

Sustainability reporting trends in mining and minerals

**DISCLOSURES BY NORTH
AMERICA'S TOP 100
COMPANIES**

ESG RESEARCH SERIES BY INDUSTRY

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Overview

This white paper provides mining and minerals organizations with insights into two key areas of sustainability reporting:

- 1) Priority criteria identified by global frameworks, standards and rating agencies.
- 2) Actual reporting behavior of the top 100 mining and minerals organizations in North America.

You will gain an understanding of:

- How sustainability and environmental, social and governance (ESG) reporting evolved to become a key business focus across all industries, globally
- How material ESG initiatives are fundamentally tied to achieving sustainability outcomes
- The five key business drivers of ESG and sustainability programs and performance in the North American mining and minerals industry
- The priority material ESG and sustainability topics, with key performance indicators (KPIs), for the North American industry as defined by international frameworks, standards and rating agencies
- The leading material ESG and sustainability topics of the top 100 North American mining and minerals organizations, based on actual reporting behaviors
- The importance of building a robust ESG and sustainability program by pursuing third-party assurance

THIS WHITE PAPER LEVERAGES PUBLICLY DISCLOSED DATA FROM THE TOP 100 COMPANIES IN THE MINING AND MINERALS INDUSTRY BY REVENUE DOING BUSINESS IN THE UNITED STATES AND CANADA PER ZOOM INFO (JUNE 6, 2024). SGS'S EXPERIENCE IN DELIVERING SUSTAINABILITY ASSURANCE SOLUTIONS ALSO INFORMS THIS CONTENT. OTHER SOURCES ARE LISTED IN REFERENCES. ORGANIZATIONS WERE NOT CONTACTED DIRECTLY WHILE GATHERING THE FINDINGS OF THIS WHITE PAPER.

Executive summary

For the third year in a row, ESG and social license to operate (SLO) stand as the top focus areas for the North American mining and minerals industry. An organization's SLO is derived from acceptance and permissions from the community and society, which increasingly hinges on an organization's ESG performance. Leaders in the industry largely agree that mitigating ESG-related risks and implementing ESG improvements can differentiate mining and minerals organizations, while creating long-term value for stakeholders.¹

85% of the top North American mining and minerals organizations are publicly disclosing ESG and sustainability performance data, with the large majority reporting on both environmental and social topics. The most common environmental topics reported, in order of frequency, are energy management, water management and land use. The top social topics reported are occupational health and safety, community relations, diversity and equal opportunity.

A best practice for industry comparison and achieving positive ESG outcomes is alignment with a globally accepted reporting framework or standard. While this is still an emerging trend in the

mining industry, the most common frameworks followed are the Global Reporting Initiative (GRI), the United Nations Sustainable Development Goals (UN SDGs), the Sustainability Accounting Standards Board (SASB) Standards and the Task Force on Climate-Related Financial Disclosures (TCFD) Framework. Often, reporting organizations are aligning with more than one of these forms of guidance. The majority of reporting organizations (69%) are disclosing ESG and sustainability data through the publication of a comprehensive stand-alone report. When indexed to relevant reporting frameworks and standards, this best practice optimizes the ease with which stakeholders can find comparable information.

Over three quarters (76%) of organizations researched have a senior governance body in place to oversee and manage their ESG and sustainability programs. However, only 70% of these committees have Board-level oversight. This implies that, although the majority are carrying out and reporting on initiatives – and although the majority have governance bodies dedicated to ESG performance – a gap exists in the extent to which Boards are actively overseeing and

contributing to the direction of ESG programs. This highlights a critical discrepancy between 'real-life' actions and 'governance and ethics' being the top ESG priority for the industry from investor-driven frameworks, standards and rating agencies.

Finally, our research shows that just under 50% of North America's top mining and minerals organizations are disclosing third-party assurance of their reported ESG and sustainability data – the majority at a limited level of assurance. This also presents a significant reporting gap, where a large room for improvement exists. The criticality of this gap is demonstrated through a recent survey of global investors, which indicated that 87% of respondents believed that corporate reporting contains unsupported sustainability claims. 75% of these respondents also said they would have greater confidence in sustainability reporting if it was accompanied by an independent, reasonable assurance report.² Moreover, it is also anticipated that North American regulators will begin to make third-party assurance a mandatory reporting requirement.³

The growing importance of ESG and sustainability

CLIMATE CHANGE BECOMES TOP GLOBAL ECONOMIC RISK

ESG is an acronym for three categories of non-financial reporting: environmental, social and governance. “Non-financial” refers to any disclosures material to an organization’s bottom line, yet not measured in currency. For this reason, they are also referred to as “extra-financial” to remind us that they do, in fact, have real financial implications.

After the global economic collapse in 1929, the financial sector spent 50 years on reform to protect investors and the economy. Instead of historical cost accounting for accuracy, the focus became decision-useful data and context regarding future performance (e.g. discounted cash flows). In the 1970s, finance professionals first identified two major types of non-financial data deemed material to organizational performance: environmental externalities and social goals. In 1980, this led to the US adding a Management Discussion & Analysis section in the annual reports of publicly traded companies, resulting in the term environmental, social and governance (ESG).

It took another 30 years to develop the sustainability reporting frameworks, standards and rating agencies for

businesses that we have today. In 1975, 83% of the S&P 500 market value was in tangible assets, like buildings, equipment, vehicles and inventory. By 2020, that completely flipped to 90% of the S&P 500 market value held as intangible assets like intellectual property, brand value and goodwill. Intangibles can change more quickly than tangibles, and therefore, carry more inherent risk from poor ESG performance.

ESG reporting is driven by financial materiality. It focuses on impacts that environmental and social issues pose on the financial performance of an organization in the short, medium and long terms. In the 2022 World Economic Forum’s Global Risks Report, nearly 1000 global leaders in business, government and civil society voted climate change (environmental) as the number one economic risk in the world.

So, why the controversy?

When people point to a conflict between financial performance and protecting the planet or people, they are referring to the impacts of an organization on the environment or society, or impact materiality. The term “double materiality” is often associated with “sustainability”, which refers

to an organization considering both financial and impact materiality when defining material topics to measure and manage – in an effort to maximize profit while limiting social and environmental harm. This aligns with voluntary standards like the Global Reporting Initiative (GRI), the UN Sustainable Development Goals (SDGs) and regulatory schemes, like the EU’s Corporate Sustainability Reporting Directive (CSRD). Successful programs addressing financially material ESG topics are the foundation for effective sustainability programs addressing broader issues.

CLIMATE ACTION FAILURE IS CONSIDERED THE MOST CRITICAL THREAT TO THE WORLD IN BOTH THE MEDIUM TERM (2-5 YEARS) AND LONG TERM (5-10 YEARS), WITH THE HIGHEST POTENTIAL TO SEVERELY DAMAGE SOCIETIES, ECONOMIES AND THE PLANET.

- World Economic Forum Global Risk Report (2022)



ESG: A KEY FRAMEWORK WITHIN CORE BUSINESS STRATEGY

ESG is a lens into how organizations measure and manage environmental and social topics that financially impact them. It is directly tied to the core business strategies of leading organizations across industries. There has never been more alignment in reporting frameworks, standards and rating agencies than today.

The most trusted and utilized investor-driven reporting guidances include:

- Integrated Reporting (IR) Framework
- Sustainability Accounting Standards Board (SASB) Standards
- Task Force on Climate-Related Financial Disclosures (TCFD) Framework

All three were combined under the Value Reporting Foundation (VRF) and absorbed into the International Financial Reporting Standards (IFRS) Foundation. IFRS guidance is followed by the majority of jurisdictions worldwide, excluding the US, where Generally Accepted Accounting Principles (GAAP) are still in use. IFRS released their S1 and S2 sustainability standards in June 2023. These now form the best starting point for any organization wanting to identify and report on material ESG topics, including industry-specific disclosures.



THERE HAVE NEVER BEEN MORE BUSINESS TOOLS, FRAMEWORKS AND STANDARDS FOR BUSINESSES TO IMPLEMENT ESG INITIATIVES AND TO GATHER INFORMATION ON ESG PERFORMANCE.

ESG and sustainability in the mining and minerals industry

Globally, the industry is shifting toward more sustainable practices, with a growing interest in creating circular economies. The core tenet of these economies is the reuse or regeneration of materials or products to minimize waste and pollutants. This innovative demand is not only affecting pricing and market strategies but also leading to increased investment in exploration, and technological advancements in operational processes to develop sustainable mining solutions.

TOP 5 DRIVERS OF ADOPTION AND GROWTH

1 Regulation



Greenhouse gas (GHG) regulation is leading the way in North America. In Canada, the IFRS S2 climate-related standard came into effect on January 1, 2024. Large industrial emitters, large federal suppliers and federally regulated financial institutions are subject to climate disclosure rules. In the US, climate disclosure rules also exist or have been proposed for large

industrial emitters, large federal suppliers, large publicly traded companies, large companies doing business in California and large banks. Broader ESG and sustainability disclosure is required by larger North American companies doing business overseas due to international regulations, including the IFRS S1 Sustainability Standard and the EU's CSRD.

2 Sustainability scores



ESG rating agencies continue to score publicly traded companies against their peers, driving organizations to act given their use in decision-making for lenders and investors. The most reputable rating agencies include the: Dow Jones Sustainability Index (DJSI), Morgan Stanley Capital International (MSCI) ESG,

Institutional Shareholder Services (ISS) ESG and Sustainalytics. These sustainability scores are increasingly used by investors, banks and other financial institutions when making buy, sell or lend decisions. Higher ESG scores are often associated with lower costs of capital.



The Towards Sustainable Mining (TSM) standard is a globally recognized sustainability program that supports mining companies in managing key environmental and social risks. While enabling companies to turn high-level environmental and social commitments into action on the ground, it also provides communities with valuable information on operational performance in areas, such as community outreach, tailings management and biodiversity. Transparent reporting of TSM performance allows the mining sector's communities of interest to look at the sustainability performance of specific mining sites. Each year, participating mining and metallurgical facilities must assess and publish their performance against the performance indicators outlined by the TSM. The TSM has been adopted by national mining chambers worldwide. [Learn more.](#)

3 Supply chain pressure



ESG rating agencies' sustainability scores of publicly traded companies are impacted by transparency and performance in their supply chain. To manage this, organizations have rapidly increased surveys and requests for suppliers to disclose sustainability data – often on accepted platforms like TCFD for

climate-related disclosures and EcoVadis for broader ESG and sustainability disclosures. This provides transparency in the organization's supply chain. Scores are increasingly used to support whether a supplier can meet minimum requirements or achieve preferred status.

4 Recruitment and retention



A wider pool of top talent is available to organizations that can brand themselves as a responsible place to work. According to IBM's 2022 Institute for Business Value survey of 16,000 employees across 10 countries, 67% of job applicants are more willing to apply for and accept positions with companies

they feel are sustainable. In the UK, a Unily survey of office employees showed that 83% felt their employer was not doing enough to tackle sustainability and climate change, while 65% would prefer to work for a company with stronger environmental policies.⁴

5 Commodity demand



Mining, refining and manufacturing organizations are being driven by a demand for commodities across industry. The growing need for essential metals like copper, nickel and zinc is being fueled by infrastructure investments, construction and the push for renewable energy and green technologies. Additionally, the rise of electric vehicles (EVs) has spiked

demand for critical minerals, such as lithium, cobalt and rare earth or marine elements, driving innovation in mining and battery technologies. The automotive, aerospace and construction industries are also increasingly in need of steel and aluminum, placing a greater demand on other, more traditional types of metal commodities.

ESG PRIORITIES BASED ON GLOBAL FRAMEWORKS, STANDARDS AND RATINGS

Let's have a look at the priority ESG material topics with related disclosures and KPIs for the industry that have been identified by global frameworks, standards and rating agencies through multi-stakeholder approaches – including investors and industry professionals.

1. GOVERNANCE & ETHICS



Related Disclosures & KPIs

- Senior governance structure for managing material ESG topics
- Names and qualifications of leaders assigned to senior ESG governance
- Stakeholder engagement process to identify ESG risks and opportunities
- List, description and management approach of material ESG topics
- Certify to governance standards (e.g. ISO 22301, ISO/IEC 27001, ISO 37001)
- Production in 20 lowest-ranked countries as per Transparency International's Corruption Perceptions Index

2. TOXIC WASTE & EMISSIONS



Environmental

- Total non-mineral waste, tailings, rock waste, hazardous waste and recycled waste
- Significant incidents associated with hazardous materials and waste management
- Waste management policies for active and inactive operations
- Tailings storage facility inventory tables
- Tailings management systems and governance to monitor and maintain stability
- Emergency preparedness and response plans for tailings storage facilities
- Air emissions from CO, NOx, SOx, PM10, Hg, Pb and VOCs

3. LABOR, HEALTH & SAFETY



Environmental & Social

- Workforce covered under collective bargaining agreements
- Number and duration of strikes and lockouts
- Rates of incidents, fatalities and near misses
- Certification to social standards (e.g. ISO 45001)
- Tier 1 suppliers certified to social standards, by type
- Health, safety and emergency response training for employees and contractors

4. BIODIVERSITY & LAND USE



Environmental

- Environmental management policies and practices for active sites
- Mine sites where acid rock drainage is predicted, actively mitigated and under treatment or remediation
- Proved or provable reserves in or near sites with protected conservation status or endangered species habitat(s)

5. HUMAN RIGHTS & COMMUNITY



Social

- Risk, opportunity and crisis management with community rights and interests
- Number and duration of non-technical days of site shutdown or project delays
- Engagement and due diligence with human rights, child labor, forced labor, Indigenous rights and conflict areas
- Proved and probable reserves in or near Indigenous land
- Proved and probable reserves in or near areas of conflict

6. WATER MANAGEMENT



Environmental

- Incidents of noncompliance with water quality permits, standards and regulations
- Water withdrawn and consumed, and percentage of each in regions with 'high' or 'extremely high' baseline water stress

7. CLIMATE RISKS



Environmental

- Short and long-term strategy for emissions, targets and reductions
- Gross global Scope 1 emissions, and percent under emission regulations
- Price sensitivity of reserves to a future price on carbon
- Giving to charitable organizations
- Estimated embedded emissions in proven reserves
- Influence of demand for regulation and price on capital expenditure
- Strategy for exploration, acquisition and asset development

TOP 100 MINING AND MINERALS COMPANIES: 12 KEY INSIGHTS

Now let's look at the actual ESG and sustainability reporting behavior of the top 100 mining and minerals companies doing business in the US and Canada, based on revenue.

DISCLOSURE

1

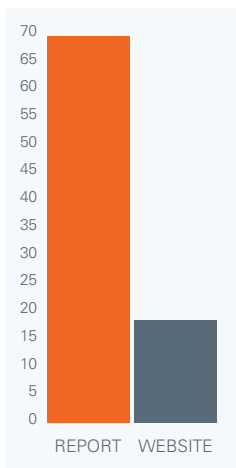
Have businesses publicly disclosed ESG and sustainability performance data?

85% – YES 15% – NO

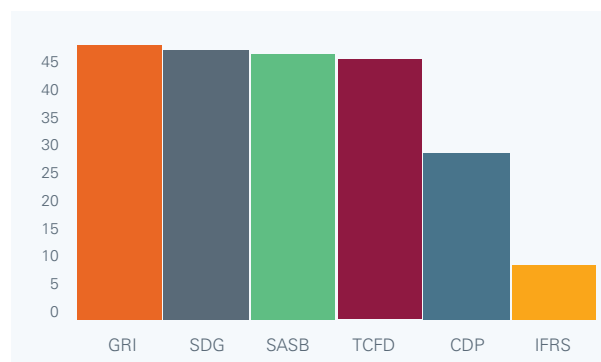
2

What are the most common avenues of disclosure and reporting frameworks? ►

DISCLOSURE



FRAMEWORKS



ENVIRONMENTAL

3

Of reporting businesses, have they disclosed environmental performance data?

83% – YES 17% – NO

4

What are their three most commonly disclosed material environmental topics?

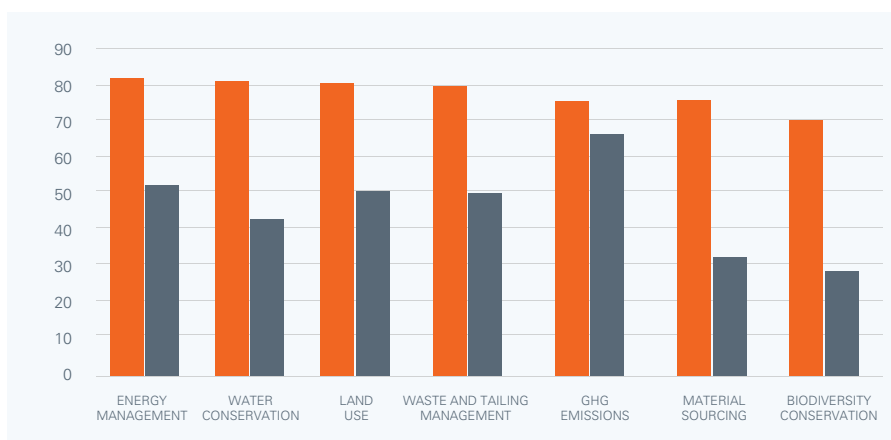
- 1) ENERGY MANAGEMENT
- 2) WATER CONSERVATION
- 3) LAND USE

5

Which environmental topics most commonly have improvement targets?

- 1) GHG EMISSIONS
- 2) ENERGY MANAGEMENT
- 3) LAND USE

MATERIAL ENVIRONMENTAL TOPICS AND TARGETS



DISCLOSED TOPICS TARGETS

SOCIAL

6

Of reporting businesses, have they disclosed social performance data?

83% – YES 17% – NO

7

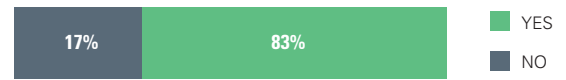
What are their three most commonly disclosed material social topics?

- 1) OCCUPATIONAL HEALTH & SAFETY
- 2) COMMUNITY RELATIONS
- 3) DIVERSITY & EQUAL OPPORTUNITY

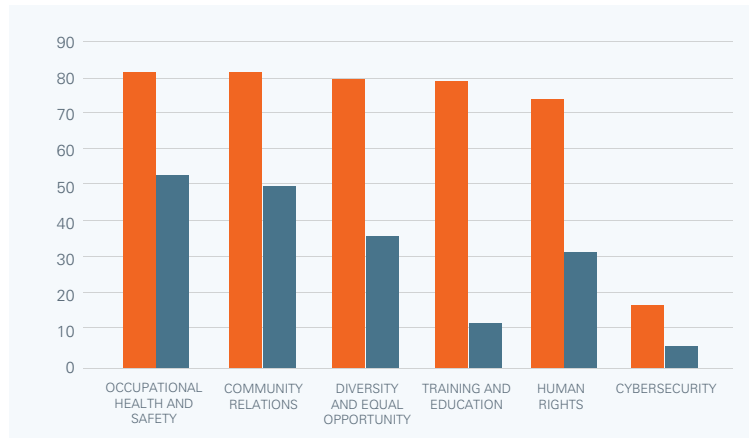
8

Which social topics most commonly have improvement targets?

- 1) OCCUPATIONAL HEALTH & SAFETY
- 2) COMMUNITY RELATIONS
- 3) DIVERSITY & EQUAL OPPORTUNITY



MATERIAL SOCIAL TOPICS AND TARGETS



DISCLOSED TOPICS TARGETS

GOVERNANCE

9

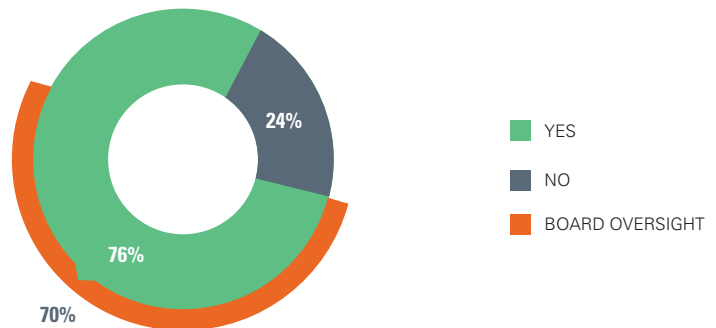
Have businesses established a senior-level governance body to manage ESG and sustainability risk and performance?

76% – YES 24% – NO

10

How many (of those) governance bodies have board-level oversight?

70% – YES 30% – NO



THIRD-PARTY ASSURANCE

11

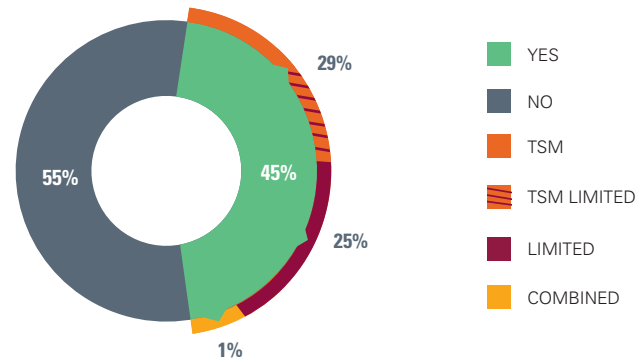
Have reporting businesses had their ESG and sustainability performance data assured by an independent third-party?

45% – YES 55% – NO

12

What level of assurance was sought for ESG and sustainability performance data?

29% – TSM 25% – LIMITED 1% – COMBINED



Companies disclosed an average of 13 KPIs, with the most common standard for delivering assurance being TSM (limited).



MINING AND MINERALS INDUSTRY: PRACTICES AND CHALLENGES

Leadership practices

According to the data, your business can take a leadership position in the North American mining and minerals industry by adopting the following practices that are most commonly being pursued by industry leaders. These can mature your sustainability and ESG program, mitigating risk for your business, saving costs and enhancing

stakeholder satisfaction.

First, you can publicly disclose data about your organization's environmental and social performance using an international framework like the GRI, UN SDGs, SASB and/or TCFD.

Second, you can report KPIs related to common environmental

topics, such as energy management, water conservation and land use, while setting improvement targets in areas beginning with (GHG) emissions.

Finally, you can report KPIs and set improvement targets in of occupational health and safety, community relations, diversity and equal opportunity.

Industry challenges

Approximately 20% of mining and minerals organizations are disclosing ESG and sustainability data via their corporate websites, often resulting in poor or unclear coverage of data indexed to reporting frameworks or standards. A stand-alone report would resolve these discrepancies.

Although a minority, 24% of organizations in the industry have yet to establish a governance body to manage ESG programs. This is a baseline industry practice that should be put into place without delay.

Also, of the 76% of organizations that have established a

governance body, 30% of these are without Board oversight. This highlights a critical discrepancy in the industry since investor-driven frameworks, standards and rating agencies place senior governance oversight as the top 'governance and ethics' priority. Of course, senior governance oversight includes Board-level oversight and engagement.

Finally, 55% of organizations are not yet disclosing third-party assurance of their reported ESG and sustainability data. To prevent claims of greenwashing and to ensure stakeholder confidence, this is a critical challenge needing attention. It is also anticipated that

mandatory assurance of GHG emissions is on the horizon in North America. Organizations would benefit from seeking third-party assurance of their Scope 1, 2 and 3 emissions reporting as a starting point.

IT IS STRONGLY RECOMMENDED THAT THIRD-PARTY ASSURANCE BE SOUGHT FOR A MINIMUM NUMBER OF KPIs, AT A LIMITED LEVEL, TO STRENGTHEN SUSTAINABILITY REPORTING.

Sustainability assurance

Across industries, businesses are under stakeholder and regulatory pressure to have their ESG and sustainability reporting independently assured by a qualified third-party. This includes ad hoc verification of individual KPIs (e.g. GHG emissions verification) and assurance of full compliance with ESG reporting frameworks, standards and regulations – such as the

Sustainability Accounting Standards Board (SASB), the Global Reporting Initiative (GRI), the Taskforce on Climate-related Financial Disclosures (TCFD) or the EU's Corporate Sustainability Reporting Directive (CSRD). New and proposed climate disclosure regulations in the US and Canada will require assurance, and this trend is growing globally. It is highly recommended that

organizations consider pre-assurance and limited assurance for a minimum number of material KPIs to prepare for these regulations. A qualified, independent third-party can validate the completeness and accuracy of your public disclosures and provide a statement of opinion for publication.



How we can help

Are you a mining or minerals company in need of support with your ESG and sustainability journey? Our expert auditors and trainers are available across North America. We can help you build your ESG and sustainability program from the ground up or rectify gaps within your existing program.

Please reach out to:
Kim.Lefrancois@sgs.com

- GHG Training
- GHG Gap Analysis
- GHG Verification
- CDP Rating Boost
- ESG Pre-Assurance
- ESG KPI Assurance
- Sustainability Report Assurance
- ESG Training
- EcoVadis Rating Boost
- ESG Gap Analysis

WE CAN PROVIDE EXPERT EDUCATION AND ASSURANCE ON YOUR ESG AND SUSTAINABILITY PROGRAM, INCLUDING ACCREDITED STATEMENTS OF OPINION THAT CONFIRM THE ACCURACY AND RELIABILITY OF YOUR CLAIMS.

SGS: A GLOBAL LEADER IN SUSTAINABILITY AND ESG ASSURANCE

SGS is the world’s leading testing, inspection and certification (TIC) company. We are also a global leader in the delivery of ESG and sustainability assurance services for over 30 years. Our teams also contribute to the development and auditing of international industry standards.

In 2024, TIME Magazine and Statista ranked SGS the sixth most sustainable company in the world. SGS ranked first in the TIC sector. This high ranking was supported by our decarbonization target of achieving net-zero emissions by 2050, as verified by the Science Based Targets initiative. Additional factors

included our implementation of energy efficiency projects, use of renewable energy for 97% of the organization’s total consumption, adherence to the UN Global Compact, inclusion in the S&P Global Sustainability Yearbook, and recognition by CDP as a leading company. SGS’s commitment to diversity also contributed to earning its ranking, with 31.9% of leadership positions held by women.

We continue to be recognized and ranked highly by every respected ESG rating agency, by which our clients are also being scored.



“Our Strategy 2027 includes ambitious corporate sustainability targets and we aim to continue to lead by example by implementing the best practices for maximum sustainable impact.”
Géraldine Picaud, CEO, SGS



GOLD
Industry rating



LEADER
10 consecutive years



PRIME
Industry rating



AAA
Risk rating



LOW RISK
Rating



A-
Leadership band



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When you need to be sure

Kim.Lefrancois@sgs.com

SGS North America Inc.
201 Route 17 North
7th Floor
Rutherford, New Jersey, 07070
United States

sgs.com



SGS