **SierraCol Energy** we seek to promote an organizational culture committed to mitigating and adapting to climate change. We do this by continuously assessing the impact of our activities and updating our governance system to ensure we can best execute on our goals.

BOARD OF DIRECTORS

Responsible for oversight and monitoring climate change strategy

ESG COMMITTEE

Board's subcommittee that provides strategic guidance related to the identification and assessment of climate risks management, and carbon footprint reduction targets

PRESIDENT AND CEO / MANAGEMENT TEAM

Assessment and engagement in climate change programs

CARBON FOOTPRINT REDUCTION MANAGER

Define and ensure the planning, development, and implementation of the company's decarbonisation strategy

SENIOR SUSTAINABILITY CONSULTANT

Responsible for emissions inventory construction and management of climate change adaptation programmes

RISK MANAGEMENT AND ANALYSIS TEAM

Implements the Process Risk Management programme and ensures compliance with corporate standards

Climate change strategy

1 Energy TRANSITION

Replacement of crude oil self-generation energy by purchasing energy from the National Grid System, use of renewable energy sources through a new solar park construction, migration of diesel self-generation rigs to electric rigs, and evaluation of new technologies including geothermal projects.

2 Methane Emissions MEASUREMENT AND REDUCTION

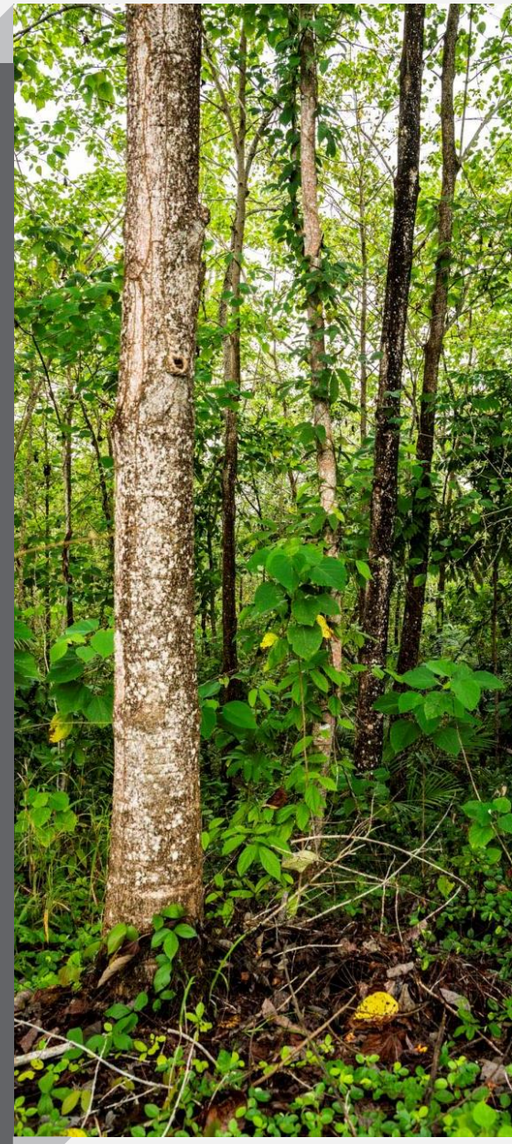
Reduce methane and other fugitive emissions at the Caño Limón and Caricare production facilities. Eliminating routine gas flaring.

3 Energy EFFICIENCY

Implementation of permanent magnet motors to artificial lift and isolation on water-producing areas in Caño Limón area.

SierraCol Energy's climate strategy aligns its actions to move towards a climate-resilient and low-carbon development path endorsed in Colombia's Climate Change Policy. As a company, we gather efforts to manage climate-related risks and opportunities, and recognize the company's role and responsibility in quantifying, reducing, and mitigating emissions, adapting to new conditions, and reducing infrastructure vulnerability.

In this regard, **SierraCol's** plan defined from 2021 to 2025, considers the implementation of strategic measures such as the shutdown of crude oil self-generation engines, the construction of a solar park, and the development of geothermal projects. The above measures will make it possible to go from the 620 kt CO_2e emitted in 2020 to approximately 310 kt CO_2e in 2023. These emissions are expected to be mitigated in the medium term through green Capex, energy efficiency projects, actions for energy generated from gas in Caricare and Cosecha fields, Guarantees of Origin (GOs), and the acquisition of Certified Emission Reduction (CERs).



Climate-related risks

In 2021, **SierraCol Energy** implemented the guidelines and recommendations of the TCFD framework, highlighting the potential physical risks that affect our operations activities and infrastructure based on geographical conditions, past events impacts, and the likelihood of extreme weather events in the surrounding area.

SIERRACOL ENERGY'S CLIMATE-RELATED PHYSICAL RISKS

To assess the physical risks that may affect operations and assets in the short (2025), medium (2030) and long term (2050) we consider the current assessment of the external environment by analyzing precipitation, temperature and vegetation cover variables to define a trend.

TYPE OF RISK	BUSINESS IMPACT	SIERRACOL ENERGY STRATEGIC RESPONSE
Floods	• Reduced production capacity and therefore reduced revenues (transportation difficulties, supply chain disruptions) • Damage to property and assets in high-risk locations • Suspension of operations due to blockages resulting from events such as floods or forest fires • Conflicts related to water resources access	• Climate Change Adaptation Plan following the strategic lines defined by the Ministry of Mines and Energy: Resilient infrastructure • Short- and long-term planning • Environment management • Adaptation information • Strengthening of the social strategy and communication, and disclosure campaigns
Droughts -Forest fires		
Temperature Increase		
Water Availability		

Climate-related risks

SierraCol expanding the range of analysis beyond the identification of physical risks and starting with the analysis of those transition risks that may have a significant effect on the company's future to include them in strategic planning, risk management and the assessment of our strategic resilience.

SIERRACOL ENERGY'S CLIMATE-RELATED TRANSITION RISKS

Transition risks were assessed based on a selection of relevant external variables for the company including carbon pricing, sectoral carbon intensities, current regulations and possible control mechanism that can be created, new technologies capital investment, Oil & Gas demand, economic incentives, and requirement for new investment projects to simulate climate scenarios.

TYPE OF RISK	BUSINESS IMPACT	SIERRACOL ENERGY STRATEGIC RESPONSE
Political, Legal, and Regulatory Increase of GHG reduction targets, establishment of new carbon taxes and implementation of an Emissions Trading System	• Stricter regulations • Increase in production costs • Stranded assets	• Emissions inventory • Carbon neutrality strategy by 2030 • Calculation of personal carbon footprint (medium-term)
Technological Increase in clean energy demand, high new technologies implementation cost	• Early retirement of existing assets • Expenditures on research and development of new alternatives • Capital investment in technological development • Costs of adopting and deploying new practices and processes	• Carbon neutrality strategy by 2030 • Research on new, cleaner and more competitive technologies • Implementation of measures to mitigate GHG emissions
Market An uncertain outlook on market trends and the establishment of the incentive towards energy transition	• Decrease in demand • Loss of opportunities associated with incentives due to late energy transition • Market fluctuations • Exposure to carbon price fluctuations	• Carbon neutrality strategy by 2030 • Product portfolio diversification • Cross-cutting energy transition scenarios
Reputational Stigmatization by local communities and increased concerns by investors regarding the compliance of environmental requirements to provide capital	• Suspension of operations due to strikes • Conflicts related to access to ecosystem services (water, forest, air) • Difficulty in obtaining new long-term investments	• Strengthening of the social strategy and communication and disclosure campaigns • Carbon neutrality strategy by 2030 • Product portfolio diversification

Climate-related opportunities

Identified opportunities for SierraCol Energy show the strategic path followed by the company on climate-related issues that are being developed and can be strengthened in their implementation framework.

OPPORTUNITY	TYPE	DESCRIPTION	GOALS	INDICATORS	FINANCIAL IMPACTS EXPECTED
RESOURCE EFFICIENCY	Use of more efficient production and distribution processes	• Implement permanent magnet motors • Improvements in the reservoir drainage strategy to optimize energy consumption and isolation of water-producing formations	• Commissioning of 330 permanent magnet motors by 2024, of which 75 will be implemented by 2022 • Completion of the petrophysical modelling of producing reservoirs by mid-2022 to increase reservoir drainage efficiency by isolating water-producing areas	Implementation progress percentage	Better competitive position Increased availability of capital (more investors in favour of low-emission production) Increased supply chain reliability and ability to operate under different conditions
	Use of recycling	• Collect and reuse rainwater and treat and use wastewater • Implement energy efficiency and transition projects to reduce GHG emissions • Promote the recycling of plastic, scrap metal, electronics, and organic waste management	• Establish a reuse water program • Improve circular economy program focused in four strategic lines (water, energy, social, and materials)	Implementation progress percentage	
	Reduction in water use and consumption	• Update of environmental monitoring programmes to include rainwater • Development of initial water footprint calculations	• Continue to carry out water quality controls • Estimate the company's water footprint in the year 2022 • Update of environmental monitoring programs including rainwater	Implementation progress percentage	Reduction of production costs Reduced exposure to future increases in the price of fossil fuels Reduced exposure to GHG emissions and less sensitivity to changes in carbon costs
ENERGY SOURCES	Use of low-emission energy sources	• Replacement of self-generation from fossil fuels by renewable and low-emission energies	• Replace 57 MWh of crude oil-fired generation by transferring them to the grid by 2023 • Methane measurement at the Caño Limón and Caricare facilities and active wells using specialized cameras and advanced software	Implementation progress percentage	
	Use of new technologies	• Construction of the Caño Limón Solar Park • Study of geothermal and solar panel projects	• Put into operation 6.5 MWp Solar Park by 2023 • Evaluation of low enthalpy geothermal project.	Implementation progress percentage	

Climate-related opportunities

Identified opportunities for SierraCol Energy show the strategic path followed by the company on climate-related issues that are being developed and can be strengthened in their implementation framework.

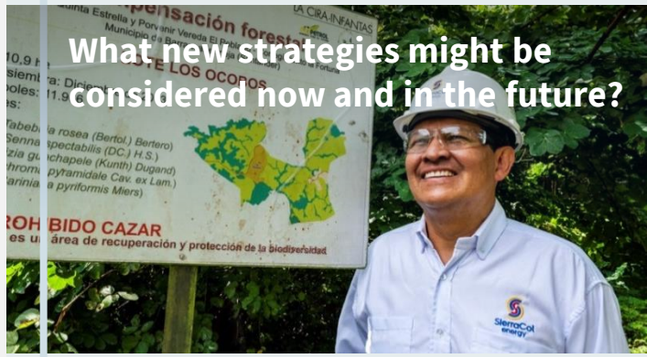
OPPORTUNITY	TYPE	DESCRIPTION	GOALS	INDICATORS	FINANCIAL IMPACTS EXPECTED
PRODUCTS AND SERVICES	Development and/or expansion of low-emission goods and services	• The company set a target of achieving energy intensity similar to that achieved by its commercial peers through the use of low-emission energy sources	• Reduce carbon intensity to 18 kg CO_2e/BOE by 2023 using low-emission energy	Progress in accordance with the annual program	Improved competitive position by reflecting a change in consumer preferences, resulting in increased revenues Reduction of costs due to climatic effects and stricter regulations and policies Reduced exposure to GHG emissions and less sensitivity to changes in carbon costs
	Development of climate adaptation and security in the solution of risks	• SierraCol Energy broadened in 2021 its study spectrum by considering not only physical risks but also transition risks	• Develop the analysis of physical and transition risks regarding climate change in Caño Limón area operations	Implementation progress percentage	
RESILIENCE	Infrastructure adaptation for the operation in response to acute events	• Consider the evaluation of physical risks and climate scenario analysis to strengthen and define new measures related to the maintenance of infrastructure	• Improve hydraulic conditions in the areas of influence of the operations through the construction of dikes, installation of culverts and mitigation works in neighbouring bodies of water as a measure to adapt to flooding	Implementation progress percentage	Reduction of costs due to climatic effects Revenue increases by providing new solutions to adaptation needs (insurance on risks transferred in products and services) Market valuation increases through resilient planning (infrastructure, land, buildings)
	Training for local communities on risks and climate change	• Enhance the relationship with local communities and avoid the generation of de facto actions in case of weather emergencies and provide new communication channels	• Train community groups on the risks associated with climate change as part of the second phase of the "Community Groups for Emergency Prevention" project in 2022	Number of villages trained / number of selected or invited villages	
MARKET	Use of public sector incentives	• Evaluate SierraCol Energy's participation in the tax incentive scheme defined by the UPME in the Rational and Efficient Energy Use Programme - PROURE and continue to participate in working groups with the Ministry of Mines and Energy and the Colombian Petroleum Association (ACP)	• Increase SierraCol Energy's participation in public sector incentives by 2025	Percentage of participation in working groups	Reduction of GHG emissions and sensitivity to changes in carbon costs Revenue increases through demand for low-emission products Elimination of VAT (Value-Added Tax) and income tax discount for the implementation of technologies

Climate scenario analysis

Climate scenarios analysis is applied to the direct effects on the company's assets considering physical and transitional risks integration. Selected scenarios were chosen following International Energy Agency guides; including a Sustainable Development Scenario focused on strengthening policies and investments in clean energy, an ambitious scenario of carbon neutrality by 2030, and the BAU scenario (Business as Usual). Besides, during physical risk assessment, AFOLU measures contribution to climate risk management were identified and included in the scenario analysis.

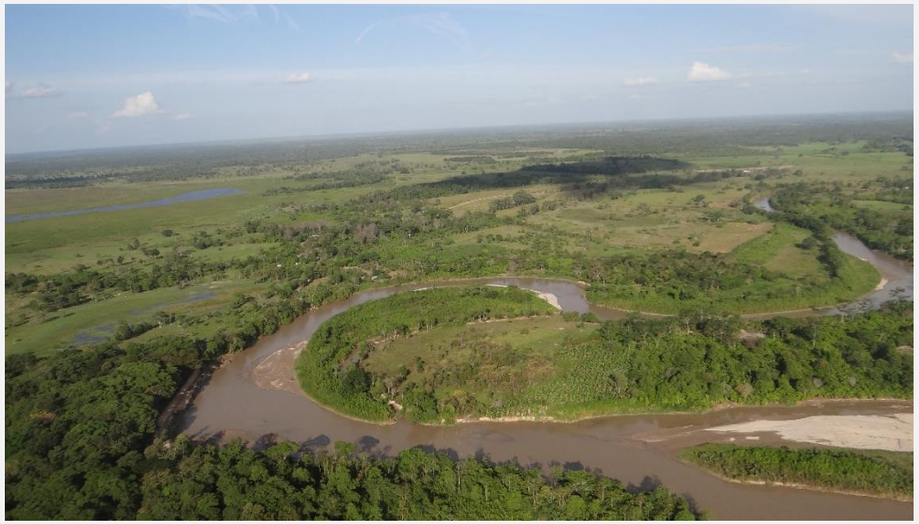
	CLIMATE SCENARIOS	SUSTAINABLE DEVELOPMENT 2030	CARBON-NEUTRALITY 2030	CURRENT TREND (BAU)
PHYSICAL ASSUMPTIONS	RCP	2.6	2.6	4.5 – 8.5
	Temperature	Increase of 1.07°C	Increase of 1.07°C	Increase between 1.54°C and 2.31°C
	Precipitation	Decrease of 4.3%	Decrease of 4.3%	Decrease between 2.2% and 2.9%
	Risks	Floods with an occurrence pattern of 3 years and flood elevation of 0.5 m	Floods with an occurrence pattern of 3 years and flood elevation of 0.5 m	Floods with an occurrence pattern of 3 years and flood elevation of 0.5 m
	AFOLU Measures	• Restoration of deforested areas 117 ha • Mitigation potential: 7,833 tCO_2e	• Restoration of deforested areas 130 ha • Mitigation potential: 8,704 tCO_2e	• Restoration of deforested areas 50 ha • Mitigation potential: 3,348 tCO_2e
TRANSITION ASSUMPTIONS	Policies	Policies that promote the production and use of alternative sources and technologies such as hydrogen, biogas, biomethane and CCCUS in the sectors	More ambitious policies promoting production and use of alternative sources and technologies such as hydrogen, biogas, biomethane and CCUS in the sectors	The world continues its current trajectory, with no additional government intervention since 2019
	NDC	51% GHG reduction by 2030	75% GHG reduction by 2030	Nonexistent
CUMULATIVE MITIGATION POTENTIAL BY 2030	Non-AFOLU Measures	5 measures within the following action lines: energy efficiency, solar photovoltaic, crude combustion engine shutdown and geothermal	8 measures within the following action lines: energy efficiency; solar photovoltaic; crude combustion engine shutdown; geothermal and gas flaring elimination	3 measures within the following action lines: solar photovoltaic and crude combustion shutdown)

AFOLU: The promotion of carbon sequestration in Agriculture, Forestry and Other Land Use change as an alternative to reduce GHG emissions.
Non-AFOLU: Promoting carbon sequestration through the use of technologies to mitigate GHG generation.
RCP: Representative Concentration Pathway (greenhouse gas concentration trajectory)
NDC: Nationally Determined Contribution



- Develop a climate finance monitoring scheme
- Strengthen the climate risk management, considering the reduction of exposure and vulnerability of assets and operations, value chain and environment
- Develop a medium and long-term plan related to the use and development of water resources in the fields
- Implement forestry projects, taking advantage of ecosystem services such as climate regulation, disturbance regulation and sediment retention
- Diversify product portfolio

Climate risk management



SierraCol has strengthened its strategy in terms of incorporating climate change-related risk analysis, broadening the spectrum of analysis beyond physical risks. Such analysis consists of a series of stages that are developed with the participation of representatives from different areas of the company.

The inputs derived from the development of the next phases, allow the construction and updating of the adaptation plan for SierraCol Energy, which aligns with the strategic lines that were defined by the Ministry of Mines and Energy for the management of climate change.

Additionally, it considers solutions based on nature, communities, technology and infrastructure and the identification of associated co-benefits.

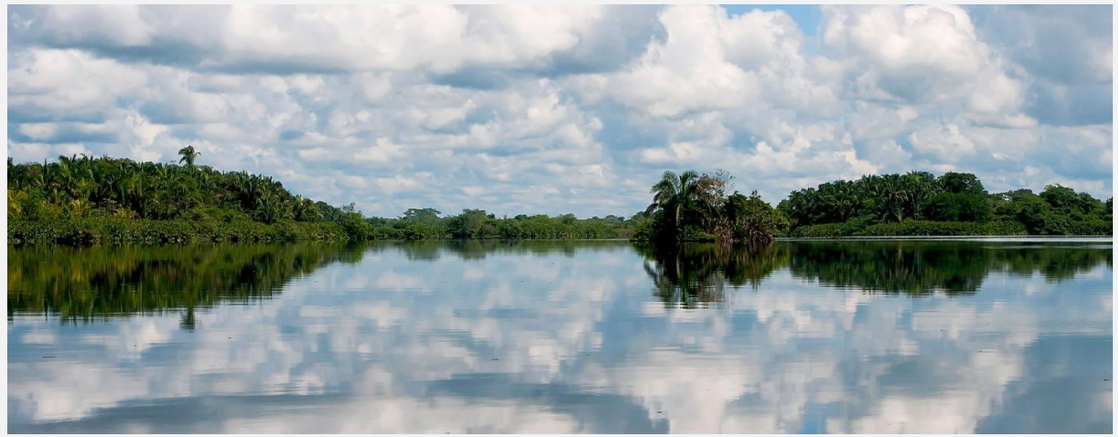
1. Analysis of past climate trends and associated variables such as temperature, precipitation, and forest cover
2. Identification of physical and transition risks, as well as their main effects on the company's operations
3. Assessment of the physical transition risks considering their probability of occurrence, consequences in terms of infrastructure, collaborators, and economic impacts
4. Identification of the company's adaptive capacity to respond to the impacts or effects derived from the risks identified, considering relevant factors

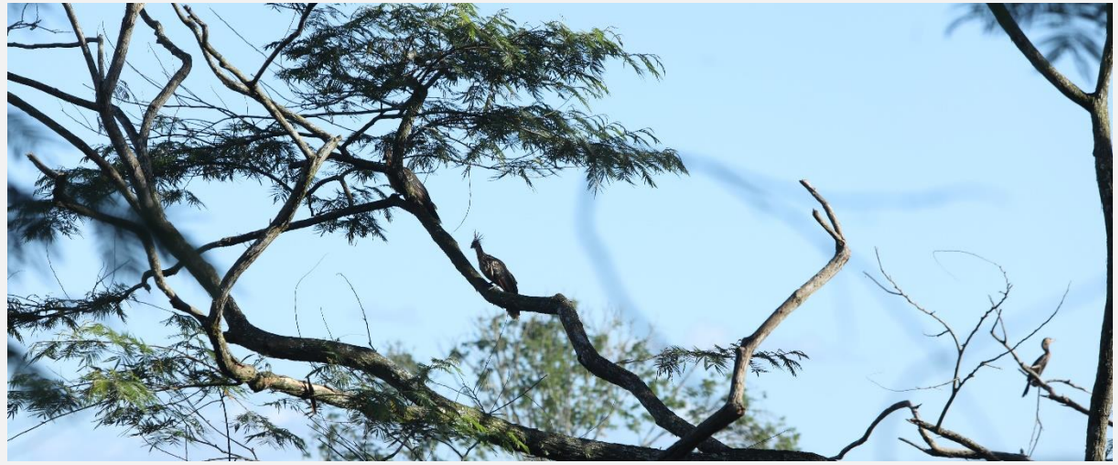
Metrics

In this section we present the emissions inventory accountability associated with the Emissions Inventory for the Caño Limón area operations, with 2020 as the base year. SierraCol Energy has the support of external consultants for the construction of the GHG emissions inventory; these are registered using the SANGEA® tool, which guarantees the traceability of the information and facilitates decision making.

TYPE OF EMISSIONS	Thousand metric tons CO_2e		
	2019	2020	2021
GHG Emissions (Scope 1 + Scope 2)	645	620	524
Direct Source Emissions (Scope 1)	512	500	406
Stationary Combustion	349	343	268
Routine gas flaring	125	117	111
Fugitive emissions	37	39	25
Process and venting emissions	0.5	0.5	1.5
Emissions generated in transportation	0.7	0.3	0.4
Indirect emissions - energy purchase [Market-based approach] (Scope 2)	133	120	118
Biogenic emissions (metric tons)	125	126	230
Emissions intensity ($kgCO_2e$/BOE)	30.59	32.51	25.35*
Pollutant Emissions Criteria	**Metric tons**		
	2019	2020	2021
NOx emissions	850	870	798
SOx emissions	2,191	2,156	1,636
VOC emissions	6,787	6,834	6,667
CO emissions	311	315	317
IMPORTED ELECTRICAL ENERGY	**Terajoules**		
	2019	2020	2021
National Grid System Energy purchase	1,503	1,269	1,864
Genser Power Generation (Gas)	256	245	215
Confipetrol Generation (Diesel)	0.6	1.9	0

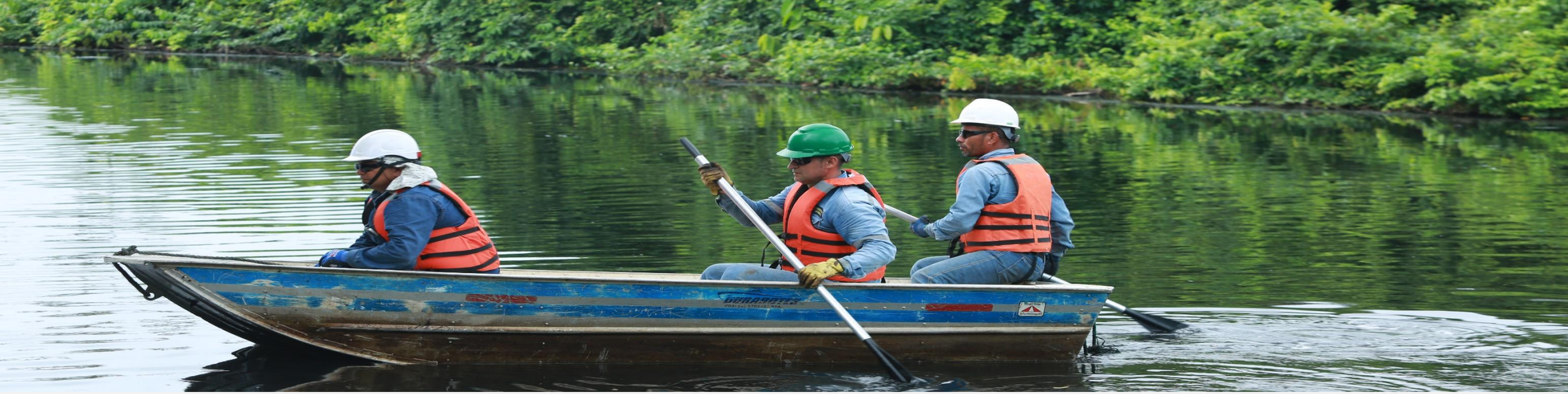
*70,298 carbon credits were used from a project carried out in the Cira-Infantas field registry: 1901-3121





TCFD Recommendations Alignment

RECOMMENDATION			SIERRACOL ENERGY REPORT
GOVERNANCE	Disclosure of the organization's governance on the management of risks and opportunities related to climate change	a) Description of the management team's view (Board of Directors) on climate-related risks and opportunities	• Letter from the President and CEO of SierraCol • Governance
		b) Describe the management roles for the evaluation and management of climate-related risks as well as opportunities identified	• Governance
STRATEGY	Disclosure of current and potential impacts of climate-related risks and opportunities related to the organization's business, strategy and financial planning where such information is working material	a) Describe the climate-related risks and opportunities that the organization has identified in the short, medium, and long term.	• Strategy • CC Strategy: RHC- Risks and Opportunities
		b) Describe the impact of climate-related risks and opportunities related to the organization's business, strategy, and financial planning	• Strategy • CC Strategy: RHC- Risks and Opportunities - Financial Impacts • Scenario Analysis
		c) Describe the resilience of the organization's strategy, taking into consideration different climate scenarios, including 2C or lower	• Strategy • CC Strategy: RHC- • Risks and Opportunities • Scenario Analysis
RISK MANAGEMENT	Disclose how the organization identifies, assesses, and manages climate-related risks	a) Describe the organization's procedure for identifying and assessing climate-related risks	• Risk Management -Climate Risk Management
		b) Describe the organization's process for managing climate-related risks	• Risk Management -Climate Risk Management
		c) Describe how the processes for the identification, assessment and management of climate-related risks are integrated into overall risk management	• Risk Management -Climate Risk Management
METRICS AND GOALS	Disclose the metrics and objectives used to assess and manage relevant risks and opportunities related to climate change where such information is working material	a) Disclose the metrics or objectives used to measure and manage relevant climate risks and opportunities, where such information is working material	• Goals and metrics • Strategy • CC Strategy: RHC- • Risks and Opportunities • Scenario Analysis
		b) Disclose Scope 1, Scope 2, and if appropriate Scope 3 GHG emissions and related risks	• Goals and metrics
		c) Describe the objectives used by the organization to manage climate-related risks and opportunities and the presentation of progress against the proposed objectives	• Goals and metrics



LEGAL DISCLOSURE

This document was prepared by SierraCol Energy with the participation of an external consulting firm with the objective of evaluating and sharing information on climate risk management in the organization for external stakeholders.

The report summarizes the information that was studied and analyzed as part of the Climate Risk Analysis and Adaptation Plan, with the participation of different leaders of areas related to Climate Change Management in the company. This study is understood as the first draft carried out to comply with the recommendations of the TCFD methodology, which is subject to subsequent review, validation and updating of the information as part of a process of continuous improvement on these matters.

It should be noted that the data used in the climate scenarios, as well as in the past trends, are based on the use of scientific models validated nationally and internationally. Similarly, the analysis carried out regarding the implementation of new GHG mitigation technologies used the company's current projections as a reference, considering compliance with the goals that have been defined in the medium and long term. However, it should be noted that the information provided and proposed also depends on external factors that are beyond the control of SierraCol Energy and that the company may propose improvement strategies at any time, to actively respond to changes in the environment and the sector.

SierraCol energy