

Appendix A: Task Force on Climate-Related Financial Disclosures

Sandstorm is proud to be a leading company in sustainability and recognizes the importance of continuing actions to reduce climate change. In addition to reporting our progress on Greenhouse Gases (“GHG”) and climate change in our Sustainability Report, we also disclose through CDP, formerly known as the Carbon Disclosure Project. This is the second year that we have aligned our sustainability reporting with the recommendations of the Task Force on Climate-related Financial Disclosures (“TCFD”), and the first year that we have included our Scenario Analysis within the reporting.

Governance

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

Sandstorm’s Board of Directors (the “Board”), and relevant subcommittees, provide oversight on the company’s approach to climate change, and to our overall Environmental, Social and Governance (“ESG”) risks. This includes considerations of climate-related opportunities and risks affecting our business.

The following Board Committees have oversight of ESG and climate-related opportunities, risks, and disclosures:

GOVERNANCE COMMITTEE

Our Governance Committee works with management to develop and recommend to the Board our approach on ESG, including climate-related issues; reviews the adequacy of our ESG practices and policies and recommends any changes to the Board; and approves the adoption of any ESG-related standards or initiatives. Where applicable, the Committee also engages with our stakeholders in respect of ESG issues.

AUDIT COMMITTEE

Our Audit Committee oversees the Company’s risk management, which includes climate change risks. This includes a review of our key risks and exposures with

a view to ensuring that such risks and exposures are being effectively managed, monitored or mitigated by reviewing management’s assessment of the significant risks and exposures impacting our company.

The Board and Committees regularly meet with senior management to determine our strategy with respect to our risks and exposures. Management last provided an update to the Board on ESG-related risks and strategies, including climate-related strategies, in early 2023. In 2023, Sandstorm has committed to the creation of an ESG Committee, whose mandates will be focused on climate and ESG risks and opportunities, the company’s practices and policies, and any disclosures or initiatives required. More information will be provided in the 2023 Sustainability report around this subcommittee.

The Board, and relevant subcommittees, oversee senior management, who are responsible for the execution of ESG and climate-related opportunities and for the management of ESG and climate-related risks. Our Chief Executive Officer is responsible for the leadership on ESG and climate-related matters. Our VP, Financial Planning & Analysis has executive responsibility over Sandstorm’s ESG strategy, external ESG-related disclosures and internal reporting of ESG performances, trends, risk and opportunities to the Board of Directors. ESG strategy, and managing climate-related risks, is considered where applicable, in each of the company’s departments, with

specific consideration by our technical team when undergoing due diligence of new opportunities, as further discussed in our Sustainability Report on [page 26](#).

Our Board oversight and management leadership of ESG and climate-related issues is depicted in the chart below:



Sandstorm’s senior executives regularly attend Board meetings, and provide updates on royalty acquisition opportunities, which include, where applicable, ESG and climate-related considerations. Where materially adverse ESG or climate-related considerations arise during the due diligence process, management and/or the Board may decide not to proceed with the royalty or stream opportunity. Over the past several years, Sandstorm has rejected potential transactions valued at over \$500 million, on the basis of ESG concerns.

Strategy

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

As Sandstorm operates in an office environment, the company’s direct environmental impact and carbon footprint is small. Due to the nature of our business, we are not directly exposed to the majority of climate-related risks that mining operators face. However, we recognize that climate-related risks are material for our

mining stream partners, and in some situations, can pass through to us. Specifically, this can occur where climate-related incidents or developments adversely impact either the production at an operation, and therefore, the royalty payments received by our company; and/or the reputation of our partner, which can have impacts on our company for having invested in them.

To manage our risks, we screen for significant risks through our due diligence process before making an investment with a partner. Our due diligence process helps us assess risks and opportunities from climate change on our investments, where applicable.

Scenario Analysis

A scenario analysis is an important tool for our company and our stakeholders to better understand our strategy for climate-related risks and opportunities and to assess how this strategy positions our company in a low-carbon future. The TCFD recommends that companies conduct at least one climate scenario analysis at 2°C (i.e.: average global temperatures of 2°C above pre-industrial levels) or lower to evaluate the potential resiliencies of strategic plans and to identify options for increasing business resiliency to plausible climate-related risks and opportunities through adjustments to strategic and financial plans.

We have chosen to apply a 2°C scenario, focusing particularly on the implications and outcomes for our existing streams and royalties, and the climate-related risks and investment opportunities relating to those commodities. The scenario analysis assumes that our strategy will be focused upon growing our exposure to gold and other precious metals.

To guide our 2°C scenario analysis, we have incorporated certain data and assumptions from the International Energy Agency’s (“IEA”) 2020 Sustainable Development Scenario (the “SDS”), which are summarized below. The SDS demonstrates a path until 2050 to simultaneously achieve the three main energy-related UN Sustainable Development Goals on access, air pollution and climate change.

2°C Scenario

HIGHLIGHTS AND ASSUMPTIONS

- *By 2030, low-carbon sources of electricity account for almost two-thirds of total generation worldwide; emissions intensity of industrial activity is 40% lower; and electric cars make up about 40% of new car sales.*
- *The proportion of renewables in global electricity generation grows from just over 25% in 2019 to more than 50% in 2030.*
- *Rapid progress is made in innovation and the deployment of low-carbon fuels and energy technologies.*
- *Investment in clean energy rise to \$2.7 trillion in 2030. Nearly 70% of clean energy and grid investment to 2030 come from private sources, with public finance and policy design playing a vital role in mobilizing it.*
- *Supported by government policy and the non-profit sector and the increase in decentralized energy solutions, universal access to energy is achieved by 2030.*
- *Co₂ pricing is established in nearly all advanced economies. In addition, several developing economies are assumed to put in place schemes to limit CO₂ emissions.*

2°C SCENARIO OUTCOME

Category of Risk	Outcome for our Partners/Operators	Outcomes for Sandstorm
Physical Risks	<p>Extreme and intermittent weather events persist and increase over time. However, as climate change is limited to 2°C, such events are manageable.</p> <p>These events may lead to production delays and/or cessation of certain operations. This is unlikely to materially impact the broader gold and precious metal markets.</p>	<p>Short term delay of revenues, with potential longer term elimination of revenues if operations ceased.</p>
Policy & Legal Risks	<p>Stringent climate-related policy & regulatory changes, particularly in jurisdictions pledging alignment with net-zero emissions. These legislative and legal changes will likely require extensive capital expenditures by some of our partners to accommodate or conform to such changes.</p> <p>Carbon-pricing policies are implemented globally with some caps on carbon implemented by governments. Carbon pricing is likely to increase costs for many of our partners, which may lead to projects being abandoned or placed into care and maintenance if such mandatory expenditures erode anticipated profitability.</p>	<p>Inevitable increased capital and operating costs, including carbon pricing costs, will be borne by operators. Subject to instances where the higher costs render certain projects uneconomic, there will not be an exposure to Sandstorm.</p> <p>Permitting new mines may become more difficult, with greater sensitivity to environmental impact from mining operations. This may result in delay of operations where we have existing royalty or streaming interests.</p>
Reputational Risks	<p>Broad reputational risks for companies that are slow to transition to low-carbon options, or who fail to pledge to net-zero goals. Operators committing to and achieving staged decarbonization will retain access to equity capital and debt more easily.</p>	<p>Sandstorm's reputation is impacted by the partners we work with, so where operators are exposed to reputational risks, so too could Sandstorm through extension. Many of our operators are best-in-class and have taken steps towards low-carbon transitions. To the extent that our partners take the necessary steps towards decarbonization through increased access to low-cost large-scale renewable energy that will reduce their carbon footprint, this will mitigate climate-related reputational risks for operators, and indirectly for our company.</p>
Market & Technology Shift Risks	<p>Shifts in supply and demand for certain commodities based on their real or perceived impact on the climate.</p> <p>Potential opportunities for copper companies, due to increased reliance on electric cars and transition to renewable energy. Additionally, as the financial landscape can be increasingly volatile, gold could continue to be a lower risk investment.</p>	<p>Sandstorm has a strategic partnership with Horizon Copper, which focuses on copper production, and has ongoing copper streams. Opportunities realized by partners for this commodity will, indirectly, also benefit Sandstorm.</p>

Climate Risks

When evaluating new royalty opportunities, Sandstorm employs multiple due diligence methods, which assists in determining climate risks ranging from both short-term to long-term.

Sandstorm enters into agreements with mining partners that cover the life of the mines, often with our royalties outliving the operators of an asset. Accordingly, Sandstorm defines our time horizons in climate change risk management the following way:

- **Short term – Under 5 years**
- **Medium term – 5-10 years**
- **Long term – Greater than 10 years**

The due diligence process is undertaken by Sandstorm’s management team, using a multi-disciplinary approach when evaluating potential transactions. The due diligence team consists of professionals with experience and expertise in the fields of geology, mining, metallurgy, engineering, and finance. By conducting a robust and detailed due diligence process, Sandstorm endeavours to invest in projects with a relatively low ESG, and climate-related, risk. Where appropriate, the due diligence process will utilize the expertise of third-party consultants. During the due diligence process, climate risks and opportunities may be identified, including potential impacts to the investment related to physical and transition climate change risks.

The table below outlines the physical and transition risks that could impact the operations of our partners and our Company’s results, many of which are considered throughout the due diligence process and through ongoing monitoring:

Category of Risk	Description of Risk and Potential Financial Impact for our Partners	Potential Financial Impact for our Company
Acute Physical Risks	Extreme weather events caused by global warming, such as droughts, floods, hurricanes, etc. These events may lead to production delays and/or cessation of operations.	Short term delay of revenues, with potential longer term elimination of revenues if operations ceased.
Chronic Physical Risks	Gradual shifts in weather conditions could lead to water scarcity, shifts in rainfall patterns, rising sea levels, etc. These shifts may lead to recurring production delays, cessations of operations and/or increased operating costs to adapt to climate changes. These results may lead to mines being abandoned or placed into care and maintenance if adaptation costs erode anticipated profitability.	Longer-term and potentially recurring delays of revenues, long term impact to asset value including impairment.
Policy & Legal Risks	Policy & legal changes in a jurisdiction that seeks to promote adaptation to climate change and/or constrain the activities of operators and operations that contribute to adverse effects of climate change. These legislative and legal changes may require extensive capital expenditures by our partners to accommodate or conform to such changes, which may lead to projects being abandoned or placed into care and maintenance if such mandatory expenditures erode anticipated profitability.	Potential impairment of assets, delays of revenues, and additional expenses to legal experts to ensure meeting legislative requirements.
Regulation Risks	Regulations of emissions, such as through carbon taxation or cap-and-trade schemes, can increase costs for businesses. As more companies and countries set net-zero emissions goals and targets, carbon pricing regulations could become more widely implemented and/or made more stringent globally. The impact of these regulations are expected to differ depending on the location of the assets, and carbon intensity of the product.	Longer-term and potentially recurring delays or revenues, long term impact to asset value including impairment.
Reputational Risks	Changing public perceptions of our partner’s climate-related activities and their contributions to or detractors from the transition to a low carbon economy. This may affect access to capital which may lead to projects changing hands or being temporarily or permanently abandoned.	Delays of revenues, and impairment of assets.
Market Risks	Shifts in supply and demand for certain commodities based on their real or perceived impact on the climate. Reductions in commodity prices may impact our partner’s revenues and, in severe cases, render a project uneconomic, causing projects to be abandoned or placed into care and maintenance until commodity prices recover.	Delays of revenue and lack of opportunities for future growth. Potential impairment of assets.

Risk Mitigation through Diversified Portfolio

Sandstorm has 250 royalty and stream agreements, therefore our exposure to climate-related risks is partially mitigated by our diversification. In 2022, our revenue was made up from 39 producing partners, located in countries throughout the world. This helps mitigate both operator-specific risks, as well as localized climate-related risks. Our due diligence process is focused on identifying high-quality mine operators that share our values in responsible mining. While the majority of our revenue is generated through precious metals, including gold and silver, we also receive revenues from various commodity types produced in multiple jurisdictions, which helps mitigate risks impacting broader regions and markets.

Climate Opportunities

The mining industry supplies commodities to sectors that are essential for the transition to a low carbon economy. Sandstorm is well positioned to participate in climate-related opportunities in connection with this transition. The following describes climate-related opportunities that we have within our portfolio, and that we expect will continue to be available to our company throughout the short, medium and long-term.

PRODUCTS AND SERVICES

COPPER

Copper is the best nonprecious metal conductor of heat and electricity, and is already used in low carbon technologies such as wind, solar power, nuclear power, and electrical vehicles. Therefore, it will play an important role in the decarbonization of the planet.

Sandstorm currently receives copper from the Chapada mine, with Lundin Mining Corp. In 2022, our Chapada copper stream made up 11% of total revenue. Strong demand for copper increases the prospects of greater production from this operation, which is currently anticipated to produce through to 2050. Sandstorm also receives copper from the world's third-largest copper mine¹, Antamina, with Compañía Minera Antamina SA. The Antamina copper mine has been in consistent production since 2001, producing approximately 560,000 copper equivalent tonnes per year. This low-cost copper operation contains Resources that support a multi-decade mine life producing high-grade copper. As part of

its strategic partnership with Horizon Copper, Sandstorm plans to sell a portion of its net profits interest ("NPI") on the Antamina copper mine, while retaining a portion of the NPI and a silver stream (see below for further details). The transaction is expected to close in the first half of 2023.

In 2022, Sandstorm closed the first part of our announced transactions with Horizon Copper Corp., creating a strategic partnership with the company which will have a focus on copper projects. Sandstorm and Horizon Copper may partner together further in the future, whereby Sandstorm will purchase streams on the precious metals by-products from the copper project acquisitions made by Horizon Copper.

1) On a copper equivalent basis

SILVER

Silver has proven to be invaluable across numerous applications, and is essential in the production of both solar panels and electrical vehicles. Silver is also used in electronics, alloying, chemical catalysts and photographic film. Due to its numerous uses, it will play a key role in transitioning from fossil fuels.

Sandstorm currently receives silver from our Cerro Moro stream, with Yamana Gold. In 2022, the Cerro Moro stream made up 19% of total revenue. In March 2023, Pan American Silver completed their acquisition of Yamana Gold.

As part of the transaction with Horizon Copper, Sandstorm will hold a 1.66% life-of-mine silver stream referenced to silver production from Antamina mine (the transaction is expected to close in the first half of 2023).

Sandstorm will continue to look for opportunities to allocate capital into the silver space.

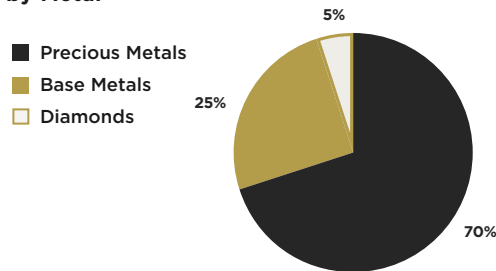
OPERATIONS

Sandstorm's head office is situated in a LEED Gold certified building in Vancouver, British Columbia, Canada. The LEED rating system is recognized as the international mark of excellence for green building in over 160 countries. As a LEED Gold certified building, specific measures are taken to reduce waste, conserve energy, and decrease water consumption. In Vancouver, 90% of the energy is supplied from renewable, clean energy sources, mainly using hydroelectric generation.

While our direct environmental impact and carbon footprint is small, operating out of a sustainably designed building is a strategic decision to further minimize our impact on the environment.

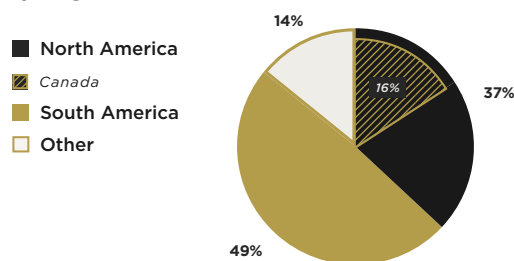
2022 Attributable Gold Equivalent Ounces

by Metal



2022 Attributable Gold Equivalent Ounces

by Region



Risk Management

How the organization identifies, assesses, and manages climate-related risks

Our Company does not operate mines, but instead provides upfront capital to mining operators, in exchange for a portion of the future metal or revenue from the mining operators, with the view of holding onto these interests for extended time horizons. Therefore, the key period for assessing and identifying ESG risks, including climate-related risks, is prior to making an investment with our partners. Accordingly, we have a due diligence process for potential operating partners. With 250 royalty and stream agreements, our due diligence team has put in thousands of hours reviewing investment opportunities. This process involves utilizing the extensive experience of our management team, technical team and Board of Directors to evaluate ESG and climate-related risks, where appropriate, specific to a mining operation and

the plans adopted by the operator to manage risks. For a detailed description of our due diligence process, refer to [page 26](#) in our Sustainability Report.

If ESG risks, including climate-related risks, identified in our due diligence process are assessed and deemed to be materially adverse to the prospects of the respective mine, this may result in Sandstorm's decision not to proceed with an investment. Over the last several years, we have rejected over \$500 million in potential transactions on the basis of ESG concerns. If we elect to proceed with an investment, we endeavour to include in our agreements, specific provisions that include reporting obligations, audit and inspection rights, etc. For further information, refer to [page 28](#) in our Sustainability Report.

Once we have acquired a royalty or stream agreement, we do not have control over the mines or their operations. Due to the nature of our business, we are exposed to other risks, which we may be unable to mitigate. For additional discussion on these risk factors, refer to the Company's Annual Information Form dated March 23, 2023, which is available on www.sedar.com.

As discussed in our Governance section above, the Board of Directors meet with senior management to discuss our company's ESG and/or climate-related risks and exposures on a regular basis. This collaborative effort is aimed at defining our ESG and climate strategy going forward. In 2023, our Board of Directors plans to create a subcommittee, focusing specifically on ESG, climate-related risks and opportunities, and other areas focused on sustainability.

Metrics and Targets

The metrics and targets used to assess and manage relevant climate-related risks and opportunities, where such information is material

Metrics

Sandstorm has been reporting our Scope 2 and relevant Scope 3 emissions in line with the Greenhouse Gas (GHG) Protocol through the CDP Climate Change Questionnaire since 2019. As announced for the first time in this year's Sustainability Report, we have committed

to a new goal of achieving net-zero emissions for our Scope 2 emissions from the year 2023. Details on our Carbon Footprint, and greenhouse gas emissions are on [page 15](#) of our Sustainability Report. As a summary, for 2022, our Scope 2 GHG was 30.6 metric tonnes CO₂e, and Scope 3 GHG was 69,104.2 metric tonnes CO₂e. Our Scope 3 emissions this year also include our Mining Partners Scope 1 and Scope 2 emissions, which is a new disclosure for Sandstorm.

Targets

Sandstorm is an office-based company with 27 employees, therefore our carbon footprint is minimal. As a royalty company, we are not involved in, nor control, the operational decisions of the mine projects on which we have royalties or streams. Our targets used to assess and manage our climate-related risks and opportunities reflect this fact, with the focus on our own actions and initiatives. Our climate-related targets were first disclosed in our 2021 Sustainability report, which we have included below our initial targets, 2021 performance and an update to reflect the 2022 activities to further achieve these targets as follows:

PARTNERING WITH BEST-IN-CLASS PARTNERS

To ensure that we are partnering with high quality partners, Sandstorm has set the goal to have a percentage of our assets align with sustainability and climate related reporting standards and frameworks by the year 2025.

2021 PERFORMANCE

Per our 2021 Sustainability report, 82% of our producing partners were reporting under a sustainability reporting standard, and 59% of our producing partners were reporting under a climate related reporting standard.

2022 UPDATE

Due to extensive acquisitions in the year, Sandstorm increased the number of producing partners from 2021 to 2022 from 29 producing partners to 40. With this 34% increase in number of producing partners, we saw a slight decrease in those reporting under a sustainability reporting standard to 71% and saw an increase to 61% of producing partners reporting under a climate related reporting standard.

CARBON NEUTRAL

We aim to be carbon neutral for our direct Scope 2 and Scope 3 emissions, by the year 2035.

2021 PERFORMANCE

In 2021, our Scope 2 emissions were 28.2 metric tonnes CO₂e, and Scope 3 emissions were 107.5 metric tonnes CO₂e. We believe we are on track to becoming carbon neutral within our timeline.

2022 UPDATE

Sandstorm has updated our carbon neutral goal, specifically recognizing that all carbon credits do not have the same impact to the environment, and to provide a committed plan to shareholders of how we will become carbon neutral. Carbon credits can be grouped into two main categories: avoidance credits, and removal credits. Avoidance credits are defined as emissions reductions from projects that reduce emissions compared with the most likely course of action, i.e.: current emissions are reduced by improved alternatives, but existing CO₂ is left untouched. Removal credits are defined as emissions offset projects that absorb additional CO₂ back from the atmosphere. While both categories are essential to achieve a net-zero future, Sandstorm sees removal credits as the premium carbon credit option, as this addresses GHG emissions that have already been released into the atmosphere. Carbon credits will be critical to Sandstorm's goal towards becoming carbon neutral, especially for Scope 3 emissions. Therefore, Sandstorm has updated our carbon neutral goal as a step plan towards being not only carbon neutral, but by being carbon neutral through the use of removal credits only.

- *By the end of 2023, Sandstorm will be carbon neutral for Scope 2 emissions through the use of both categories of carbon credits;*
- *By 2030, Sandstorm will be carbon neutral for Scope 2 emissions through the use of removal credits only;*
- *By 2035, Sandstorm will be carbon neutral for all emissions, including Scope 3 emissions, through the use of both categories of carbon credits; and*
- *By 2045, Sandstorm will be carbon neutral for all emissions, including Scope 3 emissions, through the use of removal credits only.*

ENHANCED CLIMATE-RELATED TRANSPARENCY

Sandstorm aims to be on the leading edge of the sustainability movement, and to continue to improve and increase the transparency in our sustainability reporting and continue to address climate-related issues that are important to our stakeholders.

2021 PERFORMANCE

For 2021, we significantly enhanced our climate-related disclosure, with the inclusion of our TCFD-aligned climate disclosure for the first time. We also saw improvement in our ratings with MSCI, moving from a “A” rating in 2020, to an “AA” rating in 2021.

2022 UPDATE

Sandstorm continues to improve and increase the transparency in our sustainability reporting. In 2022, we have fully aligned ourselves with TCFD reporting, adding our scenario analysis to our disclosures. We have also maintained our “AA” rating with MSCI in 2022.