

Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

NVIDIA pioneered accelerated computing to tackle challenges no one else can solve. Our work in AI and the metaverse is transforming the world's largest industries and profoundly impacting society. Read more: <https://www.nvidia.com/en-us/about-nvidia/>

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 31, 2022

End date

January 29, 2023

Indicate if you are providing emissions data for past reporting years

No

C0.3

(C0.3) Select the countries/areas in which you operate.

Armenia
Australia
Belgium
Brazil
Bulgaria
Canada
China
Czechia
Denmark
Finland
France
Germany
Greece
Hong Kong SAR, China
Hungary
India
Israel
Italy
Japan
Mauritius
Netherlands
New Zealand
Poland
Republic of Korea
Russian Federation

Saudi Arabia
Singapore
State of Palestine
Sweden
Switzerland
Taiwan, China
Thailand
Ukraine
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	NVDA

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	As stated in our publicly available charter for the Nominating and Corporate Governance Committee (NCGC) of the NVIDIA Board of Directors, and in NVIDIA's annual report, the NCGC is responsible for reviewing and discussing with management our policies, issues, and reporting related to corporate responsibility, including overall corporate responsibility strategy, risks and opportunities, and related programs and initiatives. Our corporate responsibility reporting team provides an update on these topics, as well as pertinent regulations and stakeholder inputs, and gathers feedback from the NCGC on issues such as climate change, human rights, and diversity and inclusion. The corporate responsibility reporting team updates the NCGC, and their feedback combined with executive input, helps to determine annual program direction.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain

Scheduled – some meetings	Reviewing and guiding strategy Overseeing the setting of corporate targets Monitoring progress towards corporate targets Reviewing and guiding the risk management process	NVIDIA's Nominating and Corporate Governance Committee (NCGC) of the Board is responsible for reviewing and discussing with management our policies, issues, and reporting related to corporate responsibility, including overall corporate responsibility strategy, risks and opportunities, and related programs and initiatives. Our corporate responsibility reporting team provides an update on these topics, as well as pertinent regulations and stakeholder inputs, and gathers feedback from the NCGC on issues such as climate change, human rights, and diversity and inclusion. In FY23, our NCGC reviewed our climate change position and continued investor interest in net zero strategies, science-based targets, and human rights related to the third-party use of our products.
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C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	<p>The criteria used to assess climate-related competence for CDP purposes includes education and relevant experience. A member of the NVIDIA Board of Directors is the Centennial Professor of Aeronautics and Mechanical Engineering at the California Institute of Technology. He is the recipient of a MacArthur Foundation Genius Grant and the Presidential Early Career Award for Scientists and Engineers. From 2015 to 2019, he served as a Professor of Civil and Environmental Engineering and of Mechanical Engineering at Stanford University, where he was recognized with the Eugene L. Grant Award for Excellence in Teaching, and heads the Dabiri Lab, which conducts research at the intersections of fluid mechanics, energy and environment, and biology, with a current focus on biological fluid dynamics in the ocean and next-generation wind energy. From 2005 to 2015, he was a Professor of Aeronautics and Bioengineering at the California Institute of Technology, during which time he also served as Director of the Center for Bioinspired Wind Energy, Chair of the Faculty, and Dean of Students.</p> <p>In FY23, the full Board attended an education session on Environmental, Social, and Governance topics.</p>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Corporate responsibility committee

Climate-related responsibilities of this position

Setting climate-related corporate targets

Monitoring progress against climate-related corporate targets

Assessing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Half-yearly

Please explain

Our corporate responsibility reporting team provides an annual update to NVIDIA's full Board of Directors and at least a semi-annual update to the Board's Nominating and Corporate Governance Committee (NCGC). The updates cover policies, issues, and reporting related to corporate responsibility, including overall corporate responsibility strategy, risks and opportunities, and related programs and initiatives. The Board and NCGC's feedback combined with executive input, helps to determine annual program direction.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Environment/Sustainability manager

Type of incentive

Monetary reward

Incentive(s)

Shares

Performance indicator(s)

Reduction in absolute emissions

Energy efficiency improvement

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

NVIDIA's sustainability performance, including progress towards operational energy efficiency improvements and greenhouse gas reduction goals is considered in determining the financial remuneration of NVIDIA's Sustainability Manager.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to overall progress on NVIDIA's energy and emissions reduction commitments, and sustainability performance initiatives.

Entitled to incentive

Other, please specify

Product and Social Compliance manager

Type of incentive

Monetary reward

Incentive(s)

Shares

Performance indicator(s)

Increased engagement with suppliers on climate-related issues

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Our manufacturing supply chain performance is considered in determining the financial remuneration of the NVIDIA team responsible for Social and Environmental Responsibility in our supply chain.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

NVIDIA's supply chain engagement team works with suppliers to understand energy, water, waste, and GHG emissions as well as any reduction initiatives.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	These time horizons are specific to climate-related projects.
Medium-term	1	3	These time horizons are specific to climate-related projects.
Long-term	3		These time horizons are specific to climate-related projects.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

With direction from Finance leadership, we have created thresholds for determining climate risks and opportunities that present a substantive financial impact for our business for CDP reporting. We determined that an event or series of events that cumulatively cause in any given quarter \$200 million in lost or additional revenue and/or \$75 million in additional or reduced Cost of Goods Sold or Operating Expenses could be a substantive financial impact for the purpose of CDP reporting. This estimate is based on the company's professional judgement.

In addition to these financial criteria, we assess the CR issues important to stakeholders and the company on an ongoing basis, including climate-related risks and opportunities arising over the short, medium, and long term. Risks, opportunities, and emerging trends are presented to executive management and the Board of Directors, and their input is factored into the assessment. Our Enterprise Risk Management program identifies key risks

through executive interviews, which are also considered in the assessment. CR leaders evaluate climate issues and determine the extent to which we address them in our annual corporate responsibility report.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

To identify and monitor climate-related risks throughout the year, we maintain membership of organizations such as the Responsible Business Alliance and monitor stakeholder interest in our CR programs including customer requests for our CDP participation, incorporation of climate-related questions in customer RFPs, investor engagement on climate topics, and industry interest in product energy efficiency performance. We monitor regulatory requirements such as those related to climate, GHG emissions, energy efficiency, and products. We also track customer expectations related to our products and incorporate them into product design specifications.

We assess the CR issues important to stakeholders and the company on an ongoing basis, including climate-related risks and opportunities arising over the short, medium, and long term. Risks, opportunities, and emerging trends are presented to executive management and the Board of Directors, and their input is factored into the assessment. Our Enterprise Risk Management program identifies key risks through executive interviews, which are also considered in the assessment. CR leaders evaluate climate issues and determine the extent to which we address them.

To manage physical risk, we have a corporate business continuity management (BCM) program that addresses business continuity risks, including those relevant to climate such as severe weather events and natural disasters, and review risk mitigation strategies for minimizing disruption to the business. BCM is supported by several business leaders across Corporate Communications, Cybersecurity, Facilities, Finance, Global Security, Human Resources, Information Technology, Sales, and Operations. Each function will identify and prepare a plan to respond to potential reasonable threats. We use a third-party tool to facilitate the assessment and management of business continuity risks in our manufacturing supply chain. The tool is used to map our supply chain, evaluate the implications of potential event scenarios on our business operations, and monitor and track actual events in real time. It incorporates risk scores which rate our manufacturing sites based on the potential for different types of risks to arise. Each site is scored for natural disaster risk, including the potential for extreme weather events within the region. As part of our business continuity risk assessment processes, we evaluate recovery time objectives for supplier sites at the first two tiers of the manufacturing supply chain and we take this into account in developing strategies to maintain operations in the face of events that cause individual supplier sites to go down for any length of time. We are committed to dual sourcing strategies for new products.

To manage transitional risks and opportunities, our annual CR assessment identifies reputational risks and opportunities relevant to climate change and other CR topics. The assessment considers external stakeholder concerns, business risks and opportunities, and emerging trends. The risk of ignoring stakeholder concerns could negatively impact our reputation, however, addressing their concerns could produce a positive impact.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
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Current regulation	Relevant, always included	<p>This risk type is relevant because our direct operations are subject to regulations, including in some jurisdictions, climate and energy efficiency related regulations. We monitor current regulatory requirements related to climate and are committed to complying with applicable legislation. Currently these regulations, such as national legislation to implement the European Energy Efficiency Directive, represent increased administrative costs for our business in several countries in which we operate including the UK and Germany.</p> <p>Our products are also subject to regulations, including energy efficiency regulations in some jurisdictions, such as the California Energy Efficiency Standards for computers. Our Operations team tracks energy and climate related requirements applicable to our products through an online third-party database subscription.</p>
Emerging regulation	Relevant, always included	<p>This risk type is relevant because our direct operations as well as our product design activities are potentially affected by emerging regulations. Our Operations team tracks emerging product related requirements through participation in industry groups such as the Responsible Business Alliance and subscription to an online third-party database. Our Government Affairs team tracks emerging regulation related to energy and the environment through membership in the Semiconductor Industry Association and Information Technology Industry Council. As part of our annual ISO14001 senior management review, we discuss new and emerging regulatory requirements of relevance to our operations, products, and supply chain.</p> <p>Additionally, we are monitoring the evolving landscape for mandatory climate change disclosure for companies globally. This includes the U.S. Securities and Exchange Commission's currently proposed enhanced climate disclosure rule.</p>
Technology	Relevant, always included	<p>This risk type is relevant to our investments in implementing new technologies to help us reduce our energy use and GHG emissions. If such technologies are not successfully implemented, they could fail to deliver a return on investment, both environmentally and financially. These risks form an important part of our design and planning processes for new buildings and retrofits and the feasibility evaluation of sustainability project opportunities.</p>
Legal	Relevant, always included	<p>This risk type could potentially be relevant in the form of exposure to lawsuits related to our climate-related performance, disclosures, or lack thereof. If we are deemed by stakeholders to have insufficient disclosure of climate-related programs and progress, or lack response to the implications of climate change on our business, we could face legal action. We consider the risk of legal action associated with climate change related issues to be low, given the nature of our business activities. We consider this risk to be closely linked to reputational risk.</p>

Market	Relevant, always included	<p>This risk type could potentially be relevant to customer demand for our products, which could be impacted based on climate change concerns. AI is revolutionizing scientific computing, and our platform enables modern data centers to accelerate increasingly common deep learning, machine learning, and high-performance computing (HPC) workloads, while remaining energy efficient compared to traditional computing methods. GPU-accelerated computing moves compute-intensive sections of the applications to the GPU while remaining sections execute in the CPU. As a result, sequential calculations are performed in the CPU while the more complicated matrix calculations are computed in parallel in the GPU, consuming less power than the equivalent, traditional computational forms relying on CPUs.</p> <p>Energy efficiency is critical as AI models and HPC applications increase exponentially in size. By moving to new-generation GPUs, our customers complete their work with lower energy consumption and receive results back more quickly. NVIDIA A100 GPUs are as much as 20X more energy efficient for certain AI and HPC workloads than CPUs. If HPC and AI workloads were switched from CPU only servers to GPU-accelerated systems, we estimate the world could save nearly 20 trillion watt-hours of energy a year. That's the equivalent to the electricity requirements of nearly 1.9 million U.S. homes.</p> <p>Data centers are already about 1-2 percent of global electricity consumption and growing, and computing demand around the world is still increasing. This is not sustainable for operating budgets and our planet. Acceleration is the best way to reclaim power and achieve sustainability and net zero. For computing to be sustainable, data centers must accelerate every workload possible. Accelerated workloads can be orders-of-magnitude more energy-efficient and cost effective. NVIDIA pioneered accelerated computing and has built a large installed base and a rich ecosystem of developers and applications available everywhere. Accelerated computing is sustainable computing.</p>
Reputation	Relevant, always included	<p>This risk type is relevant because we are a growing global brand, and maintaining a good reputation among our stakeholders is important to us. We assess our reputation through stakeholder feedback and survey rankings, and we seek to improve our reputation through engagement, transparency, and responsiveness. Our CR assessment is another way in which we examine reputational risks and opportunities of relevance to our business.</p>
Acute physical	Relevant, always included	<p>This risk type could potentially be relevant because we have operations and third-party manufacturing locations in regions that are vulnerable to an increase in the severity, duration, or frequency of tropical storms, wildfires, heat waves, or droughts.</p>

		As part of our evaluation of new manufacturing suppliers we consider the vulnerability of the suppliers to extreme weather events and other natural disasters. We utilize a third-party tool to assess and manage our product supply chain resiliency.
Chronic physical	Relevant, always included	This risk type could potentially be relevant because we have operations and third-party manufacturing locations in regions that may experience rising temperatures. Temperature increases could drive additional energy demands for cooling, which in turn could affect energy costs. We have completed scenario analysis to review future climate change driven increases in average and maximum temperatures in locations where we operate data centers.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Acute physical

Other, please specify

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

We do not manufacture semiconductors used for our products. Instead, we utilize a fabless manufacturing strategy, whereby we employ key suppliers for all phases of the manufacturing process, including wafer fabrication, assembly, testing, and packaging. We face several risks which have adversely affected or could adversely affect our ability to meet customer demand and scale our supply chain, negatively impact longer-term demand for our products and services, and adversely affect our business operations, gross margin, revenue and/or financial results, including disruptions in manufacturing, assembly and other processes due to closures related to heat waves or other natural disasters and electricity conservation efforts. Our worldwide operations could be disrupted by natural disasters and extreme weather conditions, power or water shortages, and other natural or man-made disasters and catastrophic events.

The acute physical impacts from climate change have the potential to affect a local hub for the tech industry which in turn can have industry-wide ramifications. For example, Thailand experienced severe flooding in July 2011 that caused widespread damage to the local disk drive manufacturing industry. PC manufacturers in need of disk drive components were severely impacted by the flooding and experienced a short-term reduction in supply. As a result, in fourth quarter of 2011 shipments from some PC manufacturers were reduced, which reduced the demand for our Graphics Processing Units (GPUs). In addition, higher disk-drive prices constrained the ability of some PC manufacturers to include a GPU in their systems which also reduced demand for our GPUs and negatively impacted our financial results into the first quarter of 2012. While this event happened a decade ago, it provides an industry sector relevant example of the potential implications of physical climate changes.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

200,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Our operations could be harmed and our costs could increase if manufacturing, logistics or other operations are disrupted for any reason, including natural disasters, high heat events or water shortages. The ultimate impact on us, our third-party foundries and other suppliers of being located and consolidated in certain geographical areas is unknown. If one or more supplier manufacturing facilities go down because of a natural disaster, this could adversely affect our supplier's production output, which would affect our ability to fulfill customer orders, and potentially lead to revenue losses. Additionally, if a region that is a local hub for the tech industry is negatively affected by climate change physical impacts, we could experience a downturn in customer orders for our products, as is illustrated by the Thailand situation in 2011. While it is not possible to accurately quantify the financial implications of this risk, we estimated that an event or series of events that cumulatively cause in any given quarter \$200 million in lost revenue and/or \$75 million in additional Cost of Goods Sold or Operating expenses could be a substantive financial impact for the purpose of CDP reporting. This estimate is based on the company's professional judgement.

Cost of response to risk

2,000,000

Description of response and explanation of cost calculation

To reduce the risk of business disruption due to climate change, we monitor strategic suppliers' exposure to climate risk and assess their preparedness. We utilize an intelligence and analytics tool to map our supply chain to evaluate potential risk to our business operations and to monitor events in real time. As part of contractual obligations, we require our suppliers to maintain documented disaster recovery plans, and we evaluate vulnerability and preparedness when onboarding suppliers. For critical suppliers, we assign a component of the Quarterly Business Review (QBR) scorecard to Business Continuity Plan performance. Addressing this risk is ongoing through QBRs and strategic planning. We have expanded our supplier relationships to build redundancy and resilience in our operations.

Explanation of cost: We estimate the total cost for reporting on risks & opportunities from climate change to be approximately \$2,000,000. This includes costs for external consulting fees, memberships in industry groups, software & database subscriptions, vendor fees, and labor costs. Management of climate risks and opportunities is integrated in business decisions and we cannot estimate the cost of response to this risk due to the various scenarios that could occur.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Improving performance and energy efficiency is a principal goal in each step of our research, development, and design processes. We aim to make every new generation of GPUs faster and more energy efficient than its predecessor. GPU-accelerated computing moves compute-intensive sections of the applications to the GPU while remaining sections execute in the CPU. As a result, sequential calculations are performed in the CPU while the more complicated matrix calculations are computed in parallel in the GPU, consuming less power than the equivalent, traditional computational forms relying on CPUs.

Energy efficiency is critical as AI models and HPC applications increase exponentially in size. NVIDIA A100 GPUs are as much as 20X more energy efficient for certain AI and HPC workloads than CPUs. If HPC and AI workloads were switched from CPU only servers to GPU-accelerated systems, we estimate the world could save nearly 20 trillion watt-hours of energy a year. Based on industry standard benchmarks for mainstream natural language processing inference, the NVIDIA Hopper architecture is up to 2.7X more energy efficient than the previous generation. An AI data center with the latest H100 has equivalent performance to an A100 with 3X lower total cost of ownership, 5X fewer server nodes, and 3.5X less energy consumed.

We consider our focus on energy efficiency to be a positive differentiator with our customers as they seek ever increased performance while also seeking to reduce the greenhouse gas emissions footprint of their value chain.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

200,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

As customers seek to meet their own climate goals, we may see increased demand for our energy efficient products, which translates into revenue generation opportunities for our company. It may also serve to justify increased R&D investment in the design and development of new, energy-efficient products. While it is not possible to accurately quantify the financial implications of this opportunity, we estimate that any such opportunities that could increase our incremental revenue by more than \$200 million in any given quarter would be a substantive financial impact for the purpose of CDP reporting. This estimate is based on the company's professional judgement.

Cost to realize opportunity

7,339,000,000

Strategy to realize opportunity and explanation of cost calculation

We aim to make every new generation of GPUs faster and more energy efficient than its predecessor, and we develop hardware, software, and networking technology to improve our product performance and energy efficiency. Adequate cooling is required to optimize supercomputer performance, reducing energy use, emissions, and utility bills for our customers. As customers seek to meet their own climate goals, we may see increased demand for our energy efficient products, which translates into revenue generation opportunities for our company.

We deploy state-of-the-art cooling technology designed for NVIDIA server products, optimizing data center designs and server deployments. Liquid cooling inside supercomputers, also known as direct-chip cooling, perpetually utilizes fluid heat transfer properties to efficiently target and remove heat while using less energy. NVIDIA's liquid-cooled GPUs consume 30% less power and 66% less rack space compared to traditional air-cooled servers. Our data center reference design documents educate our customers to achieve high levels of reliability and energy-efficient cooling of high-heat-density servers and racks.

Data center revenue was up 41% from a year ago led by strong growth from hyperscale customers and also reflects purchases made by several CSP partners to support multi-year cloud service agreements for our new NVIDIA AI cloud service offerings and our research and development activities.

Explanation of cost: We have invested over \$37 billion in research and development since our inception, yielding inventions that are essential to modern computing. Energy efficient product design and development is an integral part of research and development initiatives and cannot be separated from the total, which was \$7.3 billion in FY23 and ongoing.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

No, our strategy has been influenced by climate-related risks and opportunities, but we do not plan to develop a climate transition plan within two years

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

NVIDIA's corporate responsibility strategy has been influenced by climate-related risks and opportunities, which are assessed through our multi-disciplinary company-wide risk management process. We plan to assess the need for a climate transition plan. In FY23, our NCGC reviewed our climate change position and continued investor interest in net zero strategies and science-based targets.

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 4.5	Business activity		<p>Selection of Scenarios, Inputs, Time Horizons and Assumptions: Recognizing the implications of climate change for our business and the increased relevance of climate risk to our investors, we conducted an initial climate risk scenario analysis in FY21 to consider how resilient our business strategy is in the face of increasing temperatures. Working with a consulting partner, we assembled a cross-functional stakeholder group to oversee our scenario analysis. We started with a survey of this stakeholder group to gather their input on areas of our business potentially exposed to climate related risks and to identify individual risk types of potential relevance. Using the results of this survey, we identified our global data center and lab locations to be of significant strategic relevance for our business and modelled changes in average annual cooling degree days and average annual maximum daily temperatures under two warming scenarios, Representative Concentration Pathway (RCP) 4.5 and RCP 8.5, out to 2030 and also 2050. These timeframes were selected to provide a relatively short-term horizon and a longer-term horizon. The cooling degree day and average maximum temperature indicators were chosen as they are informative for reviewing the implications of rising temperatures for cooling demand and related energy consumption. To complete the analysis, our consulting partner ran a suite of downscaled models available from through the NASA Earth Exchange Downscaled Climate</p>

			Projections and utilized 21 of the available models, each having 2 RCPs (4.5 and 8.5). The team then reported the median of the 21 models for each RCP against the historic baseline.
Physical climate scenarios RCP 8.5	Business activity		<p>Selection of Scenarios, Inputs, Time Horizons and Assumptions: Recognizing the implications of climate change for our business and the increased relevance of climate risk to our investors, we conducted an initial climate risk scenario analysis in FY21 to consider how resilient our business strategy is in the face of increasing temperatures. Working with a consulting partner, we assembled a cross-functional stakeholder group to oversee our scenario analysis. We started with a survey of this stakeholder group to gather their input on areas of our business potentially exposed to climate related risks and to identify individual risk types of potential relevance. Using the results of this survey, we identified our global data center and lab locations to be of significant strategic relevance for our business and modelled changes in average annual cooling degree days and average annual maximum daily temperatures under two warming scenarios, Representative Concentration Pathway (RCP) 4.5 and RCP 8.5, out to 2030 and also 2050. These timeframes were selected to provide a relatively short-term horizon and a longer-term horizon. The cooling degree day and average maximum temperature indicators were chosen as they are informative for reviewing the implications of rising temperatures for cooling demand and related energy consumption. To complete the analysis, our consulting partner ran a suite of downscaled models available from through the NASA Earth Exchange Downscaled Climate Projections and utilized 21 of the available models, each having 2 RCPs (4.5 and 8.5). The team then reported the median of the 21 models for each RCP against the historic baseline.</p>
Transition scenarios Customized publicly available transition scenario	Company-wide	1.5°C	In FY22, we completed a preliminary estimate of the costs to transition our business to a net zero state in line with a 1.5 degree Celsius warming scenario. We forecasted business as usual scope 1, 2 and 3 emissions to model the impacts of our business growth, and utilized the Science Based Targets Initiative (SBTI) guidance to develop short- and long-term emissions reduction pathways for our scope 1, 2 and 3 emissions. We developed an estimate of costs to achieve a net zero state using assumed renewable energy and carbon removal costs, applying price escalators over the period of analysis.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

Physical/exploratory scenario analysis: How much will energy demand increase in current operations. Where should we consolidate/expand future operations?

Results of the climate-related scenario analysis with respect to the focal questions

Physical/exploratory scenario analysis: We found that under a lower warming scenario (RCP 4.5), the extent to which comfort cooling will be needed in our current data centers and labs is projected to be 60% higher by 2030 and 100% higher by 2050, relative to the 20-year baseline from 1986-2005. Increases in comfort cooling needs are substantially higher under the RCP 8.5 scenario. While this could result in some increases in energy use to adequately cool our facilities, for data centers in particular, various factors mitigate the potential risk of system or server failure for NVIDIA. These factors include the efforts of our teams to consider projected future climatic conditions as they specify new data centers, the relatively broad temperature ranges our data center infrastructure can handle, and the redundancy built into modern data center cooling systems.

Case study of how the results inform our business strategy: The results are also informative for the design, planning, and operation of our workplaces and data centers. We anticipate potential increases in cooling-related energy consumption and cost, and we are considering the results of this scenario analysis in our strategic planning decisions to mitigate the operational and capital cost risks of a warmer climate. Data centers were responsible for 63% of our total energy use in FY23, with offices making up the remainder. As we expand, we consider renewable energy availability, energy efficiency, and other sustainability attributes into the siting and design of new buildings and leased spaces. In the last three fiscal years, we've newly secured renewable power for several colocation data centers both in the U.S. and globally. Approximately a third of NVIDIA data centers around the world source renewable electricity.

Scenario analysis is reviewed in connection with business decisions, but decisions around business strategy to date are made due to technology expertise, execution capability, and knowledge workforce in the region rather than physical factors.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>Our strategy is to differentiate ourselves through energy efficient GPU product design, enabling customers to improve performance while reducing energy use and carbon emissions, and technology applications, which support highly sophisticated climate modeling and weather prediction. Addressing climate impacts provides revenue generation over the short, medium, and long term. The factors above have influenced our strategy to integrate energy efficiency across our product design and development processes and to collaborate with and/or financially invest in organizations using our technology for climate related applications.</p> <p>Product Efficiency: We aim to make every generation of GPUs faster and more energy efficient than its predecessor. NVIDIA A100 GPUs are as much as 20X more energy efficient for certain AI and HPC workloads than CPUs. If HPC and AI workloads were switched from CPU only servers to GPU-accelerated systems, we estimate the world could save nearly 20 trillion watt-hours of energy a year. Based on industry standard benchmarks for mainstream natural language processing inference, the NVIDIA Hopper architecture is up to 2.7X more energy efficient than the previous generation. An AI data center with the latest H100 has equivalent performance to an A100 with 3X lower total cost of ownership, 5X fewer server nodes, and 3.5X less energy consumed.</p> <p>NVIDIA Technology for Climate Research and Impacts: FourCastNet, the AI model of NVIDIA's Earth-2, can make week-long weather forecasts in less than 2 seconds, orders of magnitude faster than current simulation models and with greater confidence. The aim of Earth-2 is to be a digital twin of Earth's</p>

		<p>climate to predict the impacts of climate change so that scientists, policy makers, and companies can develop the best strategies for mitigation and adaptation.</p> <p>In FY23, the National Oceanic and Atmospheric Administration announced it is partnering with NVIDIA and Lockheed Martin to construct the Earth Observation Digital Twin (EODT), an inaugural prototype of Earth modeled on geophysical data sourced from satellites and ground stations. Potential climate impacts the EODT can display include global glacier melting, drought impacts, wildfire prediction, and other climate change events.</p>
Supply chain and/or value chain	Yes	<p>We do not manufacture semiconductors used for our products. Instead, we utilize a fabless manufacturing strategy, whereby we employ key suppliers for all phases of the manufacturing process, including wafer fabrication, assembly, testing, and packaging. Because emissions are created at every stage of our product lifecycle, including manufacturing within our supply chain, since 2014 we've required our key suppliers to report their energy usage, GHG emissions data, and reduction goals and objectives.</p> <p>These suppliers must also have their GHG emissions verified by a third party. We track suppliers' annual energy, GHG, water, and waste through the CDP and Responsible Business Alliance Environmental Survey for all silicon manufacturers and systems contract manufacturers. We use this supplier data to better understand our product manufacturing impact and to allocate carbon emissions to our customers.</p> <p>For strategic suppliers, agreements are deployed and tracked through a quarterly business review (QBR) process to ensure they meet our expectations, which may influence our business allocation decisions. Five of 100 QBR points are allocated to environmental or social performance, and requirements vary by quarter. Each quarter, we review overall supplier assessment by product category and rank performance. We've assessed and adjusted business with suppliers who don't comply with minimum requirements.</p>
Investment in R&D	Yes	<p>We have invested over \$37 billion in research and development since our inception, yielding inventions that are essential to modern computing. Energy efficient architecture is core to our product design and</p>

		<p>the focus of numerous engineers across the company. As customers seek to meet their own climate goals, we are seeing increased interest in the energy efficiency of our products. Through our R&D investments we maintain a continual focus on innovating our products to deliver increased performance per watt. This opportunity is relevant over the short, medium, and long term.</p> <p>Example of Significant Decision: We launched Omniverse, a platform for 3D design collaboration and scalable multi-GPU, real-time, true-to-reality simulation. Researchers use Omniverse to create digital twins, virtual representations that are synchronized with physical objects, people or processes. In 2021, we announced we would use Omniverse to build Earth-2, the world's most powerful AI supercomputer dedicated to predicting and modeling climate change. The system will incorporate a digital twin of Earth in Omniverse, which can be used to anticipate the climate in different global regions over decades — and help develop the best strategies for climate event mitigation and adaptation.</p>
Operations	Yes	<p>With our expanding business and diversification into new online services, data center operations have been growing rapidly. Data centers were responsible for 63% of our total energy use in FY23, with offices making up the remainder. As we expand, we consider renewable energy availability, energy efficiency, and other sustainability attributes into the siting and design of new buildings and leased spaces. In the last three fiscal years, we've newly secured renewable power for several colocation data centers both in the U.S. and globally. Approximately a third of NVIDIA data centers around the world source renewable electricity.</p> <p>We deploy state-of-the-art cooling technology designed for NVIDIA server products, optimizing data center designs and server deployments. Our data center reference design documents educate our customers to achieve high levels of reliability and energy-efficient cooling of high-heat-density servers and racks.</p> <p>Liquid cooling inside supercomputers, also known as direct-chip cooling, perpetually utilizes fluid heat transfer properties to efficiently target and remove heat while using less energy. NVIDIA's liquid-cooled GPUs consume 30% less power and 66% less rack space compared to traditional air-cooled servers.</p>

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Assets	<p>Revenues:</p> <p>Factors including increased concern about climate change and its causes and effects, as well as policy, reputational and financial factors are driving the use of our technology products to facilitate advanced climate change research, as well as to facilitate the development and application of decarbonization solutions. Examples include: Siemens Gamesa Renewable Energy, which is working with NVIDIA to speed the energy transition by creating physics-informed digital twins of wind farms —to achieve quicker calculations to optimize wind farm layouts, increasing overall production while reducing loads and operating costs; Blue Sky Analytics, an India-based company building a geospatial intelligence platform that harnesses satellite data for environmental monitoring and climate risk assessment; TrueOcean, a German startup analyzing global-scale maritime data to inform innovation around natural ocean carbon sinks, renewable energy, and shipping route optimization; and Gigastack, a pilot project by a consortium that includes Phillips 66 and Denmark-based renewable energy company Ørsted that will use NVIDIA Omniverse to create low-emission fuel for the energy company's Humber refinery in England.</p> <p>The use of our technology for these types of applications could drive additional revenue for our business and this is considered by affected business groups in their financial planning over the short, medium and long term.</p> <p>Direct costs:</p> <p>To effectively manage the risks and opportunities presented to our business by climate change we are integrating capabilities throughout the business and engaging external expertise where needed. These resources include headcount to support uses for our technology such as in the energy transition and climate modeling. We are engaging external vendors to assist in the calculation of our greenhouse gas footprint and to evaluate renewable energy investments. Costs also include the annual costs to make progress towards our 100% renewable energy goal into our financial planning. This includes costs incurred in FY23 to purchase renewable energy certificates. They are part of the operating cost of our</p>

	<p>business and are considered when affected business groups develop their annual (short term) budgets.</p> <p>Capital Expenditures and Assets:</p> <p>We are investing capital towards the further development of our Santa Clara, CA headquarters. The two headquarters buildings that we own in Santa Clara, CA are LEED Gold certified. They were designed to be energy efficient, including a high-performing building envelope, efficient and smart lighting systems that incorporate the use of daylight, underfloor air distribution, radiant heating and cooling, air and waterside economizers, and high-efficiency boilers and chillers. Advanced building control systems underpin the building operations. The two buildings are connected by a three-acre park which is provided with shade by trellis that houses 390 kW of solar panels. These newly added solar panels bring the total onsite solar generation capacity at our headquarters to 846 kW.</p> <p>Capital expenditure on these new buildings includes highly energy efficient systems and technologies, such as solar photovoltaics which are being incorporated to our newest building. Financial planning for our new buildings incorporates capital costs for such systems and technologies, as well as fees associated with external green building design expertise and the LEED application process. While integration of green building features can increase capital expenditures in the short term, we typically see a return on investment in the medium term and anticipate a positive impact on asset value over the long term.</p>
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C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition
Row 1	No, and we do not plan to in the next two years

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Target ambition

1.5°C aligned

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

65,936

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

65,936

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2025

Targeted reduction from base year (%)

100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

0

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

60,671

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

60,671

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

7.9850157729

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

The target captures 100% of market-based scope 2 emissions arising from electricity used in our global offices and data centers. There are no scope 2 exclusions.

Plan for achieving target, and progress made to the end of the reporting year

To manage the electricity related GHG emissions footprint of our data centers, labs, and offices, we focus on siting expansions strategically, managing our operations efficiently, and sourcing renewable energy. In FY23, we sourced 44% of our electricity use from renewables, a six-percentage point increase from the previous year. In the last three fiscal years, we've newly secured renewable power for several colocation data centers both in the U.S. and globally. Approximately a third of NVIDIA data centers around the world source renewable electricity.

Data centers were responsible for 63% of our total energy use in FY23, with offices making up the remainder. As we expand, we consider renewable energy availability, energy efficiency, and other sustainability attributes into the siting and design of new buildings and leased spaces.

In FY23, we increased the percentage of our total electricity use matched by renewable energy purchases to 44%, through green utility tariffs and energy attribute certificates, and we are exploring additional options to increase our sourcing of renewable energy for our growing footprint, in support of our 100% renewable electricity goal.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2020

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2020

Consumption or production of selected energy carrier in base year (MWh)

229,167

% share of low-carbon or renewable energy in base year

33

Target year

2025

% share of low-carbon or renewable energy in target year

100

% share of low-carbon or renewable energy in reporting year

44

% of target achieved relative to base year [auto-calculated]

16.4179104478

Target status in reporting year

Underway

Is this target part of an emissions target?

Abs 1. Yes, this target supports our target to reduce our scope 2 emissions in line with a 1.5 degree Celsius warming scenario.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

By the end of FY25, we plan to purchase or generate enough renewable energy to match 100% of our global electricity usage for our offices and data centers. There are no exclusions.

Plan for achieving target, and progress made to the end of the reporting year

Our current goal to source all global electricity use for offices and data centers from renewable energy is expected to result in a 100% emissions reduction of our scope 2 market-based emissions by the end of our fiscal year ending January 26, 2025. In FY23, we sourced 44% of our electricity use from renewables, a six-percentage point increase from the previous year. With our expanding business and diversification into new online services, data center operations have been growing rapidly. Data centers were responsible for 63% of our total energy use in FY23, with offices making up the remainder. As we expand, we consider renewable energy availability, energy efficiency, and other sustainability attributes into the siting and design of new buildings and leased spaces.

In the last three fiscal years, we've newly secured renewable power for several colocation data centers both in the U.S. and globally. Approximately a third of NVIDIA data centers around the world source renewable electricity. In FY23, we saw new renewable energy supply contracts come online at data centers in Finland and Taiwan.

List the actions which contributed most to achieving this target

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2023

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Engagement with suppliers

Percentage of suppliers (by emissions) with a science-based target

Target denominator (intensity targets only)

Base year

2023

Figure or percentage in base year

0

Target year

2026

Figure or percentage in target year

67

Figure or percentage in reporting year

0

% of target achieved relative to base year [auto-calculated]

0

Target status in reporting year

New

Is this target part of an emissions target?

No, this target is not part of another emissions target.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

By FY26, we plan to engage manufacturing suppliers comprising at least 67% of NVIDIA's scope 3 category 1 GHG emissions (GHG Protocol-defined Purchased Goods and Services), with the goal of effecting supplier adoption of science-based targets aligned with limiting temperature rise to 1.5 degrees Celsius.

We plan to leverage the Quarterly Business Review (QBR) process with our suppliers, and suppliers will be scored on their target setting progress.

Plan for achieving target, and progress made to the end of the reporting year

Not applicable as the goal is new this year.

List the actions which contributed most to achieving this target

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0

Implemented*	1	59,987
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy consumption

Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)

59,987

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

430,000

Payback period

No payback

Estimated lifetime of the initiative

1-2 years

Comment**C4.3c****(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Dedicated budget for other emissions reduction activities	<p>To manage the GHG emissions footprint of our data centers, labs, and offices, we focus on siting expansions strategically, managing our operations efficiently, and sourcing renewable energy. Our current goal to source all global electricity use for offices and data centers from renewable energy is expected to result in a 100% emissions reduction of our scope 2 market-based emissions by the end of our fiscal year ending January 26, 2025. In FY23, we sourced 44% of our electricity use from renewables, a six-percentage point increase from the previous year. With our expanding business and diversification into new online services, data center operations have been growing rapidly. Data centers were responsible for 63% of our total energy use in FY23, with offices making up the remainder. As we expand, we consider renewable energy availability, energy efficiency, and other sustainability attributes into the siting and design of new buildings and leased spaces. In the last three fiscal years, we've newly secured renewable power for several colocation data centers both in the U.S. and globally. Approximately a third of NVIDIA data centers around the world source renewable electricity.</p> <p>We have a dedicated budget to drive investment in emissions reduction activities and achieve our renewable energy goal.</p>

C4.5**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?**

Yes

C4.5a**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.**

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Other

Other, please specify

Green Computing

Description of product(s) or service(s)

NVIDIA is a full-stack computing company, developing CPUs, DPUs, GPUs, and AI software that fuel data center-scale computing solutions. AI is revolutionizing scientific computing, and our platform enables modern data centers to accelerate increasingly common deep learning, machine learning, and high-performance computing (HPC) workloads. GPU-accelerated computing moves compute-intensive sections of the applications to the GPU while remaining sections execute in the CPU. As a result, sequential calculations are performed in the CPU while the more complicated matrix calculations are computed in parallel in the GPU, consuming less power than the equivalent, traditional computational forms relying on CPUs.

Individual GPUs typically have a higher peak active power consumption than CPUs, but also complete workloads dramatically faster, so they return to low power idle states quickly and thus consume far less overall energy. NVIDIA GPUs are typically 20x more energy efficient for AI and HPC workloads than CPUs.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

NVIDIA proprietary method

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

Functional unit used

GPU

Reference product/service or baseline scenario used

CPU

Life cycle stage(s) covered for the reference product/service or baseline scenario

Use stage

Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

14,000,000

Explain your calculation of avoided emissions, including any assumptions

The MLPerf consortium provides an industry benchmark for AI performance and energy efficiency on scientific applications in high-performance computing (HPC). Comparing CPU performance data submitted to MLPerf, NVIDIA GPUs are typically 20X more energy efficient for certain AI and HPC workloads than traditional CPUs. We determine the quantity of CPU servers running AI and HPC from market research data and apply our energy efficiency factor. If we switched accelerated computing workloads from CPU-only servers to GPU-accelerated systems worldwide, we estimate nearly 20 trillion watt-hours of energy savings a year, equivalent to the electricity requirements of nearly 1.9 million U.S. homes. This is equivalent to avoided emissions of approximately 14 million metric tons CO₂e per year.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

55.65

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

February 1, 2019

Base year end

January 31, 2020

Base year emissions (metric tons CO2e)

2,817

Comment

Scope 2 (location-based)

Base year start

February 1, 2019

Base year end

January 31, 2020

Base year emissions (metric tons CO2e)

74,692

Comment

Scope 2 (market-based)

Base year start

February 1, 2019

Base year end

January 31, 2020

Base year emissions (metric tons CO2e)

65,936

Comment

Scope 3 category 1: Purchased goods and services

Base year start

January 31, 2022

Base year end

January 29, 2023

Base year emissions (metric tons CO2e)

1,755,666

Comment

Scope 3 category 2: Capital goods

Base year start

January 31, 2022

Base year end

January 29, 2023

Base year emissions (metric tons CO2e)

171,327

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 31, 2022

Base year end

January 29, 2023

Base year emissions (metric tons CO2e)

67,805

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 31, 2022

Base year end

January 29, 2023

Base year emissions (metric tons CO2e)

60,572

Comment

Scope 3 category 5: Waste generated in operations

Base year start

January 31, 2022

Base year end

January 29, 2023

Base year emissions (metric tons CO2e)

579

Comment

Scope 3 category 6: Business travel

Base year start

January 31, 2022

Base year end

January 29, 2023

Base year emissions (metric tons CO2e)

4,296

Comment

Scope 3 category 7: Employee commuting

Base year start

January 31, 2022

Base year end

January 29, 2023

Base year emissions (metric tons CO2e)

14,990

Comment

Scope 3 category 8: Upstream leased assets

Base year start

January 31, 2022

Base year end

January 29, 2023

Base year emissions (metric tons CO₂e)

32,952

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol: Scope 2 Guidance

The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO₂e?

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

12,346

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?

Reporting year

Scope 2, location-based

142,909

Scope 2, market-based (if applicable)

60,671

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,755,666

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Calculated using the spend-based method based on the economic value of goods and services purchased or acquired per purchase order receipt reports from NVIDIA's financial reporting system. Certain spend categories, such as taxes and payroll-related spend, were not included in the analysis because NVIDIA determined that there are not significant emissions associated with them. Emissions factors: U.S. EPA's Supply Chain Greenhouse Gas Emission Factors for U.S. Industries and Commodities v1.1, commodity level emission factor for 2016, adjusted for inflation.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

171,327

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Calculated using the spend-based method based on the economic value of capital goods purchased or acquired per purchase order receipt reports from NVIDIA's financial reporting system. Certain spend categories, such as taxes and payroll-related spend, were not included in the analysis because NVIDIA determined that there are not significant emissions associated with them. Emissions factors: U.S. EPA's Supply Chain Greenhouse Gas Emission Factors for U.S. Industries and Commodities v1.1, commodity level emission factor for 2016, adjusted for inflation.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

67,805

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Well-to-tank (WTT) emissions and transmission & distribution (T&D) losses that were calculated based on activity data (natural gas, gasoline, and distillate fuel oil) from Scope 1 and Scope 2 emissions.

Emissions factors:

- Electricity T&D losses: IEA CO2 Emissions Factor 2022

- All other WTT and T&D losses:

1. U.K.: Department for Business Energy & Industrial Strategy (BEIS) U.K. Government GHG Conversion Factors for Company Reporting 2022

2. All other countries: BEIS U.K. Government GHG Conversion Factors for Company Reporting 2021

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

60,572

Emissions calculation methodology

Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Emissions included in this category relate to upstream transportation. Emissions from shipping departures for the first through the third quarter were calculated based on weight, distance and shipping mode from reports provided by third-party shipping and logistics vendors. Where either weight, distance or shipping mode were not provided by third-party shipping and logistics vendors, NVIDIA used emissions as provided by the vendors. Emissions from shipping departures for the fourth quarter were estimated based on the mass of goods and distance to ship incoming goods, as documented by the NVIDIA Logistics Team using shipping reports provided by third-party shipping and logistics vendors.

Excludes upstream transportation emissions from vendors that represented approximately 2% of total shipment weight. Emissions factors: U.S. EPA Emission Factors for Greenhouse Gas Inventories 2022.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

579

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Emissions from waste generated in operations are calculated only for NVIDIA's headquarters location. Emissions from the first through the third quarter were calculated based on third-party invoices or annual summaries obtained from waste management providers, detailing the weight and type of waste. If waste management providers were unable to provide weight, NVIDIA used the U.S. EPA Volume-to-Weight Conversion Factors for Solid Waste 2016 to calculate weight using the quantity of bins, waste bin size, and number of pick-ups per week according to the third-party invoice or annual summary. Where the waste management provider was not able to provide actual data, the following assumptions were used:

- Quantity of bins: Determined based on Commercial service solid waste rates approved for use in 2022 by the City of Santa Clara.
- Waste bin size: Determined based on management's review of third-party invoices and rates.
- Number of pick-ups per month: Determined based on knowledge of the waste collection schedule for the Santa Clara headquarters.

Emissions from the fourth quarter were estimated by pro-rating year-to-date actual or estimated data. Emissions factors: U.S. EPA Emission

Factors for Greenhouse Gas Inventories 2022. NVIDIA applied proxy emissions factors to certain waste types generated as needed per EPA guidance "Using Waste Reduction Model (WARM) Emission Factors for Materials and Pathways Not in WARM."

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

4,296

Emissions calculation methodology

Supplier-specific method

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

96

Please explain

Emissions from air and rail travel were calculated based on data, which includes distance traveled, provided by NVIDIA's third-party commercial travel managers for employee business travel. Emissions from car travel and hotel stays were estimated using the spend-based method based on the economic value of business travel services per purchase order receipt reports from NVIDIA's financial reporting system. Excludes business travel spend through our internal expense reimbursement system which represented approximately 4% of total business travel spend.

Emissions factors:

- Distance-based emissions: Employees in Europe: BEIS U.K. Government GHG Conversion Factors for Company Reporting 2022. All other employees: U.S. EPA Emission Factors for Greenhouse Gas Inventories 2022.
- Spend-based emissions: U.S. EPA's Supply Chain Greenhouse Gas Emission Factors for U.S. Industries and Commodities v1.1, commodity level emission factor for 2016, adjusted for inflation.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

14,990

Emissions calculation methodology

Average data method

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The average number of employees working in person by region was estimated based on the total number of employees and historical badge scan data, as recorded in NVIDIA's human resources and IT systems, for each region during October 2022. October was selected as a proxy because it was the first month where mixed-use offices reopened to all employees to enter and November, December, and January are expected periods where employees take vacation. Employees that did not scan into a mixed-use office during October 2022 were assumed to be working remotely. During a 52-week year, it was assumed employees take an average of 24 days of paid time-off (PTO).

Commuting: Calculated based on the average number of employees working in person by region multiplied by the commute mix for that region, assumed commute distance by region, and the number of days commuting. The commute mix and assumed commute distance was based on regional estimates obtained from publicly available census data. For the Asia-Pacific region, appropriate data for commute mix and distance was not available, and therefore, the commute mix and distance for India was used as a proxy.

Emissions factors:

- Water transport: BEIS U.K. Government GHG Conversion Factors for Company Reporting 2022
- Other modes of transport: U.S. EPA Emission Factors for Greenhouse Gas Inventories 2022

Remote work: Calculated based on the average number of employees working remotely by region multiplied by the natural gas and electricity energy intensities published by Anthesis in Estimating Energy Consumption & GHG Emissions for Remote Workers (2021).

Emissions factors:

- Natural gas: U.S. EPA Emission Factors for Greenhouse Gas Inventories 2022.
- Electricity: U.S.: U.S. EPA eGRID subregion emission factors for 2020. All other countries: IEA CO2 Emission Factors 2021.

Upstream leased assets

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

32,952

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Indirect emissions from the operation of assets leased by NVIDIA that are not already included in Scope 1 and Scope 2, including:

- NVIDIA's proportion of overhead emissions at third-party data centers: Estimated based on monthly usage data collected from third-party invoices. An average power utilization effectiveness (PUE) value is then applied; and
- Emissions from one third-party data center where NVIDIA determined they did not have operational control: Estimated using the estimated use case of IT equipment.

NVIDIA assumed an operating PUE of 1.5 (U.S. and European countries) and 1.8 (all other regions). Average PUE values by country were obtained from an Uptime Institute Journal publication 2020.

Emissions factors:

- Non-U.S.: IEA CO2 Emissions Factors 2021
- U.S.: U.S. EPA eGRID subregion emission factors for 2020

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Transportation and distribution of NVIDIA products to business customers are captured in Category 4.

Processing of sold products

Evaluation status

Relevant, not yet calculated

Please explain

NVIDIA intends to assess the emissions associated with the Processing of Sold Products. The calculation involves a review of supply chain impacts and access to a variety of data sources. At the time of CDP submittal, this assessment was not complete.

Use of sold products

Evaluation status

Relevant, not yet calculated

Please explain

NVIDIA intends to assess the emissions associated with the end of life treatment of products. The calculation involves a review of customer and industry impacts. At the time of CDP submittal, this assessment was not complete.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Please explain

NVIDIA intends to assess the emissions associated with the end of life treatment of products. The calculation involves a review of customer and industry impacts. At the time of CDP submittal, this assessment was not complete.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

We do not sublet any of our sites.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

We do not have franchises.

Investments

Evaluation status

Relevant, not yet calculated

Please explain

NVIDIA intends to assess the emissions associated with our investments. The calculation involves a review of investment activities and access to a variety of data sources. At the time of CDP submittal, this assessment was not complete.

Other (upstream)

Evaluation status

Not evaluated

Please explain

Other (downstream)

Evaluation status

Not evaluated

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.000002707

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

73,017

Metric denominator

unit total revenue

Metric denominator: Unit total

26,974,000,000

Scope 2 figure used

Market-based

% change from previous year

12.02

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption

Please explain

GHG emissions per millions of USD revenue decreased by 12.02% in FY2023 when compared with the previous reporting year. The change is primarily driven by a decrease in Scope 2 market-based emissions and emissions reduction initiatives as described in C4.3b and an increase in revenue.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO ₂ e)	GWP Reference
CO ₂	12,330	IPCC Fifth Assessment Report (AR5 – 100 year)
CH ₄	7	IPCC Fifth Assessment Report (AR5 – 100 year)
N ₂ O	8	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	1	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO ₂ e)
Americas	5,268
Asia Pacific (or JAPA)	4,112
Europe, Middle East and Africa (EMEA)	2,966

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO ₂ e)
Stationary natural gas	8,414
Distillate fuel oil	412
Gasoline	1,854

Refrigerants	1,659
Chemical Use	7

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Americas	78,345	55,920
Asia Pacific (or JAPA)	33,347	1,952
Europe, Middle East and Africa (EMEA)	31,217	2,799

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Office Locations	82,580	40,833
Data Centers	60,329	19,838

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO ₂ e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	17,539	Decreased	21	<p>During the reporting year, several of our sites ran on 100% renewable electricity or used additional renewable electricity. We also purchased renewable energy credits in locations where renewable electricity is difficult to source. In FY23, we sourced 44% of our electricity use from renewables, a six-percentage point increase from the previous year.</p> <p>As a result, we used 39,305 MWh more renewable electricity in FY23 than in FY22. This resulted in a decrease in associated Scope 2 market-based emissions of 17,539 mtCO₂e, representing 21% of the overall Scope 1 and Scope 2 emissions compared with FY22. FY22 Scope 1 and 2, market-based emissions were 82,822 mtCO₂e. This decrease is calculated as $-17,539/82,822 = -21\%$</p>
Other emissions reduction activities	0	No change	0	Emissions did not change as a result of other emissions reduction initiatives.
Divestment				

Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	52,927	52,927
Consumption of purchased or acquired electricity		193,465	249,429	442,894
Consumption of self-generated non-fuel renewable energy		1,079		1,079
Total energy consumption		194,544	302,356	496,901

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Other biomass

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

52,927

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

52,927

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

We do not separately track the MWh consumed by fuel type.

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	1,079	1,079	1,079	1,079
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption

Brazil

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

42

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2018

Comment

Country/area of low-carbon energy consumption

Belgium

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

950

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Bulgaria

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2012

Comment

The EACs accounted for in this row are a combination of wind and solar energy, that are consumed at several European sites, including: Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Netherlands, Poland, Russia, Ukraine, Sweden and Switzerland.

Country/area of low-carbon energy consumption

Canada

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1,626

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

China

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

18,000

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

China

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2013

Comment

Country/area of low-carbon energy consumption

India

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

35,000

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

India

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2005

Comment

Country/area of low-carbon energy consumption

Israel

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

57,000

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Israel

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2016

Comment

Country/area of low-carbon energy consumption

Japan

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

275

Tracking instrument used

NFC – Renewable

Country/area of origin (generation) of the low-carbon energy or energy attribute

Japan

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2015

Comment

Country/area of low-carbon energy consumption

State of Palestine

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

117

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Egypt

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2019

Comment

Country/area of low-carbon energy consumption

Singapore

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

111

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Singapore

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

Republic of Korea

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

223

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

China

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2013

Comment

Country/area of low-carbon energy consumption

Taiwan, China

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

652

Tracking instrument used

TIGR

Country/area of origin (generation) of the low-carbon energy or energy attribute

Taiwan, China

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2017

Comment

Country/area of low-carbon energy consumption

Taiwan, China

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

500

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Taiwan, China

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2004

Comment

Country/area of low-carbon energy consumption

United Arab Emirates

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

9

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

United Arab Emirates

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2018

Comment

Country/area of low-carbon energy consumption

United Kingdom of Great Britain and Northern Ireland

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4,263

Tracking instrument used

REGO

Country/area of origin (generation) of the low-carbon energy or energy attribute

United Kingdom of Great Britain and Northern Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2014

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Armenia

Consumption of purchased electricity (MWh)

96

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

96

Country/area

Australia

Consumption of purchased electricity (MWh)

20

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

20

Country/area

Belgium

Consumption of purchased electricity (MWh)

10

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

10

Country/area

Brazil

Consumption of purchased electricity (MWh)

42

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

42

Country/area

Bulgaria

Consumption of purchased electricity (MWh)

775

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

775

Country/area

Canada

Consumption of purchased electricity (MWh)

1,598

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,598

Country/area

China

Consumption of purchased electricity (MWh)

15,395

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

15,395

Country/area

Czechia

Consumption of purchased electricity (MWh)

13

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

13

Country/area

Denmark

Consumption of purchased electricity (MWh)

191

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

191

Country/area

Finland

Consumption of purchased electricity (MWh)

983

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

983

Country/area

France

Consumption of purchased electricity (MWh)

3,705

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

3,705

Country/area

Germany

Consumption of purchased electricity (MWh)

7,781

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

7,781

Country/area

Greece

Consumption of purchased electricity (MWh)

2

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

2

Country/area

Hungary

Consumption of purchased electricity (MWh)

4

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

4

Country/area

India

Consumption of purchased electricity (MWh)

28,696

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

28,696

Country/area

Israel

Consumption of purchased electricity (MWh)

51,347

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

51,347

Country/area

Japan

Consumption of purchased electricity (MWh)

268

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

268

Country/area

Netherlands

Consumption of purchased electricity (MWh)

3,415

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

3,415

Country/area

Poland

Consumption of purchased electricity (MWh)

211

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

211

Country/area

Russian Federation

Consumption of purchased electricity (MWh)

928

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

928

Country/area

Singapore

Consumption of purchased electricity (MWh)

119

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

119

Country/area

Republic of Korea

Consumption of purchased electricity (MWh)

217

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

217

Country/area

Sweden

Consumption of purchased electricity (MWh)

1,855

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,855

Country/area

Switzerland

Consumption of purchased electricity (MWh)

206

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

206

Country/area

Taiwan, China

Consumption of purchased electricity (MWh)

4,631

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

4,631

Country/area

Ukraine

Consumption of purchased electricity (MWh)

80

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

80

Country/area

United Arab Emirates

Consumption of purchased electricity (MWh)

15

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

15

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)

6,624

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

6,624

Country/area

United States of America

Consumption of purchased electricity (MWh)

313,670

Consumption of self-generated electricity (MWh)

1,079

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

314,749

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 FY23-PwC-Assurance-Report-Management-Assertion_SIGNED-FINAL.pdf

Page/ section reference

PDF pg. 3-5

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process


Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 FY23-PwC-Assurance-Report-Management-Assertion_SIGNED-FINAL.pdf

Page/ section reference

PDF pg. 3-6

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 FY23-PwC-Assurance-Report-Management-Assertion_SIGNED-FINAL.pdf

Page/ section reference

PDF pg. 3-6

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

- Scope 3: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting

Scope 3: Upstream leased assets

Verification or assurance cycle in place

Annual process


Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 FY23-PwC-Assurance-Report-Management-Assertion_SIGNED-FINAL.pdf

Page/section reference

PDF pg. 3-8

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect GHG emissions data at least annually from suppliers

% of suppliers by number

5

% total procurement spend (direct and indirect)

60

% of supplier-related Scope 3 emissions as reported in C6.5**Rationale for the coverage of your engagement**

We prioritize our engagement with strategic suppliers who contract manufacture our products and other suppliers of strategic importance to NVIDIA's business. In addition to these suppliers being of strategic importance to our business, manufacturing activities are relatively energy and carbon intensive compared to other segments of our supply chain. Our strategic suppliers are required to complete a quarterly business review (QBR) with NVIDIA. This review covers a wide range of performance aspects relevant to our relationship with the suppliers. We leverage this QBR process to gather GHG emissions, water, and waste data from our suppliers. We regularly survey key suppliers to better understand the renewable energy performance and capability of our manufacturing supply chain. In FY23, over 60% of these suppliers reported renewable energy use.

Impact of engagement, including measures of success

One way that we measure the impact of our engagement is through our quarterly business review (QBR) process for suppliers. Each quarter, our suppliers' overall performance is measured against a range of KPIs, including social and environmental responsibility (SER). We require suppliers to report GHG emissions, water, and waste data, which factor into supplier SER scores, and inform the supplier's overall QBR score. Five of 100 QBR points are allocated to environmental or social performance, and expectations vary by quarter. Each quarter, we assess these suppliers by product category and rank performance. We've assessed and adjusted business with suppliers who don't comply with minimum

requirements. Suppliers may also be awarded bonus points in the QBR process for exemplary performance or improvements on SER. The SER criteria vary each quarter and may include supplier progress on reporting GHG emissions data and having their GHG data verified by a third party. Some of our suppliers have improved the veracity of their GHG emissions data because of our requirements for third party data verification.

By FY26, we commit to engage manufacturing suppliers comprising at least 67% of NVIDIA's Scope 3 Category 1 GHG emissions, with the goal of effecting supplier adoption of science-based targets aligned with limiting temperature rise to 1.5 degrees Celsius. We plan to leverage the existing QBR process to engage suppliers on this topic, and SER scores will be assigned to track progress against our expectations.

We engage 100% of our strategic suppliers. We measure success by the number of suppliers that report GHG emissions, water, and waste data; the number of suppliers that provide third party verification of data; the number of suppliers that set GHG emission reduction goals in line with science-based targets; and the quarter-to-quarter improvement of supplier SER scores. Supplier SER scores impact overall QBR scores, which influence business allocation decisions. Our threshold of success would be defined as suppliers achieving all five SER points.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

We report our size of engagement as 100% of our customers because we aim to educate all customers about the energy efficient features of our products and the innovative ways they are being used to address critical climate change research and mitigation challenges. Our engagement campaign includes posting regular blogs on our corporate website, hosting speakers on the topic at our annual GTC developers conference and engaging directly with existing and potential customers.

Impact of engagement, including measures of success

We track how our products are used for critical climate change research and mitigation, and we highlight these use cases on our blog. Our Inception program is designed to nurture cutting-edge startups through go-to-market support, expertise, and technology. Inception includes over 12,000 companies, many of which are demonstrating how daunting climate challenges can be better understood and addressed with AI. We measure our success through both formal and informal customer feedback.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Climate-related disclosure through a public platform

Description of this climate related requirement

We require suppliers to disclose climate-related information through the Responsible Business Alliance online portal, which is a non-public platform.

% suppliers by procurement spend that have to comply with this climate-related requirement

60

% suppliers by procurement spend in compliance with this climate-related requirement

60

Mechanisms for monitoring compliance with this climate-related requirement

Certification

Supplier self-assessment

Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Implementation of emissions reduction initiatives

Description of this climate related requirement

Suppliers are required to follow the RBA Code of Conduct which stipulates that companies must establish a corporate-wide greenhouse gas reduction goal.

% suppliers by procurement spend that have to comply with this climate-related requirement

60

% suppliers by procurement spend in compliance with this climate-related requirement

60

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, and we do not plan to have one in the next two years

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

As stated in NVIDIA's Code of Conduct, NVIDIA only seeks to affect government action on issues that directly impact our business and only through specifically authorized and legally compliant lobbying activities. Potential support of any climate change-related policy initiative would be discussed with NVIDIA's executive staff, NVIDIA's legal counsel and Government Affairs group. All lobbying activities require the prior approval of NVIDIA Government Relations and Legal. Where required by law, we file lobbying disclosure reports. In FY23, we made no independent expenditures related to political campaign initiatives and referenda meant to influence the outcome of ballot measures related to climate change and had no reportable lobbying expenditures.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

Semiconductor Industry Association

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Environment, Health, and Safety is a policy priority of the Semiconductor Industry Association (SIA). SIA states support for promoting environmental sustainability in the design, manufacture, and use of products.

In the last reporting year, SIA submitted comments to the Department of Energy on the Energy Sector Supply Chain claiming that securing the semiconductor supply chain is critical to the sustained progress of the green economy. Recently, SIA submitted comments to the Securities and Exchange Commission's proposal on the enhancement and standardization of climate-related disclosures for investors.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Information Technology and Innovation Council

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The Information Technology and Innovation Council (ITI) and member companies acknowledge their stake in the fight against climate change and support government policies that emphasize an innovation agenda for mitigating and adapting our changing climate.

In the last reporting year, ITI commended President Biden's decision to rejoin Paris Climate Agreement.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

 2023-Annual-Report-1-final (1).pdf

Page/Section reference

PDF pages 99-100, section 'Environmental, Social and Corporate Governance' and PDF pages 114-115

Content elements

Governance
Risks & opportunities
Emission targets
Other, please specify
Low carbon products

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Task Force on Climate-related Financial Disclosures (TCFD) UN Global Compact	TCFD: We disclose relevant information based on the recommendations prescribed by the Task Force for Climate-Related Financial Disclosures (TCFD). UN Global Compact: In FY23, NVIDIA joined the UN Global Compact to help assess and communicate our human rights efforts, among other environmental and social issues. Learn more at: https://unglobalcompact.org/what-is-gc/participants/152373-NVIDIA-Corporation

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues
Row 1	No, and we do not plan to have both within the next two years

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity
--	---

Row 1	No, and we do not plan to do so within the next 2 years
-------	---

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No and we don't plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No and we don't plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

Not assessed

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	
Row 1	No, we are not taking any actions to progress our biodiversity-related commitments

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No	

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
No publications		

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Executive Vice President and Chief Financial Officer	Chief Financial Officer (CFO)