LARGO

Climate Report 2024

Aligned to the Taskforce on Climate-related Financial Disclosures (TCFD)

Table of Contents

About This Report

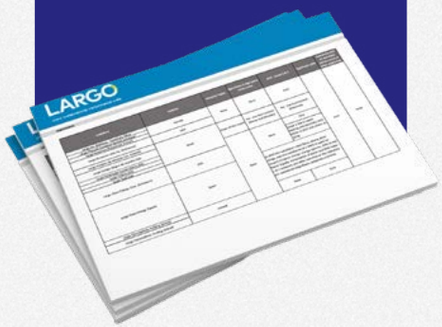
We welcome the continued development of well-designed climate disclosure frameworks and this year, we are publishing our fourth Climate Report, continuing to align with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Following the disbandment of the TCFD in October 2023, we are closely monitoring emerging regulatory and standard-setting developments that may influence future climate-related disclosures. In particular, we note the release of the IFRS S2 Climate-related Disclosures Standard by the International Sustainability Standards Board (ISSB), which supersedes TCFD's recommendations and introduces a broader and more detailed set of disclosure requirements. We will continue to monitor these developments and take them into account when preparing any future climate-related disclosures.

This report covers all Largo Inc.'s (Largo) material greenhouse gas emissions (GHGs), including, but not limited to, carbon dioxide (CO_2). The climate-related financial disclosures in this report primarily focuses on our main subsidiary in Brazil, Largo Vanádio de Maracás S.A. (LVMSA), and its activities at the Maracás Menchen Mine, which covers over 93% of our employees and is our sole mining and processing operation. Largo's other subsidiaries do not present significant risks and have therefore not been prioritized in this report. Further details in our Operations Map.

OTHER RELEVANT REPORTS

2024 Sustainability Report

2024 ESG Data



2024 Annual Information Form

Vanadium Produced by Largo – Enabling a More Resilient Future

Largo provides high-purity vanadium products that support dependable energy storage as well as essential steel and alloy applications for multiple sectors.

Vanadium is central to resilient energy storage infrastructure and secure industrial supply chains.

Largo produces approximately 5% of the global primary vanadium supply and is one of only two large-scale producers of high-purity vanadium that supplies the critical defense and aerospace industry.

Vanadium is one of 37 critical minerals required for clean energy transitions across the International Energy Agency's (IEA) scenarios[1].

Approximately 185 million MT of CO_2 are avoided annually from the use of vanadium in the construction and energy storage sectors[2].

Ilmenite Production – Resource Efficiency and Circularity

Commissioned in 2023 next to Largo's established vanadium facility, our ilmenite concentrate plant recovers ilmenite from non-magnetic tailings, turning by-products into value and meeting the growing local demand for titanium dioxide.

Largo's ilmenite is produced from tailings, **reducing waste and supporting efficient resource use in line with circular economy principles.**

Ilmenite enables **titanium-based materials** used in coatings and lightweight components that **improve efficiency and reduce carbon emissions.**

Governance

IN THIS SECTION

Board's Oversight of Climate-Related Issues

implementation of climate-related commitments. This governance structure ensures compliance, upholds ethical and legal standards, and oversees the review and approval of the Climate Report.

Board	Reviews and approves major business opportunities with climate implications, such as expansions and mergers or acquisitions. Ensures transparent disclosure to stakeholders through effective governance and internal controls. Receives regular updates from Executive Management and maintains direct communication with senior leadership. Meets at least four times per year, with additional meetings scheduled as needed.
Governance Committee	Evaluates climate-related risk exposures and management's response measures. Provides oversight and reports to the Board on the status and handling of these risks. Meets at least twice per year, or more frequently at the Chair's discretion.
Audit Committee	Reviews the integration of climate-related and other ESG risks into the Enterprise Risk Management (ERM) program as part of its broader oversight of financial and risk management policies. Convenes at least four times per year to fulfill these responsibilities.
Operations Committee	Directs the health, safety, environmental, and social performance of Largo's mining and processing operations. Reviews potential issues with management, including climate-related risk exposures, and monitors related mitigation actions. Meets at least twice per year or as determined by the Chair.
Energy Committee	Oversees Largo's clean energy investment initiatives, including business opportunities, strategic direction, principal risks, and related risk management systems. Convenes no fewer than four times annually, with additional meetings scheduled at the discretion of the Chair.
Executive Management	Leads the implementation of the ERM program, ensuring that risk owners develop and execute action plans for climate-related risks. Responsible for operational execution of certain corporate climate-related matters, including clean energy investment initiatives. The operational site maintains and controls its own risk registers covering areas such as health, safety, and project-related risks. Meets as needed to address climate and operational priorities in real time.

Management's Role in Climate-Related Matters

The development of climate-related disclosures at Largo is led by the Director, Investor Relations, with support from the ESG Analyst. Together, this corporate-level team ensures that climate-related disclosures are consistent, accurate, and aligned with evolving best practices.

The preparation of these disclosures is supported by mine site management, including managers of Environment, Maintenance, Process, and Production. This cross-functional coordination enables Largo to monitor performance, identify improvement opportunities, and advance decarbonization efforts across its operations.

Climate-related matters are also identified and assessed through Largo's ongoing Enterprise Risk Management (ERM) process, which includes, at times, interviews with leaders and subject matter experts across the organization to capture top concerns, operational vulnerabilities, and external risk drivers relevant to the company's strategic objectives.

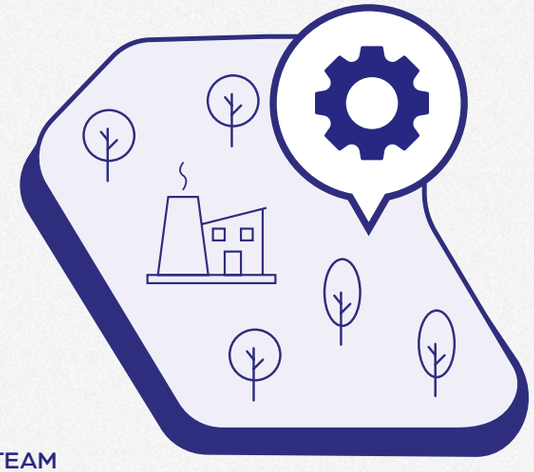
Key responsibilities

THE CORPORATE-LEVEL TEAM

Reviews and assesses climate-related risks and opportunities, using Largo's ERM process as a key input. In addition, this team leads the preparation and publication of Largo's annual TCFD-aligned Climate Report.

THE ENVIRONMENT TEAM

Responsible for collecting, tracking, and consolidating Scope 1 and 2 greenhouse gas (GHG) emissions data. The inventory is updated annually and subject to third-party verification to ensure accuracy and transparency.



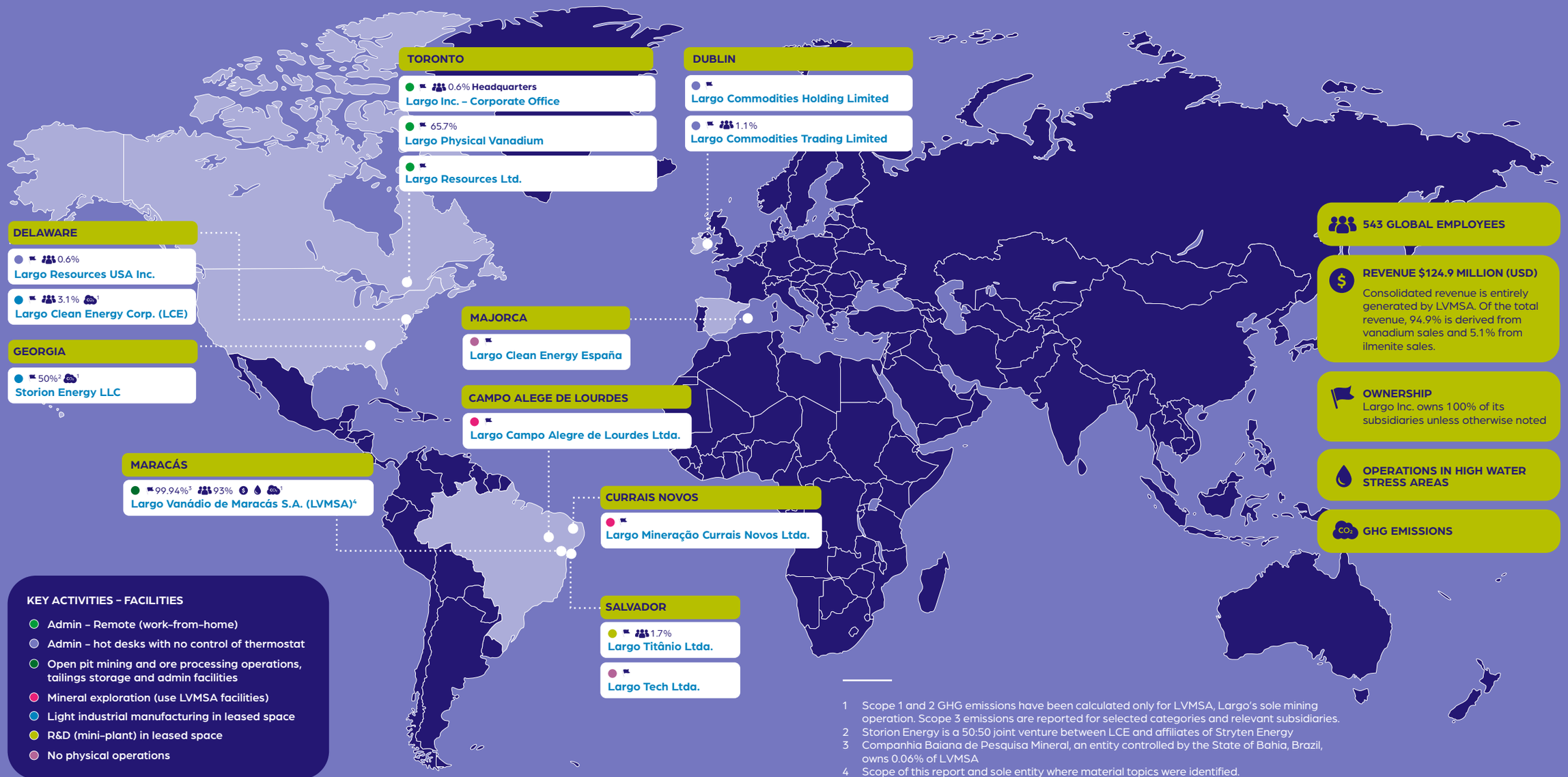
THE ENVIRONMENT TEAM

Responsible for collecting, tracking, and consolidating Scope 1 and 2 greenhouse gas (GHG) emissions data. The inventory is updated annually and subject to third-party verification to ensure accuracy and transparency.

Strategy

IN THIS SECTION

Operations Map

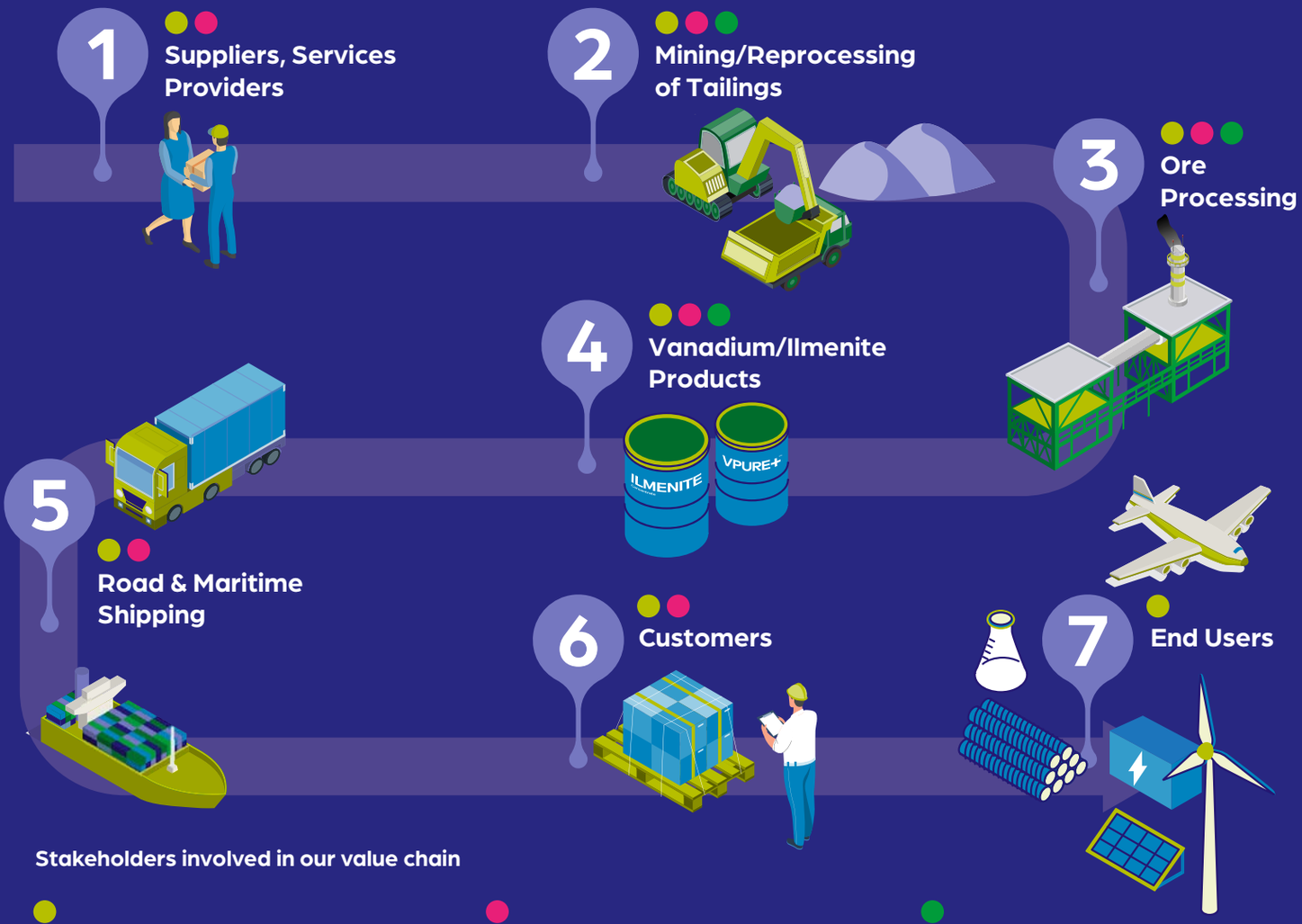


1 Scope 1 and 2 GHG emissions have been calculated only for LVMSA, Largo's sole mining operation. Scope 3 emissions are reported for selected categories and relevant subsidiaries.
2 Storion Energy is a 50:50 joint venture between LCE and affiliates of Stryten Energy
3 Companhia Baiana de Pesquisa Mineral, an entity controlled by the State of Bahia, Brazil, owns 0.06% of LVMSA
4 Scope of this report and sole entity where material topics were identified.

Business Model and Value Chain

The business activities performed by Largo's subsidiaries include vanadium and ilmenite mineral exploration, mine and ore processing operations, research and development, a vanadium holding company and sales offices in the USA, Ireland and Switzerland. In addition, Largo's subsidiary, LCE, holds a 50% interest in Storion Energy, a joint venture focused on advancing vanadium electrolyte and vanadium-based LDES solutions. Largo's subsidiary, LVMSA, is responsible for all primary mining and ore processing activities that take place at the Maracás Menchen Mine in the state of Bahia, Brazil.

LVMSA's suppliers provide a range of products such as chemical reagents for vanadium processing, energy, packaging materials, uniforms, and other essential operating supplies. LVMSA also contracts many services (on site and off site) such as drilling, open-pit mining and transportation of ore and rock waste, transportation of employees, major maintenance, construction, engineering and environmental services. Supporting services encompass catering, security, and financial support, such as employee health plans and meal benefits. Approximately 95% of Largo's Tier 1 suppliers are located in Brazil. A majority of Largo's foreign suppliers provide software and subscription licenses. A preliminary internal review of their climate-related risk exposures did not identify any significant vulnerabilities in the short-term.



Stakeholders involved in our value chain

Shareholders and the investment community

Contractors, suppliers and service providers
Industry associations and business partners
Government and regulatory agencies

Civic leaders and NGOs
Our employees and their families
Our labour union
The people in the communities in which operate

Timeframes

Timeframes for evaluating business risks are typically very short compared to climate change horizons. Largo has defined the following timeframes according to the life of its main assets, the sectors and the geographies in which it operates, which in turn, influence Largo's climate-related risk profiles.

LARGO'S CLIMATE-CHANGE TIMEFRAMES

TERM	YEARS	RATIONALE
SHORT	1 to 5	This horizon reflects the period in which acute physical climate risks may disrupt operations. Early-stage transition risks may emerge through evolving environmental regulations, ESG-related investor pressure, and shifts in local stakeholder expectation.
MEDIUM	5 to 20	This period is critical for assessing both chronic physical risks and the accelerating impact of transition risks.
LONG	Over 20	The current Maracás Menchen Mine life of mine is 31 years[3] and risks may be associated with the mine site closure and post-closure obligations.

Financial Impact Levels

Largo's ERM program uses the following impact financial impact levels. More details are provided in the Risk Management section.

FINANCIAL IMPACT LEVELS USED IN THE ERM PRIORITIZATION PROCESS

Levels	Impact (USD $ thousands)
Catastrophic	above 10,000
Major	4,000 – 10,000
Moderate	400 – 4,000
Minor	40 – 400
Insignificant	4 – 40

Climate-related Risks

Largo's main, immovable, asset is the Maracás Menchen Mine located in the northeastern part of Brazil, in a semi-arid climate. It is the asset with the highest exposure to physical risks, both acute and chronic.

Largo faces transition risks driven by changing global policies and industry trends. At its sole operational site, LVMSA, changes in environmental regulation, introduction of carbon pricing, and growing stakeholder demands could lead to increased compliance obligations and higher operational costs. The recently formed joint venture, Storion Energy, is exposed to risks linked to uncertain market adoption of vanadium-based storage technologies, regulatory variability, and technological competition.

The other subsidiaries have no physical operations or operate with high mobility, without any identified significant physical risks. While they are less exposed to direct transition risks, they may still be affected by reputational considerations and the need for strategic alignment as the shifting external reporting landscapes become more stringent. Further details are available in the Operations Map.

PHYSICAL RISKS

CATEGORY	LOCATION	TIME HORIZON	RISK DESCRIPTION	AMOUNT AND PERCENTAGE OF ASSETS OR BUSINESS ACTIVITIES VULNERABLE TO CLIMATE-RELATED RISKS.	POTENTIAL IMPACT
ACUTE	LVMSA, NE Brazil	Short to medium	Changes in rain precipitation volume, leading to flooding and associated damage	One operational site, 100% of mining and processing activities	Reduced production capacity, impacting significant majority of revenues, increased insurance costs
CHRONIC	LVMSA, NE Brazil	Medium	Increased heat	One operational site, 100% of mining and processing activities	Reduced production capacity, impacting significant majority of revenues, increased insurance costs
CHRONIC	LVMSA, NE Brazil	Medium	Extreme drought leading to water shortage	One operational site, 100% of mining and processing activities	Reduced production capacity, impacting significant majority of revenues

TRANSITION RISKS

CATEGORY	LOCATION	TIME HORIZON	RISK DESCRIPTION	AMOUNT AND PERCENTAGE OF ASSETS OR BUSINESS ACTIVITIES VULNERABLE TO CLIMATE-RELATED RISKS.	POTENTIAL IMPACT
POLICY AND LEGAL – EMERGING REGULATION	LVMSA, NE Brazil	Short	Brazil's new emissions trading system (SBCE) will require large emitters to report and offset emissions. Implementation will be phased over several years, posing a future compliance and cost risk for Largo.	One operational site, 100% of mining and processing activities	The potential financial impact of these three risks is closely related. It is expected that if Largo is not able to reduce its emissions through a technological solution, it would still be able to purchase credits in a trading system that could increase operational costs. There is no financial estimate at this time.
TECHNOLOGY	LVMSA, NE Brazil	Short to Medium	High cost of implementing lower-emissions technology at current operations. The rotary kiln, which uses heavy fossil fuel and accounts for 45% of Largo's emissions, currently has no identified cleaner fuel alternative that meets its calorific requirements.	One operational site, 100% of mining and processing activities	
MARKET	LVMSA, NE Brazil	Medium	Customer expectations around Largo's emissions may drive demand for carbon credits or lower-emissions technologies, increasing operational costs.	One operational site, 100% of mining and processing activities	
MARKET	• LCE, USA • Storion Energy, USA	Short to Medium	Limited market mechanisms for long-duration storage and uncertain demand hinder investment returns, affecting Storion Energy's role in supporting grid decarbonization during the net-zero transition.	One light industrial manufacturing plant, 100% of this business activity.	Storion's ability to monetize assets may be limited without long-term contracts or capacity payments. There is no financial estimate at this time.
MARKET	• LVMSA, Brazil • LCE, USA • Storion Energy, USA	Medium	Disruption in availability and/or increase in the cost of energy and critical raw materials.	Two operational sites, 100% of mining, processing and manufacturing activities	This is a medium-term risk that would impact Largo's entire value chain and there is no financial estimate at this time.

PHYSICAL RISKS

Other potential physical risks, such as power shortages and wildfires, have also been assessed. The risk of prolonged power shortages in the short to medium-term is significantly mitigated by the diverse and robust energy mix in Brazil's Northeast, where the Maracás Menchen Mine is located. The region's leadership in wind and solar energy, its integration into the national grid, and ongoing investments in energy infrastructure all contribute to energy stability. As for wildfires, while they are possible, they are not considered a significant risk in the Caatinga biome due to the adaptive and resilient nature of its native vegetation.

TRANSITION RISKS

Largo has identified several potential transition risks that may emerge in the short-term, though none are currently considered material. In the European Union, Largo's subsidiaries do not meet the applicability thresholds for the Corporate Sustainability Reporting Directive (CSRD), as they generate no revenue and fall below the directive's size criteria. Similarly, the Carbon Border Adjustment Mechanism (CBAM), in its current scope, does not apply to Largo's products (vanadium and ilmenite). While these regulatory measures do not presently affect our business, we continue to closely monitor ongoing policy developments in both areas, recognizing the potential for future applicability that could impact compliance obligations and increase export-related costs.

Brazil has enacted Law No. 15.042/2024, establishing a mandatory national emissions trading system (SBCE) with implementation structured across five phases, beginning in 2025. The system will require entities emitting more than 25,000 tCO_2e per year, such as Largo, to monitor, report, and reconcile emissions using Emission Quotas (CBEs) or certified offset credits (CRVEs). While detailed regulations are still under development, full compliance obligations will be phased in over several years.

Shifts in the insurance market in Brazil linked to climate risk could result in higher premiums, reduced coverage, or more restrictive terms. Technology risk, including the substitution of vanadium with other alternatives, is considered low in the short to medium term given vanadium's limited market size and its critical role in emissions reduction in steel production. Reputation risk is also considered low, given the mining sector's established exposure and vanadium's classification as a critical mineral.

For the Storion Energy joint venture, transition risks include market uncertainty, regulatory changes, and competition from alternative energy storage technologies. While the venture is aligned with long-term decarbonization goals, existing procurement models favour short-duration storage technology, and mechanisms for long-duration solutions are still developing. This developing market may delay the JV's impact on grid decarbonization and climate resilience.

Climate-related Opportunities

In Brazil, LVMSA has implemented climate-related opportunities in resource efficiency and energy sources, and they are not considered to have a significant financial impact.

While improvements in resource efficiency and energy sources in Brazil offer some climate benefits for Largo, the major opportunity lies in delivering high-quality vanadium and ilmenite to support sustainable growth for critical industries. Storion Energy represents a strategic opportunity to strengthen U.S. energy resilience and address LDES needs, key to enabling greater integration of renewable energy and reducing reliance on fossil fuels.

TOP CLIMATE-RELATED OPPORTUNITIES

CATEGORY	LOCATION	TIME HORIZON	DESCRIPTION	AMOUNT AND PERCENTAGE OF ASSETS OR BUSINESS ACTIVITIES ALIGNED WITH CLIMATE-RELATED OPPORTUNITIES	POTENTIAL IMPACT
REGULATORY & POLICY ALIGNMENT	• LCE, USA • Storion Energy, USA	Short to medium	Potential access to green financing, tax incentives, and public funding under legislation and policies	One light industrial manufacturing plant, 100% of this business activity	Enhances financial viability and accelerates deployment through supportive policy environments. There is no financial estimate at this time
PRODUCTS & SERVICES	• LCE, USA • Storion Energy, USA	Short to long	New business focused on the use of vanadium-based battery technology and components to address energy demand.	One light industrial manufacturing plant, 100% of this business activity	Increased revenues through access to new and emerging markets. The quantification of this impact figure is not public at this time

Storion's business is positioned to support both utility-scale and distributed energy applications through the supply of vanadium electrolyte and, potentially, vanadium flow battery stacks. When deployed at the grid level ("in front of the meter") vanadium flow battery solutions can help smooth peak and trough energy flows, enhancing network reliability. When integrated "behind the meter," they can support microgrids powered by renewable energy. Vanadium flow battery technology offers unique advantages for grid stability and long-duration storage as electricity systems transition away from fossil-fuel generation.

Vanadium electrolyte used in vanadium flow batteries is 100% reusable with no degradation, which allows unlimited use in long duration energy storage systems with zero risk of thermal runaway in its aqueous electrolyte form. This makes vanadium flow batteries easy to recycle, furthering supporting the circular economy.

Scenario Analysis & Resilience

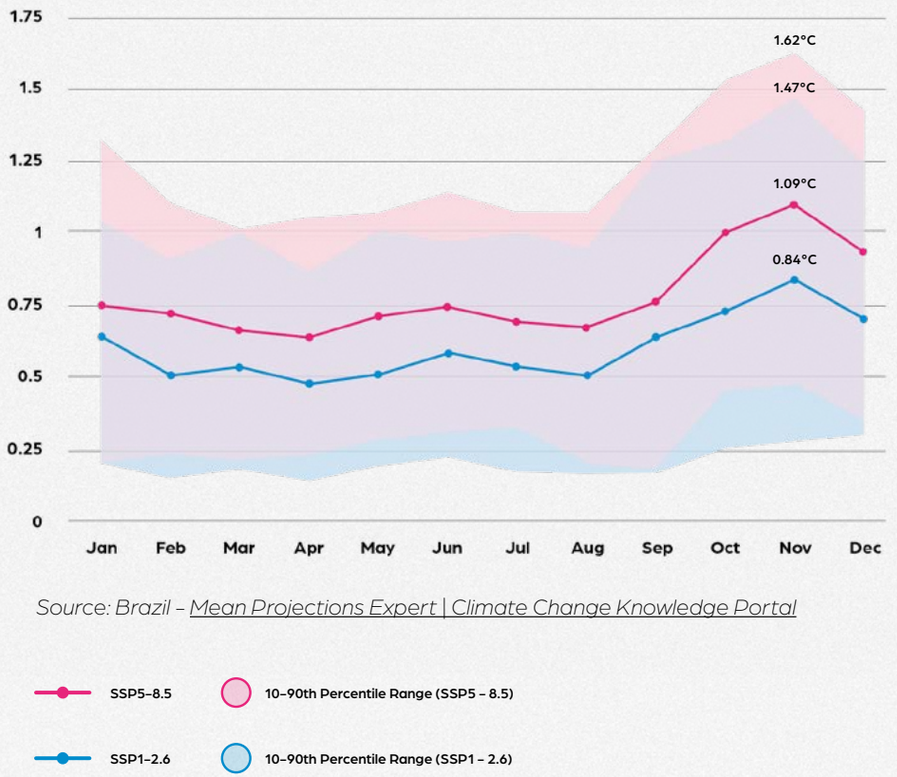
PATHWAYS AND PROJECTIONS

Largo reviewed separate projection models to understand how climate change could impact its current material issues over time.

For observed and projected climate change information, Largo referred to the global climate model compilations of the Coupled Model Inter-comparison Projects (CMIPs), overseen by the World Climate Research Program. Data presented is **CMIP6**[4], derived from the Sixth phase of the CMIPs. The CMIPs form the data foundation of the Intergovernmental Panel on Climate Change (IPCC) Assessment Reports. Please refer to the Technical Notes section for more details and full references.

According to CMIP6, for the 2020–2039 period, November should be the hottest month, where the percentile (median) temperature in Bahia is likely to increase by 0.84°C in the most optimistic scenario and exceed the 1.09°C mark in the most pessimistic scenario. The percentile range shows an even more concerning pessimistic scenario, where temperature could reach an increase of 1.62°C. This would bring more heat waves, and longer warm seasons. The temperature graph shows an increase in temperatures even in the most optimistic scenario.

PROJECTED AVERAGE MEAN SURFACE AIR TEMPERATURE ANOMALY FOR 2020–2039 IN BAHIA – BRAZIL



Source: Brazil – Mean Projections Expert | Climate Change Knowledge Portal

Using the IPCC Interactive Atlas[5], Largo reviewed climate model projections for Northeastern South America, where its Brazilian operations are located. The analysis focused on mean temperature and total precipitation for the near and medium term, relative to the 1961–1990 baseline. The temperature graph shows a clear increase in temperatures even in the most optimistic scenario.

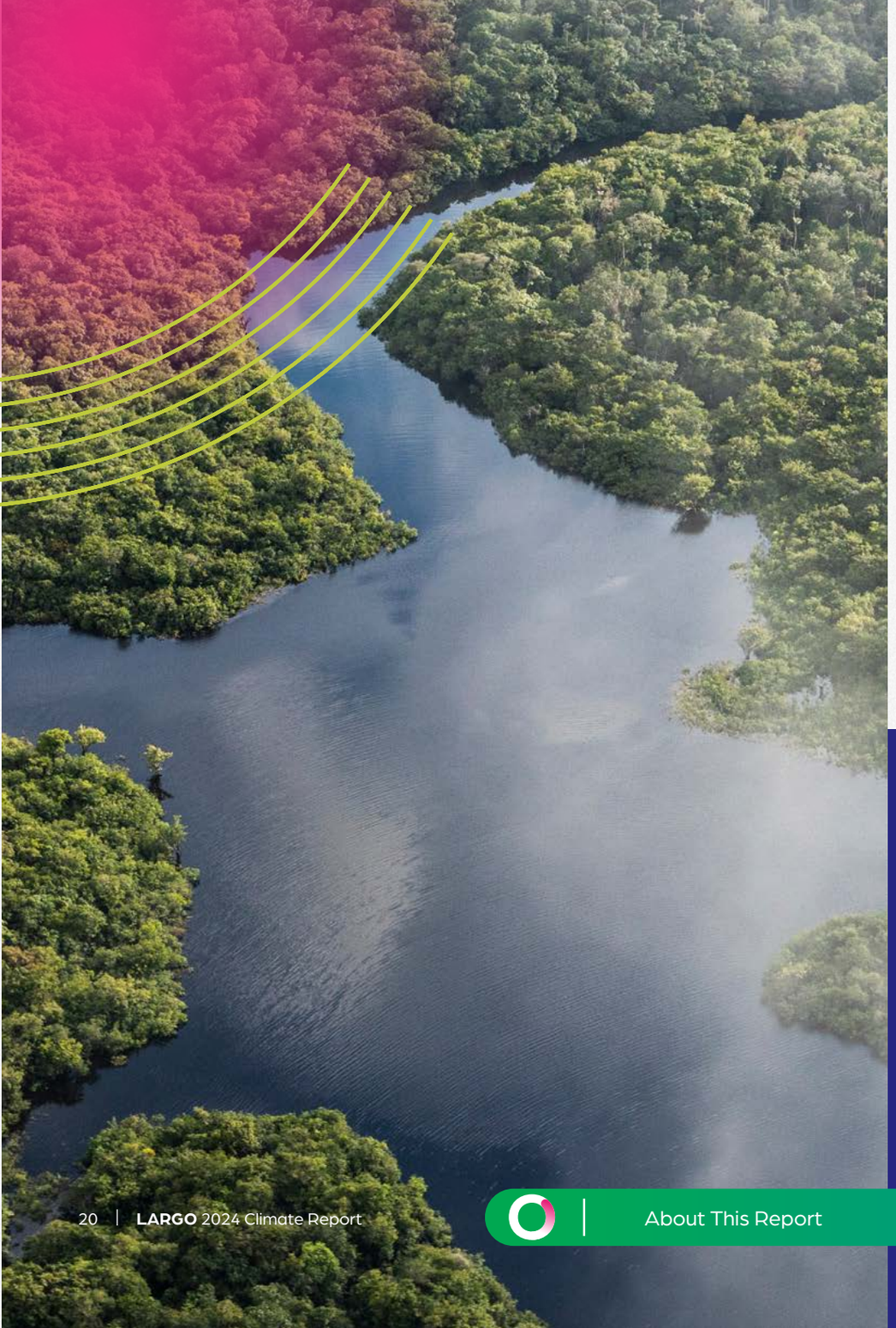
The models for total precipitation are inconclusive for the timeline of interest, with the IPCC assigning a low level of agreement to projections. However, the IPCC Regional Synthesis for Northeastern South America[6] indicates high confidence in a decrease in mean precipitation and medium confidence in an increase in heavy precipitation and pluvial flooding.

CHANGES IN MEAN TEMPERATURE (MEDIAN VALUES) – IPCC AR6

TIMEFRAME	SCENARIO	MEDIAN WARMING (°C)	LIKELY RANGE (°C)
Near term (2021–2040)	SSP1-2.6	1.1	0.9 | 1.3
Medium Term (2041–2060)	SSP1-2.6	1.6	1.2 | 1.8
Near term (2021–2040)	SSP5-8.5	1.3	1.1 | 1.5
Medium Term (2041–2060)	SSP5-8.5	2.2	1.8 | 2.5

CHANGES IN MEAN TEMPERATURE (MEDIAN VALUES) – IPCC AR6

TIMEFRAME	SCENARIO	MEDIAN (%)	LIKELY RANGE (°C)
Near term (2021–2040)	SSP1-2.6	-0.3	-3.9 | 2.9
Medium Term (2041–2060)	SSP1-2.6	0.2	-4.7 | 2.3
Near term (2021–2040)	SSP5-8.5	-1.0	-5.5 | 1.1
Medium Term (2041–2060)	SSP5-8.5	-1.6	-4.1 | 0.1

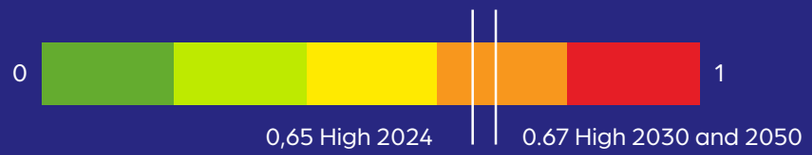


According to Adapta Brasil MCTI[7], Maracás is at a high risk for floods at present time as well as on projections for 2030 and 2050 on both optimistic and pessimistic scenarios.

This index considers vulnerability, exposure and the threat of geo-hydrological disaster from floods, flash floods and flooding, considering geological and geomorphological characteristics, land use and climatic indices of intense rainfall. The company continues to assess the implications of these climate hazards for its core operations at the Maracás Menchen Mine and integrates this information into its risk management strategies.

FLOOD RISK INDEX FOR MARACÁS

Very Low	(0,00 – 0,19)
Low	(0,20 – 0,39)
Medium	(0,40 – 0,59)
High	(0,60 – 0,79)
Very High	(0,80 – 1,00)



Source: Adapta Brasil MCTI

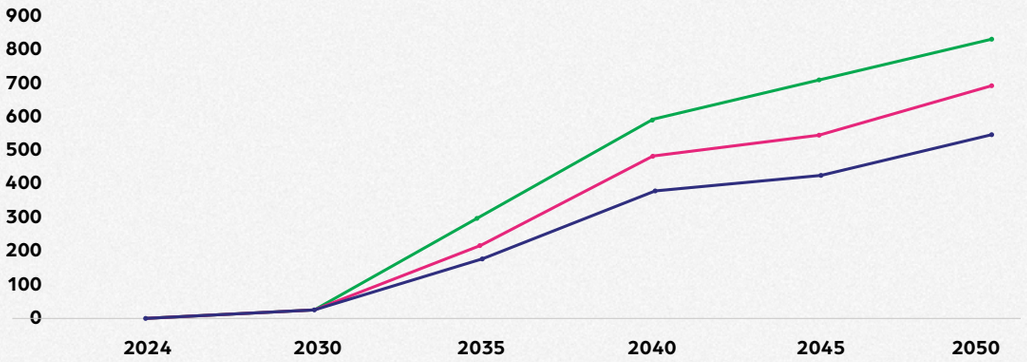
Vanadium's Role in Energy Resilience

Regarding projections related to the growth of renewable energy integration, LDES and vanadium flow batteries, Largo reviewed data and models from the International Energy Agency (IEA) and the LDES Council.

The most relevant forecast to Largo, specifically for vanadium, is presented in the IEA's Critical Minerals Data Explorer interactive tool[8], which includes global demand projections for 37 critical minerals needed for clean energy transitions across the three main scenarios and 12 technology-specific cases. Refer to the Technical Notes for more details.

IEA estimates a significant increase in vanadium market share from 2030 onwards. Demand for vanadium in clean energy technologies was projected for stationary battery storage as well as low emissions power generation technologies, including nuclear and concentrated solar technologies.

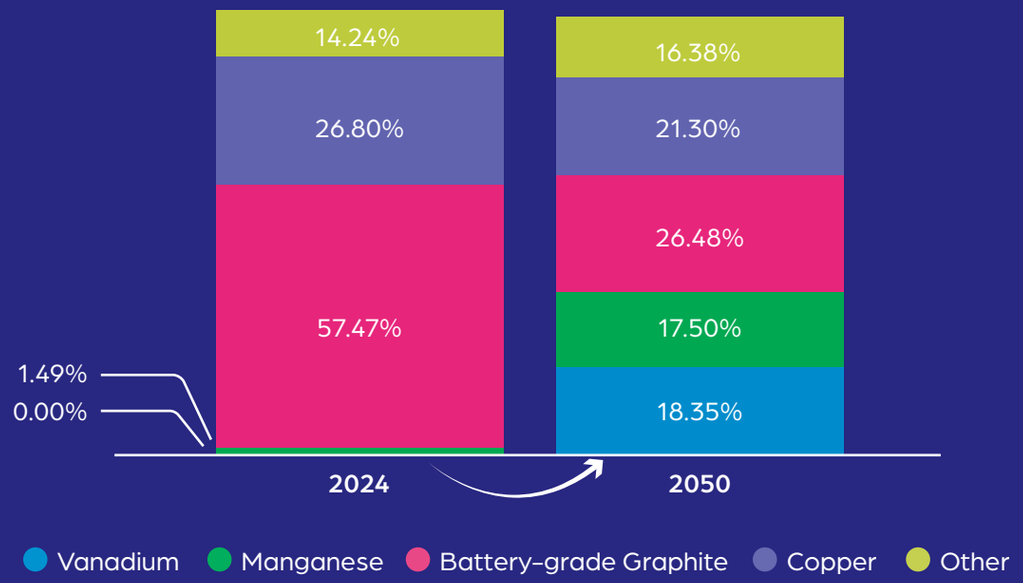
PROJECTED VANADIUM DEMAND FOR CLEAN ENERGY TECHNOLOGIES (KT)



Source: Critical Minerals Dataset – Data product – IEA

According to projections from the IEA, vanadium is expected to become a significant component of mineral demand for grid battery storage, with its share increasing from 0% in 2024 to 18.35% by 2050. This projected increase is consistent across all three IEA scenarios—the Stated Policies Scenario (STEPS), the Announced Pledges Scenario (APS), and the Net Zero Emissions (NZE) by 2050 Scenario —reinforcing vanadium's long-term strategic role in energy transition pathways.

MINERAL DEMAND FOR GRID BATTERY STORAGE (KT) – STEPS – APS – NZE SCENARIOS



Source: Critical Minerals Dataset – Data product – IEA

**Minerals included in the Other category: Cobalt, Lithium, Manganese, Silicon*

This forecast directly supports one of the key opportunities identified in Largo's assessment: expansion into new business areas focused on vanadium-based battery technology and components. With increasing global deployment of renewable energy, the demand for long-duration and grid-scale energy storage solutions is expected to accelerate. Vanadium flow batteries, offering durability and scalability, are well-suited to meet this demand.

Largo's existing position as a vanadium producer and its ongoing investments in vertical integration through clean energy storage solutions provide a strategic advantage. These efforts enhance the company's resilience under multiple climate transition scenarios and align with its long-term value creation strategy.

Risk Management

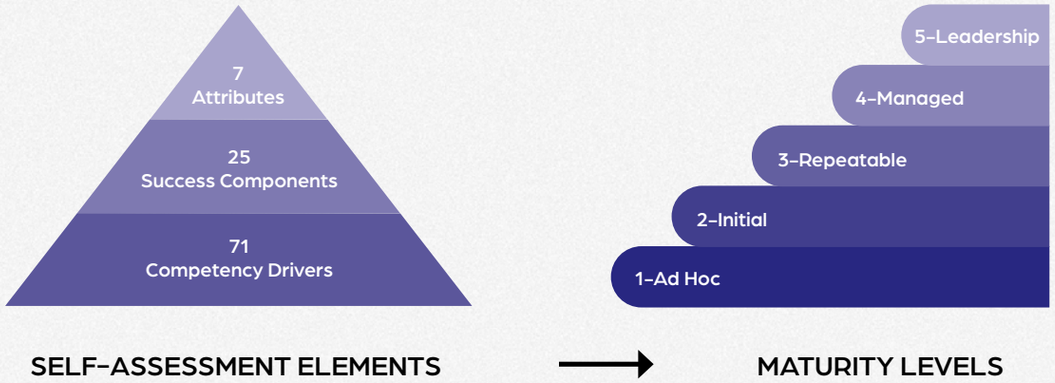
IN THIS SECTION

Enterprise Risk Management

Largo's ERM program is an ongoing structured, company-wide framework for identifying, prioritizing, and managing risks that may affect strategic or operational objectives. It enables focused mitigation efforts and informed resource allocation. To support this process, Largo uses the Risk Maturity Model (RMM) as a self-assessment and benchmarking tool to measure the maturity and effectiveness of its ERM framework.

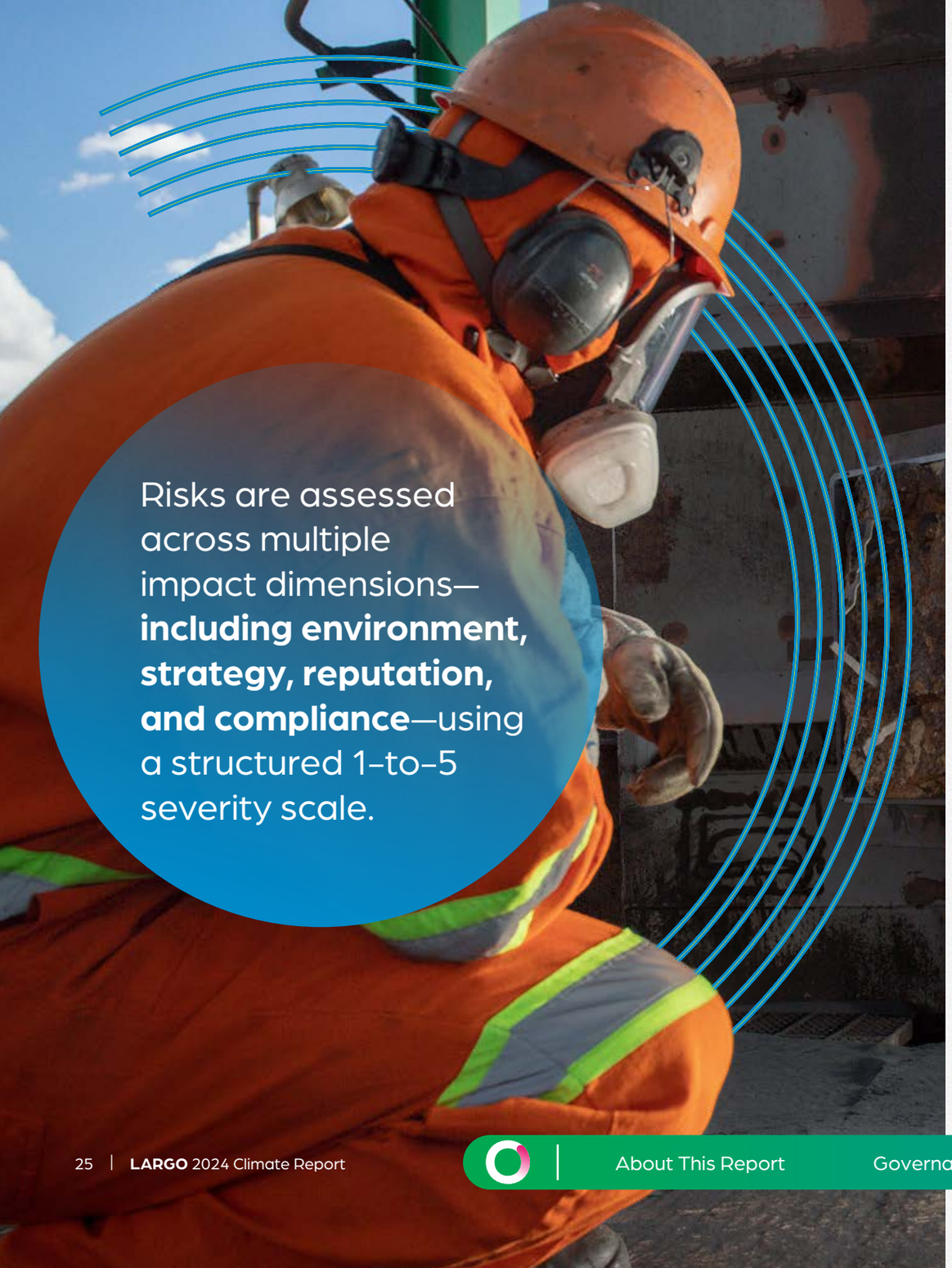
For each of the twelve prioritized risks, a Risk Owner has been assigned and draft Risk Management Action Plans (RMAPs) have been developed. Each RMAP outlines the identification and implementation of controls, monitoring of control effectiveness, reporting and analysis of incidents or non-compliance, and continuous improvement of risk management practices.

RISK MATURITY MODEL



Largo's "Risk Universe" includes all corporate and operational domains, including climate-related risks. From this comprehensive risk set, twelve risks have been prioritized for initial evaluation and management based on their potential severity. One of the top risks identified, production interruption, may be exacerbated by climate change, particularly through increased frequency or intensity of severe storms. Three additional climate-related risks were identified during this process but, due to lower potential severity, were not classified as top priorities at this stage.

Largo applies the Risk Maturity Model (RMM) to assess and improve the effectiveness of its ERM framework, supporting continuous improvement in governance and risk oversight

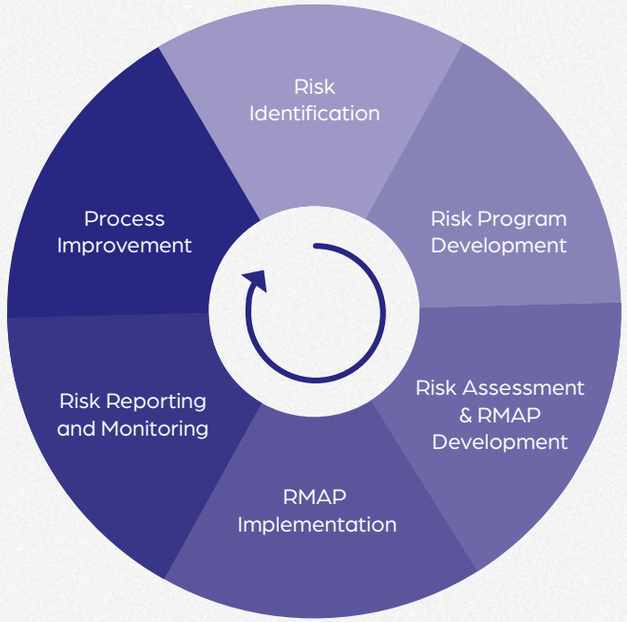


Risks are assessed across multiple impact dimensions—**including environment, strategy, reputation, and compliance**—using a structured 1-to-5 severity scale.

Risk identification was conducted through interviews with leaders and subject matter experts across the organization, considering internal resilience, reputational impacts, and external factors such as regulatory changes, industry conditions, and macroeconomic developments. Building on this input, Largo conducted a structured review of its Enterprise Risk Management (ERM) process in 2024 with senior leadership. This included evaluating and updating key strategic, operational, and environmental risks using revised severity and likelihood ratings.

Each enterprise risk was assessed using an impact scale ranging from 1 (insignificant) to 5 (catastrophic). Impact categories and subcategories included safety, environment, human rights, compliance, finance, strategy, and reputation. All relevant impact areas were considered in the evaluation of each risk.

LARGO'S ERM PROGRAM STEPS



Mitigation of Risks

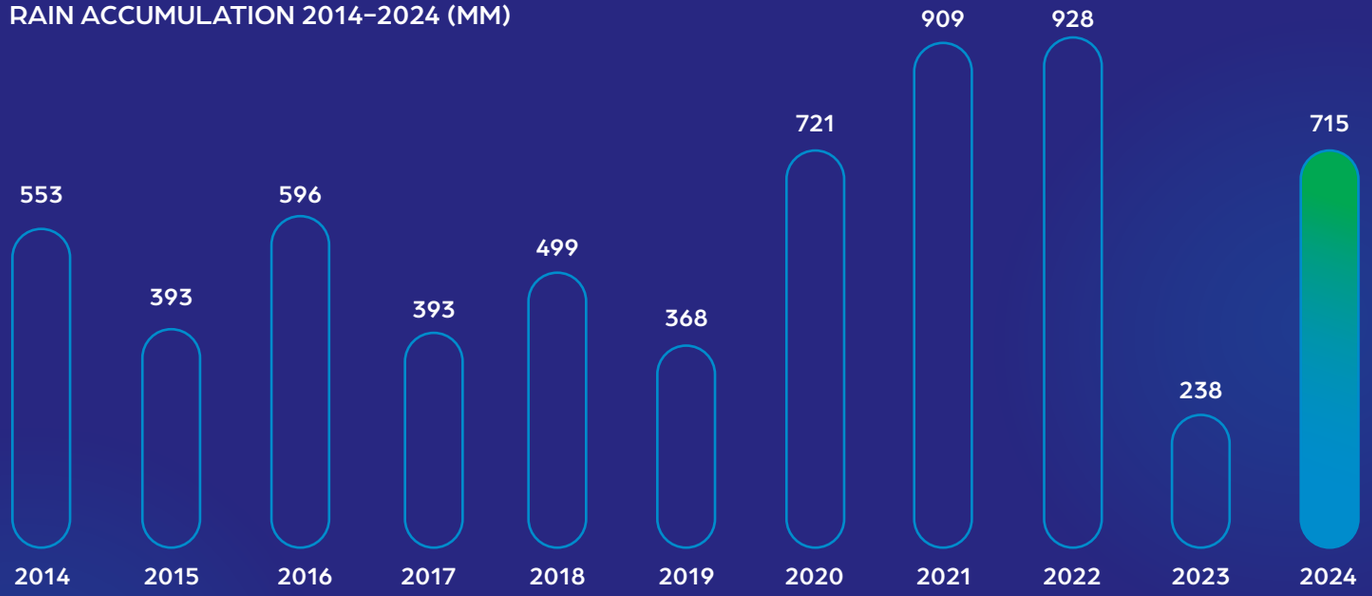
RESPONDING TO CLIMATE-DRIVEN CHANGES IN RAINFALL

Largo is actively mitigating risks associated with changing precipitation patterns. The Maracás Menchen Mine experienced elevated rainfall levels in recent years, resulting in operational interruptions during the 2021/2022 period and continuing to impact operations into early 2023. Operational interruptions are among the top 10 risks identified in Largo's Enterprise Risk Management framework. In contrast, 2023 recorded the lowest rainfall levels in the past 10 years, a sharp decline that had no impact on operations. In 2024, rainfall levels increased significantly compared to 2023. While mining operations were not interrupted, challenges at the bottom of the pit, where ore is extracted, temporarily affected ore production. The overall impact on mine output was not significant, demonstrating improved resilience and the effectiveness of adaptive measures implemented on site.

238mm

2023: **Lowest rainfall in 10 years** recorded, no operational impact.

RAIN ACCUMULATION 2014–2024 (MM)



Climate Resilience at Maracás Menchen Mine

715mm

Significant increase in rainfall vs. 2023; minor impact on ore production, no rainfall-related operational interruptions.

One of the first actions in 2021 was the commissioning of a hydrological engineering study to assess the impact of increased rainfall on Largo's tailings facilities over the life of the mine. Largo's tailings facilities are built as ponds with impermeable liners and do not have a spillway. Water levels are maintained through pumping and evaporation. Since its tailings materials are not considered chemically inert, Largo must ensure they are always contained within the facilities, even in the case of heavy rainfall.

The engineering study included modelling of extreme rainfall, with durations varying from 1 to 24 hours, and a statistical recurrence of 10,000 years. This volume amounted to 225.55 mm and the study concluded that all facilities would be able to accommodate this volume within the current safety parameters.

Several mitigation measures were implemented in 2022. In early 2023, a formal multi-disciplinary team, the Rainfall Impact Mitigations Team, was established to manage and mitigate the impacts of future heavy rainfall events. This team operates under a structured action plan that includes clear assignment of responsibilities, designated oversight by direct managers, defined deadlines, and regular updates on implementation status. Once implemented, actions are verified by the Quality Management System (QMS) team to ensure their effectiveness.

Rainfall Impact Mitigation Strategy Plan – a key risk management measure addressing the physical impacts of increased rainfall and supporting the resilience of Largo's operations

RAINFALL IMPACT MITIGATION PLAN – MAIN OBJECTIVES INCLUDE:

FLOOD PREVENTION	EROSION CONTROL	OPERATIONAL SAFETY	ENVIRONMENTAL PROTECTION	CONTINGENCY PLANNING
Prevent rainwater from accumulating in critical areas of the mine, which could cause flooding and disrupt operations.	Minimize soil erosion and the degradation of mined areas, which can be exacerbated by rainfall.	Ensure the safety of workers and equipment by preventing landslides and other dangerous situations caused by heavy rainfall.	Prevent the contamination of nearby water bodies by rainwater that may encounter potentially polluting materials in the mine.	Establish protocols for emergency situations during extreme rainfall events, ensuring a quick and effective response.

Implementing an effective Rainfall Impact Mitigation Strategy Plan involves **building drainage systems, containment dams, sedimentation basins, and other water control methods, as well as continuously monitoring weather conditions and water levels in the mine**

The identification, implementation, and validation of mitigation actions are managed by the QMS team, with support from the operational team and regular oversight by company leadership. During the 2024/2025 rainy season, rainfall intensity was lower than in the high-rainfall years of 2021 and 2022, and no interventions were required on access roads. There were no disruptions caused by truck or trailer mobility issues. Preventive road maintenance remains ongoing, with monthly paving and more frequent repairs carried out as needed.

Actions Established and Implemented

Mine **12**

02 **Tailing facilities and infrastructure**

Plant **48**

MANAGING POTENTIAL CLIMATE-DRIVEN HEAT AND DROUGHT RISKS

Chronic physical climate risks, including increased heat and prolonged drought, are systematically identified, assessed, and monitored at the operational level. These risks have been prioritized for LVMSA due to its geographic exposure and reliance on local water resources.

Rising temperatures pose a risk to worker health and safety, particularly through potential heat stress. This risk is assessed through regular occupational health reviews and integrated into site-level hazard identification and mitigation procedures. As part of its response, Largo provides personal protective equipment (PPE) and implements operational adjustments as needed to limit exposure during high-temperature periods. Heat-related risks are tracked through the site's Health and Safety Management System, and findings are escalated through ERM reporting processes.

LVMSA sources water from the Pedra Reservoir, and prolonged drought conditions pose a risk to the continuity of operations due to reduced reservoir levels and increased competition for water resources. A water scarcity event could also indirectly affect operations by impacting on the well-being and economic stability of employees, contractors, and suppliers in the region. To mitigate these risks, Largo has implemented a water management strategy that emphasizes reuse and recycling across its operations.

Largo's risk mitigation measures are supplemented by external engagement. Since 2022, Largo has represented the Bahia State Federation of Industries (FIEB) on the Recôncavo Sul River Basin Committee, currently holding the chair position for the water users sector. This committee plays a critical role in strengthening regional water governance, improving basin-level coordination among stakeholders, and raising awareness of sustainable water use practices.

EMERGING REGULATION – BRAZIL'S EMISSIONS TRADING SYSTEM (SBCE)

The phased implementation of Brazil's national emissions trading system (SBCE) will require large emitters to report and offset their GHG emissions. While implementation details and timelines are still being finalized, this regulatory development represents a material compliance and cost exposure in the medium to long-term. Largo monitors legislative progress and participates in industry forums to inform its risk assessments and evaluate cost implications. Integration of regulatory outlooks into long-range planning allows for proactive alignment with expected obligations under SBCE.

TECHNOLOGY – HIGH COST AND FEASIBILITY CONSTRAINTS OF LOW-EMISSIONS ALTERNATIVES

Approximately 45% of LVMSA's Scope 1 emissions originate from the rotary kiln, which uses a high-emission fossil fuel. Currently, no commercially viable alternative fuel meets the kiln's calorific requirements. This represents a technological barrier to reducing emissions at source. In response, Largo has initiated technical studies to evaluate options such as biomass conversion and waste heat recovery. These decarbonization initiatives are tracked under our climate strategy. Feasibility and impact assessments are ongoing and feed directly into our risk prioritization process. See Metrics section for more details.

MARKET – EVOLVING CUSTOMER EXPECTATIONS ON EMISSIONS

Demand from customers and downstream users for lower-carbon materials is expected to increase, particularly for vanadium products used in clean technologies such as battery storage and green steel. Largo proactively engages with customers to understand future emissions-related requirements. In parallel, Largo maintains transparent climate and sustainability disclosures in response to leading ESG ratings and benchmarking frameworks, including EcoVadis, CDP, and S&P Global. These engagements not only demonstrate Largo's accountability and commitment to continuous improvement but also help align our risk management efforts with evolving stakeholder expectations and best practices across our value chain.

Metrics and Targets

IN THIS SECTION

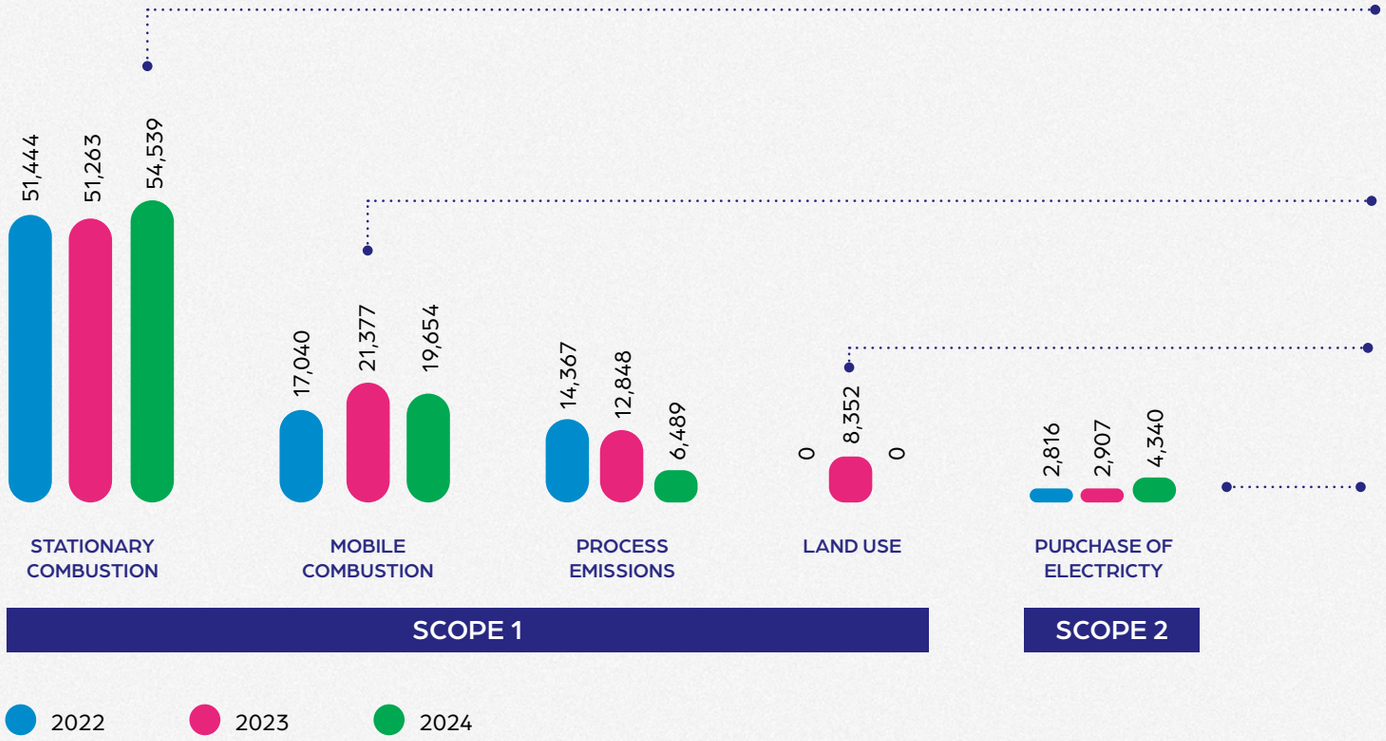
Metrics

Largo began reporting Scope 1 and Scope 2 GHG emissions for FY 2020, along with energy and water use. We maintain a detailed inventory of Scope 1 and 2 emissions and are developing methods to track Scope 3 emissions, with an initial focus on business travel, employee commuting, and downstream transportation and distribution. Preliminary Scope 3 data is disclosed for selected categories and relevant subsidiaries in the Data Performance section. According to the Transition Pathway Initiative, *Carbon Performance Assessment in the Diversified Mining Sector: Methodology*[2] suggests that Scope 3 emissions for ferroalloys like vanadium can be considered immaterial compared to other natural resources' Scope 3 emissions. Currently, the majority of these metrics are available for our operations in Brazil, which account for over 93% of Largo's workforce and represent our only mining and processing site. Additional details are provided in the Operations Map.

Largo has not set an Internal Carbon Price mechanism, given its clear focus and strategy to provide low-carbon solutions to the world.

Variable executive remuneration does not include climate-related considerations.

SCOPE 1 AND 2 EMISSIONS (tCO_2e)



2024 Stationary Combustion Scope Expanded: In addition to increased boiler fuel consumption, the category now includes emissions from rock detonation and generator emissions (moved from Process & Mobile categories, respectively).

2023 Mobile Combustion: Mining activity increased by +29% in ore extraction and +43% in waste rock leading to increased mine traffic and diesel use.

2023 Land use: 60 ha of native vegetation were removed.

2024 Electricity: Although the overall increase in electricity consumption between 2023 and 2024 was limited to 7%, Scope 2 emissions rose by 49%. This is attributed to the use of the emission factor for electricity generation in Brazil's SIN, which was significantly higher in 2024 compared to the previous year.

Decarbonizing our Operations

Typical decarbonization opportunities for mining operations include access to a cleaner electricity grid, the use of electric mobile equipment and cleaner fossil fuels and achieving efficiencies for ventilation in underground mines.

Largo is committed to reducing its GHG emissions. The vanadium trioxide (V_2O_3) plant, completed in early 2021, was designed to operate using liquefied petroleum gas (LPG), a lower-emission fossil fuel. The ilmenite concentration plant operates entirely on electricity and accounts for approximately 6% of LVMSA's total electricity consumption.

DECARBONIZATION INITIATIVES

From the outset of our operations, we have prioritized innovative technologies to reduce reliance on non-renewable resources. For instance, the pre-evaporation area uses mechanical vapor recompression (MVR) technology that allows recoveries of generated steam, reducing energy consumption and operational expenses. Other decarbonization projects, such as converting equipment to biomass or electricity and harnessing heat from the processing circuit for other purposes, are in the conceptual phase.

The following section outlines key decarbonization initiatives already implemented, as well as ongoing technical studies and feasibility assessments currently under evaluation.

Rotary kiln efficiency

Mineral Processing

Completed *(2019)*

Objective

Reduce consumption of HFO

Description

Installed a thermal insulator (ceramic paper) between the casing and the refractory wall to reduce the thermal exchange within

Notes

10% decrease in fuel consumption in the first six months of implementation

See Rotary kiln efficiency chart

In the first six months of implementation the release of sulfur oxides was reduced by 32%, minimizing the favoring of acid rain in the region

Rotary kiln efficiency

Mineral Processing

Completed *(2021)*

Objective

Reduce consumption of HFO

Description

Improved the temperature control, adjusting it based on the silica content of the material

Notes

10% decrease in fuel consumption in the first six months of implementation

See Rotary kiln efficiency chart

In the first six months of implementation the release of sulfur oxides was reduced by 32%, minimizing the favoring of acid rain in the region

Stationary equipment

Mineral Processing

Completed *(2021)*

Objective

Use of cleaner fuel

Description

Converted a flash dryer (V_2O_5) to burn LPG instead of diesel

Notes

Potential to reduce up to 35% in CO_2 emissions (by changing the scenario from 2.6 kg CO_2/liter (diesel) to 1.7 kg CO_2/liter (LPG)

Ore and waste rock transportation distance

Open pit

On-going

Objective

Reduce consumption of diesel

Description

Optimized diesel truck routes by reducing consumption of diesel

Notes

11.5% decrease on average transport distance (ATD) in 2024

Rotary kiln

Mineral Processing

Technical feasibility under way

Objective

Use of cleaner energy source

Description

The state of Bahia is extending a natural gas pipeline closer to the operational site, with no completion date

Studies examined the technical feasibility. Further studies are needed to identify engineering modifications, budgets etc

Notes

Expected to reduce up to 20% in CO_2 emissions, eliminating particles, SOx and other atmospheric contaminants.

Mobile equipment

Mineral Processing

Cost and feasibility under way

Objective

Use of cleaner energy source

Description

Reduced diesel consumption in small and medium-sized equipment through replacement with electrical equipment

Notes

Expected to reduce the release of GHG emissions by reducing diesel consumption in small equipment, such as forklifts

Solar panels

Administrative

Cost and feasibility under way

Objective

Use of cleaner energy source

Description

Installation of solar panels in the administrative building to reduce electricity consumption

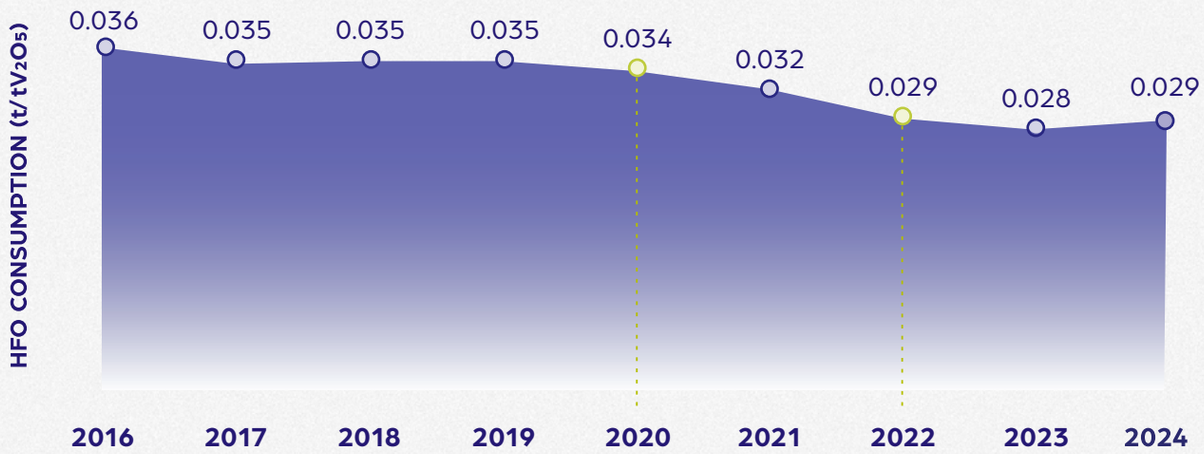
Notes

Expected to reduce electricity consumption and consequently GHG emissions

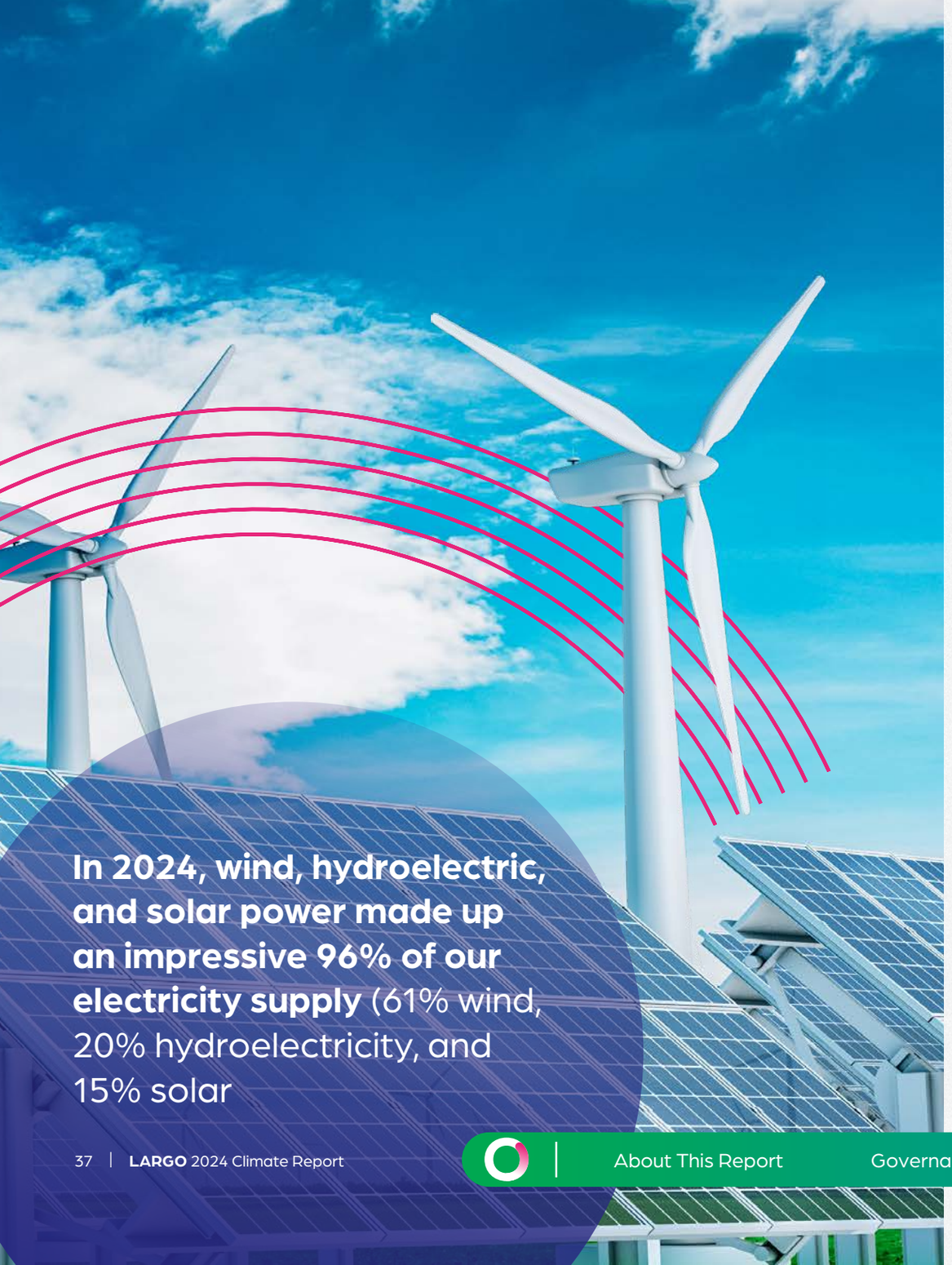
ROTARY KILN EFFICIENCY

The kiln improvements implemented in 2019 and again in 2021 have resulted in a decrease in the kiln HFO consumption in the years following the implementation (ie. 2020 and 2022). In 2024, a slight increase in HFO consumption compared to 2023 was observed, due to reduced kiln efficiency caused by operational interruptions.

ROTARY KILN EFFICIENCY CHART SHOWING 2020 AND 2022 IMPROVEMENTS



These inflection points indicate decreases in consumption resulting from the improvements described in the Decarbonization Initiatives section



In 2024, wind, hydroelectric, and solar power made up an impressive 96% of our electricity supply (61% wind, 20% hydroelectricity, and 15% solar

Targets

The process to set realistic targets for GHG emission reductions is not simple. It requires having a baseline of emissions and an understanding of the cost and availability of reduction opportunities. The latter are then compiled as marginal abatement cost curves, which provide valuable financial information to develop alternative pathways and targets over a timeline. Pathway charts display the projected reductions in emissions over the years along with the selected target and other projections such as what the "business as usual" emissions would look like if no reduction projects were put in place.

As of 2024, mobile equipment accounted for approximately 23% of Largo's combined Scope 1 and Scope 2 GHG emissions. The transition to electric trucks and equipment has been identified as a potential emissions reduction pathway and remains under internal evaluation. The implementation timeline is contingent on the availability of suitable electric models. Notably, the gasoline and diesel currently used in our mobile fleet already incorporate renewable components, including ethanol and biodiesel.

The rotary kiln is the largest single source of emissions, representing approximately 45% of combined Scope 1 and Scope 2 GHG emissions in 2024. Given its high thermal energy demands, we continue to evaluate alternative technologies that can meet these requirements with a lower emissions profile.

Largo believes that setting formal GHG reduction targets remains premature at this time, as there are no reliable estimates of cost and availability of reduction opportunities. Fortunately, the Maracás Menchen Mine is powered by an electrical grid with a high percentage of renewable energy.

Data

GENERAL DISCLOSURES

GRI 2-4 Restatements of Information

Largo continues to improve its data and information collection and review processes. Restatements of information are indicated with the symbol†.

These restatements are not anticipated to have any major effects.

SASB EM-MM-000.A Production of (1) metal ores and (2) finished metal products

	2022	2023	2024
TOTAL V_2O_5 EQUIVALENT PRODUCTION (T)	10,436	9,680	9,264
TOTAL V_2O_5 EQUIVALENT SALES (T)	11,091	10,396	9,600
TOTAL ILMENITE CONCENTRATE PRODUCTION (T)[a]	N/A	8,970	44,863
TOTAL ILMENITE CONCENTRATE SALES (T)[b]	N/A	N/A	42,916

(a) The ilmenite plant was completed in 2023, with production starting in the fourth quarter of that year.

(b) The first ilmenite sales occurred in 2024.

Largo does not produce any products that are banned on any markets or are the subject of stakeholder questions or public debate.

Ferrovanadium (FeV) "converters" add iron to V_2O_5 to produce FeV (ferrovanadium), which is the alloy sold to the steel industry. In Largo's value chain, "converters" can be both customers and service providers.

GRI 2-7 Employees

SASB EM-MM-000.B Total number of employees, percentage contractors

TYPE OF EMPLOYEE	M	F	TOTAL
TOTAL	**435**	**79**	**514**
PERCENTAGES	85%	15%	

GRI 2-8 Workers who are not employees (contractors)

SASB EM-MM-000.B Total number of employees, percentage contractors

CONTRACTORS	M	F	TOTAL
TOTAL CONTRACTORS	**839**	**74**	**913**
PERCENTAGES	94%	6%	

Additional Data Can Be Found in These Reports

2024 Sustainability Report

2024 ESG Performance Data

ENERGY

GRI 302-1 Energy consumption within the organization
SASB EM-MM-130a.1 (1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable

† Data revised in 2023 during the verification process for the Brazilian GHG Protocol Program Gold Seal. Changes are not significant and have no impact.

** not reported*

[a] Gasoline consumption data not included in the verification process for the Brazilian GHG Protocol Program Gold Seal.

[b] Ilmenite plant is 100% electricity based and it was responsible for only 6% of total electricity consumption in 2024. The plant was completed in 2023.

	2022†	2023	2024	
TYPE	GIGAJOULES (GJ)	GIGAJOULES (GJ)	% OF TOTAL ENERGY CONSUMPTION	
STATIONARY COMBUSTION				
HEAVY FUEL OIL	614,046	546,935	392,870	
CRUDE PETROLEUM OIL	0	0	245,800	
DIESEL S500 (CONTAINS BIODIESEL)	3,348	1,488	0	
LIQUEFIED PETROLEUM GAS	36,472	41,920	31,872	
ACETYLENE	81	98	90	
GASOLINE (CONTAINS ETHANOL)	0	0	45	
DIESEL S10 (CONTAINS BIODIESEL)	0	0	40	
TOTAL STATIONARY COMBUSTION	**653,946**	**590,441**	**670,718**	**53%**
MOBILE COMBUSTION				
DIESEL S10 (CONTAINS BIODIESEL)	262,529	332,401	312,743	
GASOLINE (CONTAINS ETHANOL)	2,813[a]	3,334	3,492	
TOTAL MOBILE COMBUSTION	**265,342**	**335,735**	**316,235**	**22%**
ELECTRICITY				
PURCHASED ELECTRICITY – BRAZILIAN NATIONAL INTEGRATED SYSTEM (SIN) – V_2O_5	241,497	266,633	265,007	
PURCHASED ELECTRICITY – BRAZILIAN NATIONAL INTEGRATED SYSTEM (SIN) – ILMENITE [b]	N/A	*	16,915	
PURCHASED ELECTRICITY – BRAZILIAN NATIONAL INTEGRATED SYSTEM (SIN) – ADMIN	*	*	3,705	
TOTAL ELECTRICITY	**241,497**	**266,633**	**285,627**	**22%**
ENERGY SOLD	0	0	0	**0%**
TOTAL ENERGY CONSUMPTION	**1,160,786**	**1,192,809**	**1,272,580**	

Energy consumption by renewable vs non-renewable

ENERGY SOURCE	% RENEWABLE	RENEWABLE (GJ)	NON-RENEWABLE (GJ)
HEAVY FUEL OIL	0%	0	392,870
CRUDE PETROLEUM OIL	0%	0	245,800
LIQUEFIED PETROLEUM GAS	0%	0	31,872
ACETYLENE	0%	0	90
DIESEL S10 (CONTAINS BIODIESEL)[a]	14%	43,790	268,993
GASOLINE (CONTAINS ETHANOL)[a]	27%	955	2,582
PURCHASED ELECTRICITY – BRAZILIAN NATIONAL INTEGRATED SYSTEM (SIN)[b]	96.3%	275,059	10,568
TOTAL (GJ)		**319,803**	**952,776**
TOTAL (%)		**25%**	**75%**

GRI 302-3

ENERGY INTENSITY	2022	2023	2024
ANNUAL PRODUCTION (T V_2O_5)	10,436	9,680	9,264
TOTAL ENERGY CONSUMPTION/V_2O_5 PRODUCTION (GJ/TV_2O_5)	111.23	123.22	137.37

2024 Purchased Electricity – Brazilian National Integrated System (SIN)[c]

ENERGY SOURCE	% NATIONAL	% REGIONAL (NORTHEAST)[B]
HYDROELECTRIC	61.4%	19.7%
WIND	15.2%	61.0%
SOLAR	10.7%	15.6%
TOTAL RENEWABLE COMPONENT	**87.3%**	**96.3%**
THERMAL	10.5%	3.8%
NUCLEAR	2.2%	0.0%
TOTAL NON-RENEWABLE COMPONENT	**12.7%**	**3.8%**

[a] % used in the GHG calculation – Ferramenta PBGHG Protocol Versão 2025 (base year 2025)

[b] Largo's only operation – LVMSA – is located in Maracás – BA, northeast region of Brazil.

[c] https://www.ons.org.br/Paginas/resultados-da-operacao/historico-da-operacao/geracao_energia.aspx

EMISSIONS

The organizational boundaries and data collection period are the same as the boundaries for this report, restricted to Largo's operations in Brazil, during January 1 to December 31, 2024.

The compilation of the GHG inventory was conducted by our Environment team, and independently verified by a third-party, the Totum Institute, following the GHG Protocol methodologies and emission factors identified by the GHG Protocol Brazilian Program.

Gases included in the inventory include: CO_2, CH_4, HFC and N2O. The presence of chemical reactions that would result in the emission of N_2O during the ore processing is not confirmed, therefore it was excluded from the calculation at this time. Any N2O emissions would be caused by process inefficiencies and their amount would not be significant. There were no emissions of PCFs, SF6 nor NF3.

GRI 305-1 Direct (Scope 1) GHG emissions

SASB EM-MM-110a.1. Gross Scope 1 emissions – LVMSA only

EMISSION SOURCE CATEGORY	"EMISSIONS (tCO_2e) 2022†"	"EMISSIONS (tCO_2e) 2023"	"EMISSIONS (tCO_2e) 2024"
STATIONARY COMBUSTION	51,444	51,294	54,539
MOBILE COMBUSTION	17,040	21,377	19,654
PROCESS EMISSIONS	14,367	12,848	6,489
LAND USE CHANGE	0	8,352	0
FUGITIVE EMISSIONS	97	1	64
SCOPE 1 TOTAL	**82,948**	**93,872**	**80,747**

EMISSIONS OF BIOGENIC CO_2	**1,762**	**2,583**	**2,876**

†Data revised in 2023 during the verification process for the Brazilian GHG Protocol Program Gold Seal. The revised data for mobile combustion did not include gasoline consumption. Changes are not significant and have no impact.

Scope 1 emissions by type of GHG – 2024

GHG	STATIONARY COMBUSTION	MOBILE COMBUSTION	FUGITIVE EMISSIONS	INDUSTRIAL PROCESSES INDUSTRIAIS	CHANGES IN LAND USE	TOTAL (T) 2024
CO_2 (T)	54,375	19,331	0.50	6,489	0	80,196
CH_4 (T)	2.04	1.47	0	0	0	3.52
N_2O (T)	0.41	1.06	0	0	0	1.47
HFC (T)	*	*	0.03	0	*	0.03
PFC (T)	*	*	0	0	*	0
SF_6 (T)	*	*	0	0	*	0
NF_3 (T)	*	*	0	0	*	0
CO_2E (T)	**54,539**	**19,654**	**64**	**6,489**	**0**	**80,747**
EMISSIONS OF BIOGENIC CO_2 (T)	**0.95**	**2,875**	*****	**0**	**0**	**2,876**

** Not applicable*

GRI 305–2 Indirect (Scope 2) GHG emissions

EMISSION SOURCE CATEGORY	"EMISSIONS (tCO_2e) 2022†"	"EMISSIONS (tCO_2e) 2023"	"EMISSIONS (tCO_2e) 2024"
PURCHASE OF ELECTRICITY (LOCATION-BASED METHOD)	2,816	2,907	4,340

† Data revised in 2023 during the audit process for the Brazilian GHG Protocol Program Gold Seal. Changes are not significant and there is no impact.

Scope 2 Emissions by type of GHG

LOCATION-BASED METHOD

GHG	ELECTRICITY	LOSSES DUE TO TRANSMISSION AND DISTRIBUTION	PURCHASES OF HEAT OR STEAM	TOTAL
CO_2 (T)	4,340	Included	0	**4,340**
CH_4 (T)	0	0	0	**0**
N_2O (T)	0	0	0	**0**
HFC (T)	*	*	*	*
PFC (T)	*	*	*	*
SF_6 (T)	*	*	*	*
NF_3 (T)	*	*	*	*
CO_2E (T)	**4,340**	**Included**	0	**4,340**

EMISSIONS OF BIOGENIC CO_2 (T)	**0**	**0**	**0**	**0**

GRI 305-3 Other indirect (Scope 3) GHG emissions

CATEGORY	SUBSIDIARIES INCLUDED	EMISSIONS (tCO2e) 2022	COMMENTS
1 PURCHASED GOODS AND SERVICES	LVMSA only	Not calculated yet	Relevant, not calculated yet
2 CAPITAL GOODS	LVMSA only	Not calculated yet	Relevant, not calculated yet
3 FUEL AND ENERGY-RELATED ACTIVITIES	LVMSA only	Not calculated yet	Relevant, not calculated yet
4 UPSTREAM TRANSPORTATION AND DISTRIBUTION	LVMSA only	Not calculated yet	Relevant, not calculated yet
5 WASTE GENERATED IN OPERATIONS – ONLY WASTE TREATMENT IN FACILITIES OWNED OR OPERATED BY THIRD PARTIES	LVMSA only	Not calculated yet	Relevant, not calculated yet
6 BUSINESS TRAVEL	Corporate and LVMSA	152	Data provided by the travel agency
7 EMPLOYEE COMMUTING	LVMSA only	445	Based on fuel consumed by buses used to transport employees to the site and back.
8 UPSTREAM LEASED ASSETS	Not relevant	Not relevant	Largo reported Scope 1 and 2 emissions (2022) related to the Wilmington, MA, USA facility. For the leased R&D facility near Salvador, BA in Brazil, electricity is included in the lease, therefore Largo doesn't have operational control and is considered Scope 3. Based on estimates of electricity use, the emissions are not relevant.
9 DOWNSTREAM TRANSPORTATION AND DISTRIBUTION	Consolidated for Largo Inc.	3.290	Worldwide maritime transportation. Road transportation in Europe[a], North[b] and South America.[b]
10 PROCESSING OF SOLD PRODUCTS	LVMSA only	Not calculated yet	Relevant, not calculated yet. A majority of V_2O_5 produced is converted into FeV, which in turn is added to steel to impart higher strength.
11 USE OF SOLD PRODUCTS	Not relevant	Not relevant	Not relevant. Vanadium is a key transition metal used in greener steel and energy storage applications. The use of vanadium-bearing high-strength steel allows for the use of less steel, which can reduce the carbon footprint of the entire infrastructure project.
12 END-OF-LIFE TREATMENT OF SOLD PRODUCTS	Not relevant	Not relevant	Not relevant. High strength steel and master alloys containing vanadium are recyclable. Steel scrap is a key raw material for steel production, contributing to the reduction of overall GHG emissions. Vanadium electrolyte used in long duration energy storage never degrades, offering a reusable long-term solution for renewable energy partners.
13 DOWNSTREAM LEASED ASSETS	N/A	N/A	Not applicable. Largo doesn't own any assets that are leased to other entities
14 FRANCHISES	N/A	N/A	Not applicable. Largo doesn't have any franchises
15 INVESTMENTS	N/A	N/A	Not applicable. Largo doesn't have financial investments that generate GHG emissions other than its own subsidiaries and operations
PARTIAL TOTAL – ONLY SCOPE 3 CATEGORIES ASSESSED TO DATE		**3,887**	

"Scope 3 emissions for ferroalloys were considered immaterial by the Transition Pathway Initiative in their Carbon Performance Assessment in the Diversified Mining Sector: Methodology February 2021 Report, compared to other natural resources' Scope 3 emissions.

*https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022
**https://www.epa.gov/climateleadership/ghg-emission-factors-hub

GRI 305–4

GHG EMISSIONS INTENSITY V_2O_5	2022	2023	
SCOPE 1 AND 2 EMISSIONS (tCO_2e)	85,764	96,779	85,087
ANNUAL PRODUCTION (tV_2O_5) (T)	10,436	9,680	9,264
GHG EMISSIONS INTENSITY (tCO_2e/tV_2O_5)	8.22	10.00	9.18

GRI 305–6 Emissions of ozone–depleting substances (ODS)

	EQUIPMENT	TYPE	"EMISSIONS (tCO_2e) 2022†"	"EMISSIONS (tCO_2e) 2023"	"EMISSIONS (tCO_2e) 2024"
KYOTO PROTOCOL	Commercial Air Conditioning	HFC R-410A	97[a]	1[a]	64[a]
	Circuit breakers	SF6	0	0	
MONTREAL PROTOCOL	Commercial Air Conditioning	HCFC-22 (R22)	0	0	0

† Data revised in 2023 during the audit process for the Brazilian GHG Protocol Program Gold Seal. Changes are not significant and have no impact.

[a] Included in Scope 1 - Fugitive emissions

GRI 305–7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions

SASB EM–MM–120a.1. Air emissions of significant pollutants

TYPE	2022 (T) 13 CHIMNEYS	2023 (T) 12 CHIMNEYS	2024 (T) 13 CHIMNEYS
PM	145.35	142.56	137.07
SOx	4.93	11.25	27.08
NOx	84.38	112.1	109.2
NH^3	65.46	54.38	27.49
VOC	There is no generation of VOCs in the production process. Occupational health risk assessments have not identified potential risk of hazardous emissions of VOCs except during vehicles fuel supply (gasoline and diesel). Regular tests of exposure levels through personal monitoring equipment are conducted as per legislation. Monitoring of VOCs is not a requirement for Largo's environmental permits.		

	2022	2023	2024
		MEDIAN AVERAGE – MG/M3	MEDIAN AVERAGE – MG/M3
VOx	*	7.07	4.69

** not reported*

WATER AND EFFLUENTS

SASB EM-MM-140a.1 (1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

		2022 (ML)	2023 (ML)	2024 (ML)
GRI 303-3	**WATER WITHDRAWAL**			
	SURFACE WATER FROM THE PEDRA RESERVOIR – WATER STRESSED REGION	620.8	673.2	899.7
GRI 303-4	**WATER DISCHARGE**	0	0	0
GRI 303-5	**WATER CONSUMPTION**			
	DONATED TO THE VILLAGE OF ÁGUA BRANCA	10.4	12.1	12.9
	OPERATIONAL SITE CONSUMPTION	610.4	661.1	886.8

SASB EM-MM-140a.2 Number of incidents of non-compliance associated with water quality permits, standards, and regulations

Zero.

Technical Notes on Scenarios Used

Coupled Model Intercomparison Project (CMIP) provides climate projections that support essential World Climate Research Programme (WCRP) activities and climate science worldwide, decision and policy-makers communities, in its objective to understand past, present and future climate changes. CMIP and its associated data infrastructure have become essential to the Intergovernmental Panel on Climate Change (IPCC) and other international and national climate assessments.

The IPCC published the first part (Working Group I) of its 6th Assessment Report (AR6) in August 2021, using five scenarios that cover a range of warming temperatures and the capacity of societies to adapt to the changes.

The five scenarios are based on reference socio-economic trajectories – the Shared Socioeconomic Pathways (SSP) – developed by the scientific community to create a common framework for thinking about the issues related to climate change and are considered more precise than previous ones. The scenarios are referred to as SSPx-y, where 'SSPx' refers to the Shared Socio-economic Pathway or 'SSP' describing the socio-economic trends underlying the scenario, and 'y' refers to the approximate level of radiative forcing (in watts per square metre, or W m–2) resulting from the scenario in the year 2100.

SSP SCENARIOS	SUMMARIZED DESCRIPTION[10]
SSP1-1.9	• The only scenario that meets the Paris Agreement's goal of keeping global warming to around 1.5°C above preindustrial temperatures • CO_2 emissions cut to net zero around 2050 • Societies become more sustainable, with the focus shifting from economic growth to overall well-being
SSP1-2.6	• Temperatures stabilize around 1.8°C higher by 2100 • CO_2 emissions cut to net zero around 2075 • Societies become more sustainable, with the focus shifting from economic growth to overall well-being
SSP2-4.5	• Temperatures rise by 2.7°C by 2100 • CO_2 emissions around current levels until 2050, then falling but not reaching net zero by 2100 • Slow progress toward sustainability
SSP3-7.0	• Temperatures rise by 3.6°C by 2100 • CO_2 emissions double from current levels by 2100 • Countries become more competitive with one another, ensuring their national security and food supplies
SSP5-8.5	• Temperatures rise by 4.4°C by 2100 • CO_2 emissions triple by 2075 • The global economy grows quickly, fueled by exploiting fossil fuels and energy-intensive lifestyles

IEA SCENARIO	SUMMARIZED DESCRIPTION[11]
NET ZERO EMISSIONS BY 2050 SCENARIO (NZE)	• Outlines a pathway for the global energy sector to reach net zero CO_2 emissions by 2050 • Does not depend on emissions reductions outside the energy sector • Achieves universal access to electricity and clean cooking by 2030 • Illustrates what actions are needed, by whom and by when, across key sectors to achieve net zero by 2050 • Aligns with broader energy-related sustainable development goals, including energy access
ANNOUNCED PLEDGES SCENARIO (APS)	• Assumes full and timely implementation of all climate commitments made by governments and industries as of August 2024 • Includes Nationally Determined Contributions (NDCs), net zero targets, and goals for universal access to electricity and clean cooking • Illustrates how close current pledges come to limiting global warming to 1.5 °C • Highlights the "ambition gap" between current targets (APS) and the deeper action required under the NZE Scenario • Shows the gap between existing commitments and achieving universal energy access
STATED POLICIES SCENARIO (STEPS)	• Does not take for granted that governments will reach all announced goals. Instead, it explores where the energy system might go without additional policy implementation. • As with the APS, it is not designed to achieve a particular outcome. • Takes a granular, sector-by-sector look at existing policies and measures and those under development. • The remaining difference in global emissions between the STEPS and the APS represents the "implementation gap" that needs to be closed for countries to achieve their announced decarbonisation targets.

References

[1]The Role of Critical Minerals in Clean Energy Transitions – International Energy Agency, 2021

[2]Santos, David A. et al. Assessing the role of vanadium technologies in decarbonizing hard-to-abate sectors and enabling the energy transition. iScience, Volume 24, Issue 11, 103277

[3]Independent NI 43-101 Technical Report titled "An Updated Life of Mine Plan (LOMP) for Gulçari A (Campbell Pit) and Pre-Feasibility Study for Gulçari A Norte (GAN), Novo Amparo (NAO), Novo Amparo Norte (NAN) and São José (SJO) Deposits –Maracás Menchen Project, Bahia State, Brazil", effective date of January 30, 2024

[4]CMIP6 – Coupled Model Intercomparison Project Phase

[5]IPCC WGI Interactive Atlas: Regional information

[6]IPCC WGI Interactive Atlas – Regional synthesis

[7]AdaptaBrasil MCTI

[8]Critical Minerals Data Explorer – Data Tools – IEA

[9]Dietz, Simon. et al. Carbon Performance Assessment in the Diversified Mining Sector: Methodology. Transition Pathway Initiative, 2021

[10]Masson-Delmotte, V., at al. Climate Change 2021: The Physical Science Basis – Summary for Policymakers. IPCC Sixth Assessment Report, 2021

[11]Understanding GEC Model scenarios – Global Energy and Climate Model – Analysis – IEA

Cautionary Statement on Forward-looking Information:

This report contains forward-looking information under applicable securities legislation ("forward-looking information"). Forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". All information contained in this news release, other than statements of current and historical fact, is forward looking information.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information, including but not limited to those risks described in the annual information form of Largo and in its public documents filed on www.sedar.com and www.sec.gov from time to time. Forward-looking information are based on the opinions and estimates of management as of the date such statements are made. Although management of Largo has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on Forward-looking information. Largo does not undertake to update any forward-looking information, except in accordance with applicable securities laws. Readers should also review the risks and uncertainties sections of Largo's annual and interim MD&As which also apply.

Market and Industry Data

This report includes market and industry data and forecasts that were obtained from third-party sources, industry publications and publicly available information. Third-party sources generally state that the information contained therein has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy or completeness of included information. Although management believes it to be reliable, management has not independently verified any of the data from third-party sources referred to in this presentation or analyzed or verified the underlying studies or surveys relied upon or referred to by such sources, or ascertained the underlying economic assumptions relied upon by such sources.

Corporate Directory

CORPORATE OFFICERS

Daniel Tellechea
Interim Chief Executive Officer

David Harris
Chief Financial Officer

Francesco D'Alessio
Chief Commercial Officer
President, Largo Clean Energy

Gordon Babcock and Luis Rendon
Co-Chief Operating Officers

DIRECTORS

Alberto Arias
Chair

David Brace
Director

Jonathan Lee
Director

Daniel Tellechea
Interim Chief Executive Officer, Director

Andrea Weinberg
Director

CONTACT

Alex Guthrie
Director, Investor Relations

Manoela Oliveira
ESG Analyst

www.largoinc.com

We welcome feedback on this report or on any other aspect of sustainability at Largo.

Please contact us at:
E info@largoinc.com
T 416-861-9797

CORPORATE OFFICE

Toronto

First Canadian Place, 100 King Street West, Suite 1600

Toronto, ON Canada M5X 1G5

T 416-861-9797

LARGO