Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

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

> IBM is a global technology and innovation company headquartered in Armonk, New York. It is one of the largest technology and consulting employers in the world, with more than 250,000 employees serving clients in 175 countries. IBM is the world's leading artificial intelligence (AI) and hybrid-cloud solutions company for enterprises, ingesting and extracting value from data in all its forms to create competitive advantage and societal value. Hybrid cloud is the platform on which these solutions are designed, built, tested and deployed in the world. We integrate IBM Software, IBM Consulting, and IBM Infrastructure (Cloud, Servers and Storage products) to deliver this value. Through integrated solutions and products that leverage the full spectrum of data, most advanced information technologies, deep expertise in industries and business processes, and the world's premier industrial research labs, leading in ground-breaking work in areas like AI and quantum computing, we realize two principal goals: helping clients to become more innovative, efficient and competitive; and providing long-term value to shareholders. IBM has a record of recognized leadership in setting and achieving goals related to GHG emissions reduction and transparent reporting. IBM began disclosing its carbon dioxide (CO_2) emissions in 1994 and set its first CO_2 emissions reduction goal in 2000. Since then, IBM has publicly reported its GHG emissions reduction goals, actions and results in its annual corporate environmental report and website. IBM has also disclosed climate related information to third party portals, such as CDP, since those programs' inception.

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 1, 2022

End date
> December 31, 2022

Indicate if you are providing emissions data for past reporting years
No

C0.3

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

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, an ISIN code	US4592001014

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

Chief Executive Officer (CEO)	The CEO is the chairman of IBM's board and the position oversees and approves our annual ESG report
Board-level committee	The Directors and Corporate Governance Committee of the Board of Directors (the Committee) oversee IBM's environmental programs & performance, including those related to climate change. IBM's Chief Sustainability Officer briefs the Committee annually covering topics such as our environmental controls posture, performance (including against goals), new or significant focus, emerging requirements and challenges. Our climate related goals include energy conservation and efficiency, renewable electricity procurement, GHG emissions reduction and supplier engagement. The Committee provides feedback to the CSO and it also updates the full board on topics for which it has oversight responsibility. In the case of IBM's 21 environmental goals, including updated climate and energy goals, the Committee reviewed these goals and affirmed their support.

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	Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Reviewing and guiding strategy Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Reviewing and guiding the risk management process	The Directors and Governance committee of the IBM Board of Directors oversees IBM's environmental affairs programs and performance including those related to climate change, such as energy conservation and efficiency, renewable electricity procurement, GHG emissions reduction, product and operational energy efficiency and supplier engagement in identified emissions intensive sectors. IBM's CSO is the company's top environmental executive. The CSO briefs the Directors and Governance Committee of IBM's Board of Directors annually on IBM's environmental affairs programs, performance, challenges, and emerging issues. IBM began its annual briefing to a Board Committee on the topic of environment in 1993 and has continued this practice ever since. IBM executes a comprehensive management review process of our environmental programs and performance, from self-assessments to corporate audits, to management reviews up to the Directors and Corporate Governance Committee of IBM's Board of Directors. The requirements of management review are set forth in corporate directives and embedded in our global environmental

		management system. IBM's CSO is authorized with the responsibility to set IBM's environmental strategy and direct IBM's environmental programs globally, including those pertaining to climate change. The CSO possesses the authority, requisite technical skills, environmental knowledge and business acumen, and directly interacts with IBM's top leadership team with influence across the company's businesses and operations to drive actions to achieve desired outcome.

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	The Directors and Corporate Governance Committee is responsible for leading the search for qualified individuals for election as directors to ensure the IBM Board has the optimal mix of skills, expertise, experience, and diversity of backgrounds. The Committee recommends candidates to the full Board for election. Following the Annual Meeting in 2023 , the Board consist of 12 directors with expertise and leadership experience in Industries such as Chemicals, Utilities, Pharmaceutical, Oil & Gas - a diverse, experienced group of global thought, business, and academic leaders, all with the optimal mix of skills, expertise, experience, and diversity of backgrounds that are needed to understand and oversee the scale, scope and complexity of IBM's business, including matters associated with climate protection. All current directors have risk oversight and management exposure and experience with government, regulatory, business associations or public policy. Directors also have deep industry expertise as leaders of organizations within some of the Company's most important client industries and constituencies. Their perspectives on contemporary business issues like sustainability and climate protection and their experience running data-intensive organizations are an asset to the Company and to our shareholders.

C1.2

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

Position or committee
Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
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
Quarterly

Please explain
Reviewing/guiding strategy, major action plans, risk management policies, annual budgets/business plans, and major capital expenditures. Setting/monitoring performance objectives, participating in acquisitions & divestitures activities

Position or committee
Business unit manager

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Providing climate-related employee incentives
Managing 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

Quarterly

Please explain

The Business Unit leads are responsible for implementation of initiatives to achieve IBM's corporate sustainability goals

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

Other, please specify

Executives, Business Unit managers, Energy Manager, Env. Sustainability Manager, Facilities Management, Process Operations Manager, Corporate Environmental Affairs staff, and relevant managers, executives and C-Suite officers

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target

Achievement of a climate-related target

Implementation of an emissions reduction initiative

Reduction in absolute emissions

Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Carrying out IBM's energy conservation & climate protection programs, including strategies & actions to attain goals. Also, incentives for employees whose R&D in energy and climate innovations result in patents, products and solutions

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

These IBM employees have responsibility for defining strategies and executing actions and projects for the attainment of IBM's energy and GHG emissions reduction goals. Employees are evaluated versus these responsibilities throughout the year using the formal Human Resources' "Check Point" process through which employees document their business goals and receive feedback and assessments on their performance from their managers. The assessments are considered in IBM's employee compensation program to determine annual salary increases and bonus pay. Employees may also be rewarded for their differentiated performance under various cash and equity awards programs. There are also incentives for employees whose research and development in energy and climate related innovations result in patents, products and solutions

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Other, please specify

Factor in performance review

Performance indicator(s)

Progress towards a climate-related target

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

2 types of potential awards, annual reviews (short term) and Equity award (long term).

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

The short term covers demonstrating leadership in the area of climate - both in near term progress and well as longer term vision and goals. It accounts for both the progress towards the goals, not just setting of the goals. The potential long term incentive is the "Equity Award" which is under IBM's long term performance plan and awards Restricted Stock Units (RSU - a financial incentive).

Entitled to incentive

Chief Sustainability Officer (CSO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target

Achievement of a climate-related target

Implementation of an emissions reduction initiative

Reduction in absolute emissions

Energy efficiency improvement

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Performance rated on past year as well as prior years (when goals set) and progress towards future years. Many goals set were set for many years in the future and how well that goal was scoped and defined will not be known for years - so in short term only progress toward the goal is measured. The "Equity Award" is under IBM's long term performance plan and awards Restricted Stock Units (RSU) which is a financial incentive.

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

This IBM employee has responsibility for setting out IBM's corporate policy on company's energy conservation and climate protection programs, and communicating and educating others on them.   This responsibility is executed using the formal Human Resources' "Check Point" process through which employees document their business goals, receive feedback and assessments on their performance from their managers. The assessments are considered in IBM's employee compensation program to determine an employee's annual salary increases and bonus pay. Employees may also be rewarded for their differentiated performance under various cash and equity awards programs.

Entitled to incentive

Other C-Suite Officer

Type of incentive

Non-monetary reward

Incentive(s)

Internal company award

Performance indicator(s)

Other (please specify)

Carrying out IBM's corporate policy on company's energy conservation and implementation of climate protection programs, including strategies and driving actions and projects to enable the attainment of IBM's energy and GHG emissions reduction goals.

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

2022 marks the 31st annual award for the program, which was established in 1991 to recognize the IBM organization that best demonstrates leadership and accomplishments in advancing IBM's corporate environmental policy.

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

These IBM employees have responsibility for carrying out IBM's corporate policy on company's energy conservation and climate protection programs, which includes defining strategies and executing actions and projects for the attainment of IBM's energy and GHG emissions reduction goals. The IBM Chairman's Environmental Award recognition program was established in 1991, and has continued to this day. This annual award encourages environmental leadership, strengthens integration of environmental affairs (covering environmental, energy management and chemical management) throughout IBM's business and recognizes environmental leadership, innovation, and results on the part of IBM's organizations. Each year IBM's Chairman personally presents this annual award to the C-suite executive of the organization being recognized. IBM Software organization received the 2021 IBM Chairman's Environmental Award. The award is purposefully designed to not be a monetary award and has proven to be extremely effective, relevant and meaningful for IBM's organizations and their leaders (i.e., C-Suite leaders) throughout its decades of history. It unambiguously conveys the personal interest IBM's Chairman places on the environment and is one of only 2 awards given by the Chairman's office.

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	3	Given the nature of IBM's business and the rapid transformation of the IT industry, we consider a 0-3 year period to be an appropriate short-term period for strategy planning.
Medium-term	3	10	Given the nature of IBM's business and the rapid transformation of the IT industry, we consider a 3-10 year period to be an appropriate medium-term period for strategy planning.
Long-term	10	100	Given the nature of IBM's business and the rapid transformation of the IT industry, we view everything beyond 10 years from the present to be a long-term period.

C2.1b

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

Definition and indicator of "substantive financial or strategic impact", when it comes to climate change impacts: the potential for capacity and/or asset losses at its facilities, as well as the potential for business disruption by natural disasters and weather-related events which may be exacerbated by climate change.

IBM considers a number of qualitative and quantitative indicators in assessing the financial and strategic impacts of specific climate-related risks to its business. For transitional risks such as potential for new regulations, IBM considers the potential costs for compliance as well as qualitative indicators such as current IBM practices, IBM's ability to comply, and whether new requirements will uniquely affect IBM or impact IBM's competitive position. For physical risks, such as increased severe weather events, changes in sea level, droughts, and wild fires, IBM considers the increased likelihood and costs associated with response to these events as well as IBM's established practices to ensure business continuity such as our ability to move IT workloads among different data centers, our ability to move operations which may be subject to increased risks when necessary, and our practices to ensure redundancy in our supply chains. IBM's consistent, systemic, and integrated approach to enterprise risk management (ERM) is designed to identify, mitigate, and manage significant risks. As a part of our ERM process, we assess risks across the organization to develop a holistic, enterprise-level view of risks, including environmental and climate-related risks, arising from evolving regulatory or financial environments, operations, or strategic planning and execution. The program also assesses interdependencies among risks, and ensures collaboration with affected business units to optimize actions across IBM.

IBM does not expect climate change or compliance with environmental laws and regulations focused on climate change to have a unique or disproportionate effect on the company or its financial position, results of operations, and competitive position. Conversely, we believe that there is opportunity to use IBM's AI, hybrid cloud, and other technologies to assist clients with managing their climate-related risks, and we continue to invest in solutions such as the IBM Environmental Intelligence Suite, Envizi and other tools to continually enhance IBM's capabilities in this area.

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

Risk Management

We maintain a consistent, systemic, and integrated approach to enterprise risk management (ERM). Designed to identify, mitigate, and manage significant risks, our ERM function assesses risks across the organization to develop a holistic, enterprise-level view of risks arising from evolving regulatory or financial environments, operations, or strategic planning and execution. This includes evaluation of ESG-related risks. Oversight of risk management begins with our Board of Directors, which is responsible for assessing our ERM approach and overseeing management's execution of its risk responsibilities. IBM's risk professionals, including the Chief Risk Officer (CRO), work closely with senior management to integrate risk assessment into Board and committee briefings on topics of strategic importance.

The Board and its three committees receive periodic updates on the ERM program, and each committee examines specific risk components:

Audit Committee

Reviews financial and audit risks identified through our ERM framework, including those related to cybersecurity, and oversees implementation of and compliance with IBM's Business Conduct Guidelines.

Executive Compensation and Management Resources Committee

Reviews risks related to compensation programs and employee engagement as an indicator of company culture, and reviews IBM's human capital management, diversity

and inclusion, and other management resources programs.

Directors and Corporate Governance Committee
Reviews risks associated with governance, as well as corporate social responsibility, sustainability, environmental, and other societal and governance matters.

Additionally, our Chief Trust and Compliance Officer reports regularly to the Board and to the Audit Committee on compliance-related matters and holds a private session with Audit Committee members at every meeting. Our senior management is responsible for assessing and managing the various risk exposures on a day-to-day basis. The ERM program is led by our CRO (reporting up through our Chief Financial Officer) who drives senior leader decision making. This is achieved through a senior executive Country Investment Board and operationalizes via a risk council of business unit and process leaders, and senior management's relevant governance forums. We have developed tools that employ analytics and AI technologies to assist our ERM processes, and our Country Risk Scorecard identifies emerging risk areas. By leveraging a series of key risk indicators, we can timely alert country and regional leadership of risk areas and proactively respond. We promote a company culture of risk awareness through online education and mandatory training in areas such as business integrity and cybersecurity— including a new Risk Academy, where all employees can take courses and earn badges on risk management awareness and skills. Additionally, all employees are encouraged to report potential risks through numerous channels (anonymously if preferred), or to local management.

Environmental and Climate-Related Risks
Climate change is a serious concern that warrants meaningful action on a global basis. In addition to other risks identified by our ERM process, we consider risks identified by the TCFD in our risk management profile. IBM, like other companies, is subject to potential climate-related risks and costs, such as those resulting from increased severe weather events, prolonged changes in temperature, new regulations affecting hardware products and data centers, carbon taxes, and increased environmental disclosures requested or required by clients, regulators, and others.
Our senior management assesses the significance of environmental and climate-related risks and opportunities and manages them accordingly. Reports on IBM's environmental programs, challenges, and emerging issues are regularly provided to the Board and its Directors and Corporate Governance Committee.

We do not expect compliance with environmental laws and climate change regulations to have a disproportionate effect on the company or its financial position, results of operations, and competitive position. Conversely, we believe there is opportunity to use IBM's AI, hybrid cloud, and other technologies to assist clients with managing their climate-related risks.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Main risks of current regulation are non-compliance, compliance costs, and lack of flexibility to develop new products or offerings. Non-compliance could result in fines, inability or delay in placing products and offerings on the market, and impact on reputation. Regulations can also intersect with the way a company conducts business, develops products or invests in technology, affecting options or paths to serve a market and/or societal need. Examples of regulations include those around energy and carbon taxes, renewables portfolio standards and emissions cap and trade schemes. While not uniquely to IBM, these regulations can have a cost impact on the energy we consume. We monitor these regulations as part of our risk assessment process and make pertinent planning decisions, including financial, to minimize the impact of increased energy prices. In addition, IBM maintains strong mechanisms to identify applicable climate mitigation-related regulations, such as product energy efficiency requirements, and develops and executes compliance strategies while enhancing our posture in competitiveness. We also require our suppliers to implement processes and capabilities to ensure their regulatory compliance.
Emerging regulation	Relevant, always included	Main risks of emerging regulation are uncertainty, lack of harmonization across geographies and jurisdictions, and/or overly prescriptive regulatory requirements. This may impact the operating modes we use to meet our clients' requirements for reliability, availability and serviceability, our product design strategy and our ability to place products on the market, as well as operational and compliance costs. An example involves potential future regulations or government procurement requirements around data center energy efficiency that measure performance and compliance based on ineffective, impractical and/or unimplementable metrics that do not recognize the complexity of data center operations. These regulations may cause reliability risks for data center operations or a company's ability to meet client requirements, given that data center operations are technology-specific and driven by specific, often sensitive client requirements. We include this in our corporate wide risk assessment process by evaluating the ability of our current and next generation products and services to comply with emerging regulations in jurisdictions where IBM does or plans to do business. In addition, IBM has strong mechanisms in place to identify upcoming regulations that apply to our products and offerings worldwide, and we share our

		experience through regulatory rulemaking processes to assist in the development of effective and practically implementable rules.
Technology	Relevant, always included	As a cloud services and cognitive solutions company, we are at the forefront of identifying leading edge technologies in support of our business strategy and serving our clients. The risk around technology as it relates to climate change may involve missing out on opportunities to apply advanced analytics, cognitive solutions, blockchain, Internet of Things (IoT) and other innovative tools to help address climate change related challenges. Many of the solutions IBM offers to its clients can be used as an example specific to our company. One such example is our IBM Smarter Buildings solution, which uses advanced analytics and IoT to detect faults in building operating systems before human inspections would, identifying the need for maintenance before problems surface, which translates into operational and energy savings. Other examples are our weather forecasting, data analytics and machine learning capabilities to develop algorithms that predict renewable electricity generation and power demand, helping electricity grid operators and utilities to better plan and integrate more renewable electricity to the grid mix.
Legal	Not relevant, explanation provided	The preponderance of our legal obligations is related to current or future regulations, which have been addressed and discussed in the sections above "Current regulation" and "Emerging regulation".
Market	Relevant, always included	As clients across sectors of economy increase their focus on energy efficiency and GHG emissions, companies must anticipate requirements for their products and services and innovate to address changing market needs. This could have a potential impact of reduced demand for our offerings, should IBM fail to do so. An example specific to IBM and the technology services industry is our potential to develop solutions that are energy efficient or that help understand, address and mitigate the impacts of climate change in a more effective way, aided by advanced data insights. As companies throughout the world increasingly recognize the benefits of resource including energy and operating efficiency, IBM is well positioned to develop solutions that help address these needs. This aspect is included in our corporate wide risk management strategy, through which we remain in tune of the market and client needs for new business opportunities. Our focus has led to many IBM solutions with an environmental intersect, currently under deployment with a variety of clients and in multiple geographies. IBM recognizes that we must bring to bear the edge IT capabilities in addressing the world's most challenging environmental issues such as climate change and is committed to identifying opportunities to apply these solutions.

Reputation	Relevant, always included	Companies are expected to be environmental leaders. Poor performance will lead to negative brand perception and decrease trust amongst clients and shareholders. We begin with our commitment to be an environmental leader and we understand that positive brand reputation must be built upon real results. We set forth unambiguous positions, effective programs, requirements and goals, and back up our commitment with demonstrable results. IBM has publicly communicated its position on climate change since 2007. We execute a leading global Environmental Management System which drives consistent conduct no matter where in the world we operate. We have a defined program by which to respond to inquiries from clients, investors and employees on environmental topics, including climate change, calling for transparent and fact-based responses that are supported by data and results. We seek external recognition for our programs and performance, and we believe such recognition must be earned.
Acute physical	Relevant, always included	Our risk management processes assess the potential for disruptive events and establish plans to safeguard assets and business continuity. These processes consider the potential financial impact against significance criteria. Climate change related considerations are integrated into these processes which address natural disasters and weather-related events that may be exacerbated as a consequence of climate change. IBM considers the potential for capacity and/or asset losses at its facilities and takes pro-active steps during acquisition and operation to mitigate these potential impacts inclusive of those events that may be influenced by climate change. A relevant example of an acute physical risk would be a climate change exacerbated event with significant impact on an area where we host our data centers, potentially compromising our ability to meet our contractual obligations with our clients. This impact could be, for example, the loss of power for a prolonged period. This scenario is included in our climate-related risk assessment process which integrates resiliency and service reliability of our operations and ensures that our operations have sufficient back-up power to support critical operations during a state of emergency. With an increased move to the cloud, more IT workload and transactions can be virtually transferred to designated "resiliency" data centers, which provides another alternative to continue business activities during a hypothetical situation as the one described above. In short, climate change risk is integrated into our risk management strategy and process.
Chronic physical	Relevant, always included	At this time, based on the nature and scope of our business operations, IBM does not perceive unusual physical impacts outside of those we plan for as part of our ongoing business and risk management processes. These risk management processes look at

		business risk comprehensively including, but not limited to, risks and impacts related to climate change. We apply analytics tools to our supply chain assessment activities, integrating and assessing over 10,000 data points to evaluate potential risks. There are potential physical impacts, albeit not unique to IBM, in certain geographies which may include water scarcity or diseases. We expect that the business models of both IBM's and our suppliers' operations will enable those operations to anticipate and adapt to potential risks and mitigate the impacts without significant disruptions to the business.

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?

No

C2.3b

(C2.3b) Why do you not consider your organization to be exposed to climate-related risks with the potential to have a substantive financial or strategic impact on your business?

	Primary reason	Please explain
Row 1	Risks exist, but none with potential to have a substantive financial or strategic impact on business	IBM, like other companies, is subject to potential climate-related risks and costs, such as those resulting from increased severe weather events, prolonged changes in temperature, new regulations affecting hardware products and data centers and carbon taxes. IBM's existing risk management processes, our proactive processes to reduce our energy use and GHG emissions, and our decades long efforts to ensure that our products use energy efficiently prepare IBM to respond to these risks. Moreover, none of these risks represent unique challenges for IBM. As such, IBM does not expect climate change or compliance with environmental laws and regulations focused on climate change to have a disproportionate or unique effect on the company or its financial position, results of operations, and competitive position, and therefore these risks are not deemed to have substantive financial or strategic impact on IBM. Regional context: IBM operates facilities in 100+ countries and as such, any particular acute weather event is expected to affect a limited number of our facilities and operations. Further, we ensure supply of critical components from geographically diverse suppliers to mitigate supply chain disruption. Potentially increasing, chronic physical impacts of climate change on our operations are not expected to cause timing challenges for the business to adapt, hence are not considered substantive.

		Operational context: Our likely most critical operations sensitive to consequences of climate change are data center operations, which are located in facilities specially designed to withstand emergency situations, including natural disasters, to ensure continuity of operations. An example is the presence of on-site emergency power generation infrastructure and redundancy of emergency systems that would allow data centers to continue to operate during a power outage. We also maintain the ability to move data center workload to unaffected locations to achieve business continuity. The potential exacerbation of weather impacts from climate change is expected to be marginal compared to business as usual, and hence is not considered substantive.

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 of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Sectoral context: Sustainability Strategy and Roadmap - With deep industry expertise, an ecosystem of partnerships and proven co-creation methods, IBM Consulting® helps clients build sustainability agendas and pathways to deliver corporate social impact and business value. We offer a range of strategic advisory services rooted in ethical innovation and informed by our experience with design, technology, and operations. Our

end-to-end capabilities, from implementation to managed services, embed sustainability into an organization's core operations and culture to deliver lasting impact.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Consulting in 2022 Annual report. See https://www.ibm.com/annualreport/

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

IBM's Sustainability Consulting business is integrated into IBM's larger Consulting Organization. Following is a link to case study demonstrating the value of services to an IBM Client:

• Hera (https://www.ibm.com/case-studies/hera-spa)

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Consulting in 2022 Annual report. See https://www.ibm.com/annualreport/.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Sectoral context: ESG Data, Reporting and Risk Management - IBM offers solutions and expertise that reduce the cost, time, and burden of reporting with a single system of record, enabling organizations to focus on realizing their ESG strategic goals. We help our clients measure, analyze, report, and operationalize ESG data with our IBM Envizi ESG Suite, OpenPages and Planning Analytics software and through an ecosystem of partnerships. And to leverage AI-derived insights from Environmental Intelligence Suite (EIS) to proactively manage the economic impact of severe weather and climate change events.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Software in 2022 Annual report. See https://www.ibm.com/annualreport/

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

IBM's Sustainability Software Solutions are integrated into IBM's Software Organization. Following is a link to a case study demonstrating the value of offering:

• GPT Group (https://www.ibm.com/case-studies/gpt-group)

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Consulting in 2022 Annual report. See https://www.ibm.com/annualreport/.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Sectoral context: Intelligent Assets, Facilities, and Infrastructure - IBM helps clients optimize their operations and costs while reducing waste and emissions from their critical assets, facilities, and infrastructure. We put data and AI to work through IBM Maximo® and IBM TRIRIGA® application suites to improve operational and energy efficiency while balancing sustainability with profitability.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Software in 2022 Annual report. See https://www.ibm.com/annualreport/

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

IBM's Sustainability Software Solutions are integrated into IBM's Software Organization. Following is a link to a case study demonstrating the value of offering:

• Downer (https://www.ibm.com/case-studies/downer)

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Consulting in 2022 Annual report. See https://www.ibm.com/annualreport/.

Comment

Identifier

Opp4

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Sectoral context: Responsible Computing and Green IT - We build, deploy, and manage energy efficient infrastructures and software designed for hybrid cloud strategy and enterprise AI workloads, including IBM servers and storage, IBM Cloud, and IBM Turbonomic®. In addition to optimizing data center operations and application resource management to reduce GHG emissions and maximize social impact, we are exploring the development of new materials and alternative energy sources with IBM Quantum to help curb carbon emissions faster. Through our IBM Global Asset Recovery Services (GARS), we support end-of-life hardware refurbishment, remanufacturing, and recycling.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Software in 2022 Annual report. See https://www.ibm.com/annualreport/

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

IBM's Sustainability Software Solutions are integrated into IBM's Software Organization. Following is a link to a case study demonstrating the value of offering:

• Bosch (https://www.ibm.com/downloads/cas/W0Z50YQE)

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Consulting in 2022 Annual report. See https://www.ibm.com/annualreport/.

Comment

Identifier

Opp5

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Sectoral context: Sustainable Supply Chains and Circularity: Through our leading
technology and consulting services, we help clients build more resilient, agile, and
equitable supply chains for the future. Our results-driven approach, combined with the
AI, blockchain and integration capabilities of the IBM Sterling® and IBM Supply Chain
Intelligence Suites, enables responsible sourcing and transparent operations. With the
human experience and planetary health as essential considerations, we optimize supply
chain workflows to hyper-automate decision-making, mitigate disruptions, and improve
corporate profitability.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Software in 2022 Annual report. See https://www.ibm.com/annualreport/

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

IBM's Sustainability Software Solutions are integrated into IBM's Software Organization. Following is a link to a case study demonstrating the value of offering:

• Farmer Connect (https://mediacenter.ibm.com/media/Farmer+Connect+%2B+IBM/1_8nksvgym)

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Consulting in 2022 Annual report. See https://www.ibm.com/annualreport/.

Comment

Identifier

Opp6

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Primary potential financial impact

Reduced direct costs

Company-specific description

Sectoral context: Energy Conservation – During 2022, IBM implemented 519 energy conservation projects across more than 150 locations globally, avoiding 71,000 MWh of energy consumption and 25,600 MT of CO_2 emissions, saving $9.5 million.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

9,500,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

In measuring IBM's energy conservation savings, we only include the first year's savings from projects. Accordingly, IBM's total energy savings and CO2 emissions avoidance from these projects are greater than this simple summation of the annual results. We do not include reductions in energy consumption resulting from downsizings, the sale of operations or cost-avoidance actions, such as fuel switching and off-peak load shifting, in our energy conservation results.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Our efforts included strategic adjustments to lighting levels, temperature, and other building systems to avoid unnecessary energy consumption as we adapted to new levels of onsite working. Most of our data centers now incorporate hot/cold aisle containment. In addition, we continued to execute projects aimed at enhancing the energy efficiency of both cooling and IT equipment, retrofitting lighting systems, and optimizing the operational efficiency of our building infrastructure.

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Infrastructure
in 2022 Annual report. See https://www.ibm.com/annualreport/.

Comment

Identifier

Opp7

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

Sectoral context: Energy Efficient IT Hardware – IBM offers a large portfolio of compute and IT storage systems designed for energy efficiency and with features to assist clients in reducing energy consumption associated with IT use.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Infrastrutre in 2022 Annual report. See https://www.ibm.com/annualreport/

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

IBM's IT Hardware products are integrated into IBM's Infrastructure Organization.

Case study:

• The IBM zSystems® multi-frame platform has a 27-year history of improved mainframe system capacity per kilowatt (kW), increasing the total capacity per kW by more than 100x over the last 14 generations. Built on the IBM zSystems® architecture and

introduced with IBM z13®, IBM® LinuxONE delivers the same capacity per kW improvements as the last four zSystems generations. In 2022, IBM introduced the latest generations of its enterprise servers, IBM z16 and IBM® LinuxONE Emperor 4. Both systems improve the computing power delivered for each kW of electricity consumed versus comparably configured previous-generation systems.
• Since the release of our first enterprise class Power® brand system with Power4 processors in 2001, to the release of our Power10 processor-based servers in 2021, the IBM Power family has improved its performance per unit of power consumed (rPerf/kW) by a factor of 64. In July 2022, IBM announced a significant expansion of its Power10 server line with the introduction of four mid-range and scale-out systems (S1014, S1022, S1024 and E1050). These systems' energy efficiency score, as measured using the SPEC SERT suite, improved 24%, 25%, 22% and 13% respectively when compared to equivalent previous-generation IBM POWER9® systems.

We do not report revenue and financial figures for this specific business, but revenues are included in financial results for IBM Infrastructure
in 2022 Annual report. See https://www.ibm.com/annualreport/

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
Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan
Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan
We have a different feedback mechanism in place

Description of feedback mechanism
IBM has regular and comprehensive engagement with IBM employees, clients and investors, through which we discuss IBM's energy and climate programs, goals and performance. IBM EcoTeams, process for responding to client inquiries, regular updates with investors and our annual shareholders meeting and financial reporting are examples of the respective mechanisms by which we receive feedback from these entities on our energy and climate program and goals.

IBM has a number of ways of receiving shareholder feedback on matters of interest to them including those regarding our climate transition plan. These mechanisms include scheduled calls with or those requested by investors. Interested entities can also inquire through IBM.com through which inquiries are directed to the appropriate IBM organization to address

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

https://www.ibm.com/impact/files/reports-policies/2022/IBM_2022_ESG_Report_and_Addendum.pdf

Attachment to Verification Report Ref_ 15891806_v1.0 ISO 14064-1_2018.pdf

Independent Limited Assurance Statement.pdf

IBM_2022_ESG_Report_and_Addendum.pdf

Driving progress with 21 goals for environmental sustainability (2).pdf

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	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	No, but we anticipate using qualitative and/or quantitative analysis in the next two years	Important but not an immediate priority	IBM has mechanisms currently in place and considers risks as identified by the Financial Stability Board Task Force on Climate-related Financial Disclosures (TCFD) in its risk management process. Considering TCFD risk identification, IBM does not expect climate change or compliance with environmental laws and regulations focused on climate change to have a disproportionate effect on the company or its financial position, results of operations, and competitive position, we are looking to continuously improve our processes and systems. Conversely, we believe that there is opportunity to use IBM's AI, hybrid cloud, and other technologies to assist clients with managing

			their climate-related risks, and we continue to invest in solutions such as the IBM Environmental Intelligence Suite, Maximo, TRIRIGA, Sterling and our recent acquisitions including Envizi to enhance IBM's capabilities in this area. However, we continue to look into methods to continually improve our processes and are considering climate-related scenario analysis.

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	Increasing focus on energy efficiency and regulations with energy efficiency requirements and GHG emissions restrictions are generating additional drivers and opportunities for developing new IBM products and offerings that are responsive to capturing the greater demand for efficiency, renewable energy, and climate protection management solutions. For example: 1. Our product development teams continually increase their focus on providing server, storage and software management systems that increase IT equipment utilization to deliver more work per unit of energy consumed and to do more work with less equipment. 2. Our data center teams are leveraging technology refresh cycles to introduce more efficient technologies from IBM and OEMs to improve the overall efficiency of the data center. 3. Our software business is applying cognitive and AI technologies to drive greater operational efficiency in many aspects of our client's business. Our consulting services are experiencing continued demands for sustainability-related services. IBM offers dedicated and adjacent software and services in the area of sustainability, including those related

		to energy, climate, supply chain, automation, optimization, etc.
Supply chain and/or value chain	Yes	IBM procures many hardware parts, components and products from third parties and incorporates them into our technologies and solutions. Some of the procured hardware are or may be regulated by energy efficiency requirements that are not harmonized across jurisdictions. This has added complexity to our product design process and required greater resources to addressing these requirements. That said, our longstanding processes and underlying management systems enable us to ensure compliance with applicable requirements without undue burden on our resources or impact to our ability to bring products to market.
Investment in R&D	Yes	IBM implements ongoing and effective business processes to identify, analyze, and realize emerging business opportunities which can be harnessed with IBM's range of expertise and offerings to solve challenges related with climate change. This has informed and directed our research focus over the years to create and incubate solutions across a wide range of areas for delivering a positive contribution to addressing climate change. We anticipate the magnitude of impact to be moderate. Examples of focus areas include research that addresses climate related issues through increasing the workload delivered or data stored per unit of energy consumed of IBM's IT products and data center ; to develop solutions for clients in the areas of energy storage; renewable electricity forecasting and deployment; blockchain applications that enable tracking and assigning energy generation attributes; process optimization; architecting, organizing and efficient querying of large scale geospatial aimed to effectively deliver insights; and applying AI to accelerate materials discovery to enable more effective carbon capture to provide just a few examples.
Operations	Yes	We have considered various drivers including, (1) increase of energy prices in the market which can be driven by price on carbon, renewable portfolio standards, and incentives for renewable generation imposed by regulation, (2) building and operational energy efficiency requirements, (3) client interest in energy efficient data center operations toward continually enhancing our longstanding focus on energy efficiency and conservation. The impact of magnitude is low but can become moderate in times of high energy cost.

		IBM continues to invest millions in CapEx and OpEx each year to improve energy efficiency of our operations including improving and integrating controls systems in our buildings and data center operations to reduce energy use, consolidating IT equipment in data centers to deliver more work per unit of energy consumed in connection with IBM's and client's operations. The main drivers for these investments are the economic benefit of using less energy and achieving our goals to reduce our operational GHG emissions.

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 Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	Revenues: We do not expect climate change or compliance with environmental laws and regulations focused on climate change to have a disproportionate effect on the company or its results of operations, including revenues. As sustainability, inclusive of climate change, becomes more of a priority, companies need digital technologies to create a baseline, analyze data and improve the way they operate. We have been building a portfolio of solutions to help companies make progress on this journey, which includes our sustainability solutions software and consulting services. IBM sustainability solutions software brings, under one portfolio, a range of products and technologies from climate risk management and analytics enabled decision making capabilities to asset management, from operational efficiency to supply chain management, and more. IBM Consulting also offers a full suite of services from strategic planning to risk assessment, from emissions inventory, goal setting to mitigating and more. These offerings directly and meaningfully contribute to IBM's overall revenue. Operating costs: Changes in energy costs driven by the movement towards more renewables in the grid mix and renewable portfolio standards or equivalent programs that require REC purchases at elevated prices represent a cost impact. While wholesale prices for renewables have come down over time the retail cost of electricity at the meter reflecting the total cost of integrating renewables with reliable power needed to operate our data centers at five 9's reliability levels continues to increase

in many markets. We plan for these changing energy prices, which are driven by a range of factors. For example, we are working with our utility suppliers in regulated markets and energy retailers in unregulated markets to develop contracts for reliable power supplied with a high percentage of renewable generating assets at a competitive cost.

Capital expenditures / capital allocation:
Not impacted - IBM has a long-standing energy conservation program which operates within IBM's business process governing approvals of capital investments. Energy efficiency and conservation projects are assessed on their benefits to the business and compete on equal footing with business investments in other areas for capital allocation. We take this approach with the belief that investments can only be sustained when we apply rigor and objectivity in selecting projects. A testament to the effectiveness of this process is IBM's long history of energy conservation which has avoided an average of 2.9% of annual energy consumption over the past 5 years (2018-2022). Savings from energy conservation contribute to reducing operating costs and offsetting energy cost increases where they occur.

Acquisitions and divestments:
Not impacted - IBM's acquisition and divestiture strategy is driven by business strategy. Climate change is not a separate consideration in these activities given the nature of IBM's business.

Access to capital:
We do not expect climate change or compliance with environmental laws and regulations focused on climate change to have a disproportionate effect on the company, its financial position, results of operations, or access to capital.

Assets:
We do not expect climate change or compliance with environmental laws and regulations focused on climate change to have a disproportionate effect on the company or its financial position, including total assets.

Liabilities:
Not impacted - There are no identified liabilities that are purely contingent on climate change issues

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, but we 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
2021

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2
Scope 3

Scope 2 accounting method
Market-based

Scope 3 category(ies)
Category 1: Purchased goods and services

Base year
2010

Base year Scope 1 emissions covered by target (metric tons CO2e)
141,000

Base year Scope 2 emissions covered by target (metric tons CO2e)
1,034,000

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
0

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)
0

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
1,175,000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

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)
100

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)
100

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 (%)
65

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
411,250

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
79,000

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
183,000

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
169,000

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)
169,000

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
431,000

Does this target cover any land-related emissions?

% of target achieved relative to base year [auto-calculated]
97.4140752864

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
The referenced target, set by IBM in 2021 is IBM's fifth-generation goal which calls for IBM to reduce its operational GHG emissions 65 percent by 2025 against base year 2010, adjusted for acquisitions and divestitures. This goal covers our Scope 1 and Scope 2 emissions, as well as Scope 3 emissions associated with IBM's electricity consumption at co-location data centers. Our goal is aligned with the scientific recommendations from the United Nations Intergovernmental Panel on Climate Change (IPCC) and exceeds the rate of reduction it indicates is necessary to limit Earth's

warming to 1.5 degrees Celsius above pre-industrial levels. Further, we challenge ourselves by not including the purchase of nature-based carbon offsets to comprise any emissions reduction.

In addition, in 2021 IBM set a goal to reach net zero greenhouse gas emissions by 2030 using feasible technologies to remove emissions in an amount which equals or exceeds IBM's residual emissions. Aim for residual emissions of 350,000 metric tons of CO2 equivalent or less by 2030, with 90 percent of IBM's electricity coming from renewable sources. We challenge ourselves by setting a numerical target for residual emissions. Like our goal on GHG emissions reduction, this new goal is responsive to the global ambition of the Paris Agreement.

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

The two key levers for IBM to achieve its GHG emissions reduction target is through energy conservation and transitioning to using renewable electricity. In 2022, we executed 519 energy conservation projects globally avoiding 71,000 MWh in energy consumption and 25,600 metric tons of associated CO2e. 65.9%% of the electricity IBM consumed globally was sourced from renewables. In terms of GHG emissions, we reduced emissions 63.3% against base year 2010, placing IBM on track to meet its 2025 goal. IBM will continue to prioritize energy conservation and the use of renewable electricity to reduce GHG emissions as we pursue our goal to reach net-zero GHG emissions by 2030. We anticipate new carbon removal solutions such as direct air capture and support their development with research to accelerate the discovery of enabling materials.

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
Net-zero 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

2021

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2021

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

2,011,627

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

62.7

Target year

2025

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

75

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

65.9

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

26.0162601626

Target status in reporting year

Underway

Is this target part of an emissions target?

Yes. IBM's purchases of renewable electricity are an essential component for achieving our GHG emissions reduction target.

Is this target part of an overarching initiative?

Other, please specify

This target is part of the overarching goal to reach net zero GHG emissions before 2050.

Please explain target coverage and identify any exclusions

"Base year" is not applicable to IBM's goal because our goal is not measured against a base year. Nonetheless we entered a 'base year' because this question requires an input. We selected "2021" which reflects the year we set this goal. It is important to note that this is IBM third-generation renewable electricity purchase goal, announced in 2021 upon having met our previous generation goal. Our current goal is to procure 75% of

the electricity IBM consumes worldwide from renewable sources by 2025, and 90 percent by 2030. We include renewable electricity (a) in the grid mix IBM receives from utilities, (b) for which IBM contracts over and above what's contained in the grid mix, and (c) generated on site. We challenge ourselves by not counting the purchase of unbundled Renewable Energy Certificates (RECs) to comprise any percent renewable if IBM cannot credibly consume the electricity those certificates represent.

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

During 2022, IBM increased its consumption of renewable electricity to approximately 1,299,000 MWh, representing 65.9% of its total electricity consumption, up from 62.7% in 2021. That includes 51.8% contracted directly from power suppliers and 14.1% already in the electricity mix we received from the grid. This keeps IBM on track to meet our current goal of 75% by 2025. IBM will continue to work with our power suppliers and landlords across geographies to identify the best opportunities to increase our consumption of renewable electricity, sourcing from the same grid region from which IBM operations consume the power, to reach our 2025 goal.

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Target year for achieving net zero

2030

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

Please explain target coverage and identify any exclusions

This goal covers our Scope 1 and Scope 2 emissions, as well as Scope 3 emissions associated with IBM's electricity consumption at co-location data centers. Our goal is aligned with the scientific recommendations from the United Nations Intergovernmental Panel on Climate Change (IPCC) and exceeds the rate of reduction it indicates is necessary to limit Earth's warming to 1.5 degrees Celsius above pre-industrial levels. Further, we challenge ourselves by not including the purchase of nature-based carbon

offsets to comprise any emissions reduction.

IBM's goal is to reach net zero greenhouse gas emissions by 2030 using feasible technologies to remove emissions in an amount which equals or exceeds IBM's residual emissions. IBM aims for residual emissions of 350,000 metric tons of CO2 equivalent or less by 2030, with 90 percent of IBM's electricity coming from renewable sources. We challenge ourselves by setting a numerical target for residual emissions. Like our goal on GHG emissions reduction, this goal is responsive to the global ambition of the Paris Agreement.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

IBM's interim target that supports our net zero operational GHG emissions by 2030 is our current, fifth-generation target to reduce IBM's GHG emissions 65 percent by 2025 against base year 2010, adjusted for acquisitions and divestitures. We are investing in energy conservation projects and in increasing our procurement of renewable electricity to reduce our emissions as much as to minimize our residual emissions. We anticipate relying on feasible carbon removal solutions such as direct air capture to permanently removed our residual emissions necessary to meet out net zero operational GHG emissions target. Related, IBM Research is applying AI to accelerate the discovery of more efficient materials for carbon capture and contributing to the continued advancement of technologies.

Planned actions to mitigate emissions beyond your value chain (optional)

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		
To be implemented*		

Implementation commenced*		
Implemented*	519	25,600
Not to be implemented		

C4.3b

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

Initiative category & Initiative type
> Other, please specify
> Other, please specify
>> Energy conservation across IBM's operations

Estimated annual CO2e savings (metric tonnes CO2e)
> 25,600

Scope(s) or Scope 3 category(ies) where emissions savings occur
> Scope 1
> Scope 2 (location-based)
> Scope 2 (market-based)
> Scope 3 category 1: Purchased goods & services

Voluntary/Mandatory
> Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
> 9,500,000

Investment required (unit currency – as specified in C0.4)
> 1

Payback period
> 1-3 years

Estimated lifetime of the initiative
> Ongoing

Comment
> During 2022, we implemented 519 energy conservation projects across more than 150 locations globally, avoiding 71,000 MWh of energy consumption and 25,600 MT of CO2 emissions, saving $9.5 million.
> Our efforts included strategic adjustments to lighting levels, temperature, and other building systems to avoid unnecessary energy consumption as we adapted to new levels of onsite working. Most of our data centers now incorporate hot/cold aisle

containment. In addition, we continued to execute projects aimed at enhancing the energy efficiency of both cooling and IT equipment, retrofitting lighting systems, and optimizing the operational efficiency of our building infrastructure.

In measuring performance against IBM's energy conservation goal, we only include the first year's savings from projects. Accordingly, IBM's total energy savings and CO2 emissions avoidance from these projects are greater than this simple summation of the annual results. We do not include reductions in energy consumption resulting from downsizings, the sale of operations or cost-avoidance actions, such as fuel switching and off-peak load shifting, in our energy conservation results.

IBM does not provide investment figures to protect business confidential information.

C4.3c

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

Method	Comment
Financial optimization calculations	We prioritize on energy efficiency and conservation projects that meet our internal financial IRR and ROI requirements garnering support from both operational and finance organizations. IBM's commitment to meeting its goals on energy conservation and energy efficiency (goals 4 and 5 via this link https://www.ibm.com/ibm/environment/information/IBM_Environmental_Goals_2021.pdf), combined with the business returns generated by conservation projects sustain our ability to have these projects funded and implemented. IBM's performance against these goals can be found https://www.ibm.com/impact/files/reports-policies/2022/IBM_2022_ESG_Report_and_Addendum.pdf
Employee engagement	IBM engages its employees toward achieving reduction in energy consumption and related GHG emission through a variety of programs including publicity campaigns, "best idea" solicitations, personal energy use, software-based meters for office employees, and other methods to encourage employees to identify, propose, and/or implement energy saving and GHG emissions reduction ideas. IBM leverages a formal program called EcoTeams to promote and sustain employee engagements in the area of environmental sustainability.
Compliance with regulatory requirements/standards	Compliance with applicable regulations is absolutely required and enabled with requisite resources. IBM also invests toward meeting meaningful and impactful standards (e.g., ENERGY STAR). Further, IBM anticipates and proactively addresses emerging requirements and/or implementing best practices such as those in connection with hardware product and data center service energy efficiency with twin goals of reducing impacts on climate change and competitively positioning the company in the marketplace.

Partnering with governments on technology development	IBM partners with governments around the globe on the development and implementation of innovative solar electricity generation systems, development of technologies and IT based solutions to improve the efficiency of built infrastructure, the use of high performance computers to analyze climate and energy challenges, development of IT based electric grid management systems to facilitate the integration of electric vehicle charging stations and distributed, renewable electricity generation into the grid infrastructure, development of innovative data center power and cooling infrastructures, and other projects which drive energy efficient technology development.
Internal finance mechanisms	Within IBM, Corporate Environmental Affairs staff, Finance, and business units collaborate to execute a cross functional business process aimed at improving the competitiveness of energy-related projects for capital funding.
Other Alternative funding mechanisms	IBM organizations make use of energy efficiency incentives, grants, and tax incentives offered by governments and utilities that improve the financial viability of energy conservation projects and contribute to co-funding such projects.

C4.5

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

No

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?

Yes, a divestment
No

Name of organization(s) acquired, divested from, or merged with

IBM's managed infrastructure services unit was spun off into a new company, Kyndryl.

Details of structural change(s), including completion dates

All figures contained in this report have been adjusted for the separation of IBM's managed infrastructure services unit (which was spun off into a new company, Kyndryl) that was completed on November 3, 2021. IBM does not take credit for a reduction of GHG emissions because of a significant divestiture. For those divestitures, we have removed the relevant GHG emissions from the base year of the calculation. For acquisitions, we have not adjusted the base year, but our current year data and performance against our goal includes the acquired GHG emissions.

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

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1 Scope 2, location-based Scope 2, market-based Scope 3	IBM does not take credit for a reduction of GHG emissions because of a significant divestiture. For those divestitures, we have removed the relevant GHG emissions from the base year of the calculation. For acquisitions, we have not adjusted the base year, but our current year data and performance against our goal includes the acquired GHG emissions.	Yes

C5.2

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

Scope 1

Base year start

January 1, 2010

Base year end

December 31, 2010

Base year emissions (metric tons CO2e)

141,000

Comment

These are the emissions associated with IBM's use of fuels in buildings and for transportation, direct (unplanned or expected system leakage) refrigerant GHG emissions, and direct emissions of chemicals with global warming potential from processes. This value decreased 20,000 metric tons due to the Kyndryl divestiture recalculations.

Scope 2 (location-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline because IBM's GHG emissions reduction goals are measured using market-based Scope 2 emissions.

Scope 2 (market-based)

Base year start

January 1, 2010

Base year end

December 31, 2010

Base year emissions (metric tons CO2e)

1,034,000

Comment

These are the emissions associated with IBM's use of electricity and purchased commodities, adjusted for the use of renewable energy (accounted as zero-carbon electricity). This value decreased 785,000 metric tons due to the Kyndryl divestiture recalculations.

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2010

Base year end

December 31, 2010

Base year emissions (metric tons CO2e)

0

Comment

IBM did not operate at third-party co-location data centers in 2010.

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

IBM's GHG emissions baseline does not include emissions in this category; however, they are included in our targets.

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 6: Business travel

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
These emissions are not part of IBM's GHG emissions baseline.

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
These emissions are not part of IBM's GHG emissions baseline.

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

These emissions are not part of IBM's GHG emissions baseline.

C5.3

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

ISO 14064-1

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

The Greenhouse Gas Protocol: Scope 2 Guidance

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)

79,000

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

330,000

Scope 2, market-based (if applicable)

183,000

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)

169,000

Emissions calculation methodology

Supplier-specific method

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

100

Please explain

These are the emissions associated with IBM's use of electricity at third-party managed (i.e., co-location) data centers. These emissions are in scope of IBM's current, fifth-generation GHG emissions reduction goal. The emissions are calculated by multiplying the electricity consumed by IBM at these co-location data centers by the data center specific Power Usage Effectiveness (PUE) and by the specific emissions factor for that location according to the GHG Protocol Scope 2 Guidance, accounting for any use of renewable electricity if applicable.

IBM includes emissions (Scope 3) associated with our electricity consumption in co-location data center in our operational GHG emissions reduction goal and our net zero target for operational GHG emissions given that, (a) IBM has control over its electricity consumption; and (b) primary source data is available for the electricity IBM consumes in these spaces. Primary source data for other Scope 3 emissions in the "Purchased goods and services" category does not exist and there are no effective, accurate methodologies to estimate or allocate those emissions.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

There is no reliable information on which to estimate or report the embedded emissions of our purchased capital equipment. Any estimation would require gross assumptions to arrive at the product level embedded GHG estimates for building materials, IT equipment, etc. without necessary validity or basis in reality. Moreover, estimating these emissions for the sake of accounting, not to mention of the same emissions over and over, would rob resources from actually reducing emissions. We believe each organization must take responsibility to reduce their energy consumption and direct GHG emissions and accordingly, direct their resources to achieve that.

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

Evaluation status

Not relevant, explanation provided

Please explain

IBM does not attempt to estimate emissions associated with the transportation of energy commodities, transmission of electricity or other upstream emissions associated with the production of fuels and energy commodities purchased and consumed by IBM because there is no basis or reliable data to do so. Estimating these emissions would generate a grossly inaccurate figure at best due to the many needed assumptions and would rob

resources to perform carbon accounting for the sake of accounting. Instead, we believe each organization must take responsibility to reduce their energy consumption and direct GHG emissions and accordingly, direct their resources to actually reduce emissions.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

IBM's upstream suppliers manage their own logistics and shipping operations. There is a large number of suppliers and locations from which IBM sources parts and components. Also, our suppliers manage transportation and packaging of components and parts to IBM as they are doing the same for multiple customers. We influence the reduction of emissions by focusing on working with our suppliers to reduce packaging volume and weight to make shipping more efficient, through the use of packaging specifications to drive suppliers toward improving their packaging, and by reducing the use of materials, fuel and costs. We also require our suppliers to set goals to reduce their own emissions. They know their business best, they are responsible for their emissions, and they know what actions to take to actually reduce their energy consumption and GHG emissions. This clear delineation of responsibility also avoids multiple counting of the same emissions and companies taking on responsibility or credit of another entity.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Please explain

There is no reliable information that we could use to make credible assumptions, let alone generating an estimate for GHG emissions associated with waste disposal. Since 1988, IBM has maintained a goal for recycling of non-hazardous wastes generated in its operations. IBM focuses its efforts on making its operations more efficient to reduce waste generation and increase recycling. These efforts deliver demonstrable emissions reductions which are able to be understood, as opposed to an opaque "Scope 3" number. See our response in sections above with regard to Scope 3 emissions. Please see the discussion under the Pollution Prevention and Waste Management section of the IBM ESG Report for further discussion.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

125,000

Emissions calculation methodology

Supplier-specific method

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

100

Please explain

These are the emissions from business air travel on commercial carriers and car rentals. The CO2 emissions data from rental cars are directly provided by our suppliers, who multiply mileage driven by CO2 emission factor from the vehicle manufacturers to estimate total emissions. We obtain total CO2 emissions associated with business air travel via our corporate travel booking tool. The vendor responsible for our travel booking tool calculates these emissions following a standard developed by the United Kingdom Department for Environment, Food and Rural Affairs (DEFRA).   It consists of multiplying flight distance with fixed emission factors in kgCO2/kilometer. These factors are different for short, medium and long-haul flights. Emissions are allocated per seat.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

10,000

Emissions calculation methodology

Distance-based method

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

100

Please explain

Our reported figure for employee commuting emissions only includes estimations made for our U.S. employees since this is the employee population for which a reasonably understood commuting behavior exists and we have access to reliable third-party data to estimate emissions. This estimate was calculated using daily occupancy data at our U.S. locations, assuming employees commute to an IBM location 235 days a year and have a round trip commute of 26 miles based on data from the U.S. Census Bureau; and an emission factor of 0.00033 mtCO2e/mile from the U.S. EPA. Upstream leased assets

Upstream leased assets

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

18,000

Emissions calculation methodology

Supplier-specific method

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

100

Please explain

In some countries, IBM provides leased vehicles for employees that they may use for personal purposes. For these vehicles, we have set standard guidelines that require leasing of vehicles with lower emissions profiles. These guidelines enable reductions in average car emission levels as the car fleets are renewed. IBM car fleet data related to vehicle make and model, term and mileage, fuel type and fuel consumption are collected through our lease vehicle suppliers. All reported vehicles have been active at least one day during the reporting year and only the reporting year's mileage is reported. In some cases, the GHG emissions associated with the lease car use are supplied directly by our suppliers. Otherwise, GHG emissions are calculated based on data about the cars and their fuel type provided by our suppliers, dividing the mileage traveled by average mile per gallon for the car type and then calculating the CO2 emissions using the appropriate fuel emission factor.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Logistics and shipping activities directly supporting IBM's operations are managed by many providers playing different roles and, in most cases, IBM is removed by multiple tiers from the carriers that actually transport our products. Further, IBM's purchases constitute but a very small percentage of any supplier's business. In addition, IBM's logistics operations are widely dispersed across geographies, shippers and consolidated loads disallowing credible estimates of GHG emissions. IBM does not presently have plans to try to determine the mileage and GHG emissions associated with the transport of parts and components between suppliers and IBM's manufacturing and assembly locations. We do work to maximize the efficiency of our logistics operations for activities we can control. IBM has a packaging engineering organization which designs and/or improve the efficiencies of packaging for IBM products and packaging used to move components to IBM product assembly locations. These engineering efforts have reduced packaging volume and weight to make shipping more efficient by increasing shipping density. These results effectively reduce the emissions associated with product shipment, in addition to the direct reductions in packaging materials. In addition, IBM requires its key logistics suppliers to set their own goals to reduce their Scope 1 and Scope 2 emissions in line with scientific recommendations of IPCC to limit the Earth's

warming to 1.5 degrees Celsius above pre-industrial levels (see goal 7 via this link
https://www.ibm.com/downloads/cas/QPLV0412pdf)

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

IBM divested virtually all manufacturing/processing operations that produce parts,
components, assemblies, etc. as of 2015 when we sold our semiconductor
manufacturing operations.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

264,000

Emissions calculation methodology

Average product method

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

100

Please explain

These are the emissions associated with the electricity consumption of our sold
products when they are used by our clients. In estimating emissions from the use of our
sold products, we only capture products sold during the reporting year and account for
12 months of estimated consumption. We use product specifications such as nameplate
power, quantity of products sold every year, we make assumptions around typical
hardware utilization rates, and use industry average Power Usage Effectiveness and
global electricity GHG emission factors to estimate these emissions. We do not
extrapolate this data to estimate emissions around a hypothetical lifetime of our
products because that would require gross assumptions given the lack of primary
source data.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

IBM does not attempt to estimate GHG emissions associated with disposal of its
products at end of life. There is no accepted standard or practice for how to determine
when a product (in particular non-consumer products as are IBM products) will reach
end of life or the ways it will be reused and recycled. There are many variables and a

high degree of uncertainty in establishing assumptions and the analysis causing any resulting Scope 3 emissions associated with product disposal not credible. IBM focuses its resources on its product design activities to make systems upgradeable and for ease of disassembly, to allow components to be reused or recycled at end of life, to minimize energy use over the life of the product, and to enable product end of life recycling.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Emissions of any leased assets (i.e., IBM products), if any, are captured in the "sold products" category.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

IBM does not operate franchises.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

IBM does not make significant investment outside of its own operations.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

No other relevant upstream emissions.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

No other relevant downstream emissions.

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
0.00000433

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
262,000

Metric denominator
unit total revenue

Metric denominator: Unit total
60,530,000,000

Scope 2 figure used
Market-based

% change from previous year
15

Direction of change
Decreased

Reason(s) for change
Change in renewable energy consumption
Other emissions reduction activities

Please explain
IBM does not consider this to be a meaningful or comparable metric

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 CO2e)	GWP Reference
CO2	71,000	IPCC Sixth Assessment Report (AR6 - 100 year)
CH4	0	IPCC Sixth Assessment Report (AR6 - 100 year)
NF3	200	IPCC Sixth Assessment Report (AR6 - 100 year)
SF6	1,300	IPCC Sixth Assessment Report (AR6 - 100 year)
HFCs	5,300	IPCC Sixth Assessment Report (AR6 - 100 year)
PFCs	500	IPCC Sixth Assessment Report (AR6 - 100 year)
Other, please specify Heat transfer fluids	700	IPCC Sixth Assessment Report (AR6 - 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 CO2e)
Asia Pacific (or JAPA)	6,000
Europe, Middle East and Africa (EMEA)	11,000
Latin America (LATAM)	6,000
North America	56,000

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 CO2e)
Use of fuels for building operations (stationary emissions)	54,000
Use of fuels for transportation (mobile emissions)	17,000
Use of chemicals with a global warming potential (fugitive emissions)	8,000

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 CO2e)	Scope 2, market-based (metric tons CO2e)
Asia Pacific (or JAPA)	96,000	82,000
Europe, Middle East and Africa (EMEA)	53,000	40,000
Latin America (LATAM)	14,000	2,000
North America	167,000	59,000

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 CO2e)	Scope 2, market-based (metric tons CO2e)
Consumption of electricity	316,000	170,000
Consumption of cooling, heating and steam	14,000	13,000

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 CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	12,000	Decreased	4	Scope 2 market-based emissions reduced from 221,000 in 2021 to 183,000 mtCO2e in 2022 (delta of 38,000), and Scope 2 location-based emissions reduced from 356,000 to 330,000 mtCO2e respectively (delta of 26,000). Therefore, only 12,000 mtCO2e (=38,000 – 26,000) are attributed to the increase in renewable electricity consumption year-to-year since that is the primary activity responsible for reducing Scope 2 emissions when discounting other emissions reduction activities.
Other emissions reduction activities	30,000	Decreased	10	Stationary scope 1 emissions (associated with fuel consumption in IBM's facilities) reduced from 58,000 to 54,000 mtCO2e year-to-year (reduction of 4,000). In addition, location-based scope 2 reduced from 356,000 to 330,000 mtCO2e (reduction of 26,000) - which is an indication of energy conservation and operational efficiency initiatives executed during 2022. In total, 4,000 + 26,000 = 30,000 mtCO2e. A subset of this reduction is represented by 25,600 mtCO2e avoided by energy conservation projects executed by IBM during 2022.
Divestment	0	No change		
Acquisitions	0	No change		
Mergers	0	No change		

Change in output	9,000	Increased	3	Mobile Scope 1 emissions (associated with transportation) increased from 8,000 to 17,000 mtCO2e year-to-year, reflecting a recovery from the pandemic. The difference is 9,000 mtCO2e.
Change in methodology	0	No change		
Change in boundary	0	No change		
Change in physical operating conditions	5,000	Decreased	1.7	Fugitive Scope 1 emissions decreased from 13,000 to 8,000 mtCO2e (reduction of 5,000).
Unidentified	0	No change		
Other	0	No change		

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	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	No

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	342,471	342,471
Consumption of purchased or acquired electricity		1,298,842	671,498	1,970,340
Consumption of purchased or acquired heat		0	17,414	17,414
Consumption of purchased or acquired steam		0	7,731	7,731
Consumption of purchased or acquired cooling		0	109,865	109,865
Total energy consumption		1,298,842	1,148,979	2,447,821

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	No

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

Comment

Other biomass

Heating value

Total fuel MWh consumed by the organization
0

Comment
Even though IBM consumes significant quantities of B5 biodiesel (a blend that contains up to 5% of biofuel and 95% or less fossil fuel), we cannot deterministically calculate the exact composition of the blends of B5 biodiesel we consume. Therefore, we are not reporting this consumption as biomass or renewable fuels

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Total fuel MWh consumed by the organization
0

Comment

Coal

Heating value

Total fuel MWh consumed by the organization
0

Comment

Oil

Heating value
HHV

Total fuel MWh consumed by the organization
58,696

Comment
Includes consumption of fuel oil #2, diesel and B5 biodiesel (which contains up to 5% of
biodiesel).

Gas

Heating value
HHV

Total fuel MWh consumed by the organization
211,868

Comment

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

Heating value
HHV

Total fuel MWh consumed by the organization
71,907

Comment
Includes consumption of transportation fuels, kerosene and liquified petroleum gas.

Total fuel

Heating value
HHV

Total fuel MWh consumed by the organization

342,471

Comment

Includes consumption of transportation fuels, kerosene and liquified petroleum gas.

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

United States of America

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify
Solar, wind, hydro, biomass and geothermal

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

1,020,405

Tracking instrument used

Other, please specify
Renewable Energy Certificates from multiple tracking schemes, or equivalent documentation

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

IBM's electricity demand by location is relatively low and IBM has a large and dynamic portfolio of leased locations and as such our renewable electricity purchase strategy does not often involve the use of power purchase agreements. IBM purchases renewable electricity from numerous utility providers, retailers and generators around the world and consumes renewable electricity at many facilities worldwide. The consumption of renewable electricity reported in this category involves all direct purchases IBM or our landlords execute from all sources. Given the above we do not have the data granularity to   respond to this question by country or to provide the commissioning year of every generation facility supplying renewable electricity to IBM. The selection of a country (in this case "United States of America") is needed to avoid being forced to leave no response. IBM's reporting of renewable electricity consumption counts only what is generated in the grid regions where our consumption actually occurs. We do not rely upon the purchase of unbundled renewable energy certificates to comprise any "percent renewable" if we cannot credibly consume the electricity those certificates represent. Our definition of "grid region" aligns with how the US Energy Information Administration defines power balancing authorities' territories. We apply the same concept for other jurisdictions.

Country/area of low-carbon energy consumption

United States of America

Sourcing method

Other, please specify
Grid mix of renewable electricity

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify
Solar, wind, hydro, biomass and geothermal

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

278,437

Tracking instrument used

No instrument used

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

The CO_2e emission factor for this electricity is already reflected in each local grid emission factor, which are used to calculate IBM's Scope 2 emissions. No instruments are generally available to track this electricity. IBM estimates the grid-supplied renewable electricity consumption using publicly available power generation data from the International Energy Agency (at national level), from the U.S. Environmental Protection Agency (at grid sub-region level) and from the Canada Energy Regulator agency (at provincial level). For more information about how IBM calculates its total consumption of renewable electricity, please visit this website: https://www.ibm.com/ibm/environment/climate/renewable_energy.shtml. IBM's electricity demand by location is relatively low and IBM has a large and dynamic portfolio of leased locations. IBM therefore consumes renewable electricity from numerous utility providers, retailers and generators around the world and consumes renewable electricity at many facilities worldwide. The consumption of renewable electricity reported in this category involves the share of renewables automatically supplied to IBM locations via the grid mix. Given the above we do not have the data granularity to respond to this question by country. The selection of a country (in this case "United States of America") is needed to avoid being forced to leave no response. IBM's reporting of renewable electricity consumption counts only what is generated in the grid regions where our consumption actually occurs. We do not rely upon the purchase of unbundled renewable energy certificates to comprise any "percent renewable" if we cannot credibly consume the electricity those certificates represent. Our definition of "grid region" aligns with how the US Energy Information Administration defines power balancing authorities' territories. We apply the same concept for other jurisdictions.

C8.2g

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

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

‍ Independent Limited Assurance Statement.pdf

Page/ section reference
3

Relevant standard
ISO14064-1

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

📎 Independent Limited Assurance Statement.pdf

Page/ section reference

3

Relevant standard

ISO14064-1

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

📎 Independent Limited Assurance Statement.pdf

Page/ section reference

3

Relevant standard

ISO14064-1

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

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

🔗 Independent Limited Assurance Statement.pdf

Page/section reference
3

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
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

🔗 Independent Limited Assurance Statement.pdf

Page/section reference
3

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Business travel

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

🖇 Independent Limited Assurance Statement.pdf

Page/section reference
3

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Employee commuting

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

📎 Independent Limited Assurance Statement.pdf

Page/section reference
3

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Use of sold products

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

📎 Independent Limited Assurance Statement.pdf

Page/section reference
3

Relevant standard
ISO14064-3

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, we do not verify any other climate-related information reported in our CDP disclosure

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

Other, please specify

Onboarding; ongoing assessment of compliance with IBM requirements on the environment including those pertaining to energy and climate; quarterly business review meetings; one on one meetings.

Details of engagement

Other, please specify

Climate change (CC) part of supplier selection/management. Code of conduct featuring CC KPIs and CC is integrated into supplier evaluation processes. Annual supplier symposium where we facilitate benchmarking and celebrate suppliers results.

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

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

100

Rationale for the coverage of your engagement

In 2010, IBM established a requirement that all first-tier suppliers establish a management system to address their social and environmental responsibilities. Our objective in establishing this requirement was to help our suppliers build their own capability to succeed in this area. Specifically, all suppliers are required to do the following: (1) Define, deploy, and sustain a management system that addresses corporate responsibility, including supplier conduct and environmental protection, (2) Measure performance and establish voluntary, quantifiable environmental goals, (3) Publicly disclose results associated with these voluntary environmental goals and other environmental aspects of their management systems and (4) Cascade this set of requirements to their supplier's suppliers who perform work that is material to the products, parts and/or services being supplied to IBM. These requirements are not being implemented with a "one-size-fits-all" approach. The company expects each supplier to deploy a management system, measure performance, set goals and disclose results in a way that reflects their particular intersections with corporate responsibility and the environment. IBM's supplier EMS program rests on the foundational belief that real results in GHG emissions reduction are enabled by credible and actionable information about a company's energy use and GHG emissions and that individual companies must be accountable for their own operations and are best positioned to assess, implement and sustain real GHG reductions. Each enterprise must take responsibility to reduce energy use and GHG emissions. In addition to the above, suppliers in sectors that IBM has identified to be more emissions-intensive relative to our supplier pool, IBM imposes additional requirements such as setting a GHG emissions reduction goal covering their Scope 1 and Scope 2 emissions in line with IPCC recommendations to limit global warming to 1.5 deg C above pre-industrial levels. See goal no. 17 via this link: https://www.ibm.com/downloads/cas/QPLV0412

Impact of engagement, including measures of success

IBM currently engages with over 10,000 first tier suppliers. IBM communicates its Supply Chain Social and Environmental Management System (S&EMS) requirements, which requires each supplier to have an S&EMS, an energy and GHG emissions inventory and reduction plan and a public report of their environmental impacts and results, to all of its suppliers globally. IBM has continued to work with its suppliers to help them build their capabilities to meet IBM's S&EMS and other environmental requirements, setting priority with those suppliers that ask for assistance, those with whom IBM has highest spend, and those whose operations have a greater intersection with the environment. The IBM procurement team has provided training and reviewed supplier performance, including validating that suppliers are disclosing their energy use

and GHG emissions. (1) IBM made available an educational podcast on management systems and provided many external sources of information to all suppliers to explain the EMS requirements, assist them in preparing energy and GHG emissions inventories, and the basic steps needed to conform to the requirements. (2) To-date, our review found suppliers corresponding to the majority of IBM's procurement spend have such a management system in place. Where suppliers are not meeting all of the requirements, we work with them as appropriate to bring their programs up to IBM's requirements. (3) IBM uses the Responsible Business Alliance environmental reporting systems or suppliers' own websites to review suppliers' practice on disclosing energy use and GHG emissions. We measure success based on the conformance of our suppliers with our requirements and the satisfaction of our clients.

Comment

IBM understands approximations of Scope 3 GHG emissions can help entities recognize where the greatest amounts of GHGs may be generated during the lifecycle of a typical process, general product or service on a macro level. This can be helpful when assessing, for example, what phases of a general product's design, production, use and disposal provide the best opportunities for improved energy efficiency and innovation. However, IBM does not assert the specific amount of Scope 3 GHG emissions associated with our value chain. The necessary estimating assumptions and corresponding variability simply do not allow for adequate credibility, let alone calculations that could be perceived as deterministic. Moreover, one company's asserted Scope 3 emissions are another company's Scope 1 and Scope 2 emissions. Like many companies, IBM has thousands of suppliers around the world. They are in all types of businesses and very few, if any, work solely for IBM. Furthermore, the sources of energy used by these suppliers vary and are largely a function of their location. IBM does not believe we could generate a credible estimate or apportionment of the energy used by these suppliers that would be associated with the products or services provided to IBM alone, versus those emissions associated with products or services provided to their other customers. In addition, IBM's specific scope of business with any given supplier remains dynamic, as it is driven by business need. The ultimate goal for climate protection is for global societies to reduce actual GHG emissions. IBM believes real results in GHG emissions reduction are directly achieved when each enterprise takes responsibility to address its own emissions and improve its energy efficiency.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change
Other, please specify

Included climate change in supplier selection / management mechanism. Code of conduct featuring climate change KPIs and Climate change is integrated into IBM's environmental requirements for suppliers

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

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

100

Rationale for the coverage of your engagement

In 2010, IBM established a requirement that all first-tier suppliers establish a management system to address their social and environmental responsibilities. Our objective in establishing this requirement was to help our suppliers build their own capability to succeed in this area. Specifically, suppliers are required to do the following: (1) Define, deploy, and sustain a management system that addresses corporate responsibility, including supplier conduct and environmental protection, (2) Measure performance and establish voluntary, quantifiable environmental goals, (3) Publicly disclose results associated with these voluntary environmental goals and other environmental aspects of their management systems and (4) Cascade this set of requirements to their supplier's suppliers who perform work that is material to the products, parts and/or services being supplied to IBM. These requirements are not being implemented with a "one-size-fits-all" approach. The company expects each supplier to deploy a management system, measure performance, set goals and disclose results in a way that reflects their particular intersections with corporate responsibility and the environment. IBM's supplier EMS program rests on the foundational belief that real results in GHG emissions reduction are enabled by credible and actionable information about a company's energy use and GHG emissions and that individual companies must be accountable for their own operations and are best positioned to assess, implement and sustain real GHG reductions. Each enterprise must take responsibility to reduce energy use and GHG emissions. Along with nearly 160 electronics, retail, auto and toy companies, IBM has endorsed the Responsible Business Alliance Code of Conduct. This Code establishes a standard-based approach to setting objectives and measuring compliance across several areas of social responsibility, including labor, health, safety, protection of the environment, ethics and management systems. A core activity of the RBA is working with companies across multiple tiers in the supply chain to foster a common understanding of what socially responsible business practices are and then aligning the interests of all constituents around industry standards to encourage sound practices of social responsibility in the global marketplace.

Impact of engagement, including measures of success

IBM currently engages with over 10,000 suppliers. IBM communicates its Supply Chain Social and Environmental Management System (S&EMS) requirements, which requires each supplier to have an S&EMS, an energy and GHG emissions inventory and reduction plan and a public report of their environmental impacts and results, to all of its suppliers globally. IBM has continued to work with its suppliers to help them build their capabilities to meet IBM's S&EMS and other environmental requirements, setting priority with those suppliers that ask for assistance, those with whom IBM has highest spend,

and those whose operations have a greater intersection with the environment. The IBM procurement team has provided training and reviewed supplier performance, including validating that suppliers are disclosing their energy use and GHG emissions. (1) IBM made available an educational podcast on management systems and provided many external sources of information to all suppliers to explain the EMS requirements, assist them in preparing energy and GHG emissions inventories, and the basic steps needed to conform to the requirements. (2) To-date, our review found suppliers corresponding to the majority of IBM's procurement spend have such a management system in place. Where suppliers are not meeting all of the requirements, we work with them as appropriate to bring their programs up to IBM's requirements. In 2020, IBM worked with energy service providers (NextEra and Xcel Energy to enable an innovative solution to provide on-site solar renewable energy for its Boulder, CO. Site. The solution was awarded Utility Partnership Award by the Smart Energy Decisions organization. This is only but one example of IBM's collaboration with its suppliers to develop innovative business models to source renewable energy in a regulated market.

Comment

Approximations of Scope 3 GHG emissions can help entities recognize where the greatest amounts of GHGs may be generated during the lifecycle of a typical process, general product or service on a macro level. This can be helpful when assessing, for example, what phases of a general product's design, production, use and disposal provide the best opportunities for improved energy efficiency and innovation. However, IBM does not assert the specific amount of Scope 3 GHG emissions associated with our value chain. The necessary estimating assumptions and corresponding variability simply do not allow for adequate credibility, let alone calculations that could be perceived as deterministic. Moreover, one company's asserted Scope 3 emissions are another company's Scope 1 and Scope 2 emissions. Like many companies, IBM has thousands of suppliers around the world. They are in all types of businesses and very few, if any, work solely for IBM. Furthermore, the sources of energy used by these suppliers vary and are largely a function of their location. IBM does not believe we could generate a credible estimate or apportionment of the energy used by these suppliers that would be associated with the products or services provided to IBM alone, versus those emissions associated with products or services provided to their other customers. In addition, IBM's specific scope of business with any given supplier remains dynamic, as it is driven by business need. Since the ultimate goal for climate protection is for global societies to achieve demonstrable reductions in actual GHG emissions, IBM believes real results in GHG emissions reduction are directly achieved when each enterprise takes responsibility to address its own emissions and improve its energy efficiency.

C12.1b

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

Type of engagement & Details of engagement

Other, please specify

Other, please specify

Education/Information Sharing and Collaboration & Innovation

% of customers by number

25

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

100

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

IBM works to innovate and collaborate with all its clients. Our IT products and cloud platform, with the accompanying IT solutions run on those platforms – cognitive, analytic, augmented intelligence (AI) and blockchain solutions, offers our clients solutions which enable them to run their business processes and operations more efficiently and with less energy and associated GHG emissions, and less waste generation. However, it is difficult to deterministically estimate the "percent of customers by number" as posted by the question. As an educated estimate, we believe at least 25% of our clients derive some benefits related to sustainability from our IT products, Cloud Platform and associated IT solutions, and consulting .

Impact of engagement, including measures of success

The measurements of success include less energy consumption, more efficient use of resources, less waste generation, implementation of more environmentally preferable processes or practices, and associated reductions in GHG emissions from these improvements. IBM Cognitive & Analytics offerings enable clients to implement systems management of activities such as logistics, water systems, transport and traffic systems, utility grids, manufacturing, food production, energy production, and other processes and built infrastructures to optimize activity and work flows and minimize resource use. The IBM energy management and data center teams leverage analytics-based monitoring to minimize energy use and optimize operating performance. By looking at the whole data set through a single lens, the IBM Facilities Management Software and Solutions provide early identification of individual faults and broader patterns and root causes. Overall, these solutions can save 5 to 15 percent of the overall energy operating costs at the buildings where these are being used. IBM is partnering with the US Department of Energy and leading a challenging research program with the goal to improve to accuracy of renewable energy forecasting. Accurate forecasting is one of the most cost-effective ways of integrating greater amounts of intermittent energy onto the electric grid, where the generation must always be balanced with the demand. 1% in improvement in day-ahead forecasting accuracy lowers integration costs (reduction of spinning reserves, batteries, energy storage) by $1M per GW (total US grid ~400 GW). The renewable energy forecasting system developed by IBM, which is based on big data analytics and machine-learnt blending of different models and forecast information has demonstrated repeatedly to deliver 30% more accuracy compared to the next best forecasts.   IBM is working with NB Power in New Brunswick, Canada, to more accurately predict when and where devastating weather events would strike and

proactively enable the timely mobilization of resources for faster response. IBM is working with utilities and governments on projects which utilize smart meters, energy storage, energy demand response, and renewable generation forecasting to reduce peak electricity demand and better integrate renewable generation into the power grid.

C12.2

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

Yes, climate-related requirements are 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

Suppliers must publicly disclose (a) results associated with energy conservation and scope 1 (where applicable) and scope 2 greenhouse gas (GHG) emissions (plus other non-climate aspects)

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

100

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

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
First-party verification
Second-party verification

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

Other, please specify

Where suppliers are not meeting IBM requirements, we work with them as appropriate to bring their programs up to IBM's requirements. In some instances, business may be suspended

Climate-related requirement

Implementation of emissions reduction initiatives

Description of this climate related requirement

Set voluntary environmental goals to achieve positive results associated with the supplier's significant environmental aspects including, at a minimum, one goal in each of the three aspects. 2 of these 3 aspects are climate related (energy conservation and scope 1 (where applicable) and scope 2 greenhouse gas (GHG) emissions (plus other non-climate aspects). Stated more directly:
--all suppliers are required to measure performance & establish quantifiable goals to converse energy and reduce GHG emissions
-- all suppliers are required to publicly disclose results associated with their goals
-- all suppliers are required to have deploy a management system to systemically manage their business intersections with the environment.
-- all suppliers are required to cascade IBM's requirements to their suppliers that perform work that is material to goods and services provided to IBM
-- for suppliers that are in emissions-intensive sectors, they are additionally required to set Scope 1 and Scope 2 GHG emissions targets that are consistent with scientific recommendations of UN IPCC to limit global warming to 1.5 deg C above pre-industrial levels.

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

100

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

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
First-party verification
Second-party verification

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

Other, please specify

Where suppliers are not meeting IBM requirements, we work with them as appropriate to bring their programs up to IBM's requirements. In some instances, business may be suspended

Climate-related requirement

Other, please specify

Management system, Waste avoidance and reduction, Energy efficiency, GHG emissions reduction, and Disclosure

Description of this climate related requirement

Requirements for all suppliers (since 2010): 1) Define, deploy, & sustain a management system that addresses corporate responsibility, incl. supplier conduct & environmental protection, (2) Measure performance &d establish voluntary, quantifiable environmental goals, (3) Publicly disclose results associated with these voluntary environmental goals & other environmental aspects of their management systems & (4) Cascade this set of requirements to their supplier's suppliers who perform work that is material to the products, parts &/or services being supplied to IBM. Additional requirements goals (since April 2021), involving key suppliers in what IBM defined as emissions-intensive business sectors relevant to our procurement spend: 1. Set an emissions reduction goal addressing their Scope 1 & 2 GHG emissions that is aligned with scientific recommendations from the IPCC to limit global temperature increases to 1.5 degrees Celsius above pre-industrial levels. 2. Carriers and shipment suppliers involved with IBM's product distribution globally to establish, by year-end 2021, individual baselines for fleet carbon intensity and starting in 2022, convene with each supplier to set fleet carbon intensity reduction target covering services they provide to IBM. 3. Convene an annual Sustainability Leadership Symposium to recognize progress and achievement among suppliers in emissions-intensive business sectors across applicable areas of environmental stewardship.

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

100

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

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
First-party verification
Second-party verification

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

Other, please specify

Where suppliers are not meeting IBM requirements, we work with them as appropriate to bring their programs up to IBM's requirements. In some instances, business may be suspended

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

Establish and document programs (a) to control operations that intersect with social and environmental matters and (b) that confirm their compliance with applicable law, regulation, and any specific contractual requirements related to IBM;

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

100

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

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
First-party verification
Second-party verification

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

Other, please specify

Where suppliers are not meeting IBM requirements, we work with them as appropriate to bring their programs up to IBM's requirements. In some instances, business may be suspended

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, we engage directly with policy makers
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?

Yes

Attach commitment or position statement(s)

IBM and the Environment - Energy and climate -
https://www.ibm.com/about/environment/energy-climate

Why IBM Stands Firm in Supporting the Paris Climate Agreement
https://www.ibm.com/policy/ibm-supports-paris-climate-agreement/

FACT SHEET White House Announces Commitments to the American Business Act on Climate Pledge |
https://obamawhitehouse.archives.gov/the-press-office/2015/10/19/fact-sheet-white-house-announces-commitments-american-business-act

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

The process we follow adheres to clearly and explicitly defined organizational roles and responsibilities set by the company and documented in our global Environmental Management System. IBM's Corporate Environmental Affairs staff organization is responsible for developing IBM environmental public policy positions including those addressing climate protection and advocating the company's positions on public policies related to climate change. IBM's lines of business are responsible for executing against the requirements applicable to them. All direct and indirect activities that could be considered to influence environmental policy externally must be approved by Corporate Environmental Affairs staff and Government and Regulatory Affairs staff, ensuring consistency with the company's own position on climate change and commitment to environmental leadership.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Became a founding member of the Climate Leadership Council in 2019, supporting its bipartisan plan for an economy-wide carbon tax with corresponding carbon dividend. As part of the Council, we have directly participated in discussions with members of U.S. Senate and House of Representatives.

Category of policy, law, or regulation that may impact the climate

Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate

Carbon taxes

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

IBM became a founding member of the Climate Leadership Council in 2019 and publicly supported the Council's plan for a carbon tax, with the proceeds of that tax — a "carbon dividend" — to be returned to citizens. This plan would place an economy-wide $40/ton

fee on carbon dioxide emissions, increasing by 5% above inflation every year, sending a powerful signal to encourage technological innovation and accelerate actions to reduce emissions. https://clcouncil.org/our-solution/

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

IBM works with governments to execute legislation and programs that enable IT based solutions to more effectively manage, control and modernize city infrastructure to address and manage the impacts of changing demography, land use patterns and climate conditions.

Category of policy, law, or regulation that may impact the climate

Climate change adaptation

Focus area of policy, law, or regulation that may impact the climate

Policy, law, or regulation geographic coverage

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Description of engagement with policy makers

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

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
BusinessEurope

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

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

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 positions of specific trade associations of interest to CDP and others vary and can be found on their respective websites. IBM sets and communicates its own positions on climate protection. Trade associations of which we are members serve their members across a broad spectrum of issues and as such, develop positions that reflect the collective views of their members. IBM has and continues to make our position regarding climate change clear to the public and to trade associations in which we participate and their members. We exercise these privileges across all levels of participation from executive level to working group discussions. We do not believe it is helpful to publicly detail all our differences with trade association policies, climate change or otherwise, while attempting to influence those policies. Importantly, IBM's position of climate change is clear. IBM first published its position on climate change in 2007, and our commitment remains steadfast today: Relevant sources:
https://www.ibm.com/ibm/environment/climate/position.shtml
https://www.ibm.com/blogs/policy/climate-change/

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

Business Roundtable

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

Mixed

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

Yes, and they have changed 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 positions of specific trade associations of interest to CDP and others can be found on their respective websites. IBM sets and communicates its own positions on climate protection. Trade Associations of which we are members serve companies across a broad spectrum of issues, and as such develop positions the reflect the collective positions of their members. IBM has and continues to make our position regarding climate change clear to the trade associations in which we participate and their members. We exercise these privileges across all levels of participation from executive level to working group discussions. We do not believe it is helpful to publicly detail all our differences with trade association policies, climate change or otherwise, while attempting to influence those policies. IBM's position of climate change is clear. IBM first published its position on climate change in 2007, and our commitment remains steadfast today: Relevant sources: https://www.ibm.com/ibm/environment/climate/position.shtml https://www.ibm.com/blogs/policy/climate-change/

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

US Chamber of Commerce

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

Mixed

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

Yes, and they have changed 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 positions of specific trade associations of interest to CDP and others can be found on their respective websites. IBM sets and communicates its own positions on climate protection. Trade Associations of which we are members serve companies across a broad spectrum of issues, and as such develop positions the reflect the collective positions of their members. IBM has and continues to make our position regarding climate change clear to the trade associations in which we participate and their members. We exercise these privileges across all levels of participation from executive level to working group discussions. We do not believe it is helpful to publicly detail all our differences with trade association policies, climate change or otherwise, while attempting to influence those policies. IBM's position of climate change is clear. IBM first published its position on climate change in 2007, and our commitment remains steadfast today: Relevant sources: https://www.ibm.com/ibm/environment/climate/position.shtml https://www.ibm.com/blogs/policy/climate-change/

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

📎 IBM DJSI 2022.jpg

Page/Section reference

S&P CSA & DJSI (https://www.spglobal.com/esg/csa/)

Content elements

Governance
Strategy
Risks & opportunities

Comment

The S&P Global Corporate Sustainability Assessment (CSA) is an annual evaluation of companies' sustainability practices. It covers over 10,000 companies from around the world. The CSA focuses on sustainability criteria that are both industry-specific and financially material and has been doing so since 1999.

Publication

In voluntary sustainability report

Status

Complete

Attach the document

📎 IBM_2022_ESG_Report_and_Addendum.pdf

Page/Section reference

2022 Impact report pages 55-58 and 42-44 (https://www.ibm.com/impact/files/reports-policies/2022/IBM_2022_ESG_Report_and_Addendum.pdf#page=54)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Other metrics

Comment

IBM's annual corporate environmental reporting first began in 1990 and has continued each year since. The 2022 IBM ESG Impact Report marks the 33rd consecutive annual report of environmental progress and performance that the company has published. Though this report we report on IBM's strategy, emissions figures, emissions targets, other metrics such as energy conservation, renewable energy consumption, product energy efficiency, water goal, solid and hazardous waste reduction and maximum percentage of returned products disposed to landfill.

Publication

In voluntary communications

Status

Complete

Attach the document

📎 IBM website 2022.jpg

Page/Section reference

All - webpage. We publish our results, policies and targets publicly

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify

Comment

IBM is committed to environmental leadership in all of its business activities, from its operations to the design of its products and use of its technology. IBM's corporate policy on environmental affairs, first issued in 1971, is supported by the company's global environmental management system, which is the key element of the company's efforts to achieve results consistent with environmental leadership and ensures the company is vigilant in protecting the environment across all of its operations worldwide. Through our "IBM and the Environment" external webpage we provide information related to our environmental policy, strategy, governance, environmental programs, positions, goals and performance, governance and risk management, voluntary initiatives, recognition and other disclosures (external reporting and verification).

Publication

In other regulatory filings

Status

Complete

Attach the document

📎 IBM_Annual_Report_2022.pdf

Page/Section reference

Page 4, 11, 61, 97

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

IBM is committed to environmental leadership in all of its business activities, from its operations to the design of its products and use of its technology. IBM's corporate policy on environmental affairs, first issued in 1971, is supported by the company's global environmental management system, which is the key element of the company's efforts to achieve results consistent with environmental leadership and ensures the company is vigilant in protecting the environment across all of its operations worldwide. Through our "IBM and the Environment" external webpage we provide information related to our environmental policy, strategy, governance, environmental programs, positions, goals and performance, governance and risk management, voluntary initiatives, recognition and other disclosures (external reporting and verification).

Publication

In voluntary communications

Status

Complete

Attach the document

📎 IBM_Proxy_2023.pdf

Page/Section reference

Pages: 2, 3, 23, and 29.

Content elements

Governance

Strategy
Risks & opportunities

Comment

The proxy materials, including this Proxy Statement, the IBM 2021 Annual Report, which includes the consolidated financial statements, and the proxy card, or the notice of Internet availability of proxy materials, as applicable, were distributed beginning on or about March 7, 2022 to all stockholders entitled to vote. More information: https://www.ibm.com/investor/services/annual-meeting-of-stockholders

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		

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	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	IBM's Chief Sustainability Officer (CSO) is the top environmental executive of IBM and is authorized to set IBM's strategy for environmental affairs which include matters related to biodiversity, and to establish the company's environmental requirements, goals, and management system. The CSO updates the Directors and Corporate Governance Committee of the IBM Board of Directors annually covering IBM's environmental programs, performance, challenges and emerging issues. IBM's environmental policy objectives are implemented across our business through our global environmental management system (EMS) which includes comprehensive environmental

		programs and goals to help protect biodiversity and ecosystem health, either directly or indirectly: Conserving energy and increasing energy efficiency; Procuring renewable electricity; Reducing GHG emissions; Conserving water; Reducing and recycling waste; Limiting the use of landfills as a means for waste disposal; Sourcing paper and wood-based packaging from sustainably managed forests; Creating pollinator gardens; Undertaking habitat restoration projects; Using drought resistant plants in IBM landscapes in water stressed regions; Certifying the design & construction of IBM's new or major renovation workplaces to recognized sustainability programs; Engaging, educating and training employees. In addition, IBM has been a member of the Wildlife Habitat Council (WHC) for 3 decades. Four IBM sites have maintained a WHC Conservation Certification for 18+ years in recognition of their wildlife habitat management and conservation education programs: Corporate Headquarters, NY; Research Triangle Park, NC; Almaden Research Center, CA; Silicon Valley Laboratory, CA. IBM shares conservation knowledge with employees extending the reach of IBM's program to communities where our employees live. To this end, IBM collaborated with WHC to develop pollinator garden toolkits that covered 100+ IBM locations across North America, Latin America, Asia Pacific, Europe, and Middle East. Between April 2021 (when we started our Pollinator Garden program) and July 2023, 1700+ toolkits were accessed by IBMers around the world and 300+ employees have participated in IBM organized pollinator garden trainings since we initiated the program. Year by year, more employees participate in locally organized planting events either at IBM locations or within their communities.

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	Biodiversity-related public commitments	Initiatives endorsed

Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Other, please specify Plant 50 pollinator gardens by end 2023; Source paper and wood-based packaging from sustainably managed forests; Initiate 100 client engagements or research projects by 2025, in which IBM solutions have enabled demonstrable environmental benefits	Other, please specify IBM has been a member of the Wildlife Habitat Council (WHC) since 1991. 4 IBM sites have maintained a WHC Conservation Certification for 18+ years. In 2022, IBM supported 27 employee-led Eco-teams, across 20 countries.

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
Yes

Value chain stage(s) covered
Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity
Other, please specify
Global EMS process for environmental impacts assessment. For biodiversity, IBM has had a goal for nearly 2 decades sourcing paper and paper/wood-based packaging directly procured by IBM from forests that are sustainably managed and certified as such.

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
IBM has treated environmental sustainability as a long-term strategic imperative. This commitment was first formalized in 1971 under IBM's corporate policy on environmental protection. Governing our actions and driving leadership performance is IBM's global Environmental Management System (EMS). Our EMS outlines roles, responsibilities, and accountability, and integrates the environmental work – including execution of our goals – throughout our business; and it ensures our commitment to environmental leadership. Our comprehensive environmental programs and goals help reduce our environmental impact including any potential impact on local ecosystems. Our global EMS also requires our execution of comprehensive review process of our environmental programs and performance, from self-assessments to corporate audits, to top management reviews.   Further, our EMS requires the company to identify its significant environmental intersects to ensure they are properly managed and controlled. This includes an assessment pertaining to biodiversity. Commitment to continual improvement under our global EMS IBM is continuing a process of identifying IBM locations in or nearby protected areas and all IBM locations for which IBM has

landscaping responsibilities as these are areas where opportunities may exist for IBM to further contribute toward maintaining local ecosystem health and wellbeing.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Direct operations
Upstream

Tools and methods to assess impacts and/or dependencies on biodiversity
Other, please specify
Global EMS process for environmental impacts assessment

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
The nature of IBM's business -- a hybrid cloud and AI company -- does not have a significant dependency on biodiversity. That said, pursuant to the requirement of our global environmental management systems (EMS) for identifying significant environmental intersects we have conducted an assessment pertaining to biodiversity. Our assessment concluded that biodiversity is not a significant intersect of IBM's business and activities. Nevertheless, IBM has several goals in place helping us to reduce our impact or contribute to the wellbeing of our ecosystems. These goals include:
-- Achieve a year-to-year reduction in water withdrawals at specified IBM locations in high or extremely high water-stressed regions.
-- Source paper and paper/wood-based packaging directly procured by IBM from forests that are sustainably managed and certified as such
-- Plant 50 pollinator gardens at IBM locations globally by year-end 2023 to support biodiversity.

C15.4

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

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Country/area

Name of the biodiversity-sensitive area

Proximity

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Mitigation measures implemented within the selected area

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

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?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Species management Education & awareness Other, please specify 　Extending contribution with WHC in projects that aim to improve biodiversity in already maintained landscape areas & continually improving understanding of conservation opportunities at key locations to better support local ecosystem health/wellbeing

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	Yes, we use indicators	State and benefit indicators Response indicators Other, please specify Increase awareness of biodiversity

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
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	2022 IBM Impact Report – page 41-50 https://www.ibm.com/impact/2022-ibm-impact-report

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	Vice President, Corporate Environmental Affairs and Product Safety	Chief Sustainability Officer (CSO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

IBM has a longstanding commitment to public disclosure of its environmental programs & results including disclosure of its GHG emissions in a transparent and authentic manner. IBM has disclosed to CDP since the program's inception in 2003. When requested by clients, we respond to their specific inquiries on making their operations more efficient, joint efforts to reduce CO2 emissions, & providing information specific to the products and services they procure from IBM. This information may include energy use and GHG emissions estimates and explanations of the assumptions that we used in developing any emissions estimates.

With few exceptions, Scope 3 emissions cannot be quantified in a deterministic or credible way across our supply chain. Nevertheless, we report Scope 3 GHG emissions in five of the fifteen categories defined by the GHG Protocol's Corporate Value Chain Emissions Accounting and Reporting standard. IBM calculates certain Scope 3 emissions related to the "Purchased Goods and Services" category — namely, emissions associated with electricity IBM consumes in third-party operated spaces that IBM leases for data center operations (referred to as co-location data centers), and we furthermore approximate emissions in four other Scope 3 categories. These approximations represent Scope 3 emissions pertaining to areas for which we have some relevant information upon which to make assumptions.

That said, IBM believes real reductions of emissions are directly and demonstrably achieved when the organization generating the emission takes action to do so. That's why we are committed to achieve net-zero operational GHG emissions by 2030. This covers our Scope 1 and Scope 2 emissions, as well as Scope 3 emissions associated with IBM's electricity consumption at co-location data centers.

At the same time, we remain closely engaged with our suppliers. Since 2010, IBM has required all of its first-tier suppliers to implement an environmental management system, measure and set goals to reduce their GHG emissions, and publicly disclose their results. Building upon these requirements, in April 2021, IBM enhanced its supplier engagement by establishing a new goal requiring key suppliers in emissions-intensive business sectors to set a goal to reduce their Scope 1 and Scope 2 emissions that is aligned with scientific recommendations from the Intergovernmental Panel on Climate Change to limit Earth's warming to 1.5°C above pre-industrial levels. We also convene an annual Sustainability Leadership Symposium with our suppliers during which they share innovations and best practices.

IBM has long been committed to doing business with suppliers who conduct themselves with high standards of ethical, environmental, and social responsibility, no matter where they operate. We support this commitment not only by setting specific environmental requirements for our suppliers but also by partnering with them to help drive their continual improvement.

 Building upon these requirements, in April 2021, IBM enhanced its supplier engagement by establishing a new goal requiring key suppliers in emissions-intensive business sectors to set a

goal to reduce their Scope 1 and Scope 2 emissions that is aligned with scientific recommendations from the Intergovernmental Panel on Climate Change to limit Earth's warming to 1.5°C above pre-industrial levels. As of the end of 2022, 96% of the subject suppliers have met this requirement.

We also convene an annual Sustainability Leadership Symposium with our suppliers where we celebrate their achievements and facilitate sharing of innovations and best practices.
IBM has long been committed to doing business with suppliers who conduct themselves with high standards of ethical, environmental, and social responsibility, no matter where they operate. We support this commitment not only by setting specific environmental requirements for our suppliers but also by partnering with them to help drive their continual improvement.

For more information about these goals, please visit https://www.ibm.com/downloads/cas/QPLV0412 (page 5 specifically addresses Supply Chain). These goals deepen our engagement with those suppliers who can have the greatest impact on reducing emissions across IBM's supply chain.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	60,530,000,000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

Revenue: The IBM reported revenue of $60.53 billion is in the 2022 (page 10) in the following link:
https://www.ibm.com/annualreport/assets/downloads/IBM_Annual_Report_2022.pdf

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately	IBM Scope 1 & 2 emissions: 1-IBM's facilities generally are mixed use (labs, manufacturing,

accounting for each product/product line cost ineffective	offices). Our business activity outputs inter-relate/overlap vs. being offering-specific. There is no logical methodology to separately allocate energy use to these activities based on the product/service produced.
	2-IBM's operations are not divided into differentiable "unit operations" by client or client type for which an allocated energy use or GHG emissions estimate could be accomplished.
	3-As an AI and hybrid cloud company, the majority of IBM activities are based on knowledge transfer and our clients use numerous & varied combinations of these capabilities.
	4-For IT hardware, majority of part/component manufacturing is performed by suppliers. IBM's supply chains are 3-6 levels deep and production/ non-production suppliers offer many products/services to varying customers. IBM's business with any given supplier typically comprises single digit percentages.
	Scope 3 emissions
	At a most fundamental level, determining those emissions is extremely challenging due to lack of access to primary source data across multiple entities in a value chain. As well, it is extremely difficult for us to credibly allocate emissions across individual entities in our value chain due to required reliance upon gross assumptions.
	We have provided a detailed explanation of the challenges and our concerns associated with obtaining credible Scope 3 data, tracking, estimating, and allocating GHG emissions in general associated with the products, services and solutions that IBM sells across our client base in our response to questions SC0.0 & SC1.2. IBM does not attempt to allocate its Scope 1, 2, or any Scope 3 emissions to its clients for reasons including (a) IBM is not able to develop a full value chain emissions due to the lack of primary source data, and (b) any allocation of our Scope 1 and Scope 2 GHG emissions to clients would require us to make gross assumptions / cannot be credibly done.
	Rather than focusing on estimating energy use & GHG emissions across its client base we prioritize resources on improving the energy efficiency of our operations and reducing the associated GHG emissions, and developing products, services and solutions which help our clients operate more efficiently and reduce the energy use, GHG emissions and other resource uses associated with their business activities. We have also long engaged with our suppliers requiring them to reduce their emissions.
Customer base is too large and diverse to accurately track emissions to the customer level	We have provided a detailed explanation of the challenges, misgivings, and our concerns associated with obtaining credible Scope 3 data and allocating Scope 1, Scope 2 and Scope 3 emissions to individual clients in the entry immediately above. We believe we can deliver far greater contribution toward addressing climate change

	by focusing on improving the energy efficiency of our operations and reducing the associated GHG emissions, developing increasingly more energy efficient hardware products, and developing and offering products, services and solutions which help our clients operate more efficiently and reduce the energy use, GHG emissions and other resource uses associated with their business activities.
Other, please specify It is impractical to capture meaningful emissions data or allocation from suppliers	IBM's business is only a small percentage (single digit) of the revenue of any of our suppliers. Further, the depth and breadth of our supply chain make data collection and tracking impractical, not to mention the dynamic nature of supply chains and operating variables all companies encounter including our suppliers. The challenges for suppliers to credibly allocation their emissions to IBM are equally daunting. IBM believes the best use of our resources is not to estimate energy use and GHG emissions at a customer level but to direct them toward improving the energy efficiency of our operations and reducing the associated GHG emissions, developing services and solutions which help our clients operate more efficiently and reduce the energy use and GHG emissions associated with their business activities.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

IBM has introduced methodologies for estimating GHG emissions associated with our cloud services or developed information associated with our hardware products with an aim to help clients make more informed decisions on what they can do when deploying or using IBM products and services to reduce energy demand and associated GHG emissions per work executed. As a recent example, IBM announced in May 2023 the IBM Cloud Carbon Calculator: a dashboard designed to give clients access to standards-based cloud emissions data associated with their workloads running on IBM Cloud. Based on technology from IBM Research, the IBM Cloud Carbon Calculator aims to enable organizations to track GHG emissions across various workloads down to the cloud service level to help them identify opportunities to reduce energy consumption and associated GHG emissions.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms