Nasdaq 2022

Task Force on Climate-Related Financial Disclosures Report

Nasdaq

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Introduction to TCFD

The Task Force on Climate-Related Financial Disclosures (TCFD) was established in 2015 by the Financial Stability Board to identify the information needed by investors, lenders and other financial stakeholders to appropriately assess and price climate-related risks and opportunities. In 2017, the TCFD released climate-related financial disclosure recommendations designed to facilitate the provision of information to support informed capital allocation.

Nasdaq's responses to the TCFD recommendations are organized into sections that align with the TCFD framework: (1) Governance, (2) Strategy, (3) Risk Management, and (4) Metrics and Targets. Subject matter experts across Nasdaq were engaged throughout the reporting process, from input to review and validation. Targeted internal engagement workshops were conducted across several areas of our business to inform our disclosures and support the implementation of the recommendations.

This publication is our third TCFD report, in which we disclose the outcomes of our updated climate scenario analysis and enhanced approach to evaluating the projected impacts of climate risks on our business, as well as the initiatives in place to manage climate-related risks and opportunities across the organization.

Nasdaq is committed to the continued integration of climate-related risks and opportunities across relevant business, strategy, and financial planning areas. We aim to continuously enhance our understanding of the possible impacts of climate-related risks, enabling our Company to remain resilient and to position ourselves to actualize opportunities along the transition to a low-carbon economy.

A Letter from the CFO

We are pleased to publish Nasdaq's third annual report leveraging the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). Our TCFD report represents the progress we've made as an organization in achieving our corporate sustainability goals and the steps we're taking to support the transition to a more sustainable future.

Our corporate sustainability strategy is driven by minimizing our climate impact and exposure to organizational climate risk while equipping our clients with the tools needed to progress along their own climate journeys. We continue to make progress in ensuring our long-term emissions reduction strategy has a meaningful, measurable impact. In 2022, our net-zero emissions targets were verified by the Science Based Targets initiative and our carbon dioxide removal projects were certified by the International Carbon Reduction and Offset Alliance-endorsed Puro Standard. We strove for industry leadership in ESG reporting and transparency, improving our ESG ratings from agencies across the board.

To reduce our operational impact, in 2022 we implemented an Environmental Management System aimed at improving our building efficiency measures across our real estate and data center portfolios. Under this new system we achieved eight additional LEED Gold certifications to bring our portfolio to over 55% Green Certified.

We continue to conduct regular internal audits to identify areas for further improvement and to ensure global alignment with our climate goals. For the first time, we conducted an analysis of the climate maturity of key suppliers and clients to understand the broader impact we have across our supply chain.

In addition, Nasdaq joined the UN Sustainable Stock Exchange Initiative's Advisory Group on Carbon Markets and the Taskforce on Nature-Related Financial Disclosures Forum, underscoring our commitment to working with leaders across the globe to act against the threat of climate change.

Nasdaq remains committed to our ambitious climate action initiatives. We are energized by our progress and look forward to engaging both our internal and external stakeholders in the next phase of our climate strategy.

Ann Dennison

Executive Vice President and Chief Financial Officer, Nasdaq

2022 Highlights

Initiatives

- Became a signatory member of the Taskforce on Nature-Related Financial Disclosures (TNFD) Forum
- Completed our first Sustainability-Linked Financing (closed in March 2023)
- Offered climate-related training sessions to our leadership and employees
- Implemented an Environmental Management System for our global real estate and data center portfolio that is based upon the ISO 14001 structure
- Distributed Nasdaq's first formal climate risk assessment to Business Units and Expert Functions throughout the Company
- Official validation of Nasdaq's near-term, long-term and net-zero science-based targets and commitments
- Increased the percent of our suppliers that have set or committed to set Paris-aligned science-based targets to 37.9%

Reporting Enhancements

- The latest climate scenarios from the Intergovernmental Panel on Climate Change, 6th Assessment Report (IPCC AR6), and Network for Greening the Financial System (NGFS Phase III)
- Assessed the climate maturity of our key customers and critical suppliers to understand our climate risk exposure along our value chain
- Continued to evaluate opportunities for expanding upon climate- and ESG-related products and service offerings, including the acquisition of Metrio, a SaaS based ESG reporting and analytics platform for end-to-end sustainability reporting
- Enhanced Scope 3 greenhouse gas (GHG) disclosure by expanding analysis to additional categories, including breaking out Category 3 (Fuel- and Energy-Related Activities) and Category 8 (Upstream Leased Assets) emissions

Nasdaq's Climate Journey

2012

Became a founding partner of UN Sustainable Stock Exchange (SSE) initiative

Joined UN Global Compact

2015

Launched Nasdaq Sustainable Debt Market

2017

Published inaugural Sustainability Report

2018

Joined Climate Bonds Initiative's Partner Program

Became carbon neutral for the first time

Formed Corporate ESG Steering Committee

2019

Launched Nasdaq ESG Advisory, Nasdaq Sustainable Bond Network and Nasdaq ESG Footprint

Signed "The Business Roundtable Statement on the Purpose of a Corporation"

2020

Launched Nasdaq ESG Hub

Acquired OneReport, an ESG data management, reporting, audit trail and disclosure software

eVestment launched ESG questionnaire

2021

Acquired a majority stake in Puro.earth

Launched Green Equity Designation program

Established Corporate ESG Strategy and Reporting Team

Published inaugural TCFD Report

Became a UN PRI signatory

Reported against WEF's Stakeholder Capitalism Metrics for the first time

2022

Near-and long-term science-based targets approved by SBTi

Acquired Metrio, a SaaS based ESG analytics and reporting platform

Implemented an Environmental Management System

Mapped alignment of corporate objectives to seven UN Sustainable Development Goals (SDGs)

Named to CDP Climate Change A List and CDP Supplier Engagement Leaderboard

Became a TNFD Forum member

Governance

Nasdaq believes in robust, transparent governance and management structures that facilitate dynamic action on rapidly evolving climate- and ESG-related issues. Our climate strategy is governed by the Nominating & ESG Committee of the Board of Directors (the Board), while our operational climate guidance and day-to-day management of climate- and ESG-related risks and opportunities is driven by our executive leadership. Thirty six-percent of our Board nominees have experience with environmental and social matters including human capital management, which strengthens our Board's review and oversight of our climate initiatives.

Sustainablility Governance

NOMINATING & ESG COMMITTEE (COMPRISED OF INDEPENDENT DIRECTORS)

CORPORATE ESG STEERING COMMITTEE (COMPRISED OF SENIOR LEADERS AND CO-CHAIRED BY CFO AND CMO)

CORPORATE ESG STRATEGY AND REPORTING TEAM

CORPORATE BUSINESS AND EXPERT FUNCTIONS

FINANCE	CORPORATE GOVERNANCE, LEGAL AND COMPLIANCE
MARKETING AND COMMUNICATIONS	GROUP RISK
DIVERSITY, EQUITY & INCLUSION	INVESTOR RELATIONS
PROCUREMENT, SOURCING & REAL ESTATE	INFORMATION SECURITY
PEOPLE MANAGEMENT	CORPORATE SOCIAL RESPONSIBILITY

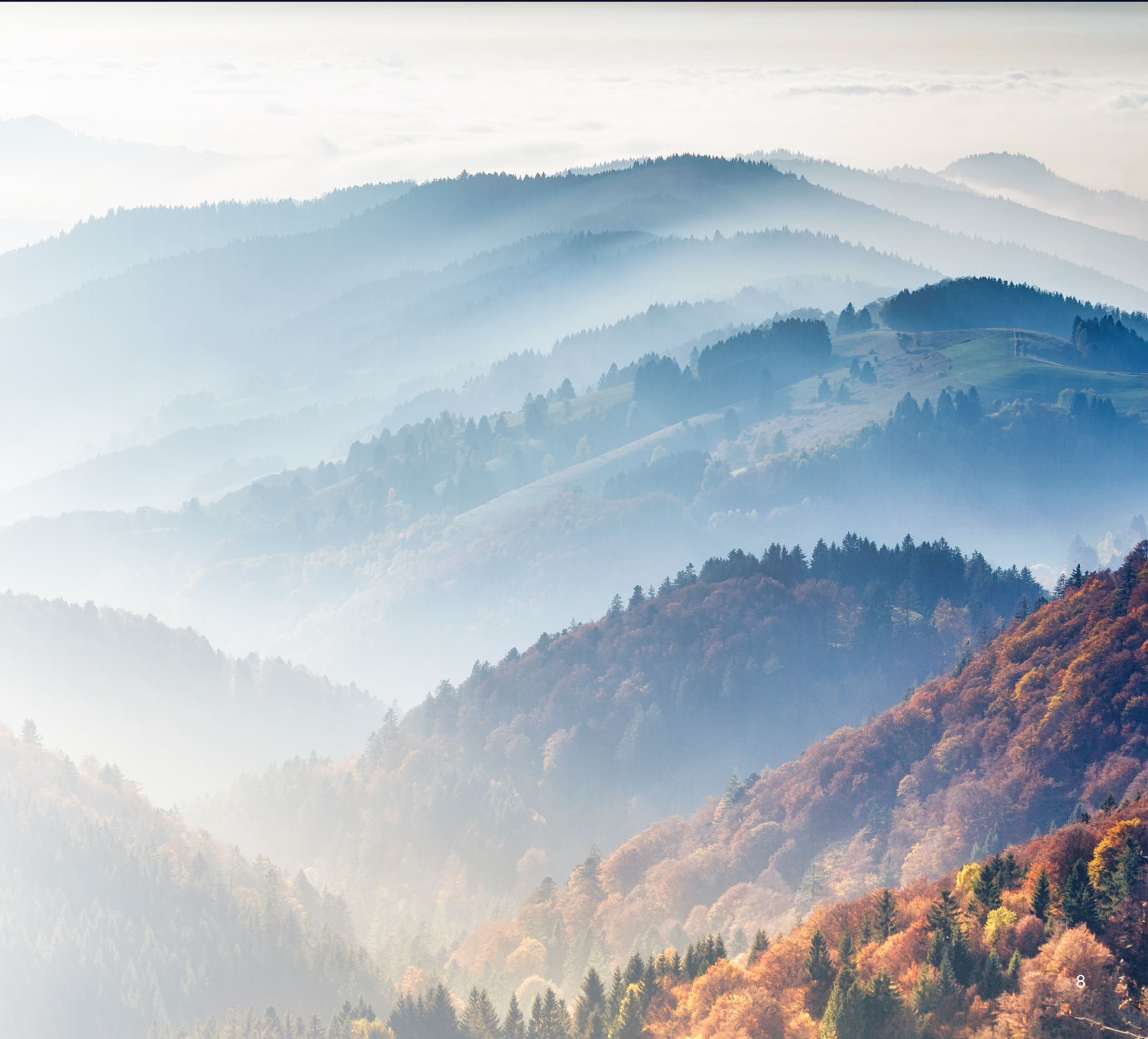
Board oversight of risks and opportunities

Nominating & ESG Committee

The Nominating & ESG Committee of the Board—comprised of independent directors—oversees environmental and social matters as they pertain to Nasdaq's business and long-term strategy. The Nominating & ESG Committee reviews ESG performance objectives and approves our annual Sustainability Report, TCFD report, and related indexes. It also periodically briefs the Board on these topics. In 2022, the Nominating & ESG Committee met seven times and approved the submission of Nasdaq's near- and long-term science-based emissions reduction targets to the Science Based Targets Initiative (SBTi). Our science-based targets, which were formally approved by SBTi in August 2022, align our business with worldwide efforts to limit global temperature rise to 1.5°C above pre-industrial levels.

While Nasdaq's executive management is responsible for the day-to-day management of the company's risk exposure and for providing regular reports to the Board, the Audit & Risk Committee has ultimate responsibility for overseeing company-wide risk management. The Audit & Risk Committee met twelve times in 2022. The Audit & Risk Committee approves our Company's risk appetite, which is the boundaries within which our management operates while achieving corporate objectives. The Board approved our Enterprise Risk Management (ERM) Policy, recommended by the Audit & Risk Committee, which in turn considers the following five risk categories:

1. Strategic and Business Risk;
2. Financial Risk;
3. Operational Risk;
4. Legal and Regulatory Risk; and
5. ESG Risk.



Role of management in assessing and managing risks and opportunities

Nasdaq's operational climate-related management is led by the Corporate ESG Steering Committee, co-chaired by the Chief Financial Officer (CFO) and Chief Marketing Officer (CMO). The Corporate ESG Steering Committee is responsible for assessing and managing climate-related issues and our environmental and social strategy, and regularly reports to the Nominating & ESG Committee of the Board of Directors. The Corporate ESG Steering Committee meets on a bi-monthly basis and is comprised of geographically diverse senior executives from business units and expert functions. The Corporate ESG Steering Committee meetings cover ESG matters, including:

1. Assessing and managing ESG risks and their potential impacts on Nasdaq's strategy, including those covered by Nasdaq's climate scenario analyses;
2. Setting and tracking short-, medium- and long-term ESG targets;
3. Evaluating supplier sustainability performance and engagement strategies;
4. Monitoring progress against climate-related goals, including those related to Nasdaq's validated science-based targets;
5. Assessing Nasdaq's progress in implementing our new EMS across our global real estate portfolio;
6. Identifying additional opportunities to integrate ESG principles and practices across Nasdaq's operating units;
7. Evaluating renewable energy procurement;
8. Reviewing Nasdaq's annual Corporate Sustainability Report, TCFD report, and ESG-related indexes.

The Head of Corporate ESG Strategy and Reporting, who is a member of the Corporate ESG Steering Committee and ultimately reports to the CFO, leads the Corporate ESG Strategy and Reporting Team and is responsible for:

1. Executing Nasdaq's sustainability strategy;
2. Communicating on performance, metrics and ambitions through Nasdaq's annual Sustainability Report, TCFD Report, and other ESG-related disclosures;
3. Collaborating with various stakeholders across the company on sustainability-related matters and ensuring a timely and accurate ESG-related data-gathering process.

The Corporate ESG Strategy and Reporting Team, engages with business units and individual expert functions across Nasdaq to identify and communicate relevant climate risks and opportunities. This includes regular engagement with Real Estate, Facilities & Security stakeholders for Nasdaq's global real estate portfolio and with Nasdaq's Procurement & Sourcing Team. When identified, relevant climate risks and opportunities may be escalated to the Corporate ESG Strategy and Reporting Team, the Corporate ESG Steering Committee, the Nominating & ESG Committee of the Board or to the full Board. In addition, climate related-risks and opportunities may also be escalated to relevant committees including: the Procurement Council, the Investment Committee, the Commercial ESG Steering Committee, the Real Estate Advisory Team, and/or the Global Risk Management Committee.

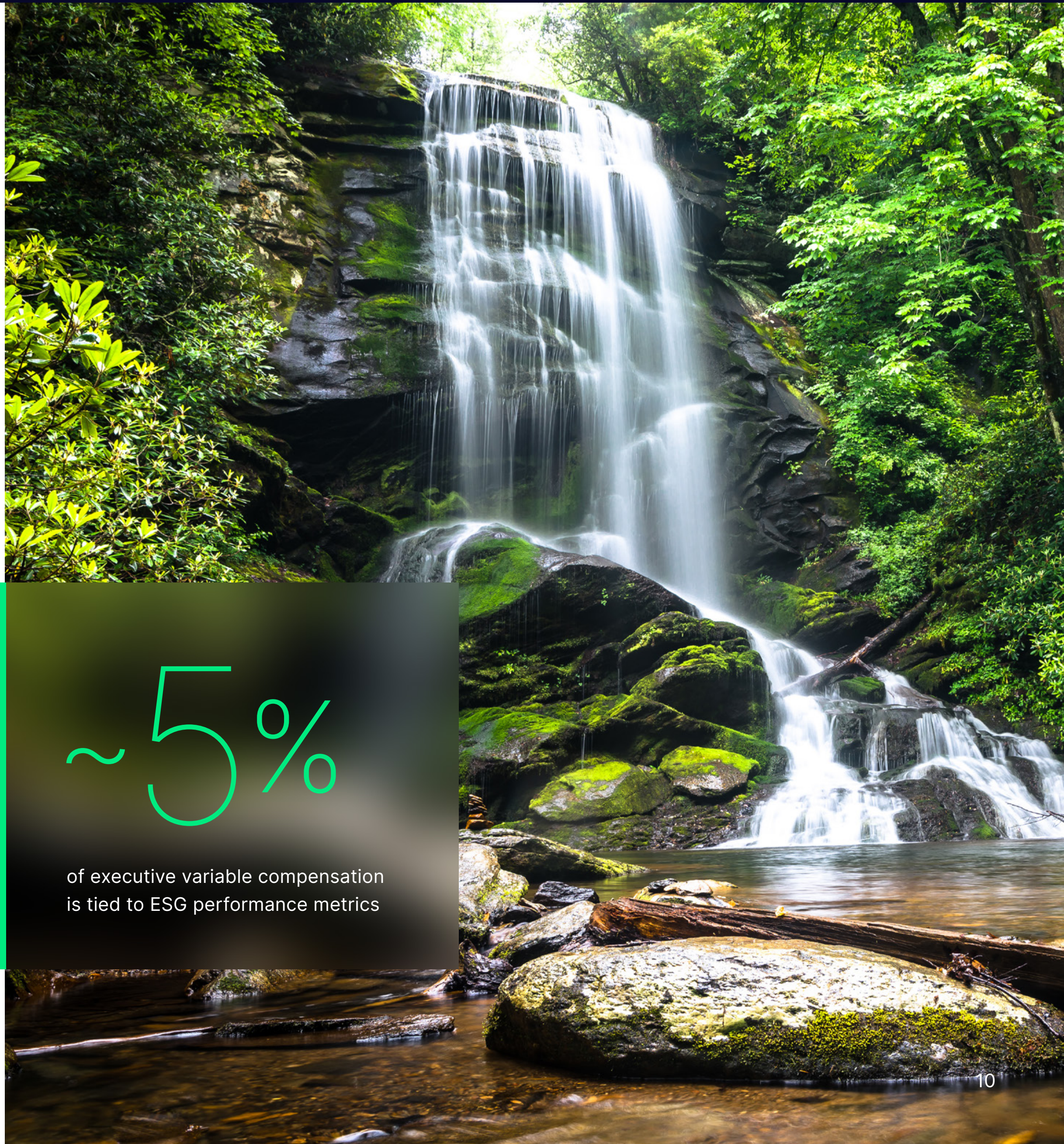
ESG-linked compensation

The achievement of specific climate and ESG goals has a direct impact on the annual compensation incentive plan for some of the members of Nasdaq's Corporate ESG Steering Committee, including the CFO, as a means of supporting our ESG ambitions. Approximately 5% of executive variable compensation is currently tied to ESG performance metrics. ESG-related performance metrics also factor into the annual incentive payments for the Corporate ESG Strategy and Reporting, the Real Estate, Facilities & Security, and the Procurement and Sourcing teams.

Climate-related training

At Nasdaq, we believe that all employees are responsible for identifying risks and opportunities that might impact the Company and for contributing to our mission of operating sustainably. In 2022, as a means of promoting the depth and reach of climate-related knowledge across the organization, Nasdaq offered several relevant training sessions to our leadership and employees, including:

- Board briefings on science-based targets and sustainable finance;
- Resiliency-related business continuity planning trainings on extreme weather events for specific business units;
- An annual Risk Week webinar for global employees on Nasdaq's climate risk management and how we support clients in their climate risk management journey; and
- Trainings on Nasdaq's ESG strategy and nature-related education by our Global Green Team, comprised of globally distributed Nasdaq employees who are passionate about sustainability.



~5%

of executive variable compensation is tied to ESG performance metrics

Strategy

Overview of risks and opportunities

Nasdaq's climate strategy and approach to ESG governance and reporting is informed by our company-wide ESG Materiality Assessment,[1] which we refreshed in early 2023 with the assistance of Nasdaq's ESG Advisory team. Our 2023 assessment weighed the relative importance of a wider universe of topics identified as relevant to Nasdaq's business by leading ESG reporting frameworks, ratings and assessments, benchmarking exercises, surveys, and interviews with internal and external stakeholders. The 2023 Assessment incorporated additional frameworks and the input of external stakeholders to reaffirm the topics previously identified as posing the greatest risks or offering opportunities to our business (as illustrated in the matrix at right). Our continual engagement with internal and external stakeholders and expanded review of key ESG reporting frameworks has reaffirmed the strategic importance of acting upon our GHG emissions and climate change strategy. Our ESG Materiality Assessment reaffirmed the expectations and demands on Nasdaq's climate management and strategy from our external partners.

[1] References to materiality and similar terms refer to ESG topics that we have found to be relevant to our business based on our 2023 materiality assessment. Such references to materiality are different and separate from how materiality is used and understood in the context of securities and other laws of the United States or as used in the context of financial statements and financial reporting. ESG topics and issues described as material in this report may not be considered material for other reporting purposes.

ESG Materiality Matrix

IMPORTANCE TO OUR STAKEHOLDERS → INCREASING IMPORTANCE

Highest Priority ESG Topics

- Data Privacy & Cybersecurity
- Risk Management
- Board Composition & Governance
- Business Ethics & Integrity
- Human Capital Management
- Anti-Financial Crime & Anti-Money Laundering
- ESG & Sustainable Finance Products
- Transparency & Reporting
- Employee Engagement & Satisfaction
- Diversity, Equity & Inclusion
- Customer Relationship Management
- Decarbonization & Climate Strategy
- Innovation & Technology

High Priority ESG Topics

- Executive Compensation & Incentives
- Employee Health & Wellbeing
- Support for Small- & Medium-Sized Enterprises
- Policy Influence
- Labor Practices & Human Rights
- Supply Chain Responsibility

Priority ESG Topics

- Community Engagement
- Natural Resource Management

INFLUENCE ON OUR BUSINESS SUCCESS → INCREASING IMPORTANCE

Our global corporate ESG strategy incorporates our assessment of climate-related risks and opportunities that could impact our business operations, products and services, supply chain and investments. Building on our previous TCFD disclosures, this year we have updated our climate scenario analyses to reevaluate the exposure of our entire global portfolio of offices and data centers to chronic and acute climate hazards; and assessed the climate maturity of our key customers and critical suppliers to bolster our analysis of the potential impacts of transition risks within our operations and markets. Climate-related risks and opportunities relevant to Nasdaq were identified and characterized according to the TCFD framework categories. Each risk or opportunity was assigned a time horizon (short, medium, or long) based upon when it was deemed likely to materialize should the risk remain unmitigated.

In 2022, we also aligned the time horizons through which we evaluate climate risks and opportunities to our science-based targets. The revised timeframes, below, are relevant for our operational, financial, and strategic planning, and are also integrated within our climate scenario analyses.

- Short-term: 0-1 years (up to 2024)
- Medium-term: 1-7 years (up to 2030)
- Long-term: 7+ years (up to 2050)

Transition risks refer to risks associated with achieving a lower-carbon economy, encompassing disruption due to changing policy/legal, technology, market, and/or reputational conditions. Physical risks refer to risks from the physical impacts of climate change, including event-driven risks (acute) and risks resulting from longer-term shifts in climate patterns (chronic).

For the first time, we have formally reported the potential business impacts associated with our climate risks and have assigned an expected level of impact to each risk. This evaluation was based on an analysis of our exposure to that risk, the financial implications of that risk materializing, and all relevant resilience actions and mitigating factors in place. These projected business impacts were further analyzed against our financial materiality threshold as defined by our Group Risk Management (GRM) function. Our forward-looking analyses of physical and transition climate risks affirm our conclusion that climate is not expected to have a material, negative, short- medium- or long-term financial impact on Nasdaq's business (see Table 1). However, we expect that several climate-related opportunities may prove to be significant for Nasdaq. These opportunities are detailed in Table 2 on page 15.

Table 1: Key Climate-Related Risks & Projected Business Impacts Across Time Horizons

🟢 Low Impact 🟡 Medium Impact 🟠 High Impact 🔴 Critical Impact

	Risk Type	Risk Description	Short-Term (2023-24)	Medium-Term (2024-30)	Long-Term (2030-50)	Risk Mitigation
Transition Risks	Policy & Legal	Increased pricing of GHG emissions	🟢	🟢	🟢	Nasdaq's recently verified science-based targets and net-zero commitment provide a roadmap for emission reductions that will minimize the direct and indirect impacts of policy changes that increase the costs of emissions. Additional customer and supplier-focused sustainability efforts will assist in minimizing our indirect exposure to carbon pricing risks in the value chain.
		Mandatory climate reporting requirements	🟢	🟢	🟡	Nasdaq has disclosed climate-related information to date, including Scope 1, 2 and 3 emissions, in this report, an annual Sustainability Report, and an annual submission to CDP. This risk becomes moderate in the long term due to the high likelihood of new climate reporting requirements becoming mandatory in this time period and the potential for pass-through of compliance costs from suppliers.
	Technology	Costs to transition to lower emissions technology	🟢	🟢	🟢	Nasdaq's sustainable leasing strategy reduces office space requirements and seeks to ensure energy-efficient office spaces, and procurement of renewable electricity to minimize our direct exposure to technology risks. We also select data center operators with ISO Certifications, renewable energy offerings, and sound sustainability policies. Nasdaq is also well positioned to assist listed companies in their sustainability journeys through our climate-related products and services, in particular through Puro.earth, the world's first carbon crediting platform for engineered carbon removals.
	Market	Shift in consumer preferences	🟢	🟢	🟢	Nasdaq is well positioned to mitigate this risk because of the low emissions intensity of our business model and sector and because Nasdaq is positioned as a climate leader with our net zero and science-based targets.
		Impact on operations due to disruption in the supply chain	🟢	🟢	🟡	These concerns will be largely mitigated through Nasdaq's Scope 3 Supplier Engagement target as part of our science-based targets. Furthermore, Nasdaq has recently become a CDP Supply Chain member, and has been growing our supplier engagement program, which is expected to help identify potential risk points within Nasdaq's supply chain. In 2023, Nasdaq was recognized by CDP as a 2022 Supplier Engagement Leader, ranking Nasdaq among the top 8% of companies for taking action to measure and reduce climate risk within our supply chain. This risk becomes moderate in the long term due to the increasing likelihood of an unpredictable supply chain disruption in this period and the current lack of TCFD and ESG reporting by some of Nasdaq's key suppliers, which could lead to an unexpected supply chain disruption resulting from a lack of supplier climate preparedness.
	Reputation	Increasing stakeholder pressure	🟢	🟢	🟢	Nasdaq is already positioned as a climate leader with our net-zero and science-based targets and has also pursued voluntary disclosure of our climate impacts through regular TCFD and CDP reporting, and the publication of our annual Sustainability Report.

	Risk Type	Risk Description	Short-Term (2023-24)	Medium-Term (2024-30)	Long-Term (2030-50)
Physical Risks	Acute	Wildfire	🟢	🟢	🟢
		Inland flooding	🟡	🟡	🟡
		Heatwave	🟢	🟢	🟢
		Cyclone	🟢	🟢	🟢
	Chronic	Sea level rise	🟢	🟢	🟢
		Water stress	🟢	🟢	🟢
		Drought	🟢	🟢	🟢

Risk Mitigation

Nasdaq has implemented a wide range of mitigation measures related to both acute and chronic physical climate risks, including:

Facility Selection, Management and Resilience

- Incorporation of climate considerations into Nasdaq's real estate leasing strategy (including site selection & business continuity planning), focusing primarily on short-term (5-year) leases.
- Creation of a new EMS, modeled after ISO 14001 standard, to formalize and standardize facilities management processes.
- Annual risk assessments of our real estate portfolio by third party insurance providers.
- Expansion of business continuity plans (BCPs) beyond general operations to include actions to build resilience for employees in remote locations and connection to disaster recovery plans.
- Establishment of a centralized location for BCPs and requiring BCP coordinators to share the plan with all employees in the relevant department and keep a local copy. There are also additional ways to access the BCPs to ensure they can be accessed in emergency situations.
- Establishment of remote working capabilities and backup energy sources for key assets.
- Existing and planned river and coastal flood defense adaptation measures in major cities where Nasdaq has a physical presence, and flood resilient building design.

Risk Assessment and Management

- Integration of short-term scenario analysis into risk assessment and management processes.
- Business Unit-specific climate risk assessments undertaken in the past year, including looking at locations, strategic business initiatives and vendors.

Energy Efficiency

- Focus on energy efficiency and minimum performance standards for HVAC in heat-stressed areas.
- Energy-efficient cooling systems and data center design, and efficient water systems to reduce demand and commodity price exposure.

Table 2: Key Climate-Related Opportunities & Time Horizons

Category	Opportunity Driver	Key Opportunities	Time Horizon
Products & Services	Ability to diversify business activities	**Drive for new ESG solutions** Nasdaq is uniquely positioned to serve both the corporate and investment communities with our ESG-related products and services, as clients work to achieve their ESG-related objectives. Nasdaq strives to continuously refine and enhance our products and services to meet our clients' evolving needs.	Medium-term
	Access to new markets	**Growth and maturation of carbon markets** Nasdaq recognizes the vital role carbon markets play in addressing climate change and supports the scaling of carbon markets through Puro.earth and other strategic partnerships. Puro.earth is an integrated standard setter and registry focusing on engineered carbon removals. In 2022, Nasdaq launched carbon reference price indices based on Puro's Carbon Removal Credits (CORCs) transactions, which bring price transparency to the market and help corporations understand the true cost of removing their carbon emissions from the atmosphere. Additionally, Nasdaq Marketplace Services Platform provides carbon credits exchanges with trading technology, ensuring that buyers and sellers are matched with carbon credits based on their specific requirements. In 2022, Nasdaq and Climate Impact X (CIX) entered into a partnership, leveraging Nasdaq's cloud-based trading technology to power CIX's new spot exchange platform. Nasdaq expects that the growth of carbon markets will promote demand amongst market participants for Nasdaq's other ESG products and services.	Medium-term
Resource Efficiency	Move to more efficient buildings	**Reduced operating and procurement costs from resource efficiency gains** By continuing to operate more efficiently, Nasdaq may reduce operating costs across our offices and data centers. We have an extensive building efficiency process in place, with energy efficiency measures deployed across our facilities and governed by our new Environmental Management System. Our sustainable leasing strategy assesses sustainability factors such as easy mass transit access and a guaranteed certifiable renewable energy supply. Our green-certified office space grew by 37% in 2022, and we anticipate having all key offices green certified by 2030, in addition to increasing our number of LEED Gold certified office spaces.	Medium-term
	Reduced resource consumption	**Adapt our resource needs for our workforce** In conjunction with our pursuit of greater resource efficiency, our climate risk analysis of our facilities also provides opportunities to continue to right-size our physical footprint—focusing on the optimization of space to meet business needs and facilitate home working solutions. This optimization may reduce fixed asset costs and increase our resilience to climate-related business disruptions. It also allows for a nimbler global workforce that has the flexibility to work from home or from our offices.	Medium-term
Resilience	Participation in renewable energy programs	**Sourcing renewable energy for our operations** By pursuing the procurement of 100% renewable electricity across our offices and data centers, we can reduce exposure to future fossil fuel price increases that may occur due to climate-focused policy developments or due to geopolitical conflicts in the regions where we operate. Pre-negotiated renewable power contracts accounted for over 84% of our annual global consumption in 2022. For power not acquired through contracts with utility providers, Nasdaq purchases Renewable Energy Certificates (RECs) that meet our stringent quality requirements.	Medium-term

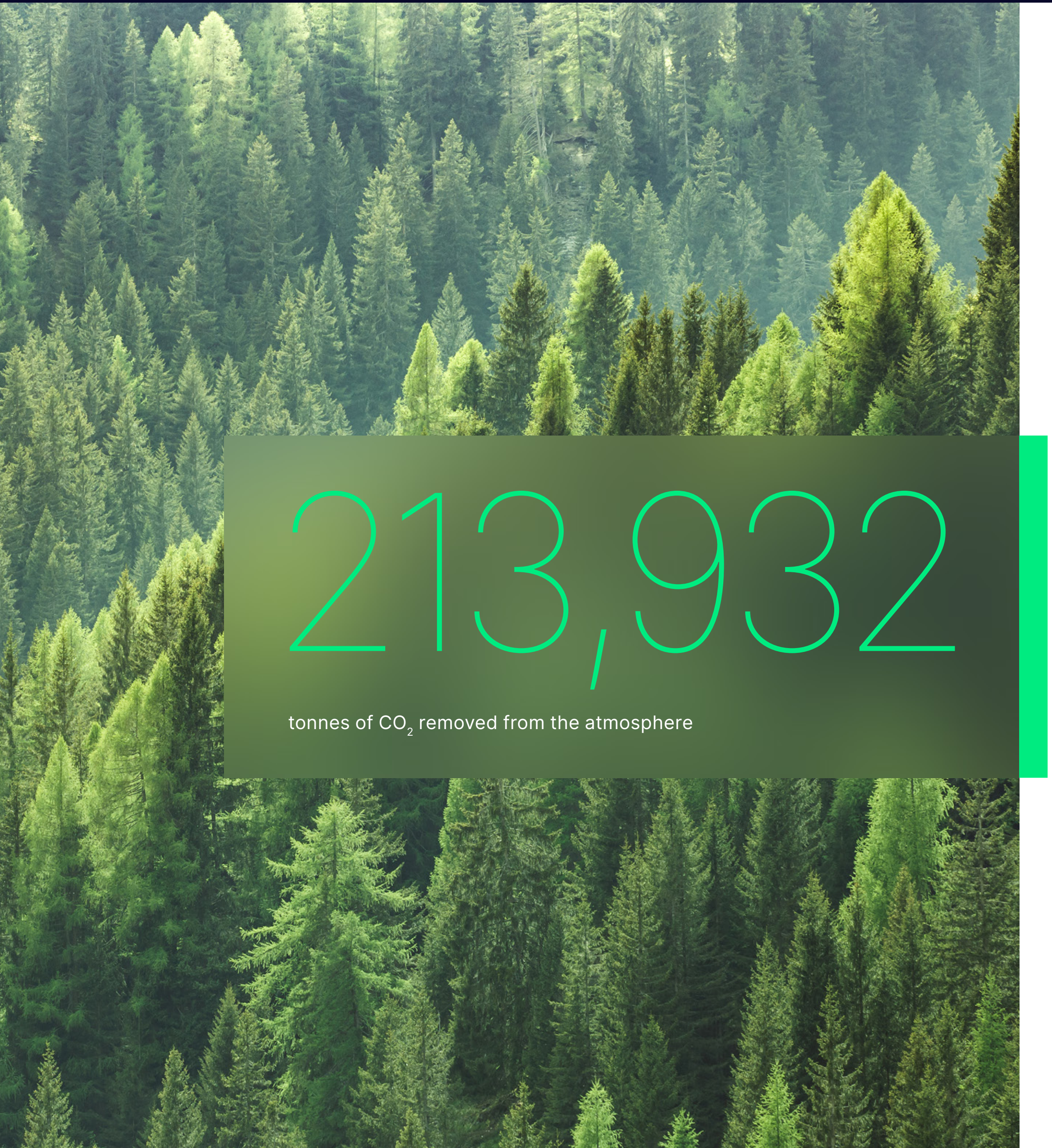
Category	Opportunity Driver	Key Opportunities	Time Horizon
Stakeholder Engagement	Growth in ESG maturity of capital markets	**Client and investment community engagement opportunities** We continue to increase ESG investor and corporate engagement through our product offerings and insights, ensuring investors and clients have the information they need to make informed decisions on climate-related risks and opportunities (see Products & Services section of this report). The eVestment ESG Questionnaire, which gathers information from asset managers on their ESG strategies and transmits this information to investors and consultants, is an example of our commitment to driving innovation in our stakeholder engagement at all levels. The comprehensive output from the eVestment ESG data set facilitates actionable and reporting transparency. Our Green Voices Newsletter gathers our latest updates, insights and inspiration on topics such as net-zero strategies, carbon removal and green transition, facilitating a continuous dialogue between investors, issuers and other stakeholders.	Short-term
	Collaboration with third parties	**Supplier engagement opportunities** Our new 2022 supplier engagement strategy encourages our suppliers to adopt practices in line with our Environmental Practices Statement and revised Supplier Code of Ethics, allowing us to lead the shift towards more sustainable and inclusive capital markets that serve all stakeholders. Through Nasdaq's membership in the CDP Supply Chain Program, our top suppliers were asked to disclose their environmental impacts through CDP's Climate Change Questionnaire. We also encourage our top suppliers to set science-based targets through SBTi to support the achievement of our own climate goals.	Medium-term
	Reputational benefits and improved ratings by ESG indexes	**Climate leadership commitments and memberships** Nasdaq has memberships in climate-related initiatives and working groups that provide extensive opportunities for stakeholder engagement and allow us to shape the conversation on ESG considerations in capital markets. Nasdaq's representation and participation in a select group of ESG-related organizations support our goal of providing consistent and transparent ESG reporting for our stakeholders. Our association memberships represent a range of topics and ambitions that closely align with our ESG strategy. These key memberships include: Business Roundtable (BRT), CDP Supply Chain, Science Based Targets initiative (SBTi), Task Force on Nature-Related Financial Disclosures (TNFD) Forum, United Nations Global Compact (UNGC), United Nations Principles for Responsible Investment (PRI), United Nations Sustainable Stock Exchanges (SSE) initiative, United Nations Sustainable Stock Exchanges (SSE) Advisory Group on Carbon Markets, and World Federation of Exchanges (WFE) – Sustainability Working Group, Global Sustainability Standards Board, and the Impact2030 Metrics Council.	Long-term

Growth of climate- and ESG-related products and services

Nasdaq endeavors to support the shift toward sustainable capital markets by educating our clients on ESG considerations, sharing our issuers' perspectives with the industry and regulators, and providing a growing portfolio of ESG-focused marketplace solutions that help clients in the corporate and investment communities achieve their own ESG objectives. Over the past several years, ESG has been a strategic growth driver for the Company. Our ESG Advisory services are well positioned as a client entry point for our larger suite of ESG-related products and solutions. ESG-related revenue has grown rapidly over the past three years, reaching $118M in 2022, and we project that ESG-related[2] revenue will reach $250M by 2027. We will continue evaluate climate-related opportunities while monitoring our ESG products and services revenue growth.

The expansion of our ESG-related solutions has occurred in conjunction with our new organizational structure, which aligns our business more closely with the foundational shifts in the global financial system and with evolving client needs. As a result, our four previous business segments (Market Technology; Investment Intelligence; Corporate Platforms; and Market Services) have been reformed to align with a new corporate structure comprised of three business segments: Market Platforms, Capital Access Platforms, and Anti-Financial Crime. Our ESG solutions are included within our Market Platforms and Capital Access Platforms segments.

[2] ESG-related revenues include Nasdaq's Governance Solutions, Index, Puro.earth platform, and other ESG products and services including Workflow Tools, ESG Advisory, and Carbon Removals.



Our climate-related products and services

Puro.earth

Puro.earth is the world's first carbon crediting platform for engineered carbon removals to obtain endorsement by the International Carbon Reduction and Offset Alliance (ICROA). The platform solely focuses on engineered carbon removal methods that stores carbon for a minimum of 100 years. Puro.earth's high integrity carbon removals, the CO_2 Removal Certificate (CORC), are in line with the guidance of Oxford Principles for Net Zero. Puro.earth's CORCs provide companies with a much-needed tool in their efforts to reach their net-zero targets. Puro.earth issued 213,932 CORCs on behalf of suppliers in 2022, which represents 213,932 tonnes of CO_2 removed from the atmosphere. The issuance equals 2.4X growth from 2021. Twenty-eight new suppliers joined the platform during 2022, bringing the total number of suppliers to 80 originating from 18 countries. Puro.earth also launched two new removal methods in 2022: Enhanced Rock Weathering and Biomass Burial. Meanwhile the number of sales channel firms and traders who sell CORCs to their clients has grown during the year.

In 2022, Puro.earth also increased transparency in the carbon removal market through improvements in the Puro Registry and the Carbon Removal Reference Price Indexes. Integrity, trust and transparency around CORCs are key factors needed for building a well-functioning market for carbon removals. A well-functioning market that brings efficiency and necessary price signals to stakeholders is a pre-requisite for an effective, societal decarbonization process.

Given the strong demand by corporate buyers for high quality carbon removals, Puro.earth plans to further expand the volumes of issued and retired CORCs on the Puro.earth platform. Furthermore, Puro.earth aims to launch additional carbon removal methods, subject to the approval from a scientific perspective by the Advisory Board of Puro.earth[3].

[3] The Advisory Board is ensuring high credit-level integrity and robust principles for science-based carbon removal verification and is authorized by Puro.earth's Board of Directors to manage the Puro.earth Standard and Crediting Rules. Puro.earth Standard and Crediting Rules include project eligibility rules, quantification of carbon removal, validation and verification rules, conditions for issuance and retirement of credits. The Advisory Board is chaired by Myles Allen, professor of Geosystem Science in the School of Geography and the Environment at the University of Oxford and the director of Oxford Net Zero Initiative. The Advisory Board are independent and non-executive, meaning they are not Puro.earth employees.

Nasdaq Green Equity Designation

Nasdaq Green Equity Designation was launched on the Nordic markets in 2021 in response to increased demand for sustainable investments and extensive growth in Nasdaq Sustainable Bond Markets. With issuers and investors searching for more green performance indicators on the equity market, Green Equity Designations aim to enable visibility and transparency for investors with two voluntary designations, Nasdaq Green Equity Designation and Nasdaq Green Equity Transition Designation. Through Green Equity Designations, Nasdaq can support environmentally sustainable companies or companies committed to transition to increase their visibility, transparency and credibility towards investors, business and other stakeholders.

The Nasdaq Green Equity Designation is currently available for companies on the Nasdaq Nordic stock exchanges. As the financial ecosystem anticipates upcoming sustainability and climate-related regulations, Nasdaq may see increasing interest in green equity classification from companies and investors outside the Nasdaq Nordic exchanges. In March 2023, the World Federation of Exchanges (WFE) launched its classification standard for Green Equity with reference to the existing model from Nasdaq's Green Equity Designation, highlighting Green Equity Designation's importance in helping investors to assess companies that are generating revenue from products and services that contribute to positive environmental outcomes.

Nasdaq Risk Modelling for Catastrophes

Nasdaq Risk Modelling for Catastrophes is the first independent, multi-vendor risk modelling solution for re/insurance firms. It brings multiple catastrophe risk model providers together on one independent platform, lowering the barriers to entry for model vendors while providing ease of access and increased choice to the market. The platform, powered by the open-source Oasis Loss Modelling Framework, makes it possible for clients to access and deploy a wide range of models without the need for multiple modelling platforms. With a broad range of catastrophe risk models across multiple geographies, for perils including flood, earthquake, hurricane, windstorm, bushfire and more, exposure management teams can quickly evaluate and apply the models that align with their business needs.

In 2022, Nasdaq Risk Modelling for Catastrophes' client base grew 60%, fueled by the need for a clearer view of complex perils such as flooding. There is growing demand among the risk management community for tools that assess climate-related physical risks and catastrophe models that contain climate conditioned events will play a valuable role in this regard. Nasdaq Risk Modelling for Catastrophes provides access to models that combine science, engineering and probabilistic modelling to help clients quantify the financial impact of climate change in terms of the damage to property caused by natural catastrophe events.

▲60%

YoY client base increase, fueled by a desire for improved views of risk around complex perils

Climate is integrated in our ESG-related products and services.

Corporate solutions

ESG Advisory

Launched as an organic growth initiative in 2019, Nasdaq's ESG Advisory is a service solution that pairs companies with consultative ESG expertise to help analyze, assess and put into action best-practice ESG programs with the goals of attracting long-term capital and enhancing value. Nasdaq's ESG Advisory practice is staffed by former ESG investors and ESG ratings agency analysts, sustainability consultants with decades of collective experience as well as individuals who ran sustainability programs in-house at Fortune 500 organizations. ESG Advisory services include ESG and climate strategy development, GHG footprinting support, Board engagement strategies, ESG investor engagement advice and ESG and climate report development support for companies.

2022 was a transformative year for Nasdaq's ESG Advisory practice as we more than doubled our headcount to meet client demand for our consultative ESG services. Headcount growth was focused on individuals with key skill sets including: banking, ESG investing, in-house corporate ESG, ESG rating agencies and ESG standard setters. 2022 also marked the first year that ESG Advisory expanded headcount into the Asia Pacific (APAC) region. In 2023, ESG Advisory plans to continue prioritizing private and public customer needs with ESG and climate-related disclosure, GHG footprinting, ESG capital attraction strategies and ESG goals and target setting. As the regulatory environment heightens its disclosure requirements within the United States, Europe and the Asia Pacific region, we're aligning our resources and competencies to help our clients navigate stakeholder demands.

Nasdaq OneReport

Nasdaq OneReport is an ESG data management, reporting, audit trail and disclosure software that allows companies to simplify ESG reporting. It optimizes workflows, facilitates reporting to frameworks, research and ratings organizations and helps disclose ESG progress against a variety of metrics to multiple stakeholders. Nasdaq OneReport's continued advancement and evolution is driven by our customers' demands for a tool which is the industry leader in the number of Frameworks and Research & Ratings Organizations provided.

In 2022, Nasdaq OneReport became the first Global Reporting Initiative (GRI) software provider to receive GRI certification for the revised Universal and Topic Standards, released in Fall 2021, through GRI's Certified Software and Tools Provider program. The platform also added new frameworks and ratings organizations such as the Just Capital and Bloomberg Gender Equality Index. In preparation for upcoming regulations, Nasdaq OneReport created an EU ESG Reporting Readiness Module to help support clients with EU Taxonomy, Corporate Sustainability Reporting Directive (CSRD) and Sustainable Finance Disclosure Regulation (SFDR) for organizations to easily access, share and document key organizational stakeholders. In 2023, with the ever-evolving ESG landscape, Nasdaq OneReport plans to continue to update the platform with the latest regulatory frameworks; helping clients mitigate risks and accelerate their ESG efforts.

Metrio

In 2022, Nasdaq acquired Metrio, expanding our suite of ESG Solutions. Metrio is an end-to-end sustainability reporting software that streamlines the way companies collect, analyze and share their ESG data. The platform is simultaneously a one source of all truth for all corporate sustainability data, with dashboards to track Key Performance Indicators (KPIs) and measure progress towards set goals, while also enabling sustainability teams to run data collection campaigns across multiple sites, locations and departments with a review process that sends task reminders, flags variations and generates an audit trail. Metrio also has built-in Corporate Social Responsibility (CSR) reporting capabilities that allows businesses to leverage their granular data and aggregate into both internal and external reports.

Metrio's platform has continued to evolve with regular updates to improve the user experience, add new features around dashboards, data collection and a home page for a role-based overview. In 2023, Metrio plans to continue to release new features focused on improving metrics to connect multiple data sources. This will allow increased autonomy for clients to build their own CSR reports with their own branding, while leveraging data collected across their organizations. Further, Metrio and Nasdaq OneReport expect to be integrated and have increasing connectivity to help clients aggregate granular data from Metrio to populate reports and disclose to regulatory bodies and third-party raters and rankers within Nasdaq OneReport.

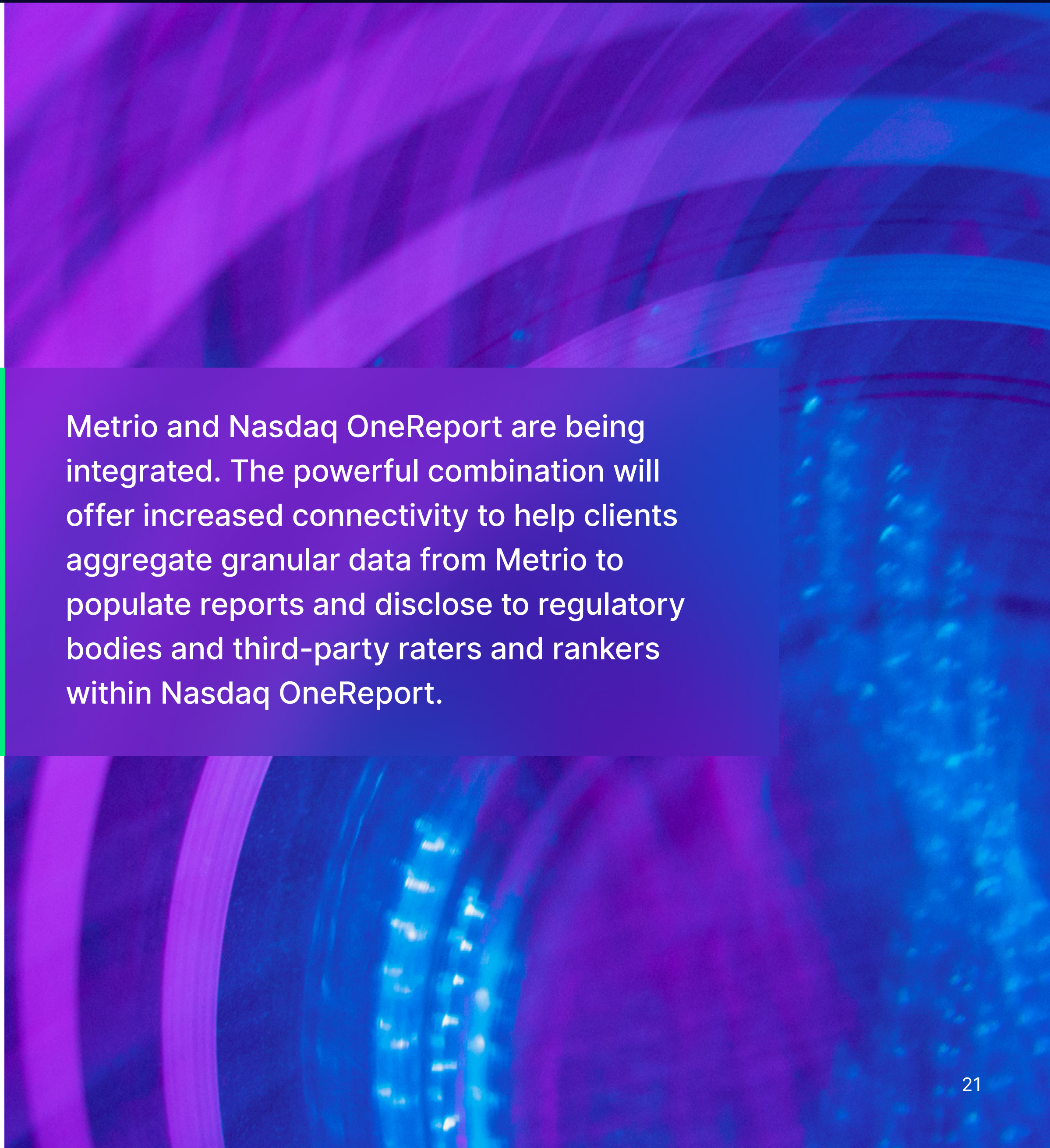
Governance Solutions

A strong corporate governance framework is the cornerstone of a sound ESG program. Nasdaq Governance Solutions provides a suite of technology and advisory services for boards and leaderships team to work at peak performance, facilitate major decisions, advance strategic vision, and drive stakeholder value. Our solutions drive governance excellence by bringing efficiency to governance and compliance programs, and fostering trusted relationships with boards and leadership teams.

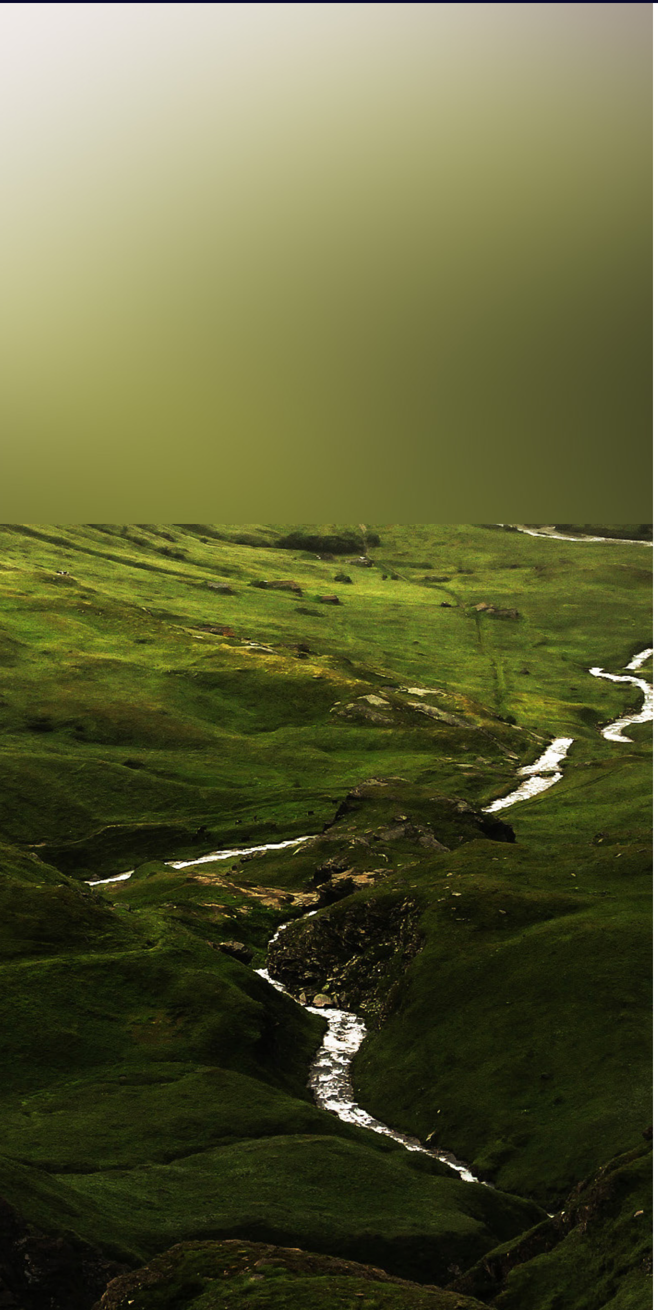
In 2022, we launched the Nasdaq Center for Board Excellence, an inclusive community of board members, executive leaders, and educators, offering best practices and insight into latest governance topics. The Center's 'ESG and Sustainability' advisory council regularly publishes research around the evolving role of boards around ESG-related matters, and how to drive action and accountability in the boardroom. In 2023, we will continue to grow an engaged community around the Center and bring governance workflow tools and services to customers to help enable effective in person or remote board meetings and discussions.

IR Intelligence

Investor Relations Intelligence (IR Intelligence) is a business within our Capital Access Platforms segment, which provides insights and analytics software, and advisory services products to nearly 3,300 companies globally with the mission to help clients to effectively navigate the capital markets. In 2022, IR Intelligence focused on providing transparency into sustainable and climate strategies through IR Insight and shareholder advisory services with ownership benchmarking, as well as advancing companies' understanding of their shareholders ESG preferences through our Global Perception service. Further in 2022, IR Intelligence produced research on sustainable investing trends, as well as proprietary research on corporate climate disclosure trends. In 2023, we plan to expand upon this foundation to provide companies with insight and analytics tools to monitor ESG trends, assess competitive positioning through benchmarking of ESG disclosure as companies strive to meet increasing demands from investors and global regulators.



> Metrio and Nasdaq OneReport are being integrated. The powerful combination will offer increased connectivity to help clients aggregate granular data from Metrio to populate reports and disclose to regulatory bodies and third-party raters and rankers within Nasdaq OneReport.



Investment solutions

ESG Indexes

The OMX Stockholm 30 ESG Responsible Index (OMXS30ESG) was the first ESG version of an established exchange benchmark introduced worldwide in June 2018. It was followed by the listing of ESG index futures contracts in November 2018. The OMXS30ESG is an ESG responsible version of the OMX Stockholm 30 Index, which is the leading share index on Nasdaq Stockholm. The OMXS30ESG is based on OMXS30, which consists of the 30 most traded securities on Nasdaq Stockholm, followed by a systematic criteria-based ESG screening where securities that fail the criteria are excluded. The OMXS30ESG Index is a market cap weighted index.

The liquidity of its constituents results in a highly suitable underlying benchmark for derivatives products. In addition, the OMXS30ESG is also constructed to be used for structured products, such as warrants, index bond options, exchange traded funds and other non-standardized derivatives products. The composition of the OMXS30ESG index is evaluated twice a year, at the beginning of January and July.

Nasdaq Sustainable Bond Network

The Nasdaq Sustainable Bond Network, launched in late 2019, is a global platform that aims to increase transparency for environmental, social and sustainable bonds. The Nasdaq Sustainable Bond Network connects issuers of sustainable bonds with investors, empowering them to evaluate impact and make informed investment decisions on sustainable bonds. The platform allows issuers of sustainable bonds to make their sustainable bond data more accessible to investors and other stakeholders. Investors can in turn use the platform to evaluate, track and create impact reports based on issuers' ESG bond reporting. The database simplifies sustainable investing with an intuitive, easy-to-use solution that allows investors to discover, compile and compare sustainable bonds as well as generate impact reports. The platform also provides issuer-level information on UN Sustainable Development Goals allocation.

In 2022, we launched functionalities to report on EU taxonomy alignment of projects financed by issuers' green and sustainable bonds. Furthermore, we reached a coverage of more than 1,500 issuers and 14,000 securities globally. We also partnered with the Singapore Stock Exchange (SGX), connecting the Asia Pacific region to the NSBN platform to provide global coverage of ESG bonds in the network.

Investors of sustainable bonds are increasingly reporting on the impact of their investments and how their proceeds are allocated. We expect this trend to continue while seeing a larger incorporation of issuer-reported sustainable bond data in the due diligence of investments.

Nasdaq Sustainable Debt Market

The Nasdaq Sustainable Debt Market is comprised of dedicated segments for listing green, social, sustainability and sustainability-linked bonds, structured products and commercial papers.

Our sustainable debt markets are designed to highlight sustainable investment opportunities to investors with a green, social or sustainable investment agenda. It is open to all types of issuers that are looking to issue securities that meet our listing criteria, which are based on the green and social bond principles as well as the sustainability-linked bond principles, for which the International Capital Markets Association (ICMA) acts as a secretariat.

Macro-economic factors had a negative effect on the Nordic debt markets in 2022 but sustainable debt markets continued to grow, emphasizing the increasing importance of sustainability throughout the financial markets. The number of sustainable debt instruments listed on Nasdaq grew by 11% during 2022 and the volume of listed bonds grew by 27%. The growth was mainly driven by new, large issuers joining the market (e.g., the inaugural Danish sovereign green bond listed on Nasdaq Copenhagen), as well as a wider adoption of sustainability-linked bonds in the Nordic region. Sustainability-linked bonds allow issuers that lack large capex but have set out ambitious sustainability targets to join the broader sustainable debt markets and will spur the overall markets' growth in the coming years by allowing new sectors to participate.

eVestment ESG Data in Asset Management

eVestment is a leading institutional investment database and analytics platform acquired by Nasdaq in 2017. To meet increasing demand for transparent and standardized D&I and ESG data from institutional stakeholders, eVestment launched multiple initiatives to provide a centralized resource in collaboration with consultants, asset managers, asset owners and key industry organizations. We partner with key industry parters to enhance the platform's breadth of data.

In 2020, eVestment launched an ESG questionnaire to power robust investment research providing opportunity for asset managers to articulate their approach to ESG with compelling proof points. In 2022, the questionnaire was expanded with major enhancements to the proxy voting and engagement data designed to better understand process and outcome, add more questions around alignment (SDGs and SFDR) as well as introduce new climate sections at both the firm and the product level. To date, more than 50% of active products on eVestment are providing responses to the ESG questionnaire, while about 45% of firms are providing firm level information. Usage of eVestment's ESG data has tripled since the 2020 questionnaire rewrite, reflecting not only the increased value of the data, but the increased importance of ESG data in the investing landscape.

ESG Data Hub

ESG Data Hub is a data solution offering investors and other stakeholders easy access to a wide range of unique and comprehensive ESG data sets, accompanied by detailed product descriptions, unique selling points and use cases. The platform enables users to find data sets relevant to specific UN Sustainable Development Goals (SDGs) providing investors with visibility on the ESG impacts of their investments. Data sets within the product are wide ranging – they assist our customers with their own projects and the impact is at the customer level. For example, our gender diversity data set might be used by data customers to allocate funds towards companies that have a better gender balance. They might use our emissions data to filter out companies that have high emissions.

Demand for the data is driven by a customer move away from broad ratings, and instead a move towards understanding in granular detail the different aspects of ESG. For many customers, ratings no longer give a representative picture of a company's complete ESG picture. The move towards granular data sets started in 2022 and remains a growing segment.

In 2022 we added several new data sets to the product from third party providers. We also added our sustainable bond network data to the platform. For 2023, we continue to look for unique data partners to add to the solution, based on feedback and the needs of customers. We plan to integrate ESG data into our broader data marketplace, Nasdaq DataLink.

ESG Footprint

ESG Footprint is an easy-to-implement platform measuring the global sustainability effect of a portfolio and individual securities. Through an intuitive dashboard, investors and managers have access to the real-life effects of each investment, along with alternatives that may better suit an individual's sustainability goals.

The tool gives investors insight into positive and negative flags for companies within their holdings-depending on criteria set by the customer. For example, an asset manager that doesn't wish to invest in weapons but does wish to invest in companies that flag well for gender balance, will be able to filter their holdings to find outliers that need to be removed from the portfolio. We have seen growing demand for regulatory solutions, particularly SFDR and EU Taxonomy, this has led to a high number of demonstrations and customer dialogues.

Within ESG Footprint, there are multiple datasets that provide insight into the core impact of business and investment opportunities on SDGs. These datasets (SDG Signals, SDG Fundamentals, SDG CAPX) allow investors to evaluate companies' alignment against the SDG framework.

In 2022, we added functionality that helps customers meet their SFDR requirements. In addition, we launched the product with a group of 20 banks in Denmark that are providing SFDR overlays for all their retail customers. In 2023, we continue to invest in the product and are looking to add an EU Taxonomy overlay to the product as well as continually improving data quality.

Impact on business, strategy and financial planning

Nasdaq regularly evaluates climate risks that may affect our products and services, value chain, operations, and investments. We assess risk factors likely to increase direct costs or cause interruptions to our primary business functions. Our climate risk analysis has identified Nasdaq's exposure to factors which could result in both physical and transition risks. Across all analyzed time horizons, transition risks were once again identified as being more significant than physical risks to Nasdaq's business, strategy and financial planning. However, the assessed climate risks ultimately are not projected to have a material financial impact on the company. We nevertheless continue to monitor and track both physical and transition risks on an annual basis and the implications of new information on their financial materiality, integrating this information into our ongoing climate strategy as appropriate.

Nasdaq incorporates climate risk mitigation across our business and strategy

Business Operations

Our low-carbon transition plan is a key strategic initiative that aligns our operations with our efforts to mitigate the business risks associated with climate change. This extensive plan includes:

1. Calculating our GHG emissions since 2018;
2. Benchmarking our global real estate portfolio to identify and implement opportunities for energy efficiency;
3. Pursuing green building certifications;
4. Minimizing emissions resulting from business travel;
5. Purchasing renewable electricity;
6. Setting science-based targets; and
7. Leveraging the TCFD framework to further integrate climate risk management across our organization.

Disclosures and ESG Ratings

As a means of communicating our performance and progress on sustainability initiatives to internal and external stakeholders, Nasdaq has expanded our ESG disclosures, including through our annual Sustainability Report, TCFD Report and CDP Climate Change disclosures. Through improved performance and enhanced disclosure, Nasdaq's ESG scores improved across multiple rating agencies and frameworks in 2022.

- Nasdaq was included on CDP's Climate Change A List. Out of 18,700+ companies that disclosed through CDP in 2022, only 297 companies made the CDP A List.
- We achieved an AA ESG score from MSCI, indicating our corporate governance practices are well aligned with shareholder interests.
- We are in the top 96th percentile for S&P Global's Corporate Sustainability Assessment (CSA) – an annual evaluation of companies' sustainability practices, covering over 10,000 companies globally.
- Our EcoVadis score increased from Silver to Gold.
- We scored in the first decile (10%) on the ISS QualityScore (Environmental, Social and Governance Disclosures), indicating better quality ESG practices and lower risk relative to our peers.

Products and Services

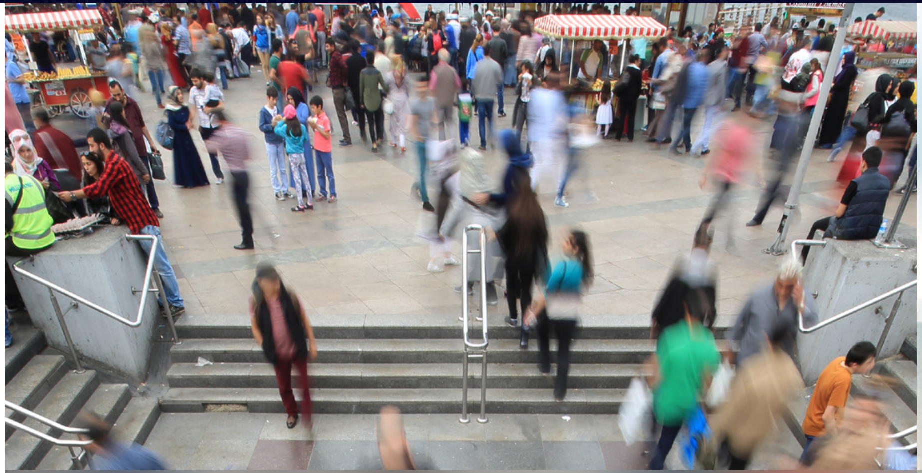
Nasdaq has increasingly integrated ESG into service offerings and invested in new ESG-related products and services, including our acquisition of Metrio in 2022, together with the extensive suite of ESG products and services outlined above. We believe that a continued focus on ESG is critical to serving the needs of our investor and corporate clients as they address their climate-related risks. Further, as part of our commitment to supporting the shift towards more sustainable and inclusive capital markets, we use our own ESG products internally, engaging in the same best practices that we recommend to our clients.

Supplier Engagement

As part of our commitment to mitigate climate risk and improve ESG considerations, we have a robust supplier engagement strategy. This strategy is being applied to existing suppliers in a multi-phased approach and to new supplier relationships. Suppliers are requested to disclose their environmental data through the CDP Supply Chain Program, as well as to set science-based targets through SBTi. All suppliers are asked to acknowledge the expectations of them outlined in Nasdaq's updated Supplier Code of Ethics.

Sustainability-linked finance

On March 29, 2023, Nasdaq completed a sustainability-linked amendment to our $1.25 billion revolving credit facility. The sustainability-linked credit facility amendment ties certain fees on the credit facility to Nasdaq's performance against two ESG-related key performance indicators (KPIs) – one environmental and one social. Our borrowing costs may be increased, or decreased, depending on our achievement of each of the KPIs. Our environmental KPI reinforces Nasdaq's commitment to SDG 13, "Climate Action" by encouraging our suppliers to set their own Science-based Targets to help address the global, existential issue of climate change. Our commitment to addressing SDG 10, "Reduced Inequalities", was reinforced through our social KPI which focuses on increasing the percentage of our U.S. spend with diverse-owned suppliers to economically empower people of all backgrounds and support the communities we represent.



Social KPI

KPI: Percent of Addressable Spend[4] from U.S.-Based, Diverse-Owned Suppliers

Description: Percent of Nasdaq's U.S. suppliers by spend covering purchased goods and services and capital goods from certified diverse-owned businesses

Sustainability Performance Target: Increase U.S.-based addressable spend from U.S.-based, diverse-owned suppliers by 0.5 percentage points annually for 5 years from a 2022 baseline of 6.8%

Environmental KPI

KPI: Percent of Addressable Spend[4] with Suppliers with Science-Based Targets

Description: Percent of Nasdaq's suppliers by spend covering purchased goods and services and capital goods that set or commit to set science-based targets

Sustainability Performance Target: 70% of suppliers by spend covering purchased goods and services and capital goods will set or commit to setting science-based targets by 2027

[4] "Addressable Spend" refers to Nasdaq's spending in which we have the discretion to directly select the provider of the goods and services and/or benefit from a sourcing event, including, for the avoidance of doubt, money that is directly spent by Nasdaq as well as money that is spent by one of Nasdaq's suppliers in relation to a contract or work authorization with or for Nasdaq.

Scenario analysis and strategy resilience

Over the past year, climate and ESG issues have impacted our stakeholders significantly, and we expect these issues to influence our businesses into the future. While Nasdaq's low-carbon transition strategy and ESG product offerings are aligned with a transition to a low-carbon economy, we understand the importance of thoroughly exploring all aspects of climate-related risks that may materialize under various global emissions scenarios.

In accordance with the TCFD recommendations, we examined the resiliency of Nasdaq's current strategy by conducting climate scenario analyses. Using this process, we assessed Nasdaq's exposure to physical and transition climate-related risks and opportunities deemed as having the potential to influence our businesses, strategy, and financial planning. In 2022, we updated and enhanced our climate scenario analyses by:

1. Applying the most recent transition scenarios from the Network for Greening the Financial System (NGFS), including two net-zero aligned scenarios;
2. Applying the latest physical scenarios as per Intergovernmental Panel on Climate Change's Sixth Assessment Report (IPCC AR6);
3. Including two new climate-related hazards, water stress and cyclones, in Nasdaq's physical scenario analysis;
4. Updating our analysis for our entire global portfolio of offices and data centers, including new sites; and
5. Performing an analysis of the climate maturity of Nasdaq's key suppliers and customers.

Our 2022 scenario analysis exercise validated that our most significant climate risks and opportunities stem from transition risks. Nasdaq's recently verified science-based emissions reduction targets are expected to help mitigate some of these risks. We aim to further explore the vulnerability of our operations to the climate hazards identified, in order to project possible financial impacts related to business disruption and identify the costs of mitigation.

Transition Analysis Scenarios

Network for Greening the Financial System (NGFS)

Three scenarios from the NGFS Phase III were applied to assess transition risks and explore the impact of delayed timing and divergent action across sectors. These scenarios were selected based upon their relevance to the sectors across which we operate, and as a means to explore the nuances of different net-zero aligned transition scenarios.

	1. Net Zero 2050 (1.5° C)	2. Divergent Net Zero (1.5° C)	3. Delayed Transition (<2° C)
Transition Analysis Scenarios Applied	**Description:** ▪ Coordinated, stringent and well-timed action to reduce GHG emissions and achieve net zero emissions by 2050 ▪ Transition risks are considered high	**Description:** ▪ Different levels of ambition in action across sectors ▪ Transition risks are considered very high	**Description:** ▪ Delay in action until 2030 ▪ Requires accelerated and disruptive policies thereafter to limit warming to below 2°C ▪ Transition risks are considered very high
	Outcome: ▪ Ambitious climate policies introduced immediately, resulting in steady increases in carbon prices from 2025 – 2050 ▪ 50% chance of limiting global warming to below 1.5 °C by end of century	**Outcome:** ▪ Divergent policies introduced across sectors and a quicker phase out of fossil fuels result ▪ 50% chance of limiting global warming to below 1.5 °C by end of century	**Outcome:** ▪ New climate policies are not introduced until 2030 and the level of action differs across countries and regions based on currently implemented policies ▪ 67% chance of limiting global warming to below 2°C by end of century

Transition risks

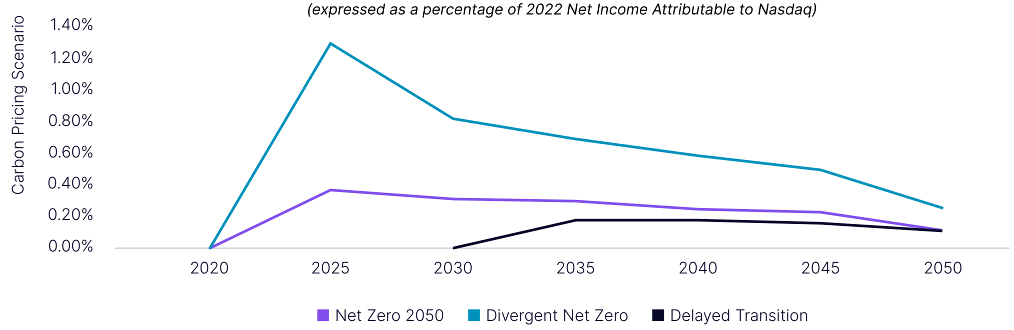
Transition risks were evaluated under three scenarios published by the NGFS. We selected these three scenarios as we deemed them particularly relevant to the financial sector in which we operate, and to explore the possible risks we could be exposed to under ambitious transition scenarios that achieve global net-zero. Table at left provides a summary of the NGFS Transition Analysis scenarios applied during our scenario analysis.

In the scenarios applied, government climate-related policies are proxied through carbon prices, which vary significantly depending on the scenario. The risks relating to mandatory carbon pricing were quantitatively assessed by applying the global carbon prices delineated in the transition scenarios, with respect to our Scope 1, 2, and 3 emissions. We investigated the possible impacts of carbon pricing against our emissions, under a future trajectory in line with the ambitions of our Science-Based Target commitment. We assumed that Nasdaq would bear the full cost of emissions, as opposed to, for example, suppliers absorbing some of the costs of carbon pricing.

As shown in the results summarized in the chart below, we found that under all scenarios assessed, the annual cost of emissions remained <2% of 2022 Net Income Attributable to Nasdaq across the short- to long-term horizons. In the long-term to 2050, there was no material difference between scenarios. Mirroring the results of our previous analyses, the impacts of mandatory carbon pricing are highest under a Divergent Net Zero scenario, and lowest under a Delayed Transition scenario. Applying NGFS Phase III modeling data has slightly increased our maximum exposure relative to our 2021 analysis – but in all instances, the projected impacts of carbon pricing fall under Nasdaq's financial materiality threshold.

Annual Cost of Nasdaq's Scope 1, 2 and 3 GHG Emissions*

(expressed as a percentage of 2022 Net Income Attributable to Nasdaq)



*Based upon carbon pricing scenario analysis using NGFS Net Zero 2050, Divergent Net Zero, and Delayed Transition global carbon prices, and Nasdaq's 2022 Scope 1, 2 and 3 Emissions and projected emissions under Nasdaq's Science-Based Targets. A discount rate of 2% applied to calculate present value annual cost of emissions. 2022 net income attributable to Nasdaq as shown on 2022 Form 10-K.

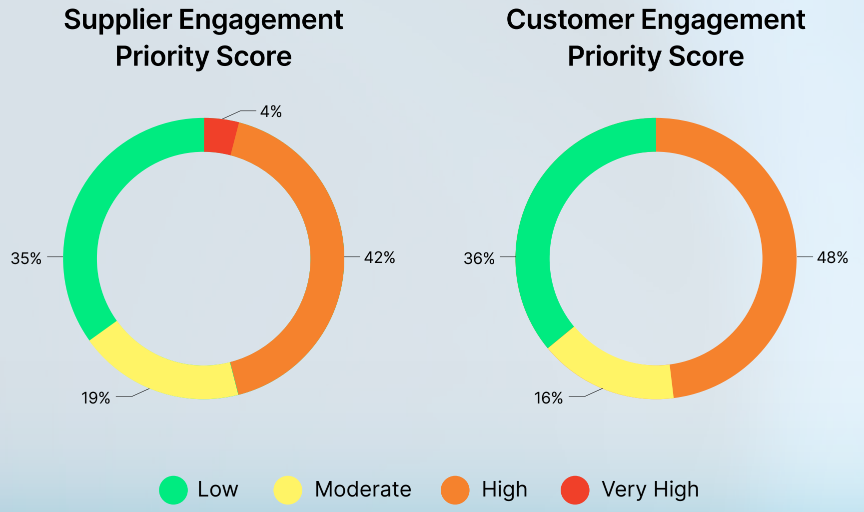
Supplier & customer analysis

In 2022, Nasdaq also analyzed the climate maturity of our key suppliers and customers to understand our exposure to other upstream and downstream climate-related transition risks. Suppliers and customers were selected based on their strategic importance to Nasdaq's operations and sales and were assessed across nine criteria – including their level of climate disclosure to initiatives like TCFD and CDP, their emissions targets, and the overall emissions intensity of their industry. Higher supplier maturity is associated with reduced risk of pass-through costs linked to carbon pricing; reduced risk of climate-related business disruption within the supply chain; and heightened opportunities for engagement on climate issues. Higher customer maturity is a signal of market stability and business continuity as regulations and markets increase their expectations of corporate climate disclosure and action. However, high customer maturity is also associated with heightened expectations on Nasdaq's climate performance, which could potentially increase reputational or market-based risk.

Overall, Nasdaq's exposure to transition risks through our suppliers and customers is considered moderate. A portfolio analysis of the assessed suppliers and customers revealed limited levels of climate maturity from many assessed companies, although overall risk is somewhat mitigated by the low emissions intensity of the financial services and data processing industries, and the advanced climate action of several key suppliers and customers. Companies with lower climate maturity scores are the highest priority in terms of supplier and customer engagement, with 4% of suppliers and no customers falling into the "Very High" category, respectively. The results of the analysis are shown in charts at right and will be used to inform Nasdaq's supplier and stakeholder engagement strategy moving forward.

Suppliers and Customer Analysis Results

Based on TCFD disclosures, emissions disclosures and targets (including Science-Based Targets), CDP disclosures, emissions intensity, potential reputational risk and use of internal carbon pricing.



Physical risks

We evaluated physical risks under three IPCC AR6 scenarios: SSP5-8.5, SSP2-4.5, and SSP1-2.6. The exposure of our entire global real estate portfolio, comprising offices and data centers, was assessed for both acute and chronic hazards.

- The SSP5-8.5 scenario covers a future where global industrial development continues its current trajectory. There is continued reliance on competitive markets to produce rapid technological progress, and global markets are increasingly integrated. There is a high reliance on fossil fuels, with emissions peaking around 2090 and global mean temperatures rising approximately 4.6°C by 2100. We applied this high emissions scenario to stress-test the exposure of our global real estate portfolio to physical hazards under a worst-case climate scenario.
- The SSP2-4.5 scenario covers a middle path, involving challenges to climate mitigation. In this scenario, environmental systems experience degradation, but overall, the intensity of resource and energy use declines. Global mean temperatures rise approximately 2.7°C by 2100. We applied this moderate emissions scenario to stress-test the exposure of our global portfolio to physical hazards under a less extreme climate scenario.
- The SSP1-2.6 scenario covers a best-case scenario where societies switch to more sustainable practices, with focus shifting from economic growth to overall well-being. Global mean temperatures rise approximately 1.8°C by 2100. We applied this low emissions scenario to stress-test the exposure of our global portfolio to physical hazards under the least extreme possible physical climate scenario.

Table 7 below provides a summary of the IPCC Physical Risk Analysis scenarios applied during our scenario analysis.

Table 7: Physical Risk scenarios applied to scenario analysis exercise

Intergovernmental Panel on Climate Change (IPCC)

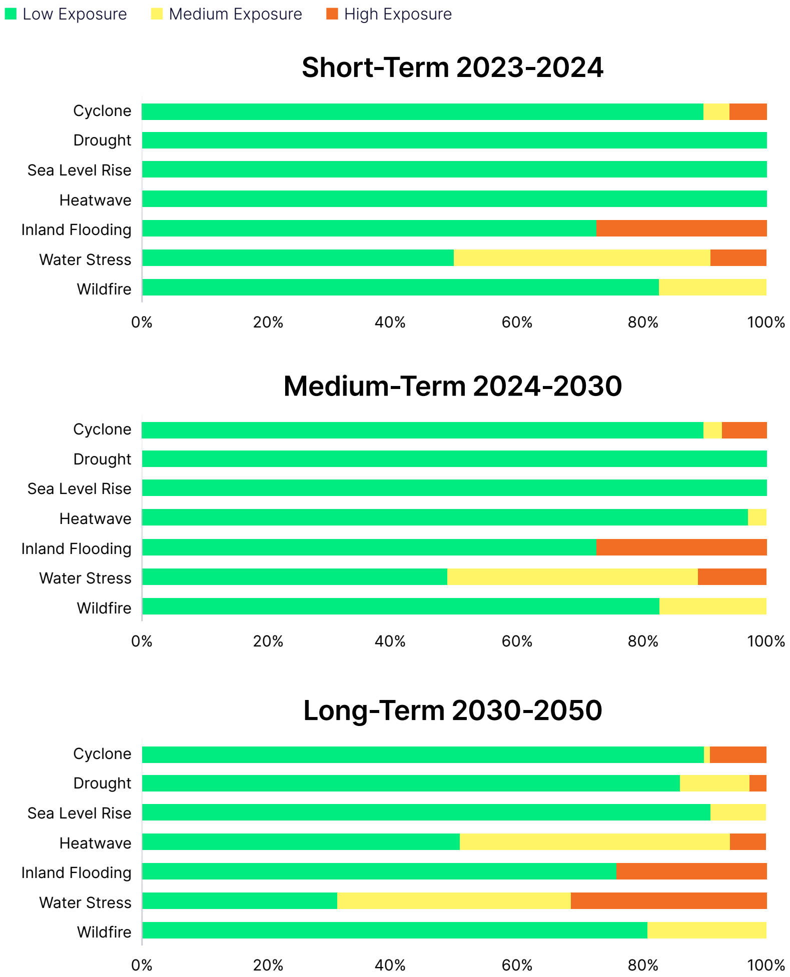
The IPCC's Sixth Assessment Report (AR6) defines a range of Shared Socio-Economic Pathways (SSPs) describing the socioeconomic trends underlying the scenarios, alongside the level of radiative forcing resulting from the scenario in the year 2100.

1. SSP1-2.6 (~1.6°C) Sustainability	2. SSP2-4.5 (~2.7°C) Middle of the Road	3. SSP5-8.5 (~4.2°C) Fossil-fueled development	
Description: Gradual, yet stringent global actions toward a more sustainable path and emissions mitigation	**Description:** Social, economic, and technological trends do not shift significantly from historical patterns, but resource use intensifies	**Description:** Continued exploitation of fossil fuel resources and the adoption of resource and energy intensive lifestyles around the world	**Physical Risk Scenarios Applied**
Outcome: This scenario is expected to result in global warming of 1.2°C by the end of the century, with a modeled temperature increase range of 1.1°C – 1.4°C. Physical risks are low.	**Outcome:** This scenario is expected to result in global warming of 2.7°C by the end of the century, with a modeled temperature increase range of 2.4°C – 2.9°C. Physical risks are intermediate.	**Outcome:** This scenario is expected to result in global warming of 4.2°C by the end of the century, with a modeled temperature increase range of 3.7°C – 5.0°C. Physical risks are high.	

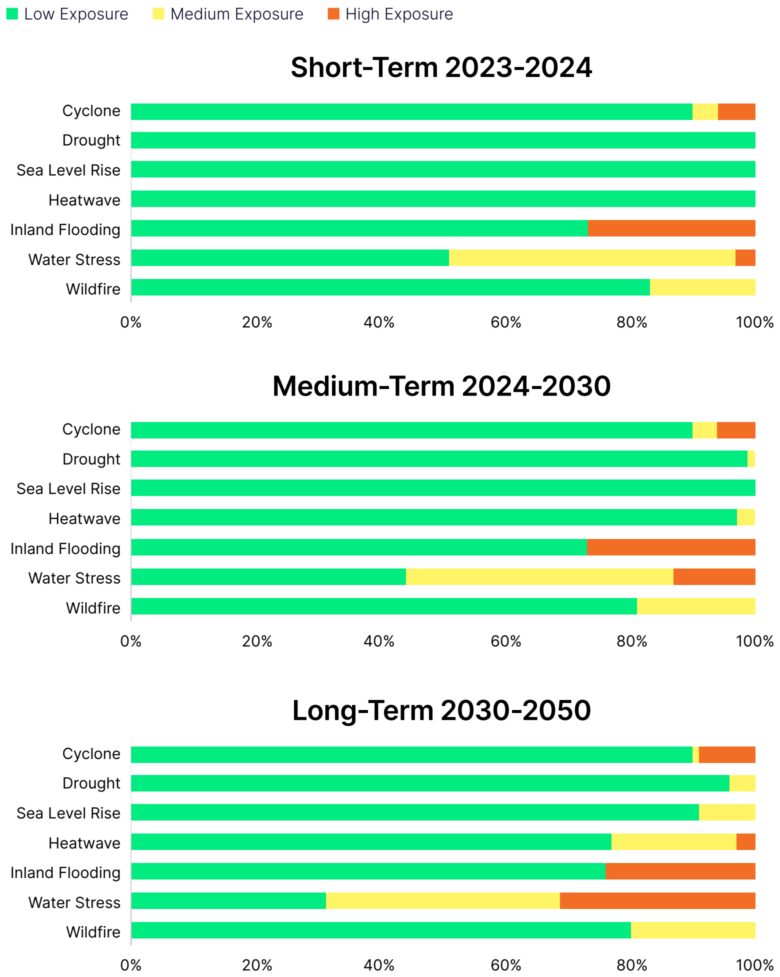
Asset-level results are aggregated to show the percentage of facilities at different levels of exposure, under each applied scenario and time horizon. For example, 100% of our global offices have low exposure to heatwaves over the short term (2023 to 2024), whereas 3% of our global offices have high exposure to drought over the long term (2030 to 2050). We have only disclosed the results from the SSP5-8.5 and SSP2-4.5 scenarios as these represent the highest risk scenarios for Nasdaq. Charts at right provide a breakdown of our physical climate risk exposure by geographic region.

Physical risks of Nasdaq's offices

SSP 5-8.5 (~4.2C) Scenario



SSP 2-4.5 (~2.7C) Scenario

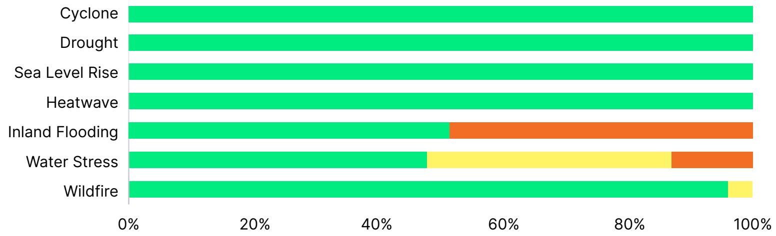


Physical risks of Nasdaq's data centers

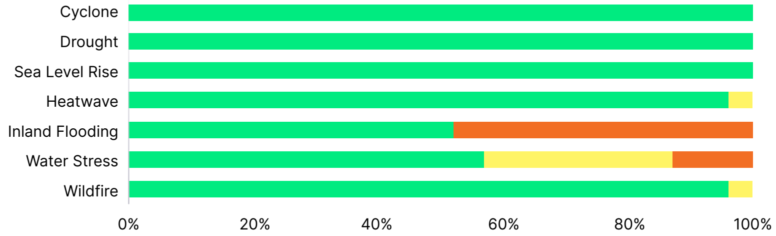
SSP 5-8.5 (~4.2C) Scenario

Low Exposure · Medium Exposure · High Exposure

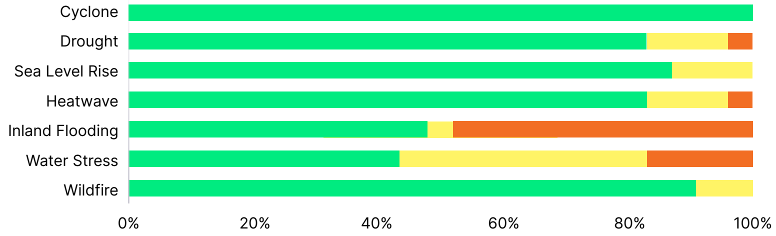
Short-Term 2023-2024



Medium-Term 2024-2030



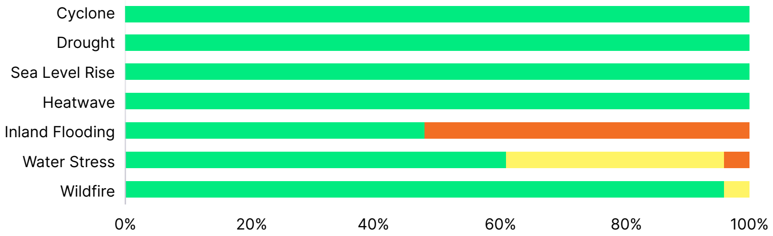
Long-Term 2030-2050



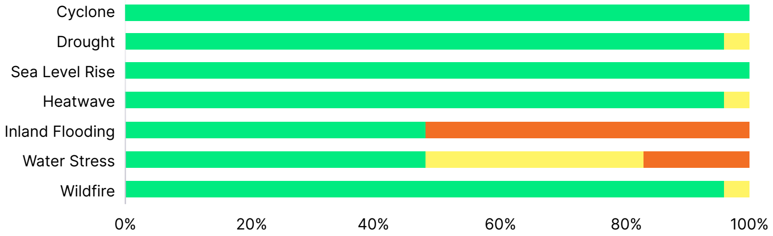
SSP 2-4.5 (~2.7C) Scenario

Low Exposure · Medium Exposure · High Exposure

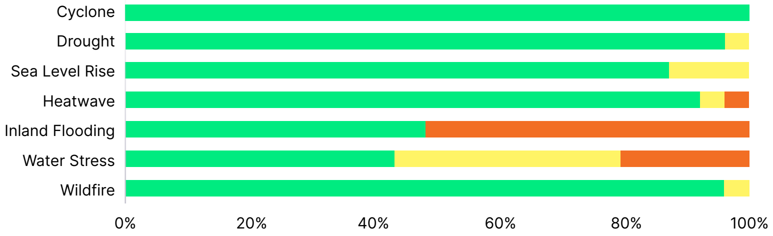
Short-Term 2023-2024



Medium-Term 2024-2030



Long-Term 2030-2050



Our analysis shows that over the long-term through 2050, the majority of assets that we presently control are expected to have low exposure to most physical climate hazards under a worst-case scenario. When comparing last year's physical scenario analysis to this year, Nasdaq's exposure to wildfires and inland flooding have increased the most in the short, medium and long term, while heatwave and drought risks have also increased in the long term. However, risks associated with sea level rise have decreased across all time frames, and increased exposure to wildfire risks is relatively small. These shifts are largely due to changes in methodology for calculating exposure to these risks from Nasdaq's physical risk data modeling provider. Although some risks from water stress and inland flooding could manifest even in the short term, Nasdaq has robust physical risk resilience measures in place that will largely mitigate these risks (see Table 1). These results also align with the distribution of physical climate risks by region: the geographic areas most at risk are North America and Europe due to Nasdaq's concentration of sites in these regions, with the most prevalent risks coming from water stress and inland flooding.

These climate scenario analysis results inform our risk management focuses and resiliency strategy, as detailed on page 34.

Geographic distribution of long-term climate risk exposure 2030-2050

Risk Management

Process for risk identification and assessment

Under the oversight of our Board and the leadership of Nasdaq's Group Risk Management (GRM) function, Nasdaq has established an Enterprise Risk Management (ERM) Framework to continuously identify, assess, manage, and monitor risks – including risks related to climate. The GRM function facilitates the execution of the ERM Framework across Nasdaq's Business Units and Expert Functions; coordinates risk management activities across the company; and aggregates and reports risk information on a regular basis to the company's leadership.

Through our Risk Taxonomy, Nasdaq classifies risks into the following five broad categories:

- Strategic and Business Risk
- Financial Risk
- Operational Risk
- Legal and Regulatory Risk
- Environmental, Social and Governance (ESG) Risk

Each risk category is associated with a unique risk appetite, which is the boundary within which our management operates while achieving corporate objectives. The risk appetite is set for each risk category by management and approved by the Audit & Risk Committee of the Board. In 2022, Nasdaq added ESG Risk to our Risk Taxonomy to formalize Nasdaq's consideration of ESG and climate issues across the company, although specific risks related to climate may fall under risk categories other than ESG Risk.

Nasdaq draws on a wide range of resources to consider the potential impacts of climate-related risks on a continuous basis across our business. Our integrated risk assessment program utilizes three separate yet related risk assessment components to support a holistic risk profile: Top-Down Risk Assessments, Bottom-Up Risk Assessments, and Scenario Risk Assessments. Nasdaq's Top-Down Risk Assessments engage senior management and consider the risks that could impede the Company's strategy. The results are shared with the Board through the Audit & Risk Committee on an annual basis.

Nasdaq is a frequent convener and host of large multi-stakeholder meetings and smaller workshop discussions, allowing for sharing climate-related knowledge across internal Business Units and stakeholder groups. Our active communication with investors, clients and other stakeholder groups has informed our understanding of the most consequential ESG issues for our business and highlighted relevant climate risks and opportunities.

Internally, climate risks and opportunities are identified through the engagement of the Corporate ESG Strategy and Reporting Team with various business units and expert functions. As part of Nasdaq's Bottom-Up Risk Assessments, in 2022 GRM developed our first formal climate risk assessment utilizing guidance from leading reporting frameworks like CDP. This assessment solicited feedback on Nasdaq's exposure to physical and transition climate risks from across Nasdaq's business units and exposure stemming from Nasdaq's key vendors. Going forward, this climate risk assessment will continue to be performed annually.

Our Procurement & Sourcing Team also contributes to Nasdaq's climate risk identification. We have requested our top suppliers to disclose their environmental data through the CDP Supply Chain program, providing insight into our carbon pricing risk exposure from these vendors; and we are exploring AI tools to assess suppliers' ESG-related risks (including reputational risks) both before and during engagement. In the future, Nasdaq intends to further enhance our ability to investigate supplier resiliency to climate risks, which may impact the company's risk exposure through third parties.

Finally, Nasdaq facility site managers are periodically surveyed to assess the vulnerability and resiliency of critical Nasdaq operating locations, considering factors including environmental changes and the likelihood and potential effects of an interruption to the location. These assessments incorporate Scenario Risk modeling of our facilities' exposure to climate hazards under both an intermediate emissions scenario (IPCC RCP 4.5) and high-emissions scenario (IPCC 8.5). Our Real Estate Advisory Team communicates all relevant climate risks to GRM as part of our annual risk assessment process.

Once a risk has been identified, Nasdaq uses an industry standard approach for assessing the risk's potential impacts and probability of materializing, and calibrates that risk using a Risk Rating Matrix which is reviewed annually and adjusted as needed.

Nasdaq's assessment methodology considers both financial and non-financial impacts (including Regulatory, Client, Operational, and Reputation), providing a consistent approach for Nasdaq to assess risks of all types, including climate-related risks. Financial impacts are considered both independently and in aggregate across the reporting year. Our Risk Rating Matrix methodology assigns a risk level of Low, Moderate, Elevated, or High for each assessed risk. Risk assessments inform our ESG strategy and business continuity planning as appropriate.

Management processes

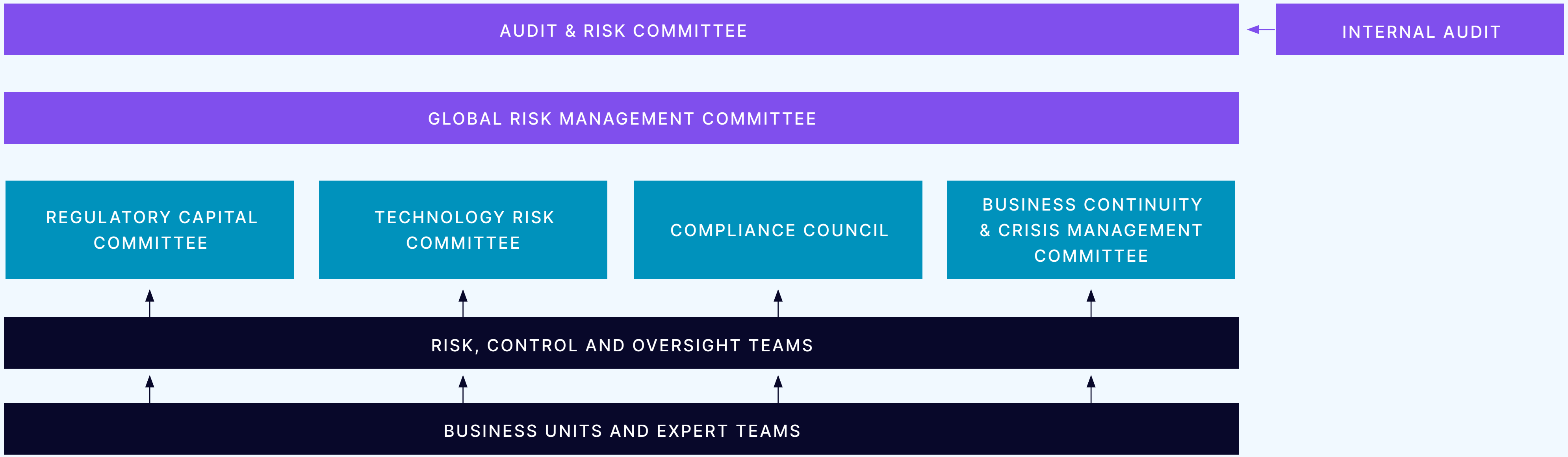
Nasdaq's Enterprise Risk Management Policy applies a "Three Lines of Risk Management" model, which defines each employee's risk management role and is based on the premise that every Nasdaq employee has responsibility for managing risk and which establishes internal controls, as well as guidance and standards to implement Nasdaq's risk management policy.

- First Line: Business units and expert functions – are responsible for maintaining a robust risk management and control environment.
- Second Line: GRM and other Oversight Functions – serves as an independent advisor to the First Line and defines the framework to direct and coordinate our risk management efforts including Business Continuity Management (BCM).
- Third Line: Internal Audit – provides an independent review of the First and Second lines to our executive leadership and our Board.

Our Global Risk Management Committee, which includes our CEO and other senior executives, assists the Board in our risk oversight role. It ensures that the ERM framework is appropriate and functioning as intended, and that the level of risk assumed by the Company is consistent with Nasdaq's strategy and risk appetite.

Other targeted risk management committees also address specific risks, geographic areas and/or subsidiaries. These risk committees, which include representatives from business units and expert functions, monitor current and emerging risks within their purview to ensure an appropriate level of risk. Together, the various risk management committees facilitate the timely escalation of material issues to the Global Risk Management Committee, which in turn may escalate critical issues to the Board.

Risk Oversight Organizational Structure



In developing BCPs, each business unit and expert function complete a Business Impact Analysis, which is a systemic process to determine and evaluate the potential effects of an interruption to critical business operations following a disaster (including climate-related disasters), accident, or emergency. Other risks determined as material to a business unit or expert function are integrated within the relevant BCP. The business units and expert functions, as the First Line, develop and review the BCPs at least annually. The GRM function, as the Second Line, reviews and challenges the BCPs to ensure the plans are comprehensive and mitigate the identified risks.

All Nasdaq BCPs incorporate a series of scenarios delineating climate-related risks and management processes – including those addressing extreme weather events – and criteria for the BCP to be invoked and communicated to employees. If a BCP is invoked, the event causing the invocation is reported as an incident in Nasdaq's Governance Risk and Compliance tool. The details of the incident, including the impact and actions taken, are captured. Lessons learned from the incident are tracked and inform future BCP iterations.

In 2021, Nasdaq expanded our business continuity management program by developing second-order BCPs – BCPs that would be invoked if a disruption were to occur wherein offices were to become unavailable and simultaneously our employees in that region could not work remotely. BCP coordinators have made BCPs available to employees through multiple forums, including a phone application that can be accessed in an emergency. These efforts serve to increase the resilience of our business operations and support our employees during a potential disruptive event.

Core components of the Business Continuity Management Framework, including the Business Impact Analysis, BCPs, Disaster Recovery Plans, and testing programs also inform our annual insurance renewal process. The Corporate Insurance program is reviewed and approved by the Global Risk Management Committee. Nasdaq's Legal team reviews the Corporate Insurance Program, engaging external counsel as appropriate.

Risk management integration

Nasdaq has implemented resiliency measures across the company to mitigate the risk of potential interruptions to business through unforeseen circumstances such as climate-related events. Nasdaq's data center infrastructure includes primary and secondary data centers to provide redundancy for critical systems. In addition, Nasdaq is actively moving infrastructure to the cloud.

Nasdaq has a globally distributed workforce which we believe provides an additional level of resiliency. Our BCPs outline the transfer of processes to alternate locations and/or regions. These plans have proven reliable in several recent events including extreme weather-related disruptions in Manila, Philippines; and potential operational disruptions in the Nordics and Baltics related to the availability and pricing of energy resulting from the crisis in Ukraine. Further, Nasdaq has transitioned to a hybrid work environment, wherein employees in applicable roles will have the ability to work both from home and the office. In the event of local power or connectivity disruptions, work-from-home employees are able to work from a nearby office which is equipped with backup power or can transfer their work to another location.

In 2022, Nasdaq implemented an EMS to govern the company's real estate and data center operations. The EMS is based on the ISO14001 structure, commonly recognized as the leading relevant international standard, and provides a framework to assist Nasdaq in achieving our environmental and sustainable objectives through consistent review, evaluation, and improvement of the company's environmental performance. Nasdaq's real estate strategy is governed by this new EMS, which ensures that environmental criteria are considered at every stage of the real estate lifecycle. This includes:

- Environmental criteria during site selection for new offices or data centers, including access to renewable energy, mass transit, and green certifications of potential sites;
- Green Leasing clauses;
- Global standards for design and performance;
- Operational and maintenance procedures and policies;
- Sustainable procurement and energy efficiency;
- GHG standards for suppliers; and
- Decommissioning of offices.

Nasdaq's Real Estate, Facilities & Security Team considers climate scenario risk analysis in leasing strategy, and business disruption is considered when determining lease length. We have largely shifted to shorter lease length, in order to minimize our exposure to physical climate risks. Moving forward, we will seek to have the EMS formally certified to the ISO14001 standard.

Metrics and Targets

Metrics to evaluate risks and opportunities

In 2022, Nasdaq received approval from SBTi for our science-based targets for ambitious emissions reductions across our emissions inventory. These targets are separated into near-term, long-term and net zero commitments:

Near-Term Targets

Nasdaq commits to reduce absolute Scope 1 and Scope 2 GHG emissions 100% by 2030 from a 2021 base year. Nasdaq also commits to continue annually sourcing 100% renewable electricity through 2030. Nasdaq further commits to reduce absolute Scope 3 GHG emissions 50% by 2030 from a 2021 base year. Finally, Nasdaq commits that 70% of our suppliers by spend covering purchased goods and services and capital goods will set science-based targets by 2027.

Long-Term Targets

Nasdaq commits to maintain a minimum of 100% absolute Scope 1 and 2 GHG emissions reductions from 2030 through 2050 from a 2021 base year. Nasdaq also commits to reduce absolute Scope 3 GHG emissions 95% by 2050 from a 2021 base year.

Overall Net Zero

Nasdaq commits to reach net-zero GHG emissions across the value chain by 2050 from a 2021 base year.

We expect to achieve our science-based targets through a variety of approaches including:

1. Increasing energy efficiency measures in our offices and data centers;
2. Continued sourcing of renewable energy;
3. Reducing employee commuting and business travel by enabling remote work; and
4. Working with our suppliers and customers to adopt sustainability and environmental practices in line with our targets.

2021

Our Baseline

Absolute market-based GHG emissions

78,876[1]

0.5

Total: 78,877 MT CO_2e

Scope 1 + 2 | Scope 3

1 2021 GHG emissions were recalculated to add Category 3 and Category 8 in order to align to our SBTi-approved base year.

2027

70% of our suppliers by spend will set their own science-based targets by 2027

2030

100% reduction of our absolute Scope 1 and Scope 2 emissions

50% reduction of our absolute Scope 3 emissions

100% renewable electricity through 2030

2050

Net Zero

100% maintain a minimum of 100% absolute Scope 1 and 2 emissions reduction

95% reduction of our absolute Scope 3 emissions

Continue to procure 100% renewable electricity

100%

Suppliers that had set or committed to set science-based targets in 2022

37.9% (2022) | 70% (2027)

GHG inventory and emissions reduction progress

We believe we have made significant strides in our efforts to reduce GHG emissions. In 2022, our total energy consumption decreased by nearly 14% from 2021, due to our optimized leasing strategy and improved data quality. We are continuing to invest in resource efficiency and expect to reduce our energy intensity while continuing to source renewable electricity. Our energy and GHG emissions performance trends are summarized below, and additional metrics are available in our 2022 Sustainability Report.

In 2022, we expanded our Scope 3 analysis to additional categories, including: 1) Scope 3, Category 3: Fuel- and Energy-Related Activities, and 2) Scope 3, Category 8: Upstream Leased Assets. The primary driver of the increase in emissions year over year in 2022 was an increase in emissions associated with business travel.

Tables at right summarize global emissions data for Nasdaq's office space, data centers, onsite combustion and other fuel- and energy-related activities, business travel, employee commuting, upstream goods, services, and assets, waste generation, and recycling/compost diversion for the current reporting period (January 1, 2022 through December 31, 2022), as compared to our baseline data from 2021. Emissions data was collected using the following methodology, listed in order of priority:

1. Full year of actual data of consumption by Nasdaq, considering only Nasdaq's tenancy, when operating within a multi-tenant building.
2. Full year of actual data for the entire building within which the Nasdaq space is located. Nasdaq's proportionate share of the consumption was then calculated by using the building's occupied square footage.
3. Where data was unavailable, estimates were calculated using assumptions based on site location, amenities within the space, rentable or actual square footage, and/or headcount.

Table at right reflects a further breakdown by category of our Scope 1, Scope 2 and Scope 3 emissions, with the following methodology enhancements from our 2021 report:

Scope 1: moved corporate card gasoline purchases from Scope 3 to Scope 1

Scope 2: inclusion of steam and district heating, resulting in an increase in market-based emissions

Scope 3: inclusion of acquisitional operational data from Verafin (acquired 2021) and Metrio (acquired 2022)

GHG Summary

		2022 Emissions (MT CO_2e)	2021 Emissions (MT CO_2e)	2020 Emissions (MT CO_2e)	Annual MT Difference 2022 vs 2021	Annual % Difference 2022 vs 2021
Scope 1	On-Site Combustion	52.5	0.5	2.7	52.0	NM[1]
	Sub-Total	**52.5**	**0.5**	**2.7**	**52.0**	**NM[1]**
Scope 2	Office Space Location-based	5,843	6,001[7]	7,027	-158	-2.6%
	Data Centers Location-based	11,251	12,812[7]	14,638	-1,561	-12.2%
	Office Space Market-based	149	0	0	149	0.0%
	Data Centers Market-based	0	0	0	0	0.0%
	Sub-Total (Location-based)	**17,094**	**18,813[7]**	**21,665**	**-1,719**	**-9.1%**
	Sub-Total (Market-based)	**149**	**0**	**0**	**149**	**0.00%**
Scope 3[2]	1. Purchased Goods & Services[3]	59,213	68,340	38,795	-9,127	-13.4%
	2. Capital Goods[3]	6,297	3,538	10,219	2,759	78.0%
	3. Fuel- & Energy-Related Activities	2,016	1,339[8]	N/A	677	50.6%
	5. Waste Generated in Operations	184	132	222	52	39.4%
	6. Business Travel[4]	14,325	1,636	3,493	12,689	775.6%
	7. Employee Commuting	1,319	993	2,841	326	32.8%
	8. Upstream Leased Assets[5]	223	859[8]	N/A	-636	-74%
	13. Downstream Leased Assets[6]	150	169	N/A	-19	-11%
	15. Investments	2,931	1,870	N/A	1,061	57%
	Sub-Total	**86,658**	**78,876[8]**	**55,570**	**7,782**	**9.9%**
Total (Location-based)		**103,805**	**97,690[7,8]**	**77,238**	**6,115**	**6.3%**
Total (Market-based)		**86,859**	**78,877[8]**	**55,573**	**7,982**	**10.1%**

Note: All the above emission data was calculated in accordance with the GHG Protocol guidelines.

[1] NM: Not Meaningful. While the percentage increase in Nasdaq's Scope 1 emissions is substantial, the gross total increase in YOY emissions remains minimal. The increase is due to methodology enhancement on moving corporate card gasoline purchases from Scope 3 to Scope 1. While the percentage increase in Nasdaq's Scope 1 emissions is substantial, the gross total increase in YOY emissions remains minimal. The increase is due to methodology enhancement on moving corporate card gasoline purchases from Scope 3 to Scope 1

[2] Categories 4, 9, 10, 11, 12, 14 were not included, as they are not applicable to Nasdaq's business operations.

[3] Scope 3, Category 1 & Category 2 only included tangible goods and services in 2020 and Scope 3, Category 1 & Category 2 included tangible and intangible goods and services in 2021 & 2022

[4] 2020 Scope 3, Category 6 travel data is limited to data provided by third party travel vendors. The data gathering process for 2021 & 2022 improved and now includes data provided by third party travel vendors and by corporate card spend

[5] Upstream leased assets include emissions from operation of assets leased by the company and not included in Scope 1 and 2

[6] Downstream leased assets include emissions from operations of assets leased to other entities.

[7] Our 2021 Scope 2 location-based emissions were recalculated from our prior reported 2021 Scope 2 emissions. For our 2022 and recalculated 2021 Scope 2 location-based emissions, we implemented a new, updated emissions methodology using location-specific emission factors for each of our U.S. locations, rather than a U.S. average emission factor.

[8] 2021 GHG emissions were recalculated to add Category 3 and Category 8 in order to align to our SBTi-approved base year

Sourcing renewable electricity

Nasdaq's electricity consumption is based on categorization of renewable or non-renewable electricity and indicates renewable energy certificates acquired by Nasdaq to balance non-renewable electricity consumption.

Nasdaq has procured 100% renewable electricity for our office space and data center portfolios since 2018. For 2022, our pre-negotiated renewable energy contracts accounted for over 84% of our annual global consumption, of which virtual power purchasing agreements account for 48% of our total consumption.

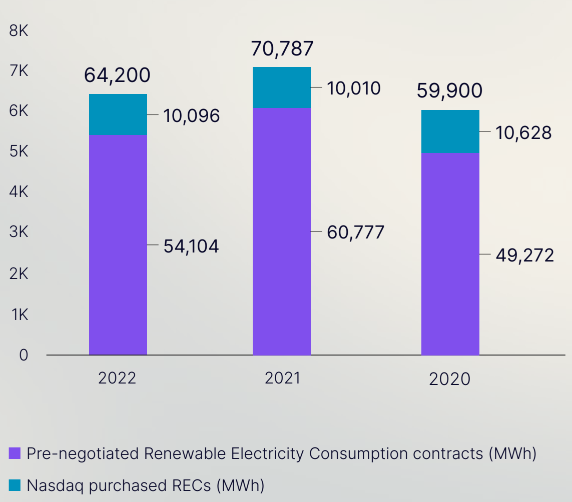
Intensity metrics

The table at right shows Nasdaq's emissions and energy intensity per full-time employee (FTE) and per million dollars of revenue. Despite an increase in employees, our energy intensity declined due to a reduction in energy consumption.

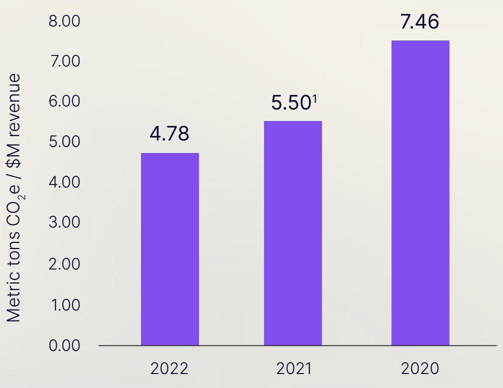
Our Scope 3 business travel emissions per full-time employee has increased in 2022 business operations returned to pre-pandemic levels and we experienced an increase in business travel, approaching levels similar to those of 2019.

Metric	2022	2021	2020	% Change (2021 Baseline to 2022 Current Reporting Year)
Number of full-time employees	6,377	5,814	4,830	10%
Million USD net revenue	3,582	3,420	2,903	5%
Absolute energy consumption (MWh) (Scopes 1 & 2)	64,882	75,143	62,364	-14%
Energy Intensity (MWh / FTE)	10.2	12.9	12.9	-21%
Total Scope 1 and Scope 2 (location-based) emissions per $ million revenue	4.78	5.50	7.46	-13%
Total GHG emissions (location-based) per $ million revenue	28.98	28.56	26.61	1%
Scope 3 business travel emissions per FTE	2.25	0.28	0.72	704%

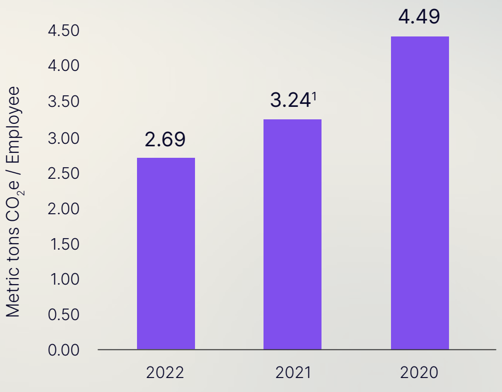
Nasdaq's Scope 2 Electricity Consumption



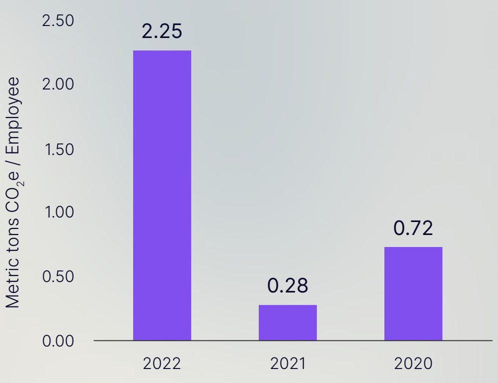
Intensity Metric for Scope 1 and Scope 2 (Location-based) Emissions per $ million revenue



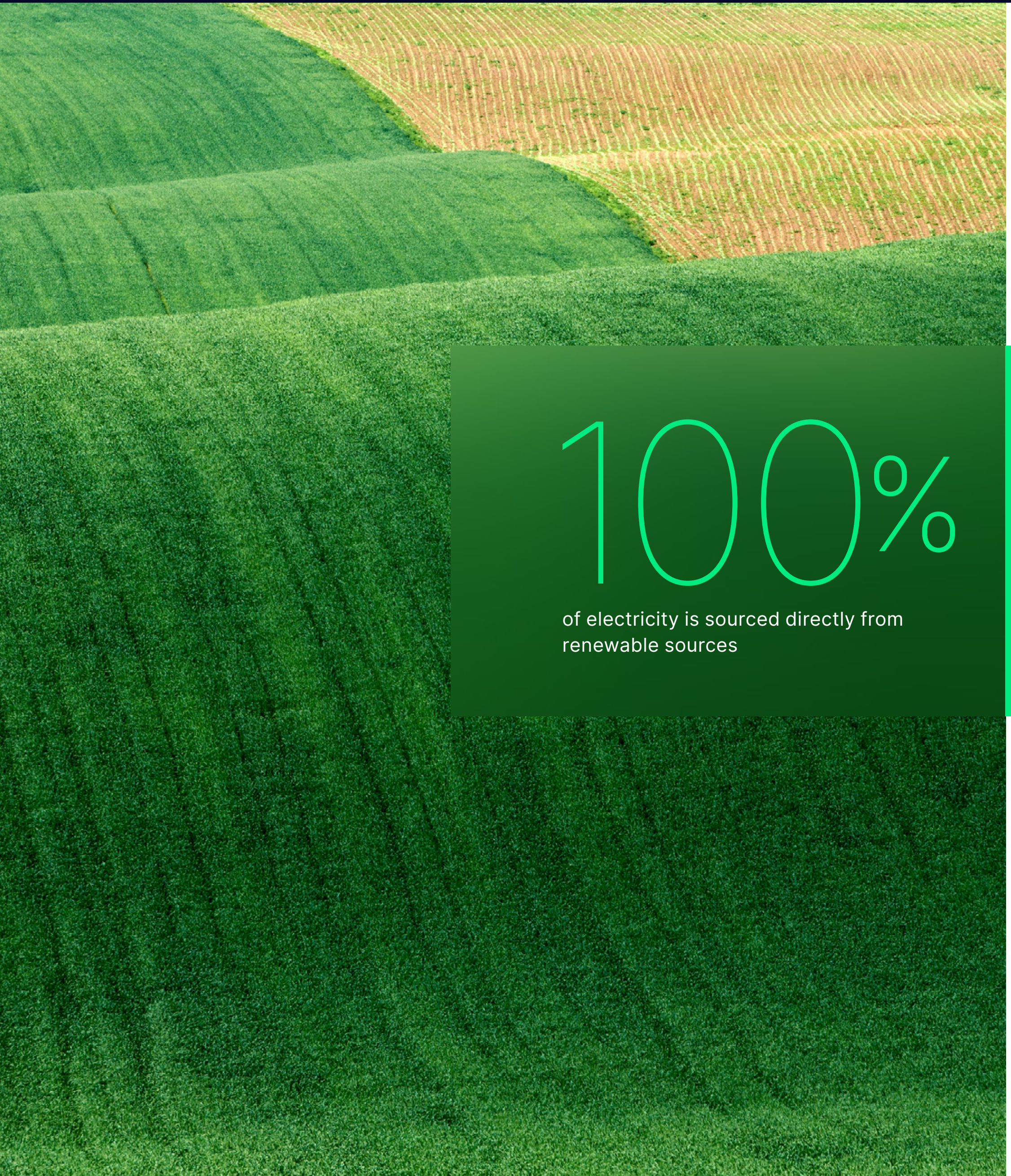
Intensity Metric for Scope 1 and Scope 2 (Location-based) Emissions per Full-Time Employee



Intensity Metric for Scope 3 Business Travel Emissions per Employee



[1] Our 2021 Scope 2 location-based emissions were recalculated from our prior reported 2021 Scope 2 emissions. For our 2022 and recalculated 2021 Scope 2 location-based emissions, we implemented a new, updated emissions methodology using location-specific emission factors for each of our U.S. locations, rather than a U.S. average emission factor.



100%

of electricity is sourced directly from renewable sources

Climate-related targets

As detailed earlier in this report, our Science-Based Targets that were approved in 2022 reflect our dedication to a low-carbon economy. Our efforts related to science-based targets are expected to reduce our exposure to transition risks across policy & legal, market, technology, and reputational risk categories.

In 2022, we again achieved carbon neutrality. This was attained through the purchase of carbon offsets, after accounting for the sourcing of renewable electricity. This year represents the fifth consecutive year of Nasdaq's Carbon Neutrality program, applied across our Scope 1, Scope 2, and relevant Scope 3 emissions. We have also committed to sourcing 100% of our electricity directly from renewable sources, and procuring Renewable Energy Certificates where this is not possible.

Since 2018, we have sought to account for additional categories of Scope 3 emissions. We aim to eventually be able to effectively report all of our upstream and downstream emissions, and continue to fully offset these amounts to remain carbon neutral based on reported emissions. We seek to follow current best practices by only sourcing carbon offsets from projects that focus on carbon removal rather than carbon avoidance.

We are committed to ongoing enhancement of disclosures in accordance with the TCFD recommendations and engaging with our market participants to support the shift towards more sustainable and inclusive capital markets. Beyond our internal efforts, we are working to encourage our suppliers to adopt sustainability and environmental practices in line with our Environmental Practices Statement and our Supplier Code of Ethics and report on their decarbonization efforts through CDP.

In 2022, we achieved Green Building Council Certification for eight more of our offices, which increases our entire real estate portfolio to over 55% Green Certified. We spent approximately $138,000 on LEED certification and building improvements throughout 2022. By 2030, we aim to have achieved Green Building Council Certification for all of our key offices.

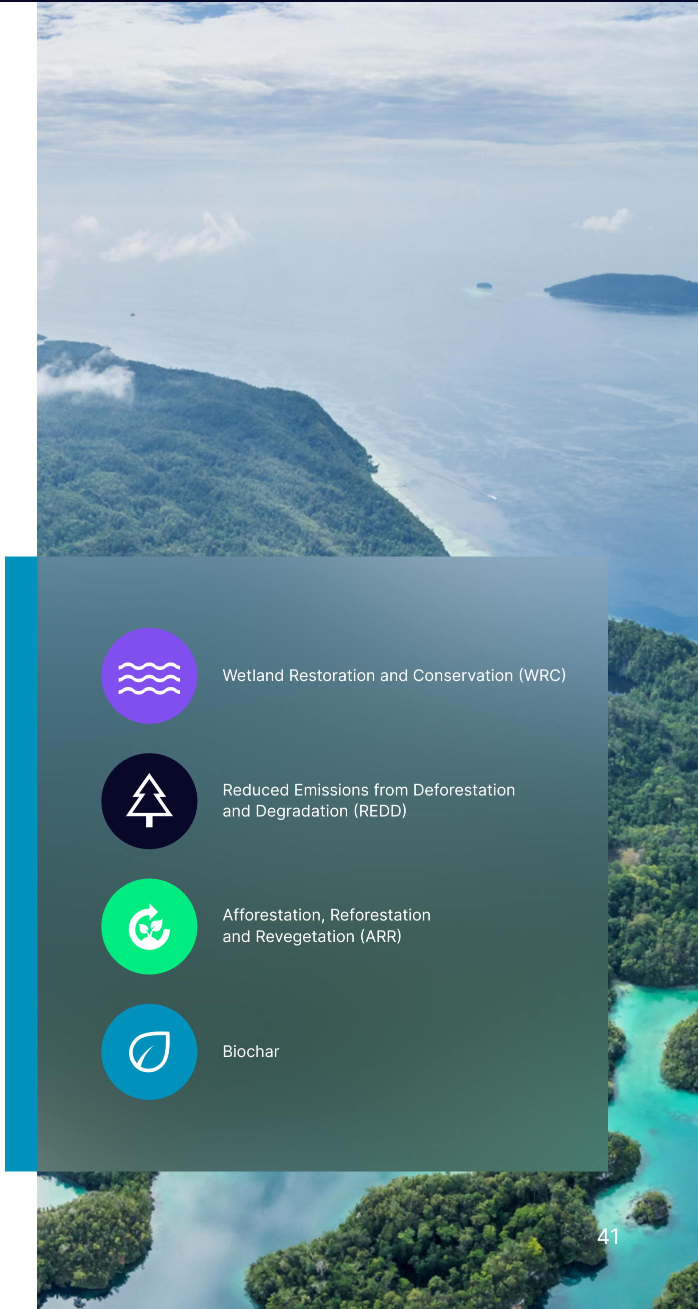
Carbon offsetting strategy

Our focus is to reduce our GHG emissions to reach our science-based targets, but we also strive to ensure that we are neutralizing our emissions as we transition to becoming net-zero. As part of our carbon neutrality program, we plan to:

- Establish a long-term strategy for our estimated net-zero residual emissions and build a portfolio of high-quality engineered carbon dioxide removal projects with proven permanence and that have been certified by the ICROA endorsed Puro standard; and
- Offset Nasdaq's remaining emissions as we move towards achieving our science-based net-zero target, utilizing a combination of high-quality nature-based carbon offset projects that preserve or enhance carbon storage and strengthen the biodiversity of our global forest networks verified by ICROA endorsed standards.

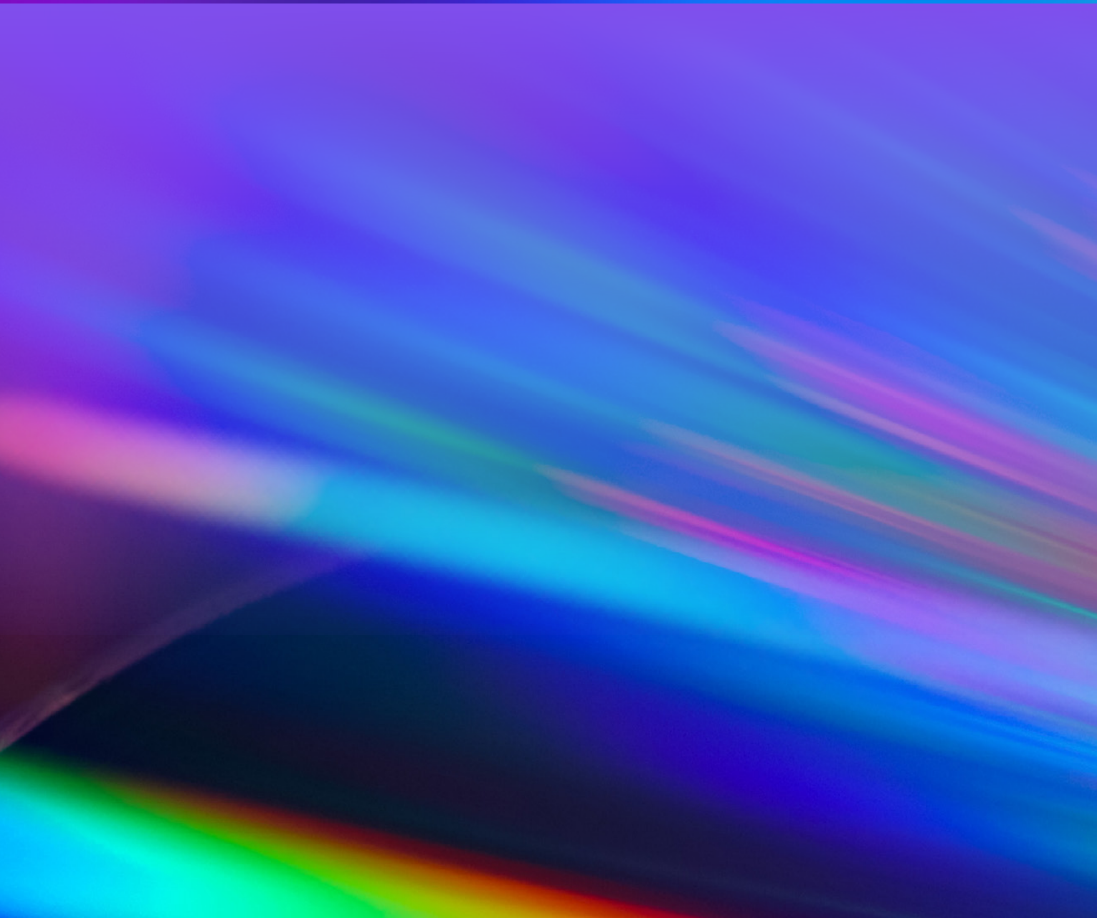
In 2022, we purchased carbon offsets to neutralize our 2022 residual GHG emissions from projects as summarized below:

Project	Standard	Location	Project Type	Description
Aperam BioEnerbia Biochar	puro.earth	Brazil		The project uses biomass residue to sequester carbon dioxide in biochar for use in soil amendment in forest crops and it runs a charcoal operation with emissions control in the northeast region of Minas Gerais, Brazil. The addition of biochar helps improve soil properties and water retention in the soil. The project also supports social development programs that support local farmers.
Katingan Peatland Restoration and Conservation project	Verified Carbon Standard A VERRA STANDARD; Climate, Community & Biodiversity Standards	Indonesia		The project aims to tackle climate change by restoring and protecting peatland ecosystems, enhancing biodiversity and offering local people sustainable sources of income. In addition to peatlands preservation, this project aims to reforest through three programs: community-led agroforestry, fire break implementation and intensive reforestation. The team will grow saplings in on-site nurseries and conduct regular maintenance to improve the rate of tree survival.
Degraded Grassland Afforestation Project	Verified Carbon Standard A VERRA STANDARD; Climate, Community & Biodiversity Standards	Colombia		The project aims to recover degraded grasslands in Vichada, Colombia, through afforestation activities to recover degraded lands. The project plans to promote connectivity between ecosystems by improving soil quality, enhancing biodiversity and reducing freshwater withdrawal. The project generates benefits for the local population, by providing employment opportunities and education.
Tambopata-Bahuaja Biodiversity Reserve	Verified Carbon Standard A VERRA STANDARD; Climate, Community & Biodiversity Standards	Peru		The project aims to conserve high biomass density tropical forest against deforestation in Tambopata National Reserve (RNTAMB) and the sector of Bahuaja-Sonene National Park (PNBS) located in Madre de Dios region. The project is located in a key biodiversity area and endemic bird area, with high ecological and sociocultural significance.



Nasdaq’s Plans

Nasdaq aims to continue building further capacity for enhancing disclosures against the TCFD recommendations in terms of detail, and complexity of analysis. Our future plans for our TCFD disclosures fall under two key objectives:



Meet our ambitious emissions reduction targets

Nasdaq’s Science Based Targets and commitments were formally approved by SBTi in 2022, so our focus going forward will be on ensuring we are on track to meet these targets. This will involve continuing to monitor our GHG emissions on a regular basis, identifying opportunities to reduce our Scope 1 and 2 emissions through improved energy efficiency measures, engaging with suppliers to encourage them to develop and set their own Science Based Targets, and further refining our carbon offsetting strategy.

Support clients in achieving their ESG objectives

Nasdaq is fully committed to continuing our ESG efforts and to supporting the shift towards more sustainable and inclusive capital markets. As such, we are dedicated to developing and expanding our ESG-related products and services and sharing our issuers’ perspectives with the industry and regulators. Continuing the trend of the past several years, we expect demand for ESG-related products and services to further grow and for associated opportunities to become more prevalent. In addition to expanding the scope of our current ESG product and service offerings, we anticipate continuing to invest in emerging companies in the ESG products and services space, as this is a rapidly growing market sector ripe with innovation.

Appendix

Strategy

Physical risks of Nasdaq's offices

SSP 5-8.5 (~4.2C) Scenario

Short-Term 2023-2024

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	83%	50%	73%	100%	100%	100%	90%
Med. Exposure	17%	41%	0%	0%	0%	0%	4%
High Exposure	0%	9%	27%	0%	0%	0%	6%

Medium-Term 2024-2030

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	83%	49%	73%	97%	100%	100%	90%
Med. Exposure	17%	40%	0%	3%	0%	0%	3%
High Exposure	0%	11%	27%	0%	0%	0%	7%

Long-Term 2030-2050

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	81%	31%	76%	51%	91%	86%	90%
Med. Exposure	19%	37%	0%	43%	9%	11%	1%
High Exposure	0%	31%	24%	6%	0%	3%	9%

SSP 2-4.5 (~2.7C) Scenario

Short-Term 2023-2024

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	83%	51%	73%	100%	100%	100%	90%
Med. Exposure	17%	46%	0%	0%	0%	0%	4%
High Exposure	0%	3%	27%	0%	0%	0%	6%

Medium-Term 2024-2030

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	81%	44%	73%	97%	100%	99%	90%
Med. Exposure	19%	43%	0%	3%	0%	1%	4%
High Exposure	0%	13%	27%	0%	0%	0%	6%

Long-Term 2030-2050

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	80%	27%	76%	77%	91%	96%	90%
Med. Exposure	20%	41%	0%	20%	9%	4%	1%
High Exposure	0%	31%	24%	3%	0%	0%	9%

Physical risks of Nasdaq's Data Centers

SSP 5-8.5 (~4.2C) Scenario

Short-Term 2023-2024

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	96%	48%	52%	100%	100%	100%	100%
Med. Exposure	4%	39%	0%	0%	0%	0%	0%
High Exposure	0%	13%	48%	0%	0%	0%	0%

Medium-Term 2024-2030

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	96%	57%	52%	96%	100%	100%	100%
Med. Exposure	4%	30%	0%	4%	0%	0%	0%
High Exposure	0%	13%	48%	0%	0%	0%	0%

Long-Term 2030-2050

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	91%	43%	48%	83%	87%	83%	100%
Med. Exposure	9%	39%	4%	13%	13%	13%	0%
High Exposure	0%	17%	48%	4%	0%	4%	0%

SSP 2-4.5 (~2.7C) Scenario

Short-Term 2023-2024

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	96%	61%	48%	100%	100%	100%	100%
Med. Exposure	4%	35%	0%	0%	0%	0%	0%
High Exposure	0%	4%	52%	0%	0%	0%	0%

Medium-Term 2024-2030

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	96%	48%	48%	96%	100%	96%	100%
Med. Exposure	4%	35%	0%	4%	0%	4%	0%
High Exposure	0%	17%	52%	0%	0%	0%	0%

Long-Term 2030-2050

	Wildfire	Water Stress	Inland Flooding	Heatwave	Sea Level Rise	Drought	Cyclone
Low Exposure	96%	43%	48%	91%	87%	96%	100%
Med. Exposure	4%	35%	0%	4%	13%	4%	0%
High Exposure	0%	22%	52%	4%	0%	0%	0%

Geographic distribution of long-term climate risk exposure under SSP5-8.5

	North America	Europe	Asia	Australia
# of Sites with at least one high exposure rating in the long term (2030-2050)	29	13	5	4
Total # of Sites	48	32	9	4
Most Prevalent Type of Risk(s)	Water stress Inland flooding	Inland flooding	Water stress Cyclones	Water stress

Annual Cost of Nasdaq's Scope 1, 2 and 3 GHG Emissions*

(expressed as a percentage of 2022 Net Income Attributable to Nasdaq)

		2020	2025	2030	2035	2040	2045	2050
Carbon Pricing Scenario	Net Zero 2050	0%	0.36%	0.31%	0.30%	0.25%	0.23%	0.13%
	Divergent Net Zero	0%	1.26%	0.79%	0.67%	0.56%	0.48%	0.24%
	Delayed Transition	0%	0%	0%	0.17%	0.17%	0.15%	0.10%

*Based upon carbon pricing scenario analysis using NGFS Net Zero 2050, Divergent Net Zero, and Delayed Transition global carbon prices, and Nasdaq's 2022 Scope 1, 2 and 3 Emissions and projected emissions under Nasdaq's Science-Based Targets. A discount rate of 2% applied to calculate present value annual cost of emissions. 2022 net income attributable to Nasdaq as shown on 2022 Form 10-K.

Suppliers and Customer Analysis Results

Based on TCFD disclosures, emissions disclosures and targets (including Science-Based Targets), CDP disclosures, emissions intensity, potential reputational risk and use of internal carbon pricing.

Supplier Engagement Priority Score	% of Critical Suppliers
Very High	4%
High	42%
Moderate	19%
Low	35%

Customer Engagement Priority Score	% of Key Customers
Very High	0%
High	48%
Moderate	16%
Low	36%

Metrics and Targets

Intesity Metric for Scope 1 and Scope 2

(Location-Based) Emissions per million USD net revenue

Emissions	2022	2021	2020
Metric tons CO_2e	4.78	5.50[1]	7.46

Intesity Metric for Scope 1 and Scope 2

(Location-Based) Emissions per Full-Time Employee

Emissions	2022	2021	2020
Metric tons CO_2e	2.69	3.24[1]	4.49

Intesity Metric for Scope 3

Business Travel Emissions per Employee

Emissions	2022	2021	2020
Metric tons CO_2e	2.25	0.28	0.72

[1] Our 2021 Scope 2 location-based emissions were recalculated from our prior reported 2021 Scope 2 emissions. For our 2022 and recalculated 2021 Scope 2 location-based emissions, we implemented a new, updated emissions methodology using location-specific emission factors for each of our U.S. locations, rather than a U.S. average emission factor.

Nasdaq's Electricity Consumption

Scope 2 Electricity Consumption	2022	2021	2020
Pre-negotiated Renewable Energy contracts (MWh)	54,104	60,777	49,272
Nasdaq purchased RECs (MWh)	10,096	10,010	10,628
Total Electricity Consumption (MWh)	**64,200**	**70,787**	**59,900**

In the table above:

- Percentage of total operational spending on energy (most recent reporting year): More than 5% less than 10%.
- No energy was sold in the reporting periods.
- Source of Conversion factors used: https://www.eia.gov/energyexplained/units-and-calculators/energy-conversion-calculators.php
- Whenever possible, Nasdaq's actual energy consumption was included in the calculation; otherwise, a proportional share was determined using occupied square footage. If energy data was completely unavailable, estimates were based on office location, amenities, square footage and headcount.

Assurance Statement

Independent Limited Assurance Statement on Nasdaq's GHG Emissions, Energy Consumption and Employee Data

LRQA verified Nasdaq's 2022 greenhouse gas emissions (including Scope 1, Scope 2 and all applicable upstream and downstream Scope 3 emissions) energy consumption, and social data (related to employee workforce, turnover and hires) to a limited level of assurance. More details on the scope, standards and LRQA's conclusion can be found in the assurance statement on right and available for download on our ESG Resource Center.

LRQA

LRQA Independent Assurance Statement

Relating to Nasdaq's GHG Emissions and Social Metrics for the CY2022

This Assurance Statement has been prepared for Nasdaq, Inc. (Nasdaq) in accordance with our contract.

Terms of Engagement

LRQA was commissioned by Nasdaq to provide independent assurance of its greenhouse gas (GHG) emissions inventory and social metrics for the Calendar Year (CY) 2022, and restatement of Base Year CY 2021 ("the Inventory") against the assurance criteria below to a limited level of assurance and materiality of 5% using LRQA's verification procedure based on ISO 14064 - Part 3 for greenhouse gas emissions. LRQA's verification procedure is based on current best practise and is in accordance with ISAE 3000 and ISAE 3410.

Our assurance engagement covered all activities under Nasdaq's operational control in its global operations and specifically the following requirements:

- Verifying conformance with:
  - Nasdaq's reporting methodologies for the selected datasets; and
  - World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol: A corporate accounting and reporting standard, revised edition (otherwise referred to as the WRI/WBCSD GHG Protocol) for the GHG data[1].
- Evaluating the accuracy and reliability of data and information for only the selected indicators listed below:
  - Direct (Scope 1), Energy Indirect (Scope 2) and Other Indirect (Scope 3) GHG emissions;
    - Scope 3 GHG emissions verified by LRQA consist of Category 1 Purchased Goods & Services, Category 2 Capital Goods, Category 3 Fuel and Energy Related Activities, Category 5 Waste Generated in Operations, Category 6 Business Travel, Category 7 Employee Commuting, Category 8 Upstream Leased Assets, Category 13 Downstream Leased Assets, and Category 15 Investments;
  - Energy Consumed;
  - Social Metrics CYs 2021 & 2022; and
  - Base Year CY 2021 Restatement.

Aside from the Scope 3 emissions categories listed above, our assurance engagement excluded the data and information of Nasdaq's suppliers, contractors and any third-parties mentioned in the Inventory.

LRQA's responsibility is only to Nasdaq. LRQA disclaims any liability or responsibility to others as explained in the end footnote. Nasdaq's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the Inventory and for maintaining effective internal controls over the systems from which the Inventory is derived. Ultimately, the Inventory has been approved by, and remains the responsibility of Nasdaq.

LRQA's Opinion

Based on LRQA's approach, except for the effect of the matters described in the Basis for Qualified Opinion, nothing has come to our attention that would cause us to believe that Nasdaq has not, in all material respects:

- Met the requirements of the criteria listed above; and
- Disclosed accurate and reliable performance data and information as summarized in Tables 1-3 below.

The opinion expressed is formed on the basis of a limited level of assurance[2] and at the materiality of 5%.

[1] *http://www.ghgprotocol.org/*

[2] The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

LRQA

Basis for Qualified Opinion

- Nasdaq has not calculated business travel emissions consistently from its data streams. This non-conformance is not material.

Table 1. Summary of Nasdaq's Key GHG Emissions Data for CY 2022:

Metric	Quantity	Unit
Scope 1 GHG emissions	53	Tonnes CO_2e
Scope 2 GHG emissions (Location-based)[1]	17,094	Tonnes CO_2e
Scope 2 GHG emissions (Market-based)[1]	149	Tonnes CO_2e
Scope 3 Category 1 Purchased Goods & Services	59,213	Tonnes CO_2e
Scope 3 Category 2 Capital Goods	6,297	Tonnes CO_2e
Scope 3 Category 3 Fuel and Energy Related Activities	2,016	Tonnes CO_2e
Scope 3 Category 5 Waste Generated in Operations	184	Tonnes CO_2e
Scope 3 Category 6 Business Travel	14,325	Tonnes CO_2e
Scope 3 Category 7 Employee Commuting	1,319	Tonnes CO_2e
Scope 3 Category 8 Upstream Leased Assets	223	Tonnes CO_2e
Scope 3 Category 13 Downstream Leased Assets	150	Tonnes CO_2e
Scope 3 Category 15 Investments	2,931	Tonnes CO_2e
Energy Consumed	64,882	MWh
Note 1: Scope 2, Location-based and Scope 2, Market-based are defined in the WRI/WBCSD GHG Protocol Scope 2 Guidance, 2015		

Table 2. Summary of Nasdaq's Restated Data for Base Year CY 2021:

Metric	Quantity	Unit
Scope 1 GHG emissions	0.49	Tonnes CO_2e
Scope 2 GHG emissions (Location-based)[1]	18,813	Tonnes CO_2e
Scope 2 GHG emissions (Market-based)[1]	0	Tonnes CO_2e
Note 1: Scope 2, Location-based and Scope 2, Market-based are defined in the WRI/WBCSD GHG Protocol Scope 2 Guidance, 2015		

Table 3. List of Nasdaq's Social Metrics[1] Verified by LRQA for CYs 2021 & 2022:

Metric
Global Workforce by Gender
Regional Breakdown of Workforce by Gender
Workforce Gender by Level
Workforce Gender by Age
Workforce Gender at the Managerial Level
Workforce by Race and Ethnicity (U.S. Only)
Workforce by Race and Ethnicity at the Managerial Level (U.S. Only)
Workforce Seniority by Race and Ethnicity (U.S. Only)
Workforce by Race and Ethnicity by Age (U.S. Only)
Employee Turnover (Overall; by Gender; by Level, by Race and Ethnicity [U.S. Only])
New and Internal Hires (Overall; by Age; by Gender; by Level, by Race and Ethnicity [U.S. Only])
Global Workforce by Gender
Note 1: LRQA verified data and information provided in file *Social Data.docx* and *Workday Report.xlsx* received March 13, 2023

LRQA

LRQA's Approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- interviewing relevant employees of the organization responsible for managing GHG emissions, energy and social data and records;
- assessing Nasdaq's GHG, energy and social data management systems to confirm they are designed to prevent significant errors, omissions or mis-statements in the Inventory;
- verifying historical GHG emissions, energy and social data and records at an aggregated level for the calendar year 2022; and
- confirming Nasdaq's adherence to its Base Year Recalculation Policy.

LRQA's Standards, Competence and Independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition* and ISO/IEC 17021 *Conformity assessment – Requirements for bodies providing audit and certification of management systems* that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

Signed Dated: 26 May 2023

Kate Pagan

Kate Pagan
LRQA Lead Verifier
On behalf of LRQA, Inc.
2101 CityWest Blvd, Houston, TX 77042

LRQA reference: UQA00002005/ 6001952

Disclaimers

This report focuses on Nasdaq's operations from January 1, 2022, through December 31, 2022, unless otherwise indicated. The report uses qualitative descriptions and quantitative metrics to describe our policies, programs, practices and performance. Note that many of the standards and metrics used in preparing this report continue to evolve and are based on management assumptions believed to be reasonable at the time of preparation, but should not be considered guarantees. In addition, historical, current and forward-looking sustainability-related statements may be based on standards for measuring progress that are still developing, internal controls and processes that continue to evolve and assumptions that are subject to change in the future. The information and opinions contained in this report are provided as of the date of this report and are subject to change without notice. Nasdaq does not undertake to update or revise any such statements. The information included in and any issues identified as material for purposes of, this document may not be considered material for SEC reporting purposes. In the context of this disclosure, the term "material" is distinct from and should not be confused with, such term as defined for SEC reporting purposes.

The information and data in this report cover Nasdaq's owned and operated businesses and does not address the performance or operations of our suppliers or contractors unless otherwise noted.

The report includes information on topics that we have identified as significant impact topics relating to ESG matters based on our 2022 ESG materiality assessment. For more information on our significant impact process, please see page 15 of this report. All financial information is presented in U.S. dollars unless otherwise noted.

This report contains forward-looking statements relating to Nasdaq's operations that are based on management's current expectations, estimates and projections. See the "Cautionary Note Regarding Forward-Looking Statements" below.

Therefore, the actual conduct of our activities, including the development, implementation or continuation of any program, policy or initiative discussed or forecasted in this report, may differ materially in the future. As with any projections or estimates, actual results or numbers may vary.

Cautionary Note Regarding Forward-Looking Statements

Information set forth in this communication contains forward-looking statements that involve a number of risks and uncertainties. This report contains forward-looking statements relating to Nasdaq's operations that are based on management's current expectations, estimates and projections regarding the ESG matters described in this report. Words or phrases such as "can", "aims", "expect", "intends", "plans", "targets", "believes", "seeks", "may", "could", "should", "will", "goals", "objectives", "strategies", "opportunities" and similar expressions are intended to identify such forward-looking statements.

Nasdaq cautions readers that any forward-looking information is not a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking information. Such forward-looking statements include, but are not limited to (i) statements about our climate, ESG or sustainability policies, programs, products or initiatives, (ii) projections relating to our future financial results, total shareholder returns, growth, trading volumes, products and services, order backlog, taxes and achievement of synergy targets, (iii) statements about the closing or implementation dates and benefits of certain acquisitions or divestitures and other strategic, restructuring, technology, de-leveraging and capital return initiatives, (iv) statements about our integrations of our recent acquisitions, and (v) other statements that are not historical facts. Forward-looking statements involve a number of risks, uncertainties or other factors beyond Nasdaq's control. These factors include, but are not limited to, Nasdaq's ability to implement our strategic initiatives, economic, political and market conditions and fluctuations, government and industry regulation, interest rate risk, U.S. and global competition and other factors detailed in Nasdaq's filings with the U.S. Securities and Exchange Commission, including its most recent Form 10-K and quarterly reports on Form 10-Q, which are available on Nasdaq's investor relations website at ir.nasdaq.com and the SEC's website at www.sec.gov. Nasdaq undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

Website Disclosure

Nasdaq intends to use its website, ir.nasdaq.com, as a means for disclosing material non-public information and for complying with SEC Regulation FD and other disclosure obligations.