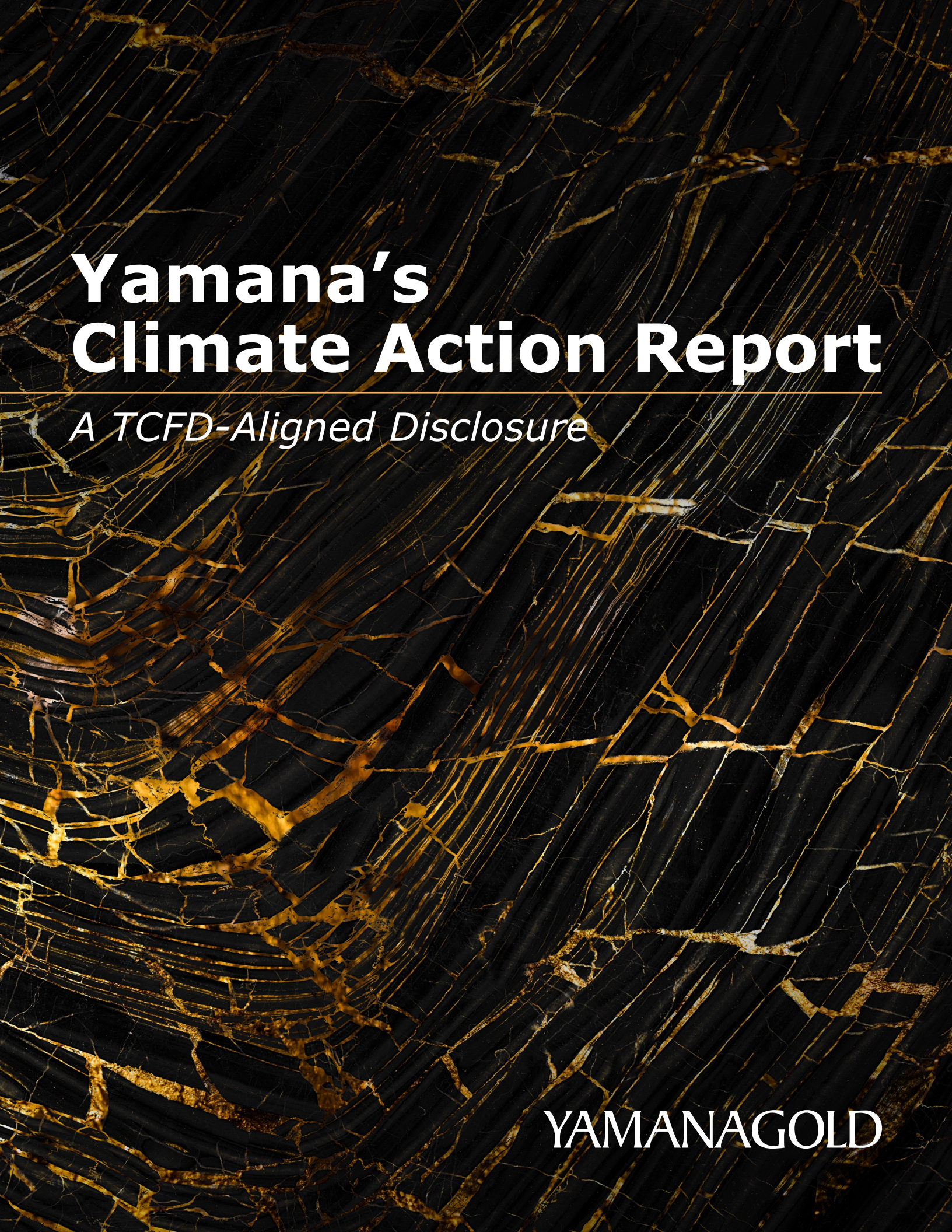

Yamana's Climate Action Report

A TCFD-Aligned Disclosure

YAMANAGOLD

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Abbreviations Used in the Report

BAU: Business as usual

BEV: Battery Electric Vehicle

CAPEX: Capital expenditure

CASG: Climate Action Steering Group

CAWG: Climate Action Working Group

DAP: Dynamic abatement portfolio

ESG: Environment, social and governance

GEO: Gold equivalent ounces

GHG: Greenhouse gas

HSSD: Health, Safety and Sustainable Development

IPCC: The United Nations Intergovernmental Panel on Climate Change

KPI: Key performance indicator

LOM: Life of mine

MACC: Marginal abatement cost curve

M&A: Mergers and acquisitions

OPEX: Operational expenditure

PPA: Power purchase agreement

RCP: Representative Concentration Pathways

RFP: Request for proposal

RGMP: Responsible Gold Mining Principles

SBT: Science-based target

SBTi: Science-Based Target Initiative

TCFD: Taskforce for Climate-related Financial Disclosures

tCO_2e: Tonnes of carbon dioxide equivalent

TSM: Towards Sustainable Mining

About Yamana Gold

Yamana Gold is a Canadian-based precious metals producer with significant gold and silver production, development stage properties, exploration properties, and land positions throughout the Americas, including Canada, Brazil, Chile and Argentina. Yamana plans to continue to build on this base through expansion and optimization initiatives at existing operating mines, development of new mines, the advancement of its exploration properties and, at times, by targeting other consolidation opportunities with a primary focus in the Americas. We are committed to operating responsibly and transparently to strengthen sustainable returns to shareholders and align business and societal outcomes by creating transformational impacts for all stakeholders.

About This Report

This report focuses on disclosure of climate-related information to our stakeholders in a clear and transparent manner. **This report covers all material greenhouse gas emissions (GHGs), including, but not limited to, carbon dioxide (CO_2)**. Notably, this report provides disclosures that address each of the recommendations of the *Task Force on Climate-related Financial Disclosures (TCFD)*. This is Yamana's first TCFD-aligned Climate Action Report.

This report covers all Yamana's wholly-owned and operated mines and does not include our exploration activities or closed properties. In addition, the report does not include data from the Canadian Malartic Mine, in which we hold a 50% ownership interest position; emissions from Canadian Malartic are considered as Scope 3, Category 15 (Investments) following discussion with our partner and in accordance with the GHG Protocol. Canadian Malartic Mine management has begun work to define their GHG emissions and pathways; we anticipate including data and information on Malartic in our next climate-related disclosure in 2023. Inclusion of additional Scope 3 emissions disclosure is under consideration.

This report establishes 2019 as our baseline GHG emissions year and we have restated GHG emissions data for 2019 and 2020 as a result of our internal assurance process. Actual emissions were lower than originally reported, resulting in a downward adjustment to our baseline.

We are committed to continuous improvement in our transparency and reporting practices and will actively seek opportunities to expand our disclosure as more information becomes available along our climate journey. If you have comments about the material covered in this report, our disclosure approach, or would like further information, please contact us at: *sustainability@yamana.com*.

TCFD Recommendations

TCFD
Recommended disclosure: Look for these boxes that indicate where our report presents disclosures recommended by TCFD.

In 2015, in response to growing concern from financial markets on the availability of reliable climate-related financial information, the Financial Stability Board established the TCFD to create recommendations to guide companies in developing more robust climate-related financial disclosures. In turn, the recommendations support investors, shareholders, and other stakeholders in understanding a company's overall carbon footprint, as well as its exposure to climate-related risks.

In 2017, the TCFD developed and published a framework with recommendations across four areas: governance, strategy, risk management, and metrics and targets. Within each area, TCFD recommends reporting against specific disclosures and produces detailed supplemental guidance to support companies in meeting the intent of the disclosures.

This Climate Action Report is closely aligned with the TCFD recommendations. Yamana has tailored the report to address each recommendation of the 2021 document, *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures*. Yamana will continue to align its future climate reporting with broadly-recognized international standards, such as TCFD, and is committed to continually improving its disclosure as it progresses on its journey towards net zero.

Note from the Executive Chairman

Transitioning to a low-carbon future is an imperative which creates both challenges and opportunities. Recognizing that business has an essential role to play in this transition, in December 2021 we announced our commitment to align with a 1.5°C science-based target.*

We believe this target, which raises our climate ambition substantially, is achievable. With implementation of projects that reduce haulage emissions at Jacobina and securing long-term renewable electricity at Minera Florida, we will be 78% of the way to our 2030 target within a few years. We have roadmaps to guide our future investment and operational decisions to achieve our target with only incremental investments required. As part of our effort to achieve 100% renewable electricity for our wholly-owned mines, we are actively evaluating renewable options for Cerro Moro; converting a portion of Cerro Moro's electricity supply from diesel to wind-generated power alone would meet the 1.5°C science-based target.

We are proud of the work our operations and procurement teams have done in recent years to position us for the transition to a low-carbon future. The nature of our operations, their geographic location and the penetration of renewable energy in those jurisdictions provide us with a substantial competitive advantage. As the benchmarking in this report highlights, Yamana's cumulative GHG emissions intensity is less than half that of the average gold mining company. We are enthusiastic about the position our company is in, to be amongst the top performers in the industry in terms of both absolute emissions and emissions intensity; we also recognize that we have work to do to maintain this leadership position. We look forward to advancing our climate action commitments to 2030 and being net zero by 2050.

Executive Chairman, Peter Marrone.

* *Press Release, Yamana Gold Releases Its Greenhouse Gas Abatement Targets Consistent With a 1.5ºC Science-Based Temperature Scenario. Dec. 14, 2021. https://www.yamana.com/English/investors/news/news-details/2021/Yamana-Gold-Releases-Its-Greenhouse-Gas-Abatement-Targets-Consistent-With-a-1.5C-Science-Based-Temperature-Scenario/default.aspx*

Note from the CEO

Welcome to Yamana's first ever Climate Action Report, providing explicit disclosure against the TCFD. This report is the culmination of one of the most significant environmental, social and governance (ESG) developments in Yamana's history – our Climate Action Strategy and the announcement of our 2030, 1.5°C-aligned target. This target was developed through an immense amount of work by a cross-company, interdisciplinary team and is well-grounded in the reality of our operations. As Peter highlighted, we believe this target is achievable and each site is in the process of building detailed, operations-specific roadmaps that look not only to 2030, but beyond to our ultimate net-zero 2050 aspirational goal.

In addition to the work that went into establishing Yamana's baseline emissions and science-based target, this report also highlights the detailed risk assessment process that was undertaken with each operation to look at both the physical and transition risks related to climate change. As the details of the risk section highlight, a significant amount of work has already been undertaken over the past five years to identify and mitigate climate risks.

We believe that our strong risk management approach, combined with our uniquely positive position vis-à-vis our 2030 targets, makes Yamana a leader in the mining industry's response to climate change. This report is a true embodiment of our mission - to mine precious metals not just profitably, but responsibly.

President and Chief Executive Offer (CEO), Daniel Racine.

Our Position and Approach on Climate Change

The potential impacts of climate change on the global environment and societies is one of the most important issues of our time. We recognize that business has a crucial role to play in addressing climate-related challenges. While climate change is a global issue, it also creates tangible risks to our operations and host communities. Yamana accepts its responsibility to both reduce our negative impacts and use our strengths as a business to contribute positively to a low-carbon future.

Our Climate Action Strategy is aligned with industry-wide approaches and programs, including the Mining Association of Canada's *Towards Sustainable Mining (TSM)* initiative and the World Gold Council's *Responsible Gold Mining Principles (RGMP)*. Acknowledging that transparency is an important part of our climate journey to net zero, Yamana supports and seeks to continually improve its implementation of the recommendations set out by TCFD.

Yamana's Climate Action Strategy is underpinned by the following three pillars:

Managing Our Carbon Targets

Reducing Energy Use and GHG Emissions

- Align compensation to achievement of our targets
- Site-specific pathways for emissions reduction
- Strategy development beyond the 2030 target
- Incorporate energy efficiency and emissions into procurement metrics
- Continue the interdisciplinary approach to managing emissions reductions

Advancing Our Strategic Position

Leverage Strong Industry Position

- Demonstrate Yamana's advanced industry position to investors and the ESG community
- Innovation-oriented approach to reduce emissions and costs
- Position our operations to be competitive in higher carbon price environments
- Explore market opportunities for low-carbon gold

Increasing Our Resilience to Climate Risk

Mitigation, Adaptation and Preparedness

- Embed climate-related risk management into operational and corporate risk evaluation and management
- Prioritize water and biodiversity management
- Collaborate with communities on climate resilience
- Adjust emergency preparedness and response plans for potential climate change impacts

We adopted our Climate Action Strategy in early 2021, following approval by the Executive Chairman and the Board of Directors. This strategy guides our short- and longer-term decarbonization activities.

Our approach is designed to support achievement of our targets: a science-based target developed on a **1.5°C-aligned emissions scenario** (compared to pre-industrial levels) and an aspirational **target of net zero by 2050.**

Our Climate Action Strategy aligns with our Responsibility Policy and Statement of Commitment on Environmental Protection, through which Yamana continually works to:

- Integrate climate-related risks and opportunities into our strategic and business planning
- Minimize our greenhouse gas emissions and energy use
- Set, track and report against climate-related targets that are based in science
- Engage and work with all relevant stakeholders on climate issues, including communities, suppliers, and governments, to increase resilience and accelerate climate action, and
- Adapt to the physical and transition risks of climate change to improve the resilience of our business.

GOVERNANCE

Governance of Climate-related Risks and Opportunities

We have established a robust governance structure to guide and implement our Climate Action Strategy, as shown in the figure and described below.

Corporate Climate Change Governance

BOARD OF DIRECTORS

Sustainability Committee

Executive Chairman

CLIMATE ACTION STEERING GROUP

*Executive Chairman**

*Chief Executive Officer**

SVP Chief Financial Officer

SVP Chief Operating Officer

SVP Health, Safety and Sustainable Development

CLIMATE ACTION WORKING GROUP

HSSD

Finance

Operations

Procurement

HEALTH, SAFETY AND SUSTAINABLE DEVELOPMENT

Corporate

Regional

OPERATIONS

Health, Safety and Sustainable Development

Site Management

* *Executive Chairman and Chief Executive Officer are Ex-officio members of the Steering Committee.*

Board of Directors

TCFD
Governance a) *Describe the board's oversight of climate-related risks and opportunities.*

Throughout the 2021 foundational year for Yamana, the Board was involved in key strategic decisions. In early 2021, on the initiation of the Executive Chairman, the Board approved Yamana's Climate Action Strategy, which outlined the Company's objectives for the year, including establishing an emissions baseline, conducting a TCFD-aligned risk assessment, and establishing company-wide targets. Completion of these and other objectives were linked to the executive scorecard and compensation, and are outlined more fully in the *Link to Executive Compensation* section.

The Executive Chairman and the Board ultimately oversee our progress against Yamana's climate-related targets and goals and, along with the Sustainability Committee, receive monthly environmental performance reports. These reports highlight operational performance vis-a-vis key environmental risks, including those related to climate issues. The Company's Executive Chairman also participates in the Company's Climate Action Steering Group.

Executive and Corporate Oversight

TCFD
Governance b) *Describe management's role in assessing and managing climate-related risks and opportunities.*

As part of the governance of our Climate Action Strategy, we established a Climate Action Steering Group (CASG) in early 2021. The CASG comprises the company's Executive Chairman and CEO as ex-officio members, the SVP CFO, SVP COO and the SVP of Health, Safety and Sustainable Development (HSSD). The primary CASG meets every two weeks; the Executive Chairman and CEO are involved in every other meeting. The CASG works closely with an interdisciplinary Climate Action Working Group (CAWG), consisting of corporate and regional representatives from HSSD, Operations, Finance, and Procurement. The CAWG is responsible for coordinating and guiding decision-making related to Yamana's Climate Action Strategy and sharing information about climate-related issues with our operations. The CAWG also works closely with the Company's lead technical consultant, Thorn Associates, a Canadian firm recently awarded the *2020 International Energy Engineer of the Year Award* (Emily Thorn Corthay) by the Association of Energy Engineers.

Operational Management of Climate Risks and Opportunities

Mine management, operations teams, and site HSSD teams are responsible for managing climate-related issues related to our physical assets. In the past, this has focused largely on physical risks related to climate change. With our 1.5°C-aligned target in place, operations will now sharpen their focus on exploring and implementing emissions reduction opportunities to meet our 2030 and net-zero 2050 targets.

Link to Executive Compensation

We believe that good governance for climate action must start at the highest level and extend throughout the organization. That is why both site and corporate (executive) compensation are linked to environmental performance, including climate change performance.

In 2020, 15% of executive and 20% of site bonuses were linked to HSSD activities, including a target to reduce absolute GHG emissions by 10% from 2019 levels, which was successfully achieved.

In 2021, Yamana added a new, standalone compensation component linked to our Climate Action Strategy valued at **5% of the executive scorecard**.

This component evaluated our progress in implementing the 2021 action plan, including:

- Board, Executive Chairman and CEO approval of the 2021 proposed Climate Action Strategy;
- Adoption of company targets;
- Establishment of an executive-level CASG and multi-disciplinary CAWG to lead the Company's climate action work in 2021 and beyond;
- Retaining third-party expert advisory services to establish emissions baseline and identify abatement pathways;
- Development of initial site-level abatement roadmaps;
- Development of a climate action strategy implementation plan; and
- Public disclosure against the TCFD's recommendations.

We are happy to report that we successfully completed the 2021 objectives, achieving the maximum level on the scorecard. Going forward, Yamana will continue to include Climate Action as a standalone element of its executive scorecard. The elements under consideration for inclusion in the 2022 scorecard include:

- The submission of Yamana's targets for approval by the Science Based Target Initiative (SBTi);
- An initial estimate of our Scope 3 emissions;
- Completion of foundational Climate Action work at our jointly-owned Canadian Malartic Mine, including the establishment of an emissions baseline, an assessment of physical and transition risks, and the establishment of Scope 1 and 2 targets;
- Completion of detailed, operation-specific roadmaps to 2030 and beyond;
- A detailed feasibility assessment of options for renewable electricity at Cerro Moro; and
- Publication of this report, Yamana's first standalone TCFD report.

STRATEGY

Incorporating a Climate Lens into our Strategy

In 2021, Yamana advanced our understanding of the physical and transition risks resulting from climate change, and further integrated climate considerations into our business strategy, planning and budgeting processes.

Climate Risks and Opportunities

In a series of multi-disciplinary climate change risk assessment workshops (further described in the Risk Management section), Yamana identified and categorized its climate-related risks and opportunities over the short (1-3 years), medium (3-10 years), and long term (10+ years).

TCFD Strategy a) *Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.*

Key Climate Change Risks and Opportunities over the Short, Medium and Long Term

Short Term *(1-3 years)*	Medium Term *(3-10 years)*	Long Term *(10 years+)*
Potential climate change risks		
• Increased insurance premiums • Water stress/scarcity • Continued access to hydroelectric power (Jacobina only) • Fire threat to assets and workers	• Carbon pricing increasing costs • Water regulation changes, increasing costs and decreasing access to water • Flooding, leading to operational disruptions (Cerro Moro only) • Asset damage due to climate change which could disrupt operations	• Water security leading to potential tensions/conflicts
Potential climate change opportunities		
• Increased resilience to power or fuel price fluctuations with increasing renewable electricity • Preferential financing rates for sustainability-backed bonds • Innovations in water recycling and desalination	• Increased demand for silver due to its use in clean technologies • Increased capital availability for lower emission producers • Reduced insurance premiums linked to meeting ESG criteria • Reduced operational costs if underground mining vehicles are electrified due to reduced ventilation, improved efficiency of electric vehicles and reduced maintenance costs	• Increased resilience to electricity or fuel price fluctuations with increasing renewable electricity • Market premium for low emission intensity gold

We have assessed how these risks and opportunities could affect our business, including associated cost implications, which are described in further detail in the Risk Management section. We have determined through our risk assessment process that all identified potential physical and transition risks pose a low to medium risk with no high risks identified.

Financial Position and Performance

Potential implications of the identified climate change risks to our financial position and financial performance include:

- Extreme weather at the operations can lead to production suspensions, adversely affecting revenue. Other potential financial-related impacts are to employee safety from extreme heat conditions (e.g. unsafe working conditions), increased insurance premiums, potential additional infrastructure spending for mitigation or repair, and additional incremental engineering and maintenance costs related to mitigation or adaptation.
- At a broader level, extreme weather within host communities where employees reside can impact employee availability, and extreme weather elsewhere has potential to affect supply chains.
- Increased capital or operational costs resulting from increases in the price of carbon and increases in the cost of water. Moreover, we may be required to purchase equipment to reduce emissions (e.g. battery electric vehicles are currently a high potential capital cost), although we do not believe that such high capital intensity steps will be required to achieve our 1.5°C target, based on our analysis.

More detailed information on the climate-related vulnerabilities and recommended mitigations and adaptations at each operating site is provided in the Risk Management section.

Potential opportunities related to financial performance that were identified in the risk assessment process include:

- There may be a potential market premium for low-carbon gold and increased capital availability as investors favour lower-emission producers. Moreover, low-carbon gold is expected to become more attractive as Yamana's customers look for ways to reduce their Scope 3 emissions.
- Access to preferential financing rates using sustainability-backed bonds.
- Potential to secure reduced insurance rates linked to meeting leading ESG criteria.
- Efforts to reduce emissions can translate to potentially lower power costs by using renewable electricity and reduced exposure to future fossil fuel price increases or carbon taxation.
- Reductions in water and energy costs can be achieved through improved efficiency.
- Improved reputation and trust with host communities because of the commitments and actions we are taking on climate change, coupled with proactive engagement to describe our actions.
- Creation of community water monitoring programs to enhance transparency and accountability, and to demonstrate our climate commitments.
- Building privilege to operate by catalyzing programs and initiatives to support community resiliency to climate change impacts.
- Improved ability to attract and retain talent because of our climate commitments, actions and our performance as a low-emission gold producer.

Impacts on Business Strategy and Financial Planning

Incorporation of potential impacts of climate change risks and opportunities into our business, including into strategy and financial planning, has begun and will continue going forward.

TCFD Strategy b) *Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.*

	Currently in place	Targeted for future evaluation
Executive compensation	• Yamana includes climate change considerations as a standalone element of its executive scorecard. • See Governance section for more details.	• Extending Climate Change elements on executive scorecards to connect directly to the achievement of the 1.5°C and net-zero 2050 targets.
Mergers, Acquisitions, and Organic Growth	• Incorporating climate-related factors in mergers and acquisition (M&A) evaluations, including GHG emissions projections and climate change adaptation and risk implications. • Consideration of climate-related factors in organic growth opportunities, including GHG projections or estimations to confirm the expansion will enable Yamana to meet its climate targets.	• Evaluating growth opportunities will consider accessibility to grid renewable electricity and/or potential to achieve 2030 and net-zero 2050 emissions targets • Climate change physical and transitional risks will be identified and assessed for future potential assets.
Procurement	• Procurement is reviewing metrics and evaluation processes regarding energy efficiency and estimated GHG emissions during the request for proposal (RFP) selection process	• Procurement will develop a Scope 3 emissions strategy for suppliers. • Procurement to consider risks associated with potential physical risks of climate change on supply chains and/or purchases.
Operational strategy	• Prioritizing opportunities to access cost-effective renewable electricity in our operational strategy. • Our operational strategy is influenced by potential future water stress and a changing environment whereby, for example, recycling water is prioritized, and fresh-water intake is minimized.	• Develop comprehensive water management plans in collaboration with host communities and other stakeholders to minimize water use, demonstrate our commitment to responsible production and build privilege to operate.
Capital Allocation	• We have developed a tool (see Achieving our Targets for more information on the Dynamic Abatement Portfolio (DAP)) which guides our strategic assessment of emissions abatement project options and capital allocation for projects identified to meet our 1.5°C science-based target (SBT).	• Projected carbon emissions will be considered in capital allocation decisions.

	Currently in place	Targeted for future evaluation
 **Innovation**	• We continually explore innovative GHG abatement technologies, such as Railveyor at Jacobina, battery electric haul trucks and pick-up trucks at multiple sites, and renewable electricity at Cerro Moro.	
 **Mitigation and Adaptation**	• In 2021, we conducted a site-by-site review of potential GHG mitigation opportunities and adaptation recommendations.	
 **Mine Planning**	• We are in the initial stages of evaluating the impact GHG abatement technologies can have on the cost per gold equivalent ounce (GEO), which in turn affects critical aspects such as the cut-off grade and ultimately mine life. • Since 2018, we have been reviewing the impacts of physical climate change on our operations (e.g. tailings storage facilities, infrastructure design).	• Future mineral resources and mineral reserves estimation, and mine planning will incorporate climate-related aspects (e.g. emissions projections, low-carbon capital and operating costs, carbon pricing, etc.) more explicitly.
 **Financial Planning**	• We are currently exploring how climate change risks and opportunities affect our financial planning, including CAPEX and OPEX, capital allocation, access to capital, and M&A.	• In 2022, we will explore the potential establishment of an internal carbon price to factor into our life of mine (LOM) and financial planning cycles.

Global Scenarios and Impact on Strategy and Resilience

TCFD Strategy c) *Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.*

To better understand the resilience of Yamana's business to physical and transition risks, we undertook a scenario analysis in 2021 using three Representative Concentration Pathway (RCP) scenarios which have been derived from the Intergovernmental Panel on Climate Change (IPCC) reports. RCPs describe different global 21st century pathways of GHG emissions and atmospheric CO_2 concentrations, air pollutant emissions, and land use. The RCP scenario numbers range from 8.5 to 2.6, reflecting increasing efforts to reduce GHG emissions globally and correspondingly lower global temperature rise.

Description of RCP Scenarios and Associated Risks

The information below is drawn from the SENSES Toolkit developed as part of the European Research Area for Climate Services.* It considers policy, legal, technological and reputational implications as well as associated physical risks. Potential changes to the gold price under different scenarios is unknown.

Global High Emissions Scenario: RCP 8.5

The RCP 8.5 scenario models a potential future where few efforts are made globally to reduce GHG emissions and the world sees average temperature increases of 3.5° – 5°C. This represents a worst-case scenario of global warming and is considered a low-probability scenario.

Under this scenario, we are anticipating a modest carbon price of 0 – 10$/ tCO_2e and insurance premiums increasing up to 20%.† It is reasonable to anticipate an additional 10-20 person days of reporting and monitoring related to health and safety-related risks and incidents due to extreme weather events. This scenario also anticipates a relatively low cost to transition to low emission technology, as this can be done over a longer time horizon. It envisions a relatively high level of stakeholder concern and associated management effort due to the greater magnitude and frequency of climate change impacts.

For physical risks, the RCP 8.5 scenario anticipates a relatively high level of infrastructure loss (i.e. transport, energy, water infrastructure) due to extreme weather events. It also anticipates relatively high increases in water costs and more pronounced impacts and costs due to higher heat (i.e. employee health, cooling costs).

Global Medium Emissions Scenario: RCP 4.5

The RCP 4.5 scenario models a potential future where moderate efforts are undertaken globally to reduce GHG emissions and the world sees average temperature increases of 1.8° – 2.4°C.

Under this scenario, a carbon price of 30 – 80$/ tCO_2e can be anticipated, with insurance premium increases of up to 15%,‡ and an additional 10-20 person days of reporting and monitoring related to both increased regulatory reporting and health and safety-related risks and incidents due to extreme weather events. This scenario anticipates a medium cost to transition to low emission technology and a medium level of stakeholder concern and associated management effort due to the impacts of climate change.

For physical risks, the RCP 4.5 scenario anticipates a moderate level of infrastructure loss (i.e. transport, energy, water infrastructure) due to extreme weather events. It also anticipates higher water costs and a moderate increase in impacts due to higher heat and temperatures (i.e. employee health, cooling costs). These costs and losses are anticipated to be less than under RCP 8.5, but more than under RCP 2.6.

* *https://climatescenarios.org/primer/mitigation/*

† *Swiss Re – reported in The Actuary (2021) https://www.theactuary.com/news/2021/11/23/global-insurance-premiums-exceed-7trn-2022*

‡ *In the RCP 8.5 scenario, additional reporting and monitoring compared to present day would likely be related to health and safety-related risks and incidents due to extreme weather events (e.g. poor air quality due to increased wildfires), whereas in the RCP 2.6 scenario, additional reporting and monitoring would likely be related to more stringent GHG policies.*

Global Low Emissions Scenario: RCP 2.6

The RCP 2.6 scenario models a potential future where a high level of effort is applied globally to mitigate GHGs and thus achieve a lower global warming with average temperature increases of < 1.5° – 2°C.

Under this scenario, we anticipate a higher carbon price of 80 – 130$/ tCO_2e, insurance premium increases of up to 10%,* and an additional 10-20 person days of ESG-related monitoring and reporting under more stringent government policies and regulations. This scenario anticipates a relatively high cost to transition to low emission technology and a relatively low level of stakeholder concern and associated management effort due to the curbing of some climate change impacts relative to other scenarios.

For physical risks, the RCP 2.6 scenario sees a relatively low level of infrastructure loss (i.e. transport, energy, water infrastructure) due to extreme weather events compared with the other scenarios. It also anticipates a smaller increase in water costs than under other scenarios and a lower increase in impacts due to higher heat and temperatures (i.e. employee health, cooling costs).

In the lower temperature scenarios (RCPs 4.5 and 2.6), the costs of transitioning to a low-carbon economy will be higher, but the projected impacts on physical assets from climate change will also be lower. Conversely, in the higher-temperature scenarios, there will be lower transition-related costs, but the financial impacts of climate change on physical assets is projected to be higher.

Based on the climate change risk assessment completed in 2021, we have concluded that **all identified physical and transition risks pose a low to medium risk.** We did not identify any high risks, largely due to our relatively low emissions profile vis-à-vis the gold and mining industry more broadly (transition risks) and the efforts our operations have made in recent years to mitigate current and future climate risks (physical risks).

Further information on our risk assessment, management and mitigation practices is provided in the Risk Management section.

* *In the RCP 8.5 scenario, additional reporting and monitoring compared to present day would likely be related to health and safety-related risks and incidents due to extreme weather events (e.g. poor air quality due to increased wildfires), whereas in the RCP 2.6 scenario, additional reporting and monitoring would likely be related to more stringent GHG policies.*

RISK MANAGEMENT

Climate Change Risk Management

Climate Change Risk Identification and Assessment Process

TCFD Risk Management
a) *Describe the organization's processes for identifying and assessing climate related risks.*

Building on the 2018 *Climate Change, Water, and Biodiversity Risk Assessment*, in 2021 Yamana focused on identifying and assessing the physical and transition risks which could have material financial impacts on our business in the short, medium, and long term. The physical and transition risk assessment was based on the ISO 31000 Risk Management Standard, and included a vulnerability assessment, risk characterization and classification, as well as risk mitigation and adaptation aspects. We integrated the IPCC's Climate Impact Driver and future outlook into the framework, and conducted a horizon scan to identify emerging environmental issues in the medium term. Results were placed into a risk matrix to better understand likelihood and impact to the business. A key process within our approach was to use scenario analysis to capture a broad range of physical and transition risks that are relevant to Yamana. We applied the three RCP temperature scenarios described above to explore the potential impact of climate change on our operations according to the unique conditions in the regions where we operate.

As part of our detailed operational risk assessments, we were able to identify potential risks and opportunities that could have material financial impact based on regional context and operations-specific vulnerabilities. Potential qualitative financial impacts were identified where the likelihood of risks was considered probable, and their impacts to the business significant enough to require mitigation action(s).

Our risk assessment processes were systematic and comprehensive, and were undertaken with the support of third-party risk experts. Beginning at the regional level, we identified relevant acute and chronic climate change variables (e.g., precipitation) and their risk exposures (e.g., extreme rainfall). In a series of workshops with each operation, we then assessed vulnerabilities, potential impacts of these vulnerabilities (i.e. risk characterization), and the future outlook under each of the three climate RCP temperature scenarios. The magnitude and scope of risks were then assessed by characterizing their likelihood, relative severity of impact, consequences and existing or required risk management controls. This last step was also conducted through collaborative workshops, which helped to identify the most appropriate risk mitigation actions for adaptation that are or will be implemented and tracked by our operations.

This process also considered a multitude of relevant transition risks, including but not limited to, carbon pricing, changing regulations involving energy efficiency and water management, renewable energy law, changing insurance premiums, technology obsolescence or financial viability, shifts in supply and demand for gold, community perceptions, and public reputation.

Increasing Our Resilience to Climate Risk

Effective risk management requires that we assess vulnerabilities and potential consequences, and confirm controls are in place to effectively mitigate risk and ensure the safety of people and our business, while embracing and creating opportunities to deliver on our values. Yamana's approach to risk management begins at the operations level and climate-related risks are monitored and managed collaboratively across disciplines and between sites and corporate.

TCFD Risk Management
b) *Describe the organization's processes for managing climate-related risks.*

At the Operational Level

Each of Yamana's mine sites has a specific committee and major risk management group that identifies the risks and opportunities present at these locations through discussion at regular meetings. Yamana's operations identify material risks by considering environmental impacts, health and safety hazards and risks, analysis of incidents and major risks that have been identified by Yamana's corporate departments. These considerations include both the physical risks associated with a changing climate, as well as risks created by the transition to a low-carbon future. The risks are identified and evaluated to support decision-making and prioritization of actions. Risk identification and evaluation are undertaken on an ongoing basis, as well as during discrete risk evaluations.

At a Corporate Level

Yamana's approach to risk requires that each operation, project, exploration and decommissioned site assess the site-level, regional and national-level risks. Climate-specific risks are jointly identified by corporate and site teams, often with external expertise, and are in the process of being more broadly reviewed in the context of project development and acquisition. For each risk assessment process, the likelihood and impact to business of each risk is identified to determine the significance of each risk and potential consequences and controls in place to determine actions taken to mitigate them. Major risks are identified and those which require mitigation by the operations are selected. We communicate material risks to senior management, as well as the Board of Directors, to ensure proper accountability with decision-makers.

We have assigned responsibility at both the corporate and regional level for identifying and managing upcoming climate regulation changes to confirm that we plan for and communicate upcoming and/or potential regulations within the company.

The 2021 climate change risk assessment demonstrated that all identified physical and transition risks pose a low to medium risk with no high risks identified. The following risks were identified as those requiring ongoing mitigation; the associated mitigation actions are described in the table below.

Key Climate-related Material Risks and Risk Mitigation

	Potential Material Risks	Risk Mitigation	Relevant Operations
Physical	**Water Management** *Increasing water stress, scarcity, drought, and intensity and frequency of extreme rainfall events*	Water management has always been a priority at Yamana. Our operations maintain water balances and engage with local stakeholders and regulatory bodies to continuously seek opportunities to improve water use efficiency and recycling. Other key mitigation measures include aligning with national water strategies, minimizing raw water intake and evaluating alternative water supplies. For more details, please visit the Water section of the Responsibility, Environment page of our website and our Material Issues Report.	El Peñón, Minera Florida, Jacobina, Cerro Moro
	Surface and Storm Water Management *Heavy precipitation could threaten the capacity of containment systems (e.g., tailings), disrupt or delay operations, interrupt transport of fuel/power due to road washout*	Our operations are responsible for confirming that storm water management infrastructure and tailing storage facilities have sufficient capacity for future scenarios. Most operations have multiple road access ways to get to site in the case of road washouts.	Minera Florida, Cerro Moro, Jacobina

	Potential Material Risks	Risk Mitigation	Relevant Operations
Physical	**Energy** *Interruptions in supply or reliability of hydroelectric renewable power generation*	Over the past few years, our operations have dedicated considerable effort into implementing opportunities for energy efficiency and clean grid supply. We continue to explore all available sources of electricity, monitor our consumption, and assess supply risks and opportunities for renewables.	Jacobina
	Fire threat *Fire threat to assets and personnel*	We continually work with local authorities to monitor and confirm preparedness for fire threats to our people and operations.	Minera Florida, Jacobina
Transition	**Carbon Taxes**	We are monitoring the development of carbon tax or emissions trading schemes in our operational jurisdictions, while working toward our aspirational goal of net-zero carbon emissions by 2050 through the Climate Action Strategy.	El Peñón, Minera Florida, Jacobina, Cerro Moro
	Water Management Regulatory Changes and Community Perceptions	We are continually monitoring regulatory changes in our operational jurisdictions as they pertain to water quantity and quality, while prioritizing the efficient use and minimizing discharges of water in our operations. We run community water monitoring programs at multiple operations. We regularly engage on the issue of water availability and quality with our communities. Yamana is committed to water stewardship in its operational catchments.	El Peñón, Minera Florida, Jacobina, Cerro Moro
	Access to Capital	Our HSSD and Finance teams work together to ensure a thorough understanding of our lenders' climate-related requirements and policies, while providing timely access to quality data. Our secure access to capital is supported by our continuous improvement of climate-related disclosures and progress on climate action.	El Peñón, Minera Florida, Jacobina, Cerro Moro
	Insurance Premiums	We work with our insurers to demonstrate risk management actions that are being undertaken to manage our physical assets responsibly (e.g. the 2021 climate change risk assessment that demonstrated all physical and transition risks posed a low to medium risk with no high risks identified). Developing and monitoring fire detection and suppression systems has been a key consideration for our insurers.	El Peñón, Minera Florida, Jacobina, Cerro Moro

Integrating Climate Change Risk into Yamana's Overall Risk Management System

Identified climate-related physical and transition risks are managed at the operations level with oversight by corporate personnel. Yamana seeks to be in conformance with the World Gold Council's RGMP by the end of 2022, which includes an enterprise risk management approach that incorporates climate change-related risks.

Yamana updates Environmental Key Performance Indicators (KPIs) for each site on an annual basis. These KPIs, which are based on the previous years' performance, include indicators related to climate change and are used to determine potential and changing risks. Indicators vary on a site-by-site basis, and manage legal, regulatory, community and operational risks. Performance on these indicators is regularly communicated to site management and the corporate HSSD team and are communicated to senior management and the Board of Directors.

TCFD **Risk Management c)** *Describe how processes for identifying, assessing, and managing climate related risks are integrated into the organization's overall risk management.*

METRICS AND TARGETS

Targets, Metrics, and Performance

Targets and Metrics

Through our Climate Action Strategy, Yamana is positioning itself to be a leading contributor amongst our peers in the transition to a low-carbon future.

Our Target:

46% reduction

in absolute Scope 1 and 2 emissions

by 2030

from a 2019 baseline

We have adopted a science-based target in accordance with the SBTi to reduce our operational (Scope 1 and 2) emissions by 46% by 2030, which aligns with a 1.5°C-aligned pathway. We have also set an aspirational target of net-zero emissions by 2050, demonstrating our support for global initiatives, such as The Paris Agreement. To meet the 2030 reduction target, we will reduce our emissions by between four and five percent annually from our 2019 base year* to 2030. We will also continue to work to establish pathways towards our aspirational 2050 net-zero emissions goal.

TCFD

Metrics and Targets a)

Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

TCFD

Metrics and Targets c)

Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

Our targets encompass Scope 1 and Scope 2 emissions. The World Gold Council estimates that Scope 3 emissions in gold mining represent approximately 22% of total emissions (Scope 1, 2 and 3) on average. Current guidance from the SBTi indicates that Scope 3 emissions should be included in a GHG reduction target if they are over 40% of total emissions.

The updated 2021 TCFD implementation guidance encourages companies to set and disclose targets for seven categories of metrics, while recognizing that not all companies will have the resources or the capability to establish and quantify metrics in all categories. We are still developing metrics for some categories and will update our progress in future reports. Yamana will work to further develop and refine our metrics to ensure they are useful for decision-making, are clear and understandable, reliable, verifiable, objective, and consistent over time. The table on the next page provides a snapshot of metrics currently in place, and additional metrics under consideration.

* *SBTi requires that the base year be as recent as possible provided the data is available and represents Yamana's normal operating parameters. Given that the COVID-19 pandemic affected many of Yamana's operations in 2020, we selected 2019 as a more representative base year, in alignment with guidance from SBTi.*

Metrics used to assess climate-related risks and opportunities

	Currently in place		For future evaluation	
Metric Category	**Description**	**Applicability**	**Description**	**Applicability**
GHG Emissions	Absolute Scope 1 and 2 Emissions (tCO_2e)	Tracks emissions across Yamana sites	Scope 3 Emissions estimate (tCO_2e)	Understand the impact of Yamana's investments and supply chain
	Scope 1 and 2 Emissions Intensity (tCO_2e/GEO)	Tracks emissions, normalized by production		
Transitional Risks	Amount of renewable electricity (% of total electricity consumption)	Transitional risk of renewable electricity requirements		
Physical Risks	Water Usage after recycling (L/year or on an intensity basis L/GEO)	Physical risk of drought or decrease in precipitation affecting water supply		
Climate Related Opportunities			Revenue per year vs emissions intensity of gold production ($ per tCO_2e/GEO)	May be an important metric for a low emission gold market
Capital Deployment	Amount of capital spent on renewable electricity and other emission reduction projects (% of total capital investment per year)	Tracks how much focus is being placed on reducing carbon emissions at a corporate level		
Internal Carbon Price			Corporate level internal carbon price ($/$tCO_2e$)	Facilitates the inclusion of climate-related costs into business decisions corporate level (such as new acquisitions) to be influenced by a carbon price
Remuneration	Weighting of climate goals on long-term incentive scorecards for Executives (Weighting)	Incentivizes implementation of the Climate Action Strategy at the executive level		

Performance

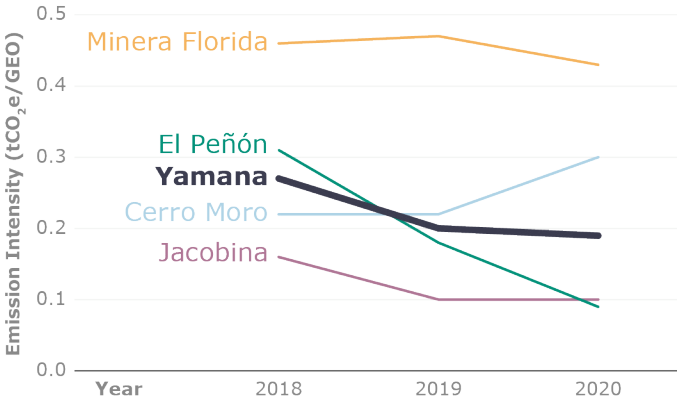
Baseline Emissions, Total Emissions and Intensity

TCFD Metrics and Targets b) *Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.*

The table below shows the total GHG emissions (Scope 1 and 2) and GHG emission intensity at Yamana's wholly-owned operating mines (Cerro Moro, Jacobina, El Peñón and Minera Florida). Yamana's corporate base-year emissions and analysis considers only the currently-owned and operating mines, which is consistent with SBTi and the GHG Protocol approaches on base-year calculations for new mine acquisitions or mine divestments. By excluding the emissions associated with former assets that were sold, a clear picture of the emission trends emerges, which can then be compared to future emission projections. However, for purposes of completeness, we have also shown the GHG emissions from former assets that were sold as separate line items.

	Total Emissions (tCO_2e)		
Site	**2018**	**2019**	**2020**
Cerro Moro	31,717	42,939	39,207
Jacobina	23,108	16,077	17,110
El Peñón	62,621	36,741	19,752
Minera Florida	37,946	34,630	38,474
Yamana Total Emissions	**155,392**	**130,387 (Yamana's Base Year emissions)**	**114,544**
Asset divested in 2019	*154,215*	*86,993*	*0*
Asset divested in 2018	*66,083*	*0*	*0*

Cerro Moro's lower emissions in 2018 are attributed to the fact that the mine was not yet in full production. The large decrease in emissions observed at El Peñón reflects the signing of a renewable electricity power purchase agreement (PPA) partway through 2019, resulting in emissions reductions observed in both 2019 and 2020. Cerro Moro's emissions decreased in 2020 compared to 2019 due to the impacts of the COVID-19 pandemic and reduced production. When considering an emissions intensity basis incorporating production as a factor, emissions intensity decreases slightly from 2019 to 2020.



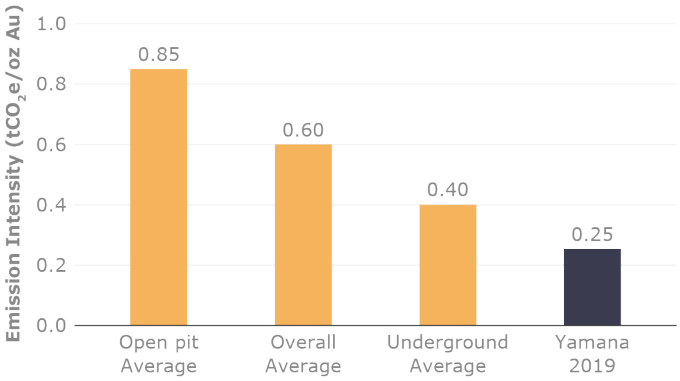
	Emission Intensity (tCO_2e/GEO)		
Site	**2018**	**2019**	**2020**
Cerro Moro	0.22	0.22	0.30
Jacobina	0.16	0.10	0.10
El Peñón	0.31	0.18	0.09
Minera Florida	0.46	0.47	0.43
Yamana	**0.27**	**0.20**	**0.19**

Benchmarking

Emissions intensity varies widely across the gold mining sector. This is partly attributable to large differences in the emissions intensity of electricity used at the various sites, as well as to differences in mining methods, processing technologies and ore grades.

The figure below compares the emissions intensity (in units of tCO_2e per ounces of gold) of a benchmarking study of gold mines by S&P Global* to Yamana's overall emissions intensity in 2019. Averages for underground and open pit mines are included, with the average underground mining emissions intensity having a value of 0.4 tCO_2e /oz Au.

Emission Intensity Benchmarking - Gold Mining



Site	Emissions Intensity (tCO_2e/oz Au) 2018	2019	2020
Yamana	**0.33**	**0.25**	**0.23**

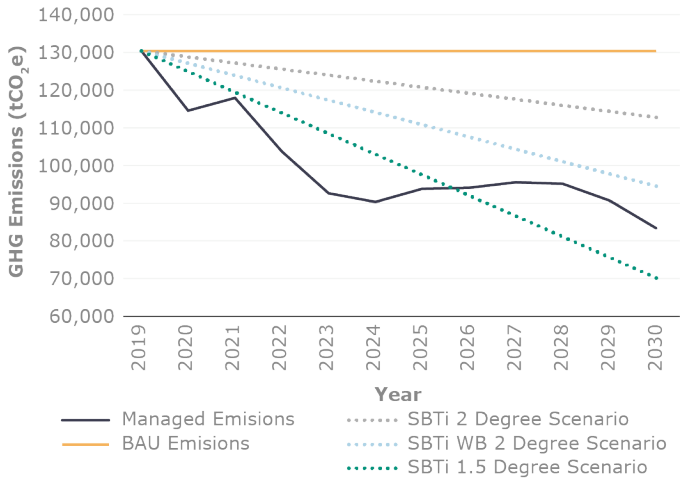
The graph compares Yamana's emissions intensity data (converted to tCO_2e/oz Au) to the benchmarking data. These data are aggregated for the four wholly-owned operations in Yamana's portfolio.

Yamana's 2019 emissions intensity was almost 60% lower than the 2019 average emissions intensity of benchmarked gold mines. In 2020, Yamana's emissions intensity was even lower. It is anticipated that our emissions intensity will continue to drop once Minera Florida's renewable electricity PPA is in place later in 2022.

* *Greenhouse gas and gold mines Nearly 1 ton of CO_2 emitted per ounce of gold produced in 2019 S&P Global Market Intelligence (spglobal.com) (2019)*

Emission Projections

The figure below presents Yamana's historical and projected emissions*. Projections include the three selected future SBTi-aligned climate scenarios (2°C, well below 2°C and 1.5°C), and the business as usual (BAU) emissions if production remained constant between 2019 and 2030. Yamana's managed emissions represent projected projected emissions based on approved life-of-mine plans. Note this figure provides a snapshot based on current life of mine plans. Actual emissions can change on an annual basis based on a range of factors, including changes to mineral reserves, actual gold grades, optimization of mining methods, gold prices, operational costs, organic growth, acquisitions and other factors.



Yamana plans to continue to reduce its GHG emissions and emissions intensity over the next decade through the implementation of a range of approved projects, continuing our substantial downward trajectory.

Achieving our Targets

GHG Reduction Project Selection

Employing a diligent, multistage process involving workshops with each of our operations and third-party experts, we have already identified numerous emissions abatement opportunities at each site that will achieve our emissions reduction target. To support the action needed to meet our targets, we developed the DAP tool, which guides our strategic assessment of project options and financial planning to develop a clearly-defined pathway for emissions reduction. Each abatement opportunity identified at the sites is registered in the DAP. The DAP combines the use of a marginal abatement cost curve (MACC) while filtering against relevant risks, technology readiness, and our implementation readiness to prioritize a portfolio of projects that, when implemented, will achieve our emissions reductions and meet the 1.5°C-aligned carbon budget to 2030.

Gold mining is inherently energy intensive. This is why Yamana's multistage approach to net zero begins with addressing our Scope 2 emissions that are the result of grid-related energy consumption (i.e. electricity). Since all of our operations are located in jurisdictions with plentiful and affordable renewable electricity production, we have been able to significantly reduce our Scope 2 grid-related emissions at El Peñón through a 100% renewable PPA implemented midway through 2019. We have also finalized a PPA at Minera Florida, which will begin partway through 2022. With Jacobina also operating on 100% renewable electricity, Yamana currently has 75% of our GEO production using emission-free electricity; this will rise to 85% by the end of 2022 with the initiation of the Minera Florida PPA. The combined GHG emissions reductions associated with these PPAs means that Yamana is well on its way to meeting its SBTi-aligned 1.5°C emissions reduction target by 2030; nevertheless, we continue to evaluate similar opportunities for renewable electricity at Cerro Moro, with a focus on wind energy.

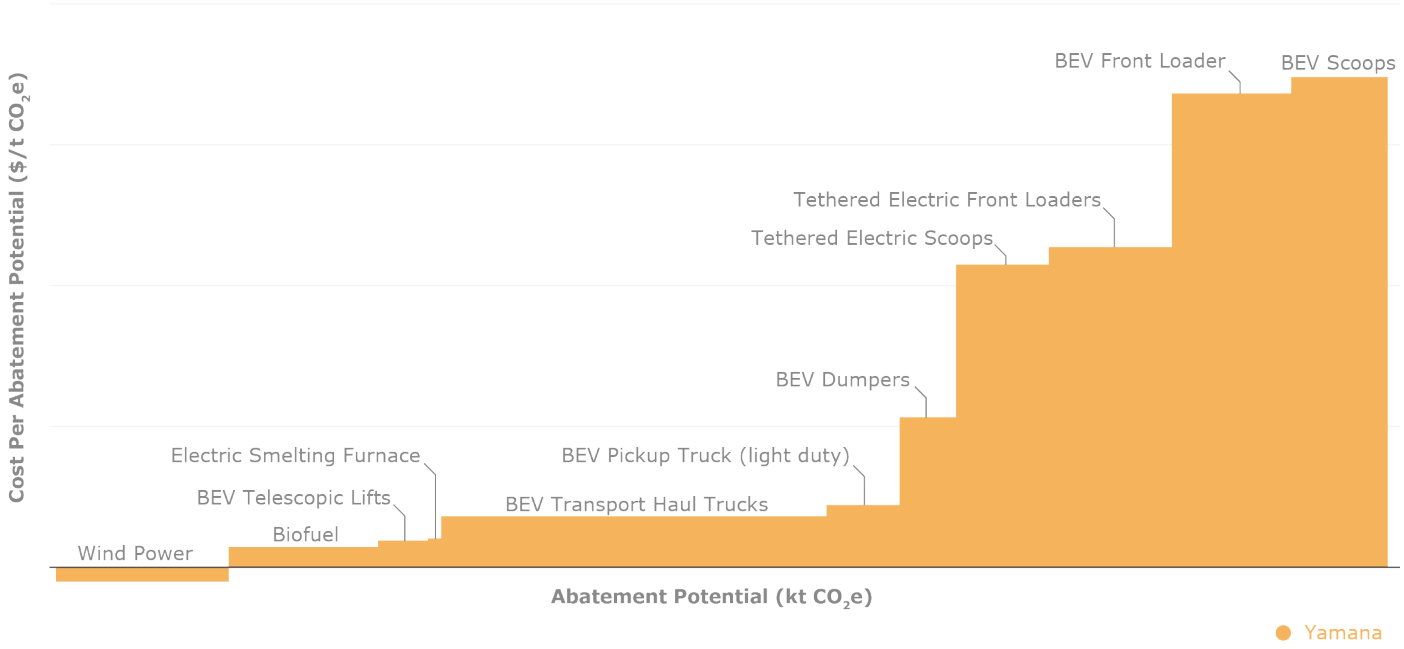
* *The following operational consumables usage were included in the emission projections by multiplying by the appropriate emission factors for diesel, LPG/propane, electricity, explosives, and refrigerant (fugitive).Whenever possible, a market-based approach was carried out when determining emissions factors. For example, PPA certificates were used to verify zero emission intensity electricity at El Peñón.*

The focus on renewable electricity is only part of the solution. We are also working to minimize our direct (Scope 1) emissions (e.g. emissions such as diesel emission of mining vehicles). We continue to investigate a range of opportunities including, but not limited to, improved efficiency of our systems and equipment, transitioning to the use of battery electric vehicles (BEV) and/or switching to biofuels for mobile equipment, and stationary alternatives for material handling (e.g. conveyors). Evaluation of such opportunities involves consideration of technological readiness, and capital and operating costs. Our efforts have already included upgrading ventilation infrastructure at Jacobina to high efficiency electrical equipment (ventilation on demand), and the approved, future installation of a Railveyor system at Jacobina to reduce haul truck usage. The SBTi expects most companies to have emissions reductions of at least 90 – 95% by 2050*, and we acknowledge that there are some emissions from our operations that are going to be hard to abate. We will continue tracking the development of emerging technologies and exploring the appropriateness of offsets for residual emissions (representing a small percentage of total emissions) and nature-based solutions.

A MACC is used to help identify opportunities that would help reach our 2030 climate targets while also minimizing costs. We developed a MACC to illustrate a variety of the aforementioned opportunities. The schematic MACC derived from our quantitative MACC below compares the cost estimates of the opportunities (estimated over the life-of-mine and including the capital cost and operational savings or expenditures for each technology) and the GHG abatement potential of each opportunity.

Yamana's MACC clearly demonstrates that deploying wind power at Cerro Moro is an attractive option: this power would replace high-cost, diesel-generated electricity. The Cerro Moro area of southern Argentina is considered one of the best on-shore locations in the world for wind energy. Detailed evaluation of this opportunity is underway.

A Schematic MACC Derived From Our Quantitative MACC



* *Source: The Net-zero Standard - Science Based Targets*

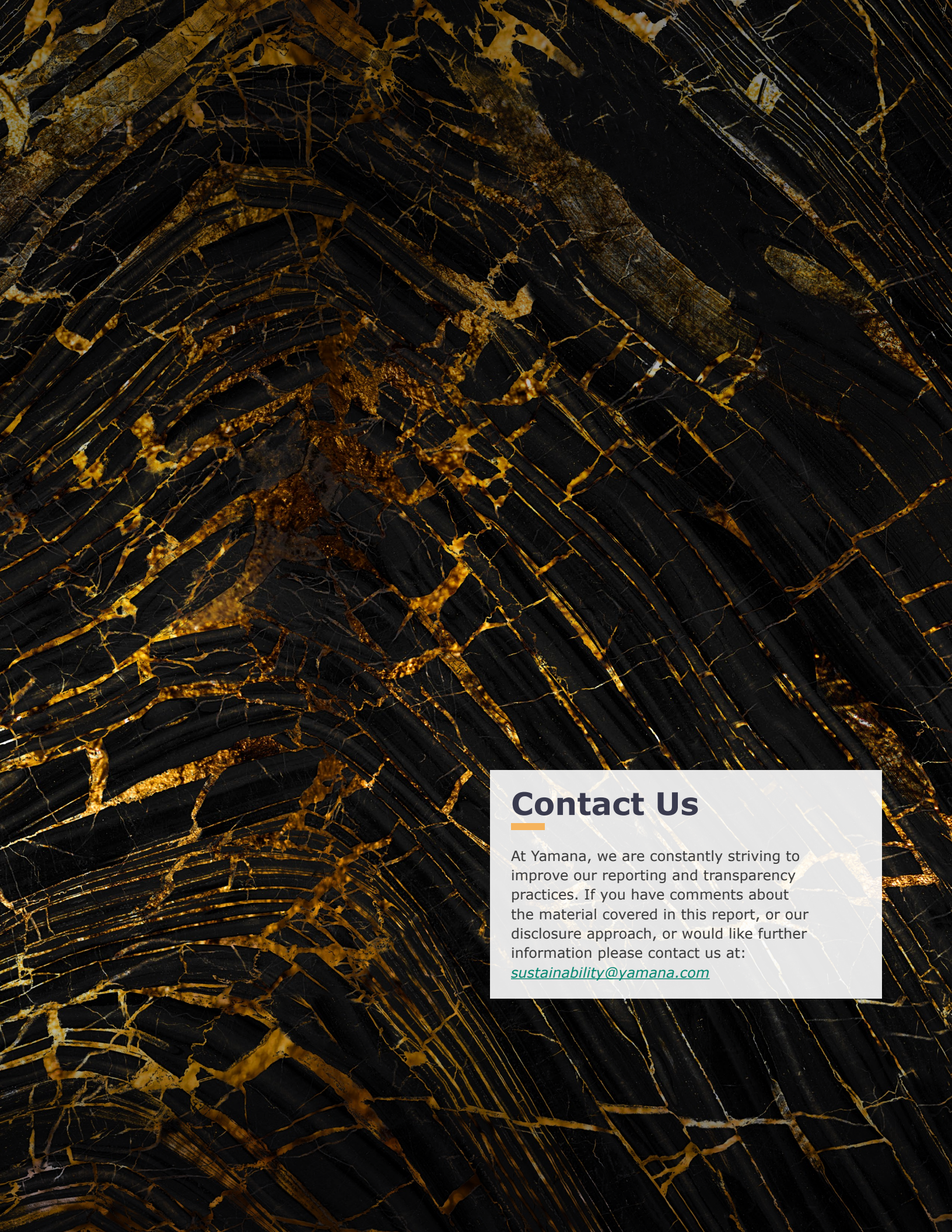
Pathways to 2030 and Beyond

We have defined three potential pathways to enable us to meet our 2030 target, providing us with multiple options to achieve our target.

Pathway 1: **Renewable Electricity at Cerro Moro**	This pathway would convert 50% of Cerro Moro electricity use to renewable electricity. This pathway requires the smallest capital investment compared to other pathways and will have minimal impact on operations; however, the relatively short mine life at Cerro Moro needs to be considered in evaluating the capital investment. Moreover, there are different options to consider, including self-performing and involving a third party in financing and constructing, with Cerro Moro as an off-taker.
Pathway 2: **Hybrid Option**	This pathway would include converting 25% of Cerro Moro's electricity supply to renewable, wind-generated electricity, plus introduction of biodiesel and some BEV projects at the other sites. This pathway requires moderate comparative investment and has moderate impact on operations.
Pathway 3: **BEV and Biodiesel**	This pathway would not include renewable electricity at Cerro Moro and instead includes a range of projects, including biofuel at Cerro Moro and numerous BEV options. It requires the most comparative investment and will have the greatest impact on operations; however, it also distributes capital investment across Yamana's sites, reducing proportional capital investment at Cerro Moro.

While some pathways require less capital investment than others, all of the pathways represent only modest investment for the company **to meet our emissions reductions by 2030.** In 2022, we will evaluate each of these pathways further, including preparation of detailed costing.

Yamana is confident that we can achieve our 1.5°C-aligned target by 2030. Through the work conducted and outlined within this report, we have a sound understanding of our emissions baseline and future projections. We have already identified a range of viable projects that can contribute to emissions reductions both in the short and long term, and have developed tools to support evaluating and selecting projects of interest. We have identified 3 actionable pathways to lead us to our 2030 targets and beyond. We are well-positioned to work towards our aspirational 2050 net-zero emissions goal.



Contact Us

At Yamana, we are constantly striving to improve our reporting and transparency practices. If you have comments about the material covered in this report, or our disclosure approach, or would like further information please contact us at: *sustainability@yamana.com*