



SEABRIDGE GOLD

**CLIMATE
STRATEGY
REPORT
(TCFD)**

March 2023



CAUTIONARY STATEMENT

This Climate Strategy Report includes certain statements that may be deemed to be “forward-looking statements” or “forward-looking information” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities laws (collectively, “forward-looking statements”). Forward-looking statements relate to future events or future performance and reflect current estimates, predictions, commitments, expectations or beliefs regarding future events. These include statements about anticipated climate change scenarios, the consequences of the realization of such scenarios to the Company and its business and to the environments in which we operate, as well as plans for mitigating them. The purpose of these statements is to help the reader understand management’s current intentions with respect to our future Climate Strategy initiatives and performance and is not intended for other purposes. There can be no assurance that such statements will prove to be accurate, as Seabridge’s actual results and future events could differ materially from those anticipated in these forward-looking statements. This information speaks only as of the date of this Climate Strategy Report, and the Company will not necessarily update this information, unless required to do so by securities laws. By their nature, forward-looking statements involve assumptions, inherent risks, and uncertainties, many of which are difficult to predict, and are usually beyond the control of management, that could cause actual results to be materially different from those expressed by these

forward-looking statements, and information. We intend to report annually on these matters but this information will not necessarily be updated between reports or in future reports unless required by securities laws.

All reserve and resource estimates reported by the Company were estimated in accordance with the Canadian National Instrument 43-101 and the Canadian Institute of Mining, Metallurgy and Petroleum (“**CIM**”) Definition Standards. The U.S. Securities and Exchange Commission (“**SEC**”) now recognizes estimates of “measured mineral resources,” “indicated mineral resources” and “inferred mineral resources” and uses new definitions of “proven mineral reserves” and “probable mineral reserves” that are substantially similar to the corresponding CIM Definition Standards. However, the CIM Definition Standards differ from the requirements applicable to US domestic issuers. US investors are cautioned not to assume that any “measured mineral resources,” “indicated mineral resources,” or “inferred mineral resources” that the Issuer reports are or will be economically or legally mineable. Further, “inferred mineral resources” are that part of a mineral resource for which quantity and grade are estimated on the basis of limited geologic evidence and sampling. Mineral resources which are not mineral reserves do not have demonstrated economic viability.

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1. FOREWORD FROM THE CEO



Rudi Fronk
Chair and CEO

“

My mission has been to drive value for our shareholders while respecting the environment and the rights of Indigenous groups and other partners in our projects.

- Rudi Fronk

”

After completing our first Environmental, Social and Governance (ESG) materiality process in 2021, the Board Sustainability Committee and members of our leadership team continued to develop our ESG strategy and dig into our climate-related risks. We have utilized a rigorous risk and opportunity approach to climate-related exposure and feel that we are on the right path to understanding the potential impact of climate-related risks. We believe these actions can transition our business into a more optimized enterprise and overall better climate steward. By going through this interactive process at all levels of the organization, we have set realistic and measurable ESG performance goals and have taken a logical and what I believe to be an effective approach to climate risk.

Since launching Seabridge Gold more than 20 years ago, our mission has been to drive value for our shareholders while respecting the environment and the rights of Indigenous groups and other project partners. This means finding and developing projects with practices that respect rights-holders, local communities, our employees, and the local environment. Shareholders expect this high standard from Seabridge Gold. Our newly updated Preliminary Feasibility Study (PFS) for KSM provides proof that a greener, more sustainable project is also a more profitable one. Improvements in the new PFS include reducing diesel consumption by adding electric trolleys to the mine operations; the inclusion of a fully funded, in-perpetuity water treatment plan; and an integrated remote operations centre for greater offsite workforce inclusion that will facilitate employment opportunities for traditionally underrepresented groups and more time for our employees with their families.

I invite you to read our inaugural Seabridge Gold Climate Strategy Report, aligned with the Task Force on Climate-Related Financial Disclosures (TCFD), to get a clear picture of our understanding of climate-related risks and opportunities as well as our commitments to transition to more sustainable practices in the future.

Sincerely,

Rudi P. Fronk

2.1 ABOUT THIS REPORT

This Climate Strategy Report (the “Report”) constitutes Seabridge Gold’s inaugural Report regarding the Company’s progress aligning with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). Throughout this document, “Seabridge Gold” and “the Company” refers to Seabridge Gold and its major subsidiaries.

This Report follows the guidance provided by TCFD, and the structure of this Report broadly follows the core elements of recommended climate-related financial disclosures, as shown in the figure below. The Report outlines the Company’s relevant governance structures, developing climate strategy, risk management approach, prioritized risks, targets, and relevant performance data.

As this is Seabridge Gold’s first Report against the TCFD recommendations, we acknowledge that gaps exist in meeting all recommendations. The Company takes an iterative approach to its TCFD reporting and commits to transparently reporting on the evolution and improvement of its climate management approach and disclosure year over year. A TCFD Content Index is available in Appendix A, which maps this Report’s disclosures against the key TCFD recommendations.

In this Climate Strategy Report, the Company takes an enterprise-wide approach to provide a holistic view of its risk profile and strategy developments. However, this approach has been informed by workshops involving staff from functional and corporate teams as well as the Board of Directors. There are examples throughout the Report of site-specific details which highlight where sustainability is being integrated into Seabridge Gold’s supplier relationship management philosophy, including the contract and tendering processes. These examples show our commitment to transitioning to a more climate-aware approach to business.

Overview of the outline of TCFD



GOVERNANCE

The organization’s governance around climate-related risks and opportunities

STRATEGY

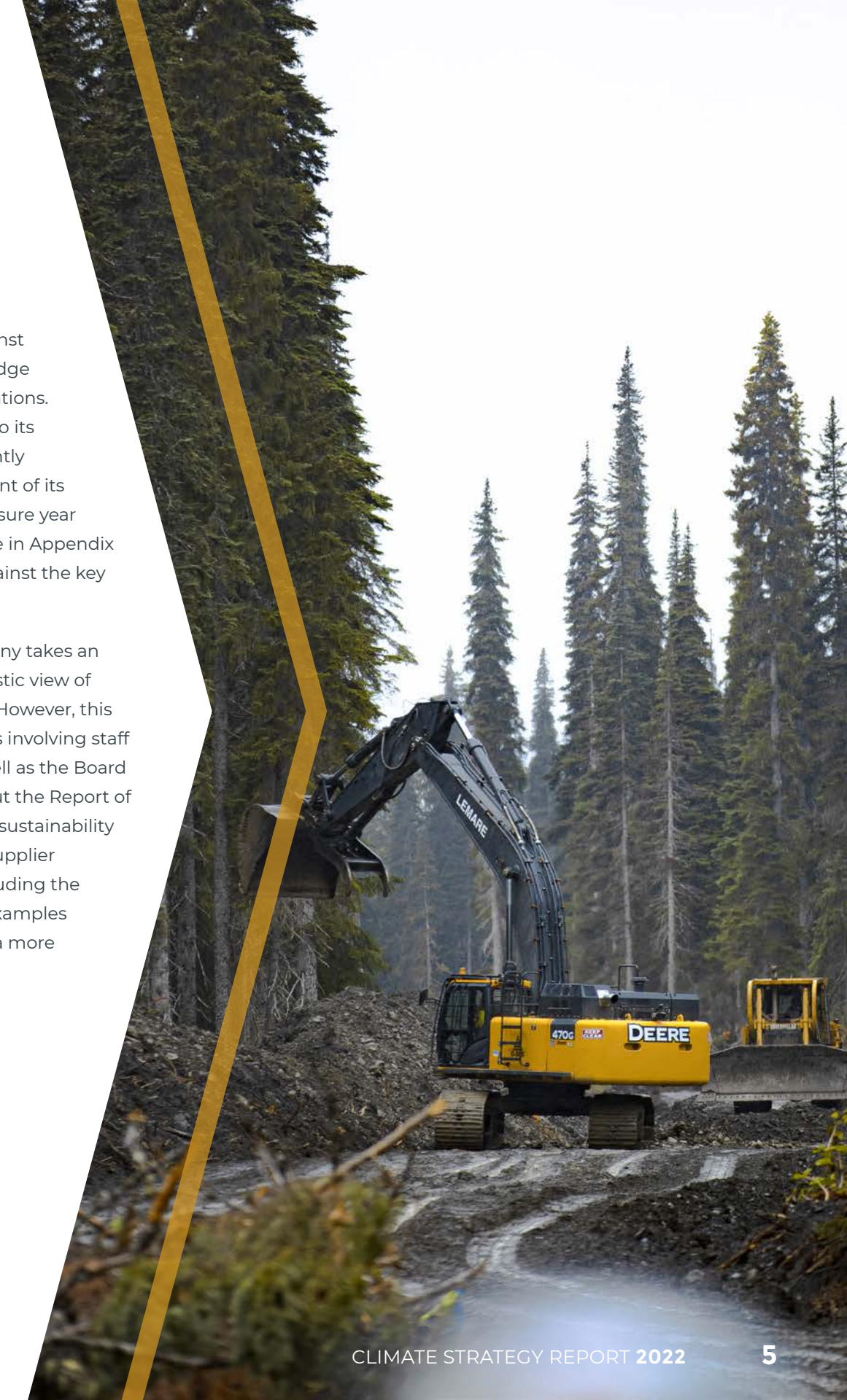
The actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning

RISK MANAGEMENT

The processes used by the organization to identify, assess, and manage climate-related risks

METRICS AND TARGETS

The metrics and targets used to assess and manage relevant climate-related risks and opportunities



2.2 METHODOLOGY

A number of techniques have been utilized in the development of both the Company's climate change strategy and this Climate Change Report. These include desktop studies and information gathering, data collection and quantitative analysis, interviews, and live interactive workshops. The latter involved activities and techniques regularly employed in organizational risk management and scenario analysis. In all cases, International and Canadian best practices have been used to supplement practices already in place within the organization.

2.2.1 WORKSHOP METHODOLOGY

Many of the key findings reported here were identified through a series of workshops. Held in Q1 of 2023, these workshops engaged key staff, such as the Board of Directors, senior leaders, and functional managers, with knowledge of the operations and their surrounding communities. The workshops included representation from across the business, involving Exploration, Sustainability, Environment, Community Relations, Projects, Legal, Human Resources, and Finance departments. The key objectives of the workshops were to:

01. Provide tailored training material to ensure that participants are aligned regarding the importance of, and potential opportunities and threats posed by climate change to Seabridge Gold.
02. Identify and prioritize relevant potential risks and opportunities related to climate change.
03. Design and run scenarios in line with TCFD requirements.
04. Consider tangible actions which may be relevant to and form part of the Company's climate change strategy in response to the potential risks and opportunities identified.
05. Provide tailored training material to ensure that participants are aligned regarding what constitutes Seabridge Gold's Scope 1, 2, and 3 emissions and how they can be calculated and reported.
06. Facilitate discussion as to how sustainability can be included in future tenders and contracts, demonstrating transition activities in action.
07. Facilitate discussion regarding the total cost of ownership (TCO) for Seabridge Gold. TCO includes not only the purchase price of a good or service but other items such as safety, quality, technical capability, and energy efficiency, amongst other criteria, ensuring a complete picture of the cost of a purchase transaction.
08. Provide input to this TCFD-aligned Report.



A risk profile was developed for the Company as a whole. This was then stress-tested through a series of relevant climate change scenarios. Risks (considered as both opportunities and threats) were identified as they pertain to the Company and its surrounding environment. Risks were identified over several different time horizons, including those which were deemed to have the potential to impact the Company immediately and those which are relevant through to 2050. Risks identified therefore include the impacts of climate change and the low-

carbon economy on the Company and our business, as well as those related to our impacts on the surrounding environment (i.e., the concept of double materiality) over significant time horizons. The climate change impacts which are most prescient include physical risks, such as changes in biodiversity and animal habitat; social risks tied to the understanding of mining, exploration and the industry as a whole; and transition risks, such as technology keeping up with carbon-reduction demand.

Regarding discussions on embedding sustainability into future tenders and contracts, these were specific to several contracts that are currently open for application. The solutions identified from the exercise were therefore tailored to them. However, these solutions serve as models of good practice for future tenders.

3. CONTEXT OF SEABRIDGE GOLD

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3. CONTEXT OF SEABRIDGE GOLD

3.1 ABOUT SEABRIDGE GOLD

Seabridge Gold provides its shareholders with exceptional leverage to a rising gold price. From 1999 through 2002, when the gold price was lower, Seabridge Gold acquired nine North American projects with substantial gold resources, including Courageous Lake and KSM. Subsequent exploration by Seabridge Gold has significantly expanded its acquired gold resource base.

Today, Seabridge Gold's resource base of gold, copper, and silver is one of the world's largest. We are ranked among the world's top ten companies in proven and probable gold reserves. Seabridge Gold currently has two Canadian projects with a combined 53.8 million ounces of gold reserves at the Pre-Feasibility Study (PFS) stage: KSM, in northwestern British Columbia (B.C.) and Courageous Lake, located in the Northwest Territories (N.W.T.). KSM has 7.3 billion pounds of proven and probable copper reserves and represents the largest undeveloped gold and copper deposit, by gold and copper resources, in the world.

Seabridge Gold is pursuing three value-enhancing strategies. First, the Company continues to search for gold projects in North America, which would be accretive in terms of gold resources. Second, Seabridge Gold funds exploration and engineering work considered likely to expand resources and upgrade them to reserves. Third, Seabridge Gold sells or partners its projects when they reach the production stage to limit risk and share dilution.

The Company is ranked among the world's top ten companies by gold reserves, with two late pre-feasibility stage projects (KSM and Courageous Lake). In addition to these two projects, Seabridge Gold's core assets include 3 Aces, Iskut and Snowstorm. All projects but Snowstorm are in Canada.

KSM PROVEN AND PROBABLE RESERVES

Reserve Category	Tonnes (000,000s)	Diluted Grades				Contained Metal			
		Au (g/t)	Cu (%)	Ag (g/t)	Mo (ppm)	Au (Moz)	Cu (Mlb)	Ag (Moz)	Mo (Mlb)
Proven	1,297	0.71	0.15	2.4	75	29.6	4,203	98	215
Probable	995	0.55	0.14	1.9	77	17.7	3,116	62	170
Proven & Probable	2,292	0.64	0.14	2.2	76	47.3	7,320	160	385

1. The Mineral Reserve estimates were reviewed by Jim Gray, P.Eng. (who is also the independent Qualified Person for these Mineral Reserve estimates), reported using the 2014 CIM Definition Standards and 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines, and have an effective date of May 26, 2022.
2. KSM Mineral Reserves are based on the all open pit PFS Life of Mine plan set forth in the report entitled "KSM (Kerr-Sulphurets-Mitchell) Prefeasibility Study and Preliminary Economic Assessment, NI 43-101 Technical Report" with an effective date of August 8, 2022. See the Report, which is available at www.sedar.com and www.sec.gov/edgar (with filing dates of August 8, 2022 and August 11, 2022 respectively) for the details of the reserves estimate.

COURAGEOUS LAKE MINERAL RESERVES

Tonnes (000s)	Au (g/t)	Au (oz 000)
Proven		
12,320	2.41	955
Probable		
78,814	2.17	5,505
Proven + Probable		
91,134	2.20	6,460

1. The Courageous Lake Mineral Reserve estimate was prepared by Jim Gray, P.Eng. of Moose Mountain Technical Services (who is also the independent Qualified Person for these Courageous Lake Mineral Reserve estimates), reported in accordance with the requirements of Canadian National Instrument 43-101 at the effective date of the estimate, being September, 2012.
2. The details of the Courageous Lake Mineral Reserve estimate are set forth in the report entitled "Courageous Lake Prefeasibility Study, dated September 5, 2012, which is available at www.sedar.com (with a filing date of September 6, 2012).

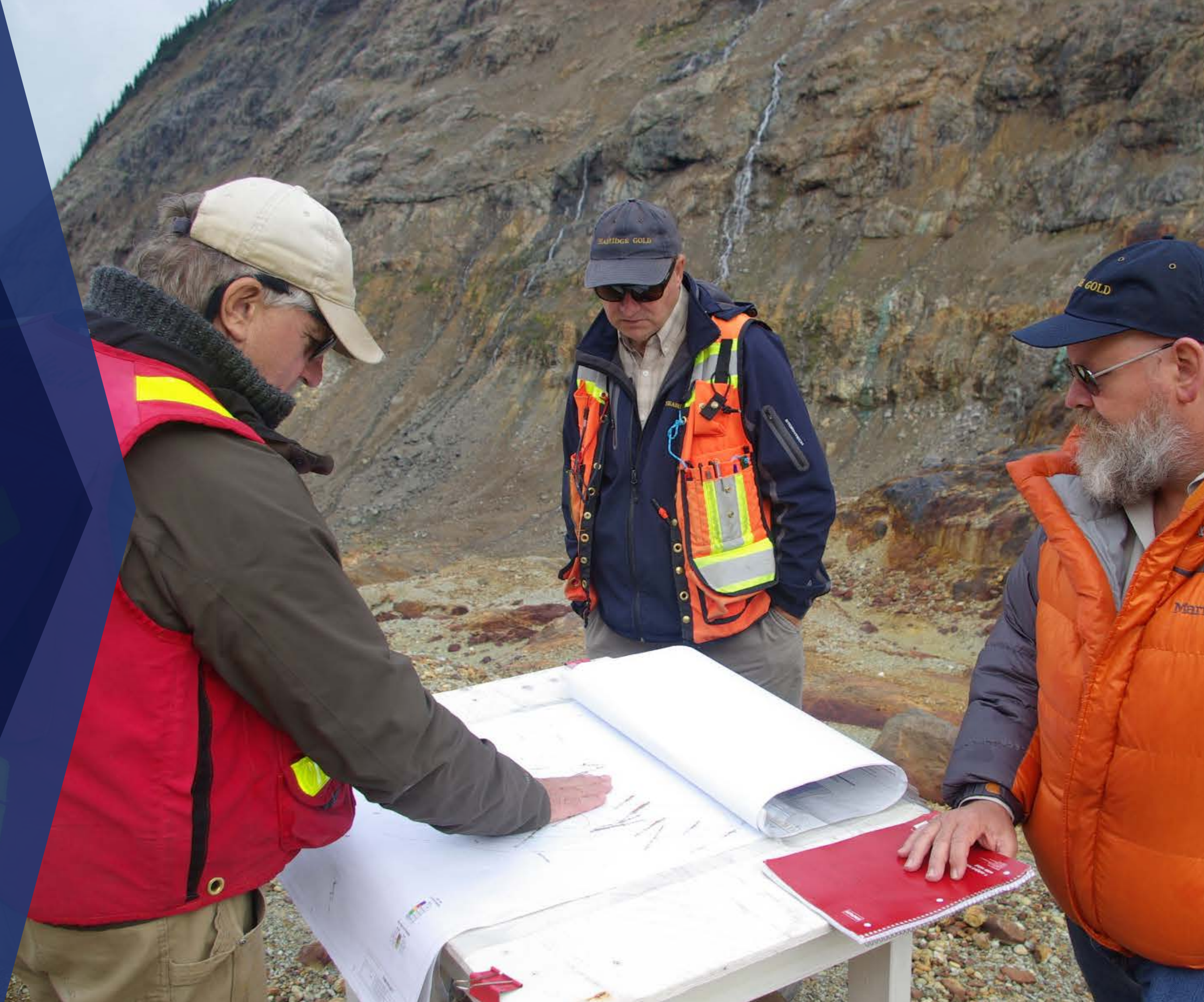
3.2 WHAT TCFD MEANS TO US

Seabridge Gold believes that being a responsible and welcoming member of the communities in which we operate is an essential part of our business. For the past 16 years, Seabridge Gold has worked hard to gain trust from community members near the KSM Project, which has included going through the development of Impact Benefit Agreements (IBA's) with two of our Indigenous Peoples partners and the Environmental Assessment process. Since the start of the permitting process, we have understood the importance of transparency and environmental stewardship. However, in 2021 the Company published its first annual Sustainability Report, recognizing that there are opportunities to improve the communication of these vital aspects of the positive environmental work being accomplished.

Now in 2023, for 2022 reporting, we see a TCFD-aligned report as the next step in fostering transparency with our wider community, disclosing our material climate-related risks to all our stakeholders, holding ourselves accountable for measuring our environmental impact, informing the design and implementation of a strategy to mitigate negative impacts, and taking advantage of available opportunities in the future.

4. GOVERNANCE

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4.1 ACCOUNTABILITY AND STEWARDSHIP

The Seabridge Gold Board of Directors and the Sustainability Committee are responsible for the Company's climate-related risk management and strategy. The Committee is currently led by the designated Chief Sustainability Officer, who ensures that climate change commitments are upheld within the Company.

The Sustainability Committee sits at Board-level; climate change is a standing agenda item for Sustainability Committee meetings, whereby concerns, data, targets and strategy are discussed and reviewed. This is supplemented by work undertaken by the senior leadership team.

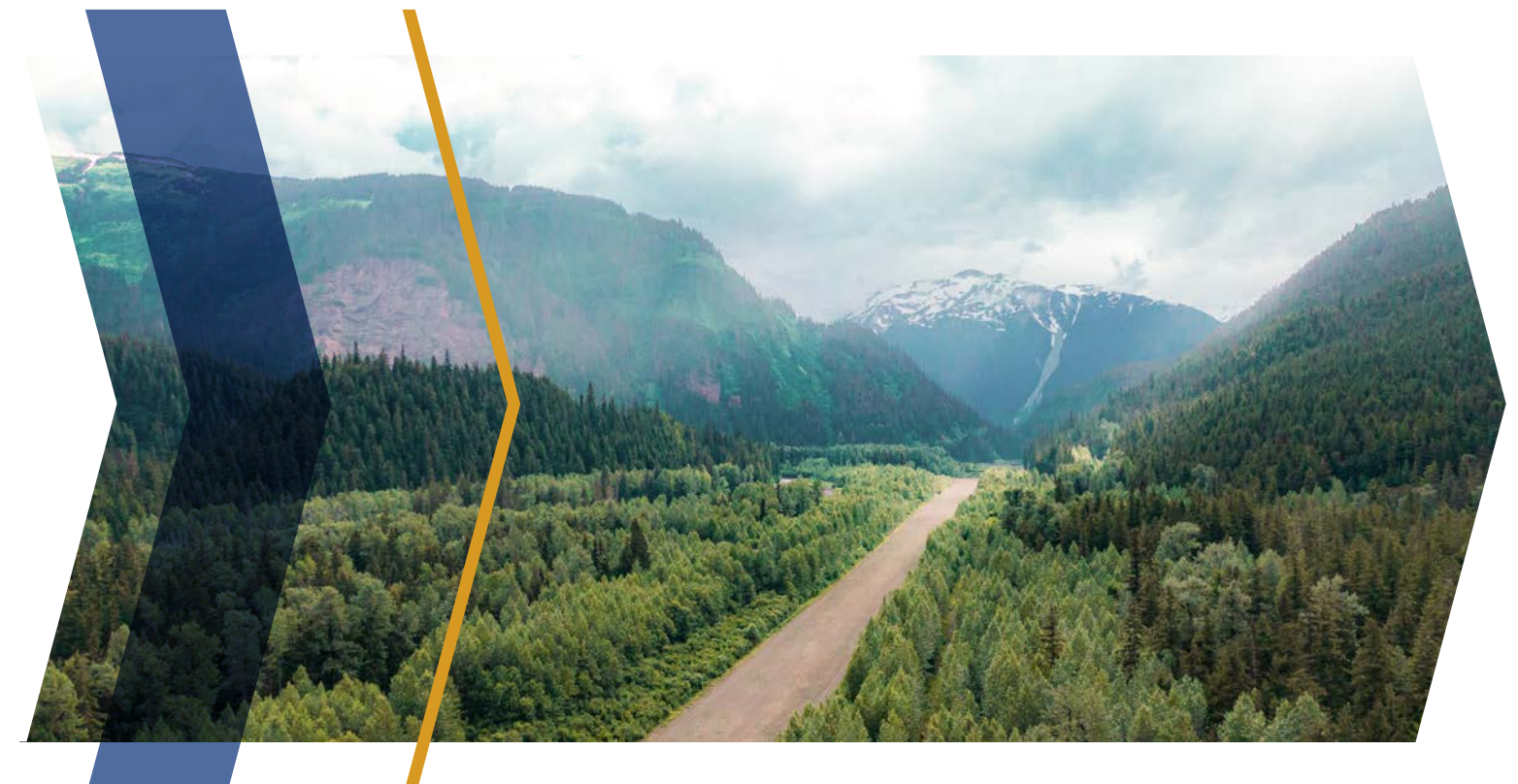
Sustainability Committee outcomes are reviewed at all board meetings, typically held in excess of quarterly intervals, and sustainability issues are brought to the Board by the Sustainability Committee. In turn, the Board will ensure an ongoing understanding of climate-related risks and opportunities throughout the Company. While there are many factors considered in decision-making at this level, these processes ensure that climate change and sustainability are incorporated when guiding strategy, major plans, and performance objectives.

The discussion associated with the production of the Company's annual Sustainability Report takes place at every level of the Company to produce a well-informed presentation of the Company and its activities and plans, ensuring a truly enterprise-wide approach. Further discussion and review are also part of the ongoing management of sustainability within the Company and its engagement with the Board.

4.2 ASSURANCE

The senior leadership team and Sustainability Committee review all work and information related to climate change, ESG (Environmental, Social responsibility, and Governance), and DEI (Diversity, Equity, and Inclusion). This includes tracking climate change and sustainability goals and targets, including risk controls and actions.

The collection and presentation of our climate data and strategy, including the collection of Scope 1, 2, and 3 emissions data, has been undertaken under the guidance of external consultants.





4.3 LINKING CLIMATE CHANGE TO KPIs AND REMUNERATION

Seabridge Gold is committed to embedding ESG and, specifically, climate-related risk into the performance and remuneration process. The Company has established several ESG and climate-related goals, which account for a significant portion of the bonus structure from the Board of Directors through the entire organization. For 2023 these include:

- ▶ Continue to strengthen our social license by responding effectively to the needs and concerns of Treaty and Indigenous Peoples and local communities.
- ▶ Continue to implement our ESG commitments as set out in our Sustainability Report and update our sustainability strategy by capturing two- to three-year climate change, diversity and governance targets.
- ▶ Continue to build our risk management system by capturing climate risks.

4.4 PROCESS FOR REVIEWS AND UPDATES

Sustainability goals are reviewed annually. While this is the first iteration of Seabridge Gold's climate-related disclosure, the Company foresees that updates will be part of this annual process.

5. CLIMATE STRATEGY AND RISK MANAGEMENT

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5.1 CLIMATE CHANGE AMBITIONS

Seabridge Gold recognizes that climate change is considered a key risk to global economies and that many stakeholders are increasingly concerned about its resulting threats. This Report sets out the initial steps we are taking toward climate change risk management to ensure that the Company is transparent in its efforts and holds itself accountable.

Seabridge Gold is committed to maintaining high governance and transparency standards and recognizes the importance of taking an integrated approach to managing climate risks at exploration and development sites. Overall, our intentions are to understand and mitigate the threats to our business, exploration, and development assets while minimizing the negative impacts our activities have on the environment. More detailed actions and targets have been identified and are outlined in Section 6.3 of this Report.

5.2 CLIMATE STRATEGY OVERVIEW

This Report forms Seabridge Gold's first iteration of reporting in line with recommendations from TCFD, and as such, a process is underway to integrate climate risk considerations into high-level strategic and day-to-day business decision-making, including business strategy, Indigenous partner communication, financial planning, employee and contractor collaboration, and procurement processes.

The Company will continue to review and update this Report, the Sustainability Strategy, the progress toward sustainability goals and other related actions on a regular basis to ensure that changing practices and requirements are captured.



5.3 RISK IDENTIFICATION AND MANAGEMENT PROCESSES

Seabridge Gold recognizes that to fully integrate climate change risk management into the business, the Company's enterprise risk management process must be robust. As such, the workshops carried out as part of this TCFD alignment exercise formed the test case for implementing a more in-depth risk identification and management style for climate-related risk discussions. The workshop methodology is outlined in Section 2.2.1 of this Report.

Risks collated from the workshops have been fully articulated and form the basis of a new enterprise-level risk register. The register is intended to be dynamic, link to company objectives, and enable appropriate consideration of ESG. The risks noted in this Report are deemed potentially significant between now and 2050. This includes potential financial risks, as well as risks which may have the ability to meaningfully influence the Company's operations, either in day-to-day activities or long-term objectives.

These risks, considered to be potentially significant, went through a prioritization effort through impact-action mapping and scenario analysis. During prioritization, risks were ranked relative to one another along axes of 'the impact that the risk could have on Seabridge Gold' and 'the amount of action that needs to be taken to control it.' This produced an analysis of the risks to the Company as they currently stand. Scenario analysis was then carried out (according to the procedure noted in Section 5.6) to assess the relative prioritization of risks in multiple scenarios. Through these activities, we began the process of assessing the materiality of the suite of risks.

Those deemed significant across the different scenarios were then assessed for potential control strategies and actions, which formed the basis of the risk management process. A more detailed analysis of the financial implications of these risks will be included in the next stage of Seabridge Gold's analysis; this will help inform the evolving strategy in an iterative manner.

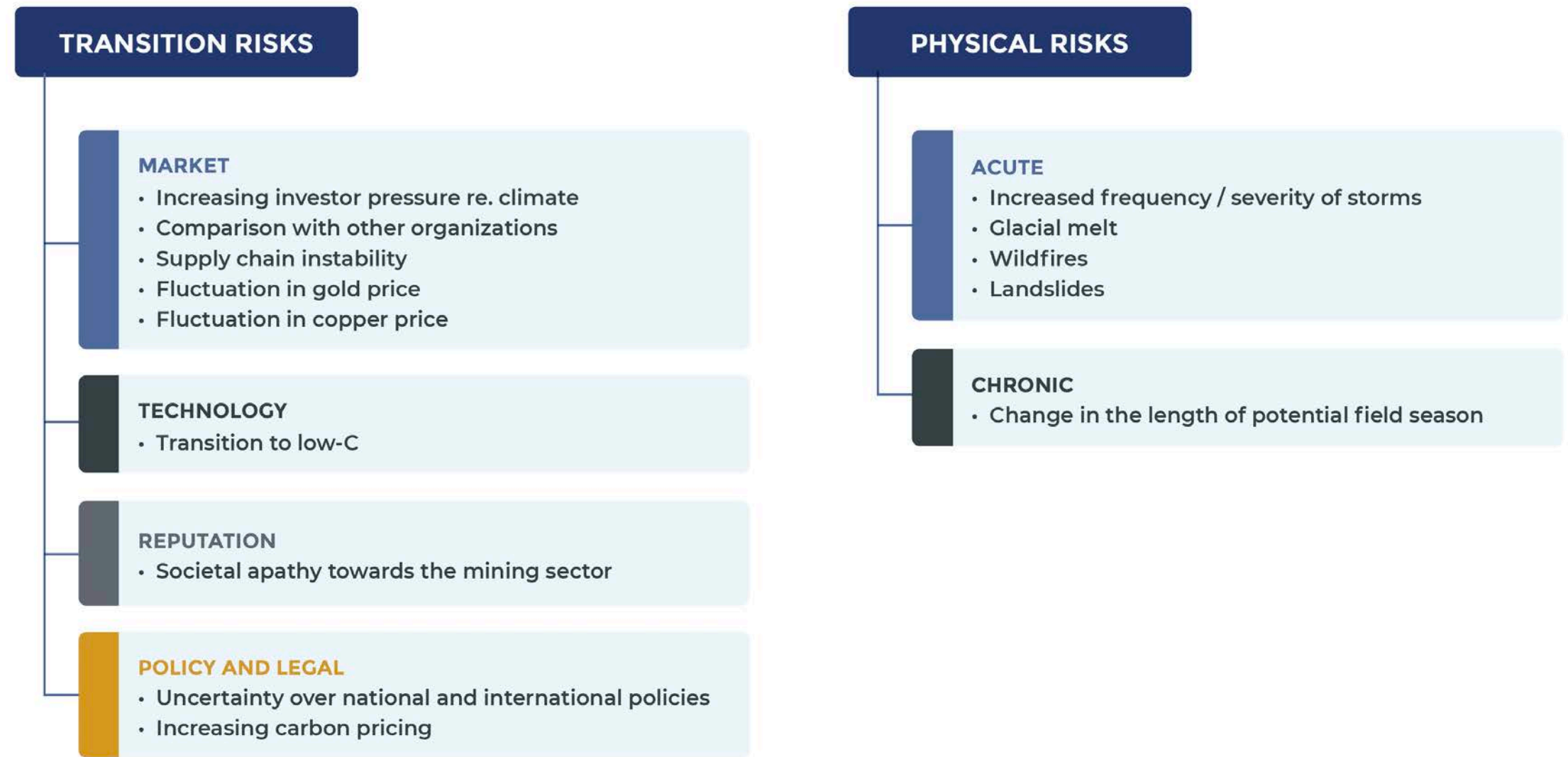


5.4 CLIMATE-RELATED RISKS (THREATS AND OPPORTUNITIES)

As per recommendations from TCFD, risks related to climate change can be categorized as transition risks

(both threats and opportunities associated with transitioning to a low-carbon economy, including risks related to market, technology, policy and legal changes, in addition to changes to reputation) and physical risks (both threats and opportunities which are associated with the physical impacts of climate change). Physical risks are then further categorized into acute (short-term but high impact risks such as storms or forest fires) or chronic (those which are gradual and prolonged).

An overview of transition and physical risks that have been identified as having potentially significant impacts on the Company, either at the corporate level or operational level, across the different scenarios is presented in the following figure.



Transitional and physical risks identified at Seabridge Gold.

MARKET-RELATED RISKS AND OPPORTUNITIES

It is likely that ESG expectations of companies within the mining sector, including exploration and development companies, will continue to evolve. Specifically, investor (and other stakeholder) expectations around ESG disclosure, sector benchmarking, and alignment with the Paris¹ Agreement are likely to increase. It is possible that investors could favour low-carbon producers within the mining sector or favour alternative sectors that are considered more environmentally friendly.

Disruption to supply chains, resulting in uncertain lead times and difficulties for organizations when sourcing both materials and contractors required for projects, is expected to continue. While Covid-19 and interstate conflict have been two of the primary drivers of this disruption, climate-related factors are also increasingly playing a part. For example, the increase in extreme weather events (physical risk) and carbon pricing border adjustments (transition risk) both have the potential to make the sourcing of components more complex.

Gold and copper are likely to experience different market responses. Gold is not regarded as essential in the generation of green technologies, and so its market value is not likely to increase in response to a Net Zero transition. However, gold reserves have traditionally been utilized as an investment safe haven, resilient to market forces, in periods of economic and political instability. Conversely, copper is an essential component of many batteries and green technologies, and as such, its market value is more closely tied to Net Zero driven demand. Therefore, while it is not expected that stranded assets will become a big risk for Seabridge Gold, the energy transition may influence the relative value of different commodities and associated infrastructure.

¹The Paris Agreement (https://unfccc.int/sites/default/files/english_paris_agreement.pdf) is a legally binding treaty adopted in 2015 at the UN Climate Change Conference (COP) 21 by 196 parties in Paris, France. It came into force on 4th November 2016.

TECHNOLOGY-RELATED RISKS AND OPPORTUNITIES

Should investor expectations extend to the decarbonization of exploration and development sites, the costs of implementing low-carbon technologies on-site could pose a financial material risk. For Seabridge Gold, these risks relate to vehicles and associated fuel mixes. With no large fleets of vehicles that can be decarbonized, this risk is considered low in impact.

However, there are opportunities to leverage new technologies across all sites and offices to improve efficiency, reduce impact and enhance profits.

REPUTATION-RELATED RISKS AND OPPORTUNITIES

As a result of perceived operational impacts, poor public perception of the mining sector, and increased interest due to the need for raw materials for the energy transition, there is a potential for NGOs or other influential groups to damage the reputation of mining or even Seabridge Gold specifically, resulting in damaged viability of ongoing operations. However, it is also possible that the opposing position will gain popularity, i.e. that mining will be viewed in an increasingly positive light, as it is considered an essential step to acquiring the necessary materials for the green transition.

KSM has 19.4 billion pounds of measured and indicated copper reserves (see section 3.1). Given that copper is used in batteries and green technologies, the Company may enjoy more positive feedback as investors are keen to invest in metals that are necessary for technologies seen to contribute to tackling climate change. Gold is not currently an essential commodity for the green transition, and therefore social attitudes towards Seabridge Gold may be apathetic or negative if exploration of this resource is seen as non-essential. All these factors have the potential to influence the reputation of Seabridge Gold and of mining more broadly.

Attracting talented individuals to work in exploration and mining is a growing challenge across the sector. The total number of individuals studying relevant subjects at university have decreased considerably over the past 20 years, which has resulted in universities dropping relevant degree programs. The mix of skills required is also changing, with many large-scale mining operations requiring individuals who can lead in automation and digital projects. The mining sector is therefore competing with organizations in other industries, e.g., technology companies, for the same individuals and requires positive differentiation. A clear distinction that mining companies may be able to leverage is the provision of careers in sectors responsible for enabling the energy transition.



POLICY AND LEGAL-RELATED RISKS AND OPPORTUNITIES

It is possible that negative perceptions of mining, in conjunction with increasing expectations regarding legally mandated environmental and climate-related corporate disclosure, may lead governments to instigate regulatory changes. For example, within the regulatory space, the International Sustainability Standards Board (ISSB) has recently announced (February 2023) alignment with TCFD. As a result of international treaties and pressures to meet Paris Agreement-aligned climate change targets, there may be shifts in government policies that result in more difficult operating environments, higher regulatory hurdles, and/or fewer profits. Changes in government are therefore identified as a risk that interacts with the instigation of regulatory changes. As a North American company, changes in the governments and leadership of Indigenous Peoples are also important with respect to regulatory changes and land access, as well as changes in the agreed interactions between these different governing bodies.

Future carbon prices could have direct financial impacts on the Company in terms of capital and operational expenditure but also extend along the supply chain, affecting costs of fuel and other production consumables, spares and raw materials. Canada is a world leader in implementing carbon pricing and is projected to have one of the fastest and highest-rising carbon pricing in any climate change scenario. As a growing business that could expand absolute carbon emissions (despite the potential to reduce emissions per capita), increases in carbon pricing could become a risk for Seabridge Gold. However, at current emissions levels, it is not considered a priority risk.

PHYSICAL RISKS

Extreme weather events, wildfires and landslides are all chronic physical risks identified by Seabridge Gold. Extreme weather events such as storms and wildfires represent a threat to sites, communities and supply chains. It is envisaged that related existing risk issues may become more serious and necessitate greater resources to secure both site assets and the transportation network for workers and the supply of materials.

Landslides associated with extreme weather events present both threats and opportunities for Seabridge Gold. With respect to threats, landslides could potentially impact transport routes and networks, disrupting the passage of workers and supply materials to site. However, landslides also present a unique opportunity to Seabridge Gold, exposing previously unseen rock surfaces and increasing the efficiency of exploration activities, as well as possibly indicating the presence of further reserves at site.

One chronic physical risk to Seabridge Gold is variation in the length of the field season for exploration from changes in climatic and physical conditions. For example, an increase in mean daily temperature may extend the field season by producing more days without snow cover (which would be deemed to be advantageous to the Company), whereas an increase in the regularity of extreme weather events could reduce the number of workable days within an exploration field season.



5.5 VARIATION ACROSS THE BUSINESS

The assessments of risks presented in Section 5.4 reflects Seabridge Gold at an enterprise level. Workshops used to identify climate-related risks were attended by senior leaders and management team members from the various Seabridge Gold operations, with first-hand knowledge of site activities and the surrounding communities. Participants assessed the materiality and prioritization of risks differently depending on the operation that they oversee. At a site-specific level, disruption to the supply chain was prioritized as a risk linked to others, such as winter road availability.

At Board-level workshops, risks prioritized included the responses of other companies in the sector to climate change, a closer connection to the land, social acceptance of mining, and the availability of contractors.

5.6 ASSESSING RESILIENCE THROUGH SCENARIO ANALYSIS

Scenario analysis is highlighted as an important tool in the TCFD recommendations for assessing potential business implications of climate-related threats and opportunities. Scenario analysis was completed at an enterprise level, in line with the risk identification procedure in Section 5.3.

The scenarios used in Seabridge Gold's analysis were developed by the Network for Greening the Financial System (NGFS), recommended by TCFD. NGFS scenarios identify a range of plausible futures to provide a common reference point, illustrating how physical and transition risks could

develop in different futures from the present day through to 2050 and beyond. Those utilized in the scenario analysis are described in the table below.

Three time horizons of 2028, 2035, and 2050 were selected as intervals for analysis that efficiently capture how the relative impact of risks change over time. As per the scenario descriptions above, risk profiles developed for Seabridge Gold across the scenarios show:

Descriptions of climate change scenarios used, developed in accordance with the NGFS

<p>01</p> <p>HOT HOUSE CURRENT POLICIES</p> <hr/> <ul style="list-style-type: none"> · The world only implements policies it has currently agreed to by law, resulting in a warming of 4-6 degrees Celsius. · Lower transition risks, with, e.g., carbon prices remaining low or rarely introduced. · High physical risks, with extreme weather events; extreme drought; sea level rise; and serious disruption of supply chains. 	<p>02</p> <p>DISORDERLY - DELAYED</p> <hr/> <ul style="list-style-type: none"> · The global response to climate change is slow until 2030, when, e.g., extreme weather events, drought etc., become a certainty, initiating rapid policy and significant transition risk. · Carbon pricing imposed rapidly at very high levels; insurance and litigation are also particularly high risk. 	<p>03</p> <p>ORDERLY - NET ZERO 2050</p> <hr/> <ul style="list-style-type: none"> · All countries work together coherently towards a 'Net Zero' carbon economy, resulting in a smaller temperature rise of approximately 1.5 degrees; physical risks are kept limited. · Global economies experience transition risks such as high carbon prices; border adjustment; litigation; insurance; investor sentiment; etc.
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- ▶ Orderly – Net Zero 2050 has the highest transition risks regarding market, technology and reputation.
- ▶ Disorderly also has high transition risks, with reputation, market, and policy and legal risks being the most concerning due to civic and political engagement with the mining sector and gold market uncertainty.
- ▶ The Hot House Current Policies scenario had the risk profile containing the most impactful physical risks. Reputation risks were also ranked highly with respect to impact due to Canada's strong pre-existing social engagement with climate change.

The following risks were consistently identified as having the highest potential impact and level of action needed in all climate scenarios:

- ▶ Societal acceptance of mining.
- ▶ Gold market prices.
- ▶ Copper market prices.
- ▶ Low carbon technologies.
- ▶ Extreme weather events.

5.7 ASSESSING FINANCIAL MATERIALITY

Within this first iteration of Seabridge Gold's climate change risk management process, no specific financial information was collected to determine the financial materiality of the risks identified. Instead, workshops focused on identifying materiality through a relative assessment of the 'impact' that risks posed to the Company and the level of 'action' required to control them. However, the outputs from the workshops bring together all our work to date and will inform the next

iteration of work, which will include assessing the range of potential financial implications for the Company. The information collected in this Report ensures that a quantitative assessment can be carried out in a logical manner going forward. The finance organization will complete audit activities in subsequent years.



5.8 INPUT TO STRATEGY – RISK CONTROLS AND ACTIONS

5.8.1 ACTIONS SPECIFIC TO SCOPE 1, 2, AND 3

Discussion following the strategy workshops resulted in the definition of actions required to generate a transition plan and strategy. With respect to greenhouse gas emission reporting, these actions include:

- ▶ Generation of a greenhouse gas reporting template.
- ▶ Approval of and continual improvements to the greenhouse gas reporting process.
- ▶ The rollout of the greenhouse gas reporting process to sites and projects (a system is already in place for offices).
- ▶ Introduction of greenhouse gas reporting requirements into tendering processes with contractors.

5.8.2 INCLUSION OF ESG ASPECTS IN CONTRACTS

During the workshops, Seabridge Gold explored how to ensure that appropriate ESG requirements are included in contracts that are in the process of going to tender. Two contracts were identified as test cases:

- 1) the busing contract to and from KSM, and
- 2) the site security contract at KSM.

To embed these factors effectively, a number of actions were identified. In all cases, actions were evaluated for their practical and pragmatic nature, ensuring that, for example, small providers would not be penalized. This assessment of ESG requirements represents initial work toward the analysis of the total cost of ownership.

ESG requirements identified for future inclusion in tendering processes for contractors include:

- ▶ Involvement of Indigenous groups and Indigenous Peoples.
- ▶ A contractor's reporting and collection of emissions data.
- ▶ Experience of the contractor in the relevant environmental conditions.
- ▶ Diversity of a contractor's employees.
- ▶ The paying of a fair/living wage.

6. DATA AND METRICS

OUR PERFORMANCE

- 22 6.1 SEABRIDGE GOLD DATA, METRICS AND TARGETS
- 22 6.2 GREENHOUSE GAS (GHG) EMISSIONS TARGETS
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6.1 SEABRIDGE GOLD DATA, METRICS, AND TARGETS

Seabridge Gold has not previously published climate-related data, metrics and targets. This Report contains within it the first calculation of Scope 1 and 2 emissions for the organization, as well as select Scope 3 emissions. Data is presented in this Report at an enterprise level, broken down by activity and fuel source.

Data presented here is for yearly reporting periods, representative of the full year for 2022. As of 2023, we have begun measuring data monthly. This data will be included in the next iteration of this Report.

6.2 GREENHOUSE GAS (GHG) EMISSIONS

Seabridge Gold calculates Scope 1, 2, and select Scope 3 emissions. Scope 3 emissions included in this Report are those for which reliable data was readily available and which constitute an essential part of Seabridge Gold’s operations.

We adhere to the following definitions:

- ▶ **Scope 1 (direct):** Direct emissions from owned or controlled sources.

Seabridge Gold’s principal source of Scope 1 emissions is fuel supply for equipment and equipment/vehicle fleets. Despite these vehicles being owned by external contractors, the fuel source is owned and controlled by Seabridge Gold.

To take ownership of the full suite of emissions generated by activities directly associated with the Company, Seabridge Gold chooses to take accountability for these emissions within Scope 1 to ensure that the business accurately reports emissions from activities associated with it.

- ▶ **Scope 2 (indirect):** Indirect emissions from the generation of purchased energy.
- ▶ **Scope 3 (indirect):** Indirect emissions from upstream and downstream activities.

In many industries, Scope 3 commonly represents the largest proportion of emissions; it is often viewed as difficult to measure, as it relies on data from external sources, such as producers, suppliers, customers, and contractors. With respect to Seabridge Gold’s contractors, only contractors that burn their own fuel fall within the remit of Scope 3. Other Seabridge Gold Scope 3 emissions sources include busing employees/contractors to and from the KSM site, business travel and a contractor-owned incinerator facility used for waste management.

At the time of writing, Scope 1 and 2 emissions reporting is required by TCFD. It is expected that Scope 3 emissions reporting will become a requirement shortly. We are calculating Seabridge Gold’s 2022 GHG emissions for all sites, offices and remote employees, producing a framework for all future reporting.

The emissions table below summarizes our emissions data.





Emissions production by source: Direct and Indirect (tonnes CO₂e)

Operation		GHG Emissions (tCO ₂ e)			
		Scope 1	Scope 2	Scope 3	Total Emissions
Seabridge Gold Total		5759.47	43.35	292.33	6095.15
Sites	KSM	2990.90	0	8.06	2998.96
	Iskut (Johnny Mountain)	2671.33	0	0	2671.33
	Snowstorm	94.89	0	0	94.89
	3 Aces	1.44	0	0	1.44
	Courageous Lake	0.91	0	0	0.91
Offices		0	36.05	0	36.05
Working From Home Employees		0	7.3	0	7.3
Business Travel & Accommodation		NA	NA	284.27	284.27

The Company's consolidated Scope 1, 2, and 3 GHG emissions (as per the definitions above and Table 2) for 2022 is estimated to be 6095.15 tonnes CO₂e. Seabridge Gold's principal source of emissions is fuel supply for equipment and vehicle fleets within Scope 1 at KSM and Iskut.

6.3 TARGETS

Targets within this Report are the objectives that Seabridge Gold sets with regards to mitigating threats and/or maximizing opportunities posed by climate change. The strategy developed will be centred on achieving these objectives.

The most common targets found in TCFD reports are those related to emissions.

Before effective and appropriate targets can be made, it is essential to have an accurate understanding of current emissions. Therefore, future emissions targets will be set after the completion of calculations for 2022.

While emissions are important, other targets can and should be set in the development of an effective climate change strategy. The actions outlined below were identified during workshops. These will be refined and supplemented where appropriate to form the Seabridge Transition Plan (which may also be referred to as the Climate Change Strategy). Fully assessing (and, where appropriate, implementing) the following actions can be considered our short-term target:

- ▶ Optimize Scope 1, 2, and 3 data collection and reporting.
- ▶ Inclusion of appropriate climate change data requirements and expectations in contract documentation.
- ▶ Assigning all Climate Change-related management to the Sustainability department.
- ▶ Understanding internal Carbon Pricing current practices and opportunities for inclusion in the budget and strategic planning activities.
- ▶ Consider using Total Cost of Ownership when building future contracting strategy for operational work and procuring new equipment.
- ▶ Regulatory compliance and ongoing understanding of what the future regulatory landscape looks like.
- ▶ Assess the opportunity to use emerging low-carbon technologies and decarbonization where appropriate.
- ▶ Continue to monitor social acceptance and engagement of KSM and exploration sites.
- ▶ Plan for and manage the impact on biodiversity and water availability.
- ▶ Evaluate options for extending the field season.
- ▶ Review opportunities for diversification and localization of supply chains.
- ▶ Understand the impact, cost and possible budget for carbon tax and regulations.
- ▶ Proactively identify opportunities for carbon reduction to impact cost.



APPENDIX A: TCFD CONTENT INDEX

DISCLOSURE	LOCATION
GOVERNANCE	
b) Describe the Board's oversight of climate-related risks and opportunities.	Section 4.1, Section 4.3, Section 4.4
c) Describe management's role in assessing and managing climate-related risks and opportunities.	Section 4.1, Section 4.2, Section 4.3, Section 4.4
STRATEGY	
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term .	Section 5.4, Section 5.5
b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	Section 5.3, Section 5.4, Section 5.8
c) Describe the resilience of the organization's strategy , taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Section 5.6, Section 5.7

DISCLOSURE	LOCATION
RISK MANAGEMENT	
a) Describe the organization's processes for identifying and assessing climate-related risks .	Section 5.3, Section 2.2.1
b) Describe the organization's processes for managing climate-related risks .	Section 5.3
c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management .	Section 5.3, Section 2
METRICS AND TARGETS	
a) Disclose the metrics used to assess climate-related risks and opportunities in line with its strategy and risk-management process.	Section 6.1
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	Section 6.2
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Section 6.3 <i>Note: Seabridge Gold has not yet developed targets to manage climate-related risks and opportunities</i>

