Welcome to your CDP Climate Change Questionnaire 2019

C0. Introduction

C0.1

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

Western Digital creates environments for data to thrive. The company is driving the innovation needed to help customers capture, preserve, access and transform an ever-increasing diversity of data.

Everywhere data lives, from advanced data centers to mobile sensors to personal devices, our industry-leading solutions deliver the possibilities of data. Western Digital® data-centric solutions are marketed under the G-Technology™, HGST, SanDisk®, Upthere™ and WD® brands. Financial and investor information is available on the company's Investor Relations website at investor.wdc.com.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Row 1	January 1, 2018	December 31, 2018	No

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.

China
India
Israel
Japan
Malaysia
Philippines
Thailand
United States of America

C0.4

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

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

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(s)	Please explain
Director on board	The Board periodically reviews information relating to the potential impact of natural disasters on business continuity and how to mitigate risks. This information has been presented to the Board by the CEO, CFO, COO, President and other members of management.
Chief Executive Officer (CEO)	The Board periodically reviews information relating to the potential impact of natural disasters on business continuity and how to mitigate risks. This information has been presented to the Board by the CEO, CFO, COO, President and other members of management.
Chief Financial Officer (CFO)	The Board periodically reviews information relating to the potential impact of natural disasters on business continuity and how to mitigate risks. This information has been presented to the Board by the CEO, CFO, COO, President and other members of management.
Chief Operating Officer (COO)	The Board periodically reviews information relating to the potential impact of natural disasters on business continuity and how to mitigate risks. This information has been presented to the Board by the CEO, CFO, COO, President and other members of management.
President	The Board periodically reviews information relating to the potential impact of natural disasters on business continuity and how to mitigate risks. This information has been presented to the Board by the CEO, CFO, COO, President and other members of management.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding business plans	The Board periodically reviews information relating to the potential impact of natural disasters on business continuity and how to mitigate risks. This information has been presented to the Board by the CEO, CFO, COO, President and other members of management.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other, please specify SVP, Real Estate Operation	Both assessing and managing climate-related risks and opportunities	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Senior Vice President, Real Estate Operations, has ultimate responsibility for oversight of Western Digital's global facilities, including (1) assessment of facilities-related risks and opportunities associated with climate change and other matters as part of our business continuity planning process and (2) investment in measures to minimize impacts of climate change to our operations. This review process is executed globally at least annually, and more frequently as significant changes dictate, and the review/funding request process is executed at least quarterly. Specifically, infrastructure and utilities investments are managed by Western Digital Corporation's Real Estate Operations (REO) function, whose highest level of management is the Senior Vice President. The REO organization, in turn, reports in through the Finance/Corporate Strategy organization through to executive management. Key business

cases for such investments are developed within the REO function taking into account multiple factors, including sustainability and resiliency goals. REO is responsible for identifying the need for and taking forward the justification to secure investment funding quarterly, at a minimum. Therefore, the SVP responsible for REO is the highest level position responsible for championing climate change related investment.

C1.3

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

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).

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Monetary reward

Activity incentivized

Efficiency project

Comment

Western Digital Corporation includes several types of awards within our performance management framework to incentivize and recognize employees for exceptional contributions and performance. These include spot awards (“High-5”) for performance/accomplishments “above-and-beyond”, as well as compensation-based awards (short term incentives on an annual basis, and long term incentives geared toward recognition and retention) for exceptional and sustained contributions. Accomplishments in all areas, including upholding and improving our sustainability and/or resiliency posture, are eligible for recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Other, please specify

Sustainability/resiliency projects

Comment

Western Digital Corporation includes several types of awards within our performance management framework to incentivize and recognize employees for exceptional contributions and performance. These include spot awards ("High-5") for performance/accomplishments "above-and-beyond", as well as compensation-based awards (short term incentives on an annual basis, and long term incentives geared toward recognition and retention) for exceptional and sustained contributions. Accomplishments in all areas, including upholding and improving our sustainability and/or resiliency posture, are eligible for recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Other non-monetary reward

Activity incentivized

Other, please specify

Sustainability/resiliency projects

Comment

Western Digital Corporation includes several types of awards within our performance management framework to incentivize and recognize employees for exceptional contributions and performance. These include spot awards ("High-5") for performance/accomplishments "above-and-beyond", as well as compensation-based awards (short term incentives on an annual basis, and long term incentives geared toward recognition and retention) for exceptional and sustained contributions. Accomplishments in all areas, including upholding and improving our sustainability and/or resiliency posture, are eligible for recognition.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	1	Aligned with financial planning
Medium-term	1	3	Aligned with financial planning
Long-term	3	5	Aligned with financial and strategic planning

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	3 to 6 years	Western Digital assesses climate-related risks in a multitude of ways, including: (1) Business forecast from strategic planning; (2) Business continuity planning by various business units within the company, including business impact analyses and risk assessments; (3) Energy, water and other resource evaluations; (4) Severe weather events; (5) Customer requests. Climate-related risks and opportunities are evaluated in the less than 1 year to 5 year time frame as part of this process, and monitored by REO and other potentially impacted business units (e.g., Global Procurement, Global Supply Chain).

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

Western Digital identifies and assesses climate-related risks in multiple ways:

- Enterprise risk planning - owned at the Board level for long-term, strategic planning
- Business continuity management - owned at the Executive level for protecting against, reducing the likelihood of occurrence, preparing for, responding to and recovering from disruptive incidents
- Upstream supply chain management - owned by Global Procurement for continuous real-time monitoring of natural and man-made risks to global suppliers

- Downstream supply chain management - owned by Global Quality for monitoring downstream product use by enterprise customers
- Energy & resource management - owned by Real Estate Operations for identifying, assessing and reducing climate risks related to energy and resource use

Through implementation of these processes, Western Digital business functions regularly assess potential impacts, both internal and external. These may include impacts arising directly or indirectly from climate change and its effects on our direct operations as well as our supply chain, among others. Risks with the potential to materially affect the company would be communicated to the Board of Directors and included in enterprise risk planning activities.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Western Digital stays appraised of global regulatory and compliance requirements that may impact our products and operations. In many cases we rely on internal and 3rd party audits of our management systems and subsequent certifications of awareness and compliance to current regulations. Climate related risks we monitor may include, but are not limited to: Increasing pricing or taxing of GHG emissions Increasing emissions-reporting obligations Mandates on and regulation of existing products and services Possible exposure to litigation Monitoring increasing operating costs (e.g., higher compliance costs, increased insurance premiums) Potential, impacts on existing assets due to policy changes Impact on brand/credibility Increased costs and/or reduced demand for products and services resulting from fines and judgments. The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and opportunities of our employees around the world, and across genders, races, ethnicity and age.
Emerging regulation	Relevant, always included	Western Digital is committed to maintaining compliance with all applicable legal requirements and obligations as a matter of corporate policy. We have established robust regulatory tracking and assessment procedures to assure we remain aware of emerging regulations applicable to our business; and that we proactively develop and implement compliance programs in advance of the effective date of such regulations. We periodically review our compliance management capability and performance during our preparations for

		annual internal and external, third party audits. In many cases, as a leading company, we are participating in review or input to climate-related emerging regulatory or compliance requirements that impact our operation, suppliers, clients, and the communities we operate. The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and opportunities of our employees around the world, and across genders, races, ethnicity and age.
Technology	Relevant, always included	New technology is always being evaluated in our operations and Research and Development (R&D) efforts to be more productive with resources to be both sustainable and resilient to fluctuations in availability and cost. These are major customer satisfaction and competitive advantage issues which benefit from Western Digital's continual improvement in the energy efficient design and performance of our products; and which in turn also benefit our customers by helping reduce their energy requirements and resulting Green House Gas emissions. Technology considerations is core to our financial, sustainability, and resiliency management systems. Some examples of risks considered in climate-related risk assessments may include: Substitution of existing products and services with lower energy and, potentially, GHG emissions options; Successful and unsuccessful investment in new technologies; Costs or savings to transition to lower emissions technology; Write-offs and early retirement of existing assets due to technology changes; Changes in demand for products and services; R&D expenditures in new and alternative technologies; Capital investments in technology development; Costs to adopt/deploy new practices and processes. The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and opportunities of our employees around the world, and across genders, races, ethnicity and age.
Legal	Relevant, always included	Climate-related legal risks require timely compliance with new legal requirements and sustained compliance with existing requirements, and that compliance is key to maintaining and growing our access to the global markets where we sell our products. Of particular concern is access to markets where there maybe exposure to litigation, remediation liability or emerging country requirements for reporting. Our legal risks are often related to regulation, and such climate-related

		risks may include: increasing pricing or taxing of GHG emissions; increasing emissions-reporting obligations; mandates on and regulation of existing products and services; possible exposure to litigation; monitoring increasing operating costs (e.g., higher compliance costs, increased insurance premiums); potential impacts on existing assets due to policy changes; impact on brand/credibility; and increased costs and/or reduced demand for products and services resulting from fines and judgments. The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and opportunities of our employees around the world, and across genders, races, ethnicity and age.
Market	Relevant, always included	Climate related market risks are certainly considered in risk assessments. Specific concerns for Western Digital include: Maintaining accuracy and legal review of climate-change related statements and commitments by Western Digital. Monitoring changing customer behaviour; specifically, as is relates to perception of Western Digital's operations and products in relation to mitigating climate change. Uncertainty in market signals as political and social risks vacillate in accepting or rejecting action associated with Climate change risks. Climate change associated risks may increase cost of raw materials due to supply chain or business disruption in Western Digital or supplier operations. Specific risks for Western Digital are associated with electricity costs from fossil fuel related electricity generation and the associated GHG emissions. The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and opportunities of our employees around the world, and across genders, races, ethnicity and age.
Reputation	Relevant, always included	Climate change issues and how we are responding to them can be a factor that influences our reputation as a responsible corporation and supplier; and can impact our customers' confidence that they can rely on Western Digital to manage our risks and protect their reputation by demonstrating they are engaging in responsible sourcing practices. Our performance as an upstream supplier for our clients, specifically as viewed as contributing to their Scope 3 GHG emissions and water stewardship concerns. Our products are considered in our clients' energy usage profile of their products and as such, we must respond

		to increasing competitive demand on our products to be more efficient. End-of-life considerations on our products in relation to waste streams and close-loop efforts. The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and opportunities of our employees around the world, and across genders, races, ethnicity and age.
Acute physical	Relevant, always included	Acute physical risks associated with climate change are included by Western Digital in annual risk assessments. Risks considered may include: business continuity planning review for near term risks; increased severity of extreme weather events such as cyclones and flood; reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions); reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism); write-offs and early retirement of existing assets (e.g., damage to property and assets in "high-risk" locations); increased operating costs (e.g., inadequate water supply, increasing energy costs); increased capital costs (e.g., damage to facilities); reduced revenues from lower sales/output; increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations. The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and opportunities of our employees around the world, and across genders, races, ethnicity and age.
Chronic physical	Relevant, always included	Chronic physical risks associated with climate change are included in longer term risk assessments. For example, Western Digital has undertaken and will periodically update “Black Swan” vulnerability assessments on assets and supply chains. In these reviews changes in scenarios consider climate related risks and may include, but are not limited to: Precipitation patterns, Extreme variability in weather patterns, Rising mean temperatures, Rising sea levels, and Resource availability. The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and

		opportunities of our employees around the world, and across genders, races, ethnicity and age.
Upstream	Relevant, always included	Suppliers upstream to Western Digital operations are susceptible to climate change risks. Our primary goals are to avoid business disruption to Western Digital due to disruption in our supply chain; and to assure we are engaging in responsible sourcing practices. Western Digital business continuity management system requires procurement teams to address risk assessments of suppliers and mitigate risks via tools and procedures at their disposal, i.e. procurement code of conduct, contractual stipulations, business continuity planning, and audits requirements of core suppliers with demonstrated climate risk exposure. Suppliers are requested to submit the business continuity plans to Western Digital in case of the natural disasters occurs at their manufacturing sites. The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and opportunities of our employees around the world, and across genders, races, ethnicity and age.
Downstream	Relevant, always included	Downstream risk is currently associated with Western Digital product performance as required by market drivers on our client. We aim to continuously make our products competitive when it comes to energy usage. Western Digital design and development teams are achieving significant advances in the energy efficiency performance of our storage products with simultaneous dramatic increases in storage capacity and no increase in physical footprint. We must be competitive when it comes to embodied energy and GHG emissions as well as the performance of our products. A new climate-related risk and opportunity is the “circular economy” concept. The goal is to extend the life of products through recovery and reuse, and/or to recover and recycle valuable materials and components, to reduce the demand for (or compensate for diminishing supplies of) critical virgin materials (e.g., rare earth minerals). The materiality assessment helped us to focus our efforts on adherence to fair business practices through strong guidelines, oversight and employee education; sustainable product lifecycle practices, responsible practices relating to chemical and hazardous substances as well as critical minerals and metals; energy efficiency and renewable energy use; and safeguarding the rights, health and opportunities of our employees around the world, and across genders, races, ethnicity and age.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

Western Digital (WDC) monitors and responds to both internal and external risks and opportunities through multiple process. Internally, WDC maintains a documented risks/opportunities assessment at the global level, and at the facility level. As part of our certified ISO14001 management system, climate-related risks and opportunities are included in this assessment. This assessment is one of input of our internal Environmental Management System (EMS) objective, and we set energy reduction target at both global level and local level in this reporting year. This process enables us to make our operation more energy efficient, and this process will allow for response to climate change. Another example of internal process is our comprehensive implementation of BCMS (Business Continuity Management System) at each facility. BCMS at WDC has the similar operation process to our Environmental Management System, and we defined the specific requirements to establish, maintain and continually improve a BCMS to protect against, reduce the likelihood of occurrence, prepare for, respond to, and recover from disruptive incidents when they arise. In this process, WDC is expanding the Risk Assessment Process to include climate change related factors. In addition to this regular process, WDC has conducted a deeper assessment of climate-related risks and opportunities through focused vulnerability assessments at key locations. The studies include a high-level identification of external hazards, hazardous situations and events that can cause harm to assets at a facility. This is followed by a more refined study to gather specific data, identification of extreme weather events, generation of data to understand and develop responses to specific events, developing probabilities, assessing operational impacts, and preparing a risk register and threat assessment summary. These macro inputs are further informed and refined by the more frequent business impact assessments conducted through implementation of the BCMS process. In terms of external processes, WDC monitors stakeholder perspectives on risks and opportunities through multiple mechanisms including participation in industry organizations such as RBA, response to customer inquiries including the participation in CDP, incorporation of environmental questions in customer RFPs, interest shown by shareholders & NGOs in our product energy efficiency. We track climate change regulatory requirements, customer & legal requirements related to our products, including energy efficiency requirements, & incorporate them into product design specifications. For example, in some countries, there are laws requiring improve of product energy efficiency. WDC has a process to monitor for and review proposed changes to these requirements, and communicate necessary updates with our product development teams. These types of regulations are identified as one of our climate change related risks, because they are presumed to become more stringent. WDC has been taking a proactive approach to ensure ongoing compliance to these regulations. In fact, many of our products are achieving more energy efficiency beyond this law's minimum threshold. We think that this is also an opportunity for our business, because our proactive approach will enable us to provide products attractive to eco-conscious customers. WDC risk mitigation planning and execution following assessments to ensure our business addresses its key risks both physical and transitional:

- Physical Risks: The manufacturing process for storage drives necessarily involves the use of chemicals. We strive for risk-free work-sites and products, innovating to minimize the use of hazardous chemicals and develop safer substances. Two teams are responsible for managing hazardous substances in our operations: Real Estate Operations Global Environmental Health and Safety team sets minimum corporate environmental, health and safety management requirements for use of chemicals in WDC's operations worldwide. Product Environmental Compliance team part of Quality Management Systems, ensures all WDC products meet worldwide environmental regulations and customer requirements.
- Transitional Risks: WDC strives to be a full partner to our customers, helping them meet their product standards in addition to our own. We regularly engage with our customers to identify material management opportunities that go beyond regulatory requirements. When customers consider unique requirements, we work together to implement new capabilities. Because our product chemicals are common for all customers, those innovations often lead to a beneficial change across all products. For example, we recently extended our halogen-free requirement across all WDC products. We initially worked with a customer to review all components in a high-volume retail product, then developed a plan to implement the halogen-free requirement for that product and across our product portfolio.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Supply chain

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact

Increased costs and/or reduced demand for products and services resulting from fines and judgments

Company- specific description

Increased monitoring and compliance costs of various greenhouse gas emission schemes (e.g., cap and trade, carbon taxes, etc.) are passed on to Western Digital as

part of our procurement of goods and services from our suppliers. For example, such requirements impact our operations in China and California. This is particularly true for our procurement of energy, as the power sector is impacted by requirements to decarbonize.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

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

Financial impact not yet estimated.

Management method

Western Digital is working to develop an estimation and management method relevant to the newly integrated company.

Cost of management

100,000

Comment

Western Digital is working to develop an estimation and management method relevant to the newly integrated company.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Enhanced emissions-reporting obligations

Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

Enhanced emissions-reporting obligations causing an increase in labor/fees to support compliance. For example, CDP, client and investor inquiries, etc., require an increasing amount of resource to gather information and respond. Lately Western Digital has had to invest significant additional effort to respond due to a growing lack of consistency in units of measure, reporting periods, and definitions.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

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

Financial impact not yet estimated.

Management method

Western Digital is working to develop an estimation and management method relevant to the newly integrated company.

Cost of management

100,000

Comment

Western Digital is working to develop an estimation and management method relevant to the newly integrated company.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

As a result of climate change, Western Digital is experiencing patterns of more severe extreme weather at all of our global operations. We are factoring this into our risk assessment process.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-low

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

Financial impact not yet estimated. While we have insurance for floods and business interruption, the effects would significantly affect our ability to manufacture or sell our products, which would result in a substantial loss of sales and revenue and a substantial harm to our operating results.

Management method

To manage these risks, we have insurance and multiple suppliers for parts as well as multiple production facilities in different geographical regions.

Cost of management

Comment

Cost of management is company confidential information.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact

Increased capital costs (e.g., damage to facilities)

Company- specific description

Adverse weather in affected regions has the potential to cause physical damage to our property and other assets, to directly harm our employees, and to disrupt our owned and contracted operations.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Low

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

Financial impact not yet estimated. Tropical storms could result in physical damage to our buildings and equipment, leading to repair, and possibly even rebuild costs. They may result in staff not being able to travel to work with potential lost work time. If a data center went down and we did not have contingency arrangements in place, we could suffer a loss of data. If a critical supplier manufacturing facility goes down as a result of a tropical storm, this would likely adversely affect our supplier's production output, which would affect our ability to fulfill customer orders, and potentially lead to revenue losses.

Management method

To manage these risks, we have insurance and multiple suppliers for parts as well as multiple production facilities in different geographical regions.

Cost of management

0

Comment

Cost of management is company confidential information.

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Supply chain

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact

Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions)

Company- specific description

Adverse weather in affected regions has the potential to cause physical damage to our property and other assets, to directly harm our employees, and to disrupt our owned and contracted operations, and related production/sales.

Time horizon

Short-term

Likelihood

Unlikely

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

Financial impact not yet estimated. In the event that a region that is a local hub for the tech industry is negatively affected by climate change physical impacts, we could experience a downturn in customer orders for our products, as is illustrated by the Thailand situation in 2011.

Management method

To manage these risks, we have insurance and multiple suppliers for parts as well as multiple production facilities in different geographical regions.

Cost of management

Comment

Cost of management is company confidential information.

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Other

Type of financial impact

Reduced revenue from decreased demand for goods/services

Company- specific description

Ever since we established our environmental programs, we have recognized that our customers have expectations for us to invest in reducing our environmental impact. Our manufacturing facilities worldwide conform to an Integrated Management System and are 3rd-party certified within this framework on a multi-site certification to ISO14001:2015, demonstrating to our customers and other stakeholders our commitment to the environment. Many of our customers are large, high profile

companies who have well- established environmental programs. They understand that they are only able to reduce their total impact by actively engaging with their suppliers to encourage impact reduction. Some of Western Digital's customers are members of the CDP Supply Chain Consortium and have requested that Western Digital respond to the CDP supply chain module and provide customer specific data. One of our customers also requires that we have a GHG reduction strategy, including a goal and reduction plan for our own operations. If Western Digital were not responsive to such requests, this could negatively impact our relationships with our customers and could lead to lost business should our customers decide to engage with alternative suppliers.

Time horizon

Short-term

Likelihood

Unlikely

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

Financial impact not yet estimated. If we were not responsive to our customers' requests regarding our GHG emissions data and reduction plans, we could lose customers and associated revenue.

Management method

Following multiple, large-scale acquisitions, Western Digital has centralized a team to comprehensively review and transform its sustainability reporting and governance processes. The company is implementing a consolidated, long-term sustainability strategy, while it continues to focus on delivering sustainable value for customers and other stakeholders. Ensuring that our customers' expectations are met and where possible exceeded has always been a key driver for our environmental programs and we are committed to being both responsive and proactive in our climate change-related dealings with customers.

Cost of management

500,000

Comment

Approximate costs during the reporting year were $500,000. We expect to continue to incur similar costs for at least the next 5 years.

Identifier

Risk 7

Where in the value chain does the risk driver occur?

Supply chain

Risk type

Transition risk

Primary climate-related risk driver

Market: Increased cost of raw materials

Type of financial impact

Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatement)

Company- specific description

Climate change has the potential to cause natural disasters which may disrupt production and transportation of raw materials.

Time horizon

Long-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

Financial impact not yet estimated.

Management method

Western Digital requests suppliers to prepare Business Continuity Plan for the natural disasters and reduce the GHG amount released from the production.

Cost of management

100,000

Comment

Western Digital is working to establish business continuity plans with key suppliers to ensure minimal disruption to supply chain.

Identifier

Risk 8

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact

Reduced revenue from decreased demand for goods/services

Company- specific description

External factors may affect customer and stakeholder perceptions of Western Digital, which may impact the demand for Western Digital products.

Time horizon

Long-term

Likelihood

Unlikely

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

Financial impact not yet estimated.

Management method

Western Digital regularly engages with customers and stakeholders to address concerns as they arise.

Cost of management

250,000

Comment

Western Digital regularly engages with customers and stakeholders to address concerns as they arise.

Identifier

Risk 9

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Technology: Costs to transition to lower emissions technology

Type of financial impact

Costs to adopt/deploy new practices and processes

Company- specific description

Western Digital's Real Estate Operations (REO) team is tasked with the installation and maintenance of infrastructure equipment. As technology advances, the new equipment is more resource-efficient than existing. The site REO team conducts analyses based on a number of factors, including equipment availability, local technical support, and total cost of ownership.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-low

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

Financial impact not yet estimated.

Management method

Western Digital sets annual energy reduction targets for sites to meet by implementing energy-efficient technology or processes.

Cost of management

1,000,000

Comment

Site personnel are responsible for meeting the annual energy reduction target by implementing energy-efficient technology or processes.

Identifier

Risk 10

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Rising mean temperatures

Type of financial impact

Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)

Company- specific description

Manufacture of Western Digital products take place in environments controlled for temperature and humidity. Rising temperatures mean increased air conditioning and ventilation costs.

Time horizon

Long-term

Likelihood

Very 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

Financial impact not yet estimated.

Management method

Western Digital tracks energy costs at all manufacturing locations. Sites with increasing energy costs are prioritized for equipment upgrades to more energy-efficient technology. All sites are required to meet annual energy reduction targets.

Cost of management

500,000

Comment

Site personnel are responsible for meeting the annual energy reduction target by implementing energy-efficient technology or processes.

Identifier

Risk 11

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Rising sea levels

Type of financial impact

Increased capital costs (e.g., damage to facilities)

Company- specific description

Western Digital constructed a flood wall surrounding our Thailand facility to mitigate local flood impacts.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Flood wall was constructed at a cost of around $2 million USD.

Management method

Western Digital conducts risk assessments of site susceptibility to rising sea levels. Facilities in locations sensitive to rising sea levels will require business continuity management to protect the operations.

Cost of management

100,000

Comment

Western Digital is working to develop an estimation and management method relevant to the newly integrated company.

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?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Participation in carbon market

Type of financial impact

Returns on investment in low-emission technology

Company-specific description

Western Digital's commitment to lowering greenhouse gas emissions has a dual effect of cost savings related to increased resource productivity (i.e., energy and water) as well as assisting customers to achieve their greenhouse gas emissions goals. For example, our facilities in China operate under a carbon quota. We are able to sell excess emissions on the market, which is an incentive to reduce greenhouse gas emissions.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

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

The impact is still at a small scale and requires further analysis in the future.

Strategy to realize opportunity

Western Digital continually evaluates lower emissions technology when equipment and processes are upgraded.

Cost to realize opportunity

Comment

Cost to realize opportunity is loss of market share if priced too high.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Supply Chain

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Type of financial impact

Increased revenue through demand for lower emissions products and services

Company-specific description

Energy costs are projected to rise globally, a situation which is exacerbated in some regions such as California, China, India and the European Union by taxes and regulations intended to reduce fossil fuel use. As customers seek to reduce their operational costs, they are increasingly looking for energy efficient technology solutions. This promotes the market for Western Digital products that use significantly less energy when compared with alternative solutions. Product efficiency standards are anticipated to drive the market for energy efficient technology products. This creates an opportunity for marketing of Western Digital's products that offer energy efficiency advantages over comparable products. For example, under the EU Eco-design Directive, server and other equipment which incorporate Western Digital products may be subject to future regulatory requirements. California has also proposed energy efficiency standards for computers as part of its Appliance Efficiency legislation. Customers who place technology equipment on the market may be required to incorporate higher levels of energy efficiency to their product and this in turn could stimulate demand for products such as our highly efficient Hard Disk Drives.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

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

It is difficult to accurately quantify and effectively communicate the financial implications of this opportunity due to multiple other factors that could accompany a scenario of increasing energy costs. Energy taxes and product efficiency standards driving increased demand for Western Digital's energy efficient products translate into revenue generation opportunities for our company. It may also serve to justify increased R & D investment in the design and development of new, energy-efficient products

Strategy to realize opportunity

Improving energy efficiency is a guiding principle of our product design and development across all product lines. The Western Digital hard disk drives deliver more computing power while using less energy power. Western Digital technology in data centers powers applications over a cloud-based network. It lets multiple users simultaneously share data with ultra-fast streaming display, mitigating the need for high-powered workstations for each user. Western Digital platforms lead the industry for accelerating data analytics, scientific computing, and high-performance computing. The new devices deliver the fastest performance and best energy efficiency for workloads with near-infinite computing needs. Western Digital technology powers many of the top energy-efficient systems on the Green500 supercomputer list. This includes the Tokyo Institute of Technology's Tsubame-KFC, the first super- computer to break the 4 gigaflops per watt barrier. Western Digital HDDs maximizes energy conservation and battery life in notebooks by automatically shutting off the HDD when it is not needed.

Cost to realize opportunity

Comment

Changes in market share as solutions leverage different mixes in SSD and HDD products.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

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

Type of financial impact

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company-specific description

Western Digital Design and development teams are achieving significant advances in the energy efficiency performance of our storage products with simultaneous dramatic increases in storage capacity and no increase in physical footprint. Western Digital's continuing innovation in design enables significant greenhouse gas emission reductions during the "customer use" phase of our product life cycle since the customer is able to achieve doubling of their storage capacity while cutting energy requirements in half, and with no increase in physical footprint.

Time horizon

Medium-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

It is difficult to accurately quantify and effectively communicate the financial implications of this opportunity due to multiple other factors that could accompany a scenario of increasing energy costs. The use of Western Digital HDD technology for climate change research and mitigation applications drives additional revenue streams for Western Digital.

Strategy to realize opportunity

Hiring local talent results in greater local investment in education. Unique partnerships between Western Digital and local educational institutions are designed to train the next generation of engineers and managers who will help lead our development and manufacturing activities in the future. We engage and cooperate with local governments and universities to develop advanced technology curricula. We arrange hands-on

training for polytechnic lecturers, donate lab equipment and provide engineers as volunteer teachers at local universities.

Cost to realize opportunity

Comment

Potential loss of market share if new technology does not meet customer expectations.

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Type of financial impact

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company-specific description

Western Digital's commitment to lowering greenhouse gas emissions has a dual effect of cost savings related to increased resource productivity (i.e., energy and water) as well as assisting customers to achieve their greenhouse gas emissions goals. For example many customers have set science-based targets, including Scope 3 targets.

Time horizon

Medium-term

Likelihood

About as likely as not

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

It is difficult to accurately quantify and effectively communicate the financial implications of this opportunity due to multiple other factors that could accompany a scenario of increasing energy costs. Financial implications of improving stakeholder relations include i) attracting and retaining customers to maintain and grow our revenue; ii) potential for favorable ratings by investment analysts, with a potential longer term positive impact on our share value; iii) attracting and retaining the best employees, which is critical to creating our innovative products and iv) ensuring a positive relationship with local agencies enabling us to continue to develop our facilities. We are unable to quantify the positive impact to our business due to the intangible nature of the opportunity.

Strategy to realize opportunity

We believe that proactive communication of our environmental programs will enhance our reputation. We have responded to the CDP Investor survey annually since 2007. Western Digital is preparing to publish and regularly update a global Corporate Responsibility report that details our environmental programs; and to participate in surveys such as those from the Dow Jones Sustainability Index. We post case studies about our energy efficient products on our corporate website and social media channels such as our Facebook, Twitter, LinkedIn and blog (https://datamakespossible.westerndigital.com/). Our efforts have been recognized by third parties. At our Bay Area facilities and headquarters in California, we operate commute programs which provides employees with climate-friendly options for traveling to and from work while addressing a priority issue for the locals. We are also building high levels of energy efficiency into our facilities, with two buildings certified LEED Silver by USGBC. Through our actions, we anticipate that a positive impact on our reputation is likely.

Cost to realize opportunity

500,000

Comment

During the reporting year, we incurred costs associated with employee time and consulting fees, in support of our environmental program. Approximate costs during the reporting year were over $500,000. We expect to continue to incur similar costs for at least the next 5 years.

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description

Products and services	Impacted	A significant risk and opportunity is associated with Western Digital's development of new products and services through R and D and innovation. A recent example can be found in press releases introducing the new Ultrastar SAS SSD, the company's highest- density drive and the fastest dual-port SAS SSD in the market, enabling server and storage array manufacturers to offer customers substantially lower data center total cost of ownership for Fast Data applications. By doubling maximum capacity of the previous generation to 15.36TB within the same 2.5-inch 15-mm form factor, drive storage density also doubles, giving IT managers the potential to reduce the number of drives deployed, consolidate servers and open up valuable rack space while improving resource productivity in energy, water, and associated GHG emissions.
Supply chain and/or value chain	Impacted	Risks and opportunities addressed by Western Digital pertain to the ability to produce our products and services as well as a reliable supply of our products to our clients. We recognize a future competitive advantage by our ability to assess value chain climate risks and opportunities, especially those associated with avoiding reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions). For example, changes in precipitation patterns and extreme variability in weather patterns. Increased severity of extreme weather events such as cyclones and floods (Increased capital costs (e.g., damage to facilities). Our responses in the CDP demonstrate we have established business continuity programs for our internal operations and requirements for our suppliers to prepare for extreme weather and natural disaster events that are increasingly more common (e.g., earthquakes and floods) We were an early customer for Resilinc's (www.resilinc.com) event notification and impact assessment services, which facilitates prompt assessment of any significant interruption of our customer fulfillment; and prompt recovery of impacted operations or transfer to alternative internal and supplier facilities.
Adaptation and mitigation activities	Impacted	Most adaptation and mitigation associated with climate change to our physical assets/operations and supply/value chain are covered both above and below in respective line items. A volatile area containing risk and opportunities that require adaptation and mitigation services also relate to policy and legal mandates on and regulation of existing products and services (Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums). We remain vigilant to local, regional, national, and international changes and require due diligence by our corporate functions and local teams.
Investment in R&D	Impacted	Our R and D commitment and improvement in product performance demonstrates how Western Digital design and research and development teams are achieving significant advances in the energy efficiency performance of our storage products with simultaneous dramatic increases in storage capacity and no increase in physical footprint. Western Digital's continuing innovation in design enables significant

		greenhouse gas emission reductions during the “customer use” phase of our product life cycle. For example, the customer can achieve doubling of their storage capacity while cutting energy requirements in half, and with no increase in physical footprint.
Operations	Impacted	As cited above in supply chain/value chain, our responses in the CDP demonstrate we have established ISO certified or compliant business continuity programs and procedures for our internal operations to prepare for extreme weather and natural disaster events that are increasingly more common (e.g., earthquakes and floods) and associated with climate change. As stated earlier, we were an early customer for Resilinc’s event notification and impact assessment services, which facilitates prompt assessment of any significant interruption and prompt recovery of impacted operations.
Other, please specify	Impacted	Western Digital's marketplace position is also impacted. Western Digital is always seeking better competitive position to reflect shifting consumer preferences that includes responding to climate related risks and opportunities. Managing the risk and opportunity may correlate to perceived brand value and resulting increased revenues and the overall success of Western Digital.

C2.6

(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.

	Relevance	Description
Revenues	Impacted	Financial planning, specifically related to the amount of investment into research and development, marketing, and monitoring the performance of products is, in some part, a reaction to our clients’ preferences shifting to procuring more efficient products from Western Digital. In essence, our clients are looking at their own efforts to be more productive with costs and risks associated with energy use and subsequent GHG emissions. The CEO, CFO, COO and; President and other members of management team, periodically review information relating to the market for our products, shifts in client preferences and risk and opportunities associated with overall competitiveness of Western Digital. Western Digital’s continuing innovation in design enables significant greenhouse gas emission reductions during the “customer use” phase of our product life cycle since the customer is able to achieve doubling of their storage capacity

		while cutting energy requirements in half, and with no increase in physical footprint. This productivity of resource use compared to storage capability speaks to the competitiveness of our products and our revenue from product sales. A recent example can be found in the press release introducing the new Ultrastar DC SS530 SAS SSD, the company's highest-density drive and the fastest dual-port SAS SSD in the market, enabling server and storage array manufacturers to offer customers substantially lower data center total cost of ownership for Fast Data applications. By doubling maximum capacity of the previous generation to 15.36TB within the same 2.5-inch 15-mm form factor, drive storage density also doubles, giving IT managers the potential to reduce the number of drives deployed, consolidate servers and open up valuable rack space while improving resource productivity in energy, water, and associated GHG emissions.
Operating costs	Impacted	Potential for financial impact of disruption caused by different threats is one of the factors in determining the risk to our business operations. These identified risks are the drivers of the different mitigation initiatives of the company. Specifically, infrastructure and utilities investments are managed by Western Digital Corporation's Real Estate Operations (REO) function, whose highest level of management is the Senior Vice President. The REO organization, in turn, reports in through the Finance/Corporate Strategy organization through to executive management. REO has responsibility for oversight of Western Digital's global facilities, including: (1) assessment of facilities-related risks and opportunities associated with climate change and other matters as part of our business continuity planning process and (2) investment in measures to minimize impacts of climate change to our operations including annual operating expenditures (opex) and capital (capex) financial investments. Key business cases for such investments are developed within the REO function taking into account multiple factors, including sustainability and resiliency goals. REO is responsible for identifying the need for and taking forward the justification to secure investment funding quarterly, at a minimum.

Capital expenditures / capital allocation	Impacted	Potential for financial impact of disruption caused by different threats is one of the factors in determining the risk to our business operations. These identified risks are the drivers of the different mitigation initiatives of the company. Specifically, infrastructure and utilities investments are managed by Western Digital Corporation's Real Estate Operations (REO) function, whose highest level of management is the Senior Vice President. The REO organization, in turn, reports in through the Finance/Corporate Strategy organization through to executive management. REO has responsibility for oversight of Western Digital's global facilities, including: (1) assessment of facilities-related risks and opportunities associated with climate change and other matters as part of our business continuity planning process and (2) investment in measures to minimize impacts of climate change to our operations including annual operating expenditures (opex) and capital (capex) financial investments. Key business cases for such investments are developed within the REO function taking into account multiple factors, including sustainability and resiliency goals. REO is responsible for identifying the need for and taking forward the justification to secure investment funding quarterly, at a minimum.
Acquisitions and divestments	Impacted for some suppliers, facilities, or product lines	Western Digital's Board periodically reviews information relating to acquisitions and divestments that are usually related to the overall competitiveness of Western Digital. This may include risks and opportunities associated with markets for our products, shifts in client preferences and the ability of Western Digital to, without disruptions, competitively deliver products to our clients. At times, embedded in this information are climate related risks and opportunities. This information has been presented to the Board by the CEO, CFO, COO and President, and other members of management.
Access to capital	Not impacted	Investors and creditors of Western Digital are increasingly focused on sustainable and socially responsible investment, based on environmental, social and governance (ESG) information provided through various channels such as this CDP submittal. Our investor relations and treasurer teams are fulfilling requests for information from which investment and credit decisions are being made. Western Digital is not aware of access to capital being impacted.

Assets	Impacted for some suppliers, facilities, or product lines	A principal potential financial impact due to climate change and water security risks would be due to a temporary interruption of our business continuity/order fulfillment resulting from an extreme weather event or natural disaster. Such events could potentially impact Western Digital's and our suppliers manufacturing operations, as well as logistics/transport operations in the impact zone for these events. Western Digital conducts a periodic study to identify and mitigate the effects of any future "Black Swan" or other events that may disrupt operations. Steps include a "high level" identification of potential external hazards, hazardous situations and/or events that can cause harm to assets at a given facility. This is followed by a more refined study to gather specific data (e.g., geological maps, etc.), identification of extreme weather events, generation of specific data to understand and develop responses to specific events (e.g., flooding, earthquake, etc.), developing probabilities, assessing operational impacts, and preparing a risk register and threat assessment summary. These macro inputs are further informed and refined by the more frequent business impact assessments conducted through implementation of the business continuity management system process, as previously described. In general, our business continuity and recovery planning is intended to minimize such impacts by informing financial decision making as to the costs and investments associated with mitigating risks to our assets.
Liabilities	Impacted for some suppliers, facilities, or product lines	When addressing materiality analysis and associated liabilities related to risks and opportunities, including the climate related risks and opportunities communicated in this CDP submittal, Western Digital takes into account both quantitative and qualitative factors. For the quantitative analysis, we consider the impact on various financial metrics depending on the circumstances, such as: revenue; total, current or fixed assets; cash and cash equivalents; operating income; working capital; and net income. For the qualitative analysis, the factors we consider depend on the event or issue we are evaluating, but could include: strategic impact; customer impact; competitive impact; alternatives, substitutions or replacements; legal or regulatory requirements; contractual requirements; or impact on strategic relationships. As it pertains to liabilities, Western Digital Board, periodically reviews information relating to the potential impact of natural disasters on business continuity and how to mitigate risks. This

		information has been presented to the Board by the CEO, CFO, COO and President and other members of management.
Other	Impacted for some suppliers, facilities, or product lines	Business Continuity Planning Western Digital has defined the specific requirements to plan, establish, implement, operate, monitor, review, maintain and continually improve a Business Continuity Management System to protect against, reduce the likelihood of occurrence, prepare for, respond to, and recover from disruptive incidents when they arise. Western Digital also regularly conducts an enterprise risk assessment process, and communicates key risks and mitigation efforts to the Board of Directors. Through implementation of these processes, Western Digital business functions regularly assess potential impacts, both internal and external. These may include impacts arising directly or indirectly from climate change and its effects on our direct operations as well as our supply chain, among others. Those with the potential to materially affect the company are communicated to the Board of Directors. Efforts to address risks and opportunities may require financial planning to account for potential operational costs, capital expenditures, or even low/no cost communication or behavior change initiatives.

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

Yes, qualitative

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

1. Following multiple, large-scale acquisitions, Western Digital has centralized a team to comprehensively review and transform its sustainability reporting and governance processes. The company is

implementing a consolidated, long-term sustainability strategy, while it continues to focus on delivering sustainable value for customers and other stakeholders. Our goal is for our CSR committee to more effectively engage executives and business managers from across our organization in considering issues that represent a strategic business risk or opportunity and how these should be incorporated in our CSR strategy. We maintain membership of organizations such as the RBA and the Silicon Valley Leadership Group to help us to track emerging risks and opportunities and we monitor and take into account customer interest in our environmental programs, including the number of customers who request our participation in the CDP Supply Chain program and/or incorporate environmental questions in their RFP process, and the interest shown by customers and other stakeholders in our industry-leading product energy efficiency performance.

2. Our strategy focuses on climate change aspects including energy efficiency (of our products and processes), addressing impacts in our supply chain and reducing our operational carbon footprint. In relation to our own operations, our strategy has been influenced by energy cost exposure, and we are now strategically pursuing opportunities to reduce our energy costs, particularly as new energy and carbon taxes are introduced around the world. Our customers are also requiring that we have a GHG reduction goal for our own operations. Focusing on reducing our direct emissions helps to demonstrate our commitment to our employees, customers, investors and other interested stakeholders thereby enhancing our reputation. In the area of product design, whether we are engineering systems to power mobile devices or creating architectures that support high-performance supercomputers, our technology can have a significant positive impact on the energy efficiency of the devices in which they are incorporated. Our product design teams' efforts to dramatically improve product energy efficiency positively differentiate our products in the marketplace, reflecting increased customer interest in energy efficiency. Our product efficiency focus positions us well for emerging appliance efficiency regulatory standards. We recognize that a failure to engage with our suppliers on greenhouse gas emissions and other CSR issues could present risks to our business, including reputational impact, business continuity impacts and increased costs. Since 2007 when we joined the EICC, now Responsible Business Alliance (RBA), we have been committed to engaging with our supply chain on corporate responsibility issues, including most recently our collection of carbon emissions and water usage data from critical suppliers and our request to understand more about their response to climate change.

3. The short term aspects of our strategy that have been influenced by climate change include our 6 year goal to reduce our absolute GHG emissions by 10% by CY2023. We are actively pursuing initiatives that will contribute to realizing our goal, including evaluation of onsite renewable options and integration of energy efficiency in new construction. Another short term aspect of our strategy relates to the increased relevance of the consumer market to our business. We are evaluating the extent to which product energy efficiency is important to our consumers and we are working on how to best raise awareness of this customer group about the environmental and other benefits of our product energy efficiency performance. The third short term aspect of our strategy focuses on our supply chain where we have been working to quantify the supply chain emissions attributable to our product, in order to inform our supplier engagement efforts going forward.

4. We anticipate that our longer term (5-6 years) strategy will involve furthering our efforts to extend our programs across our entire value chain, addressing impacts at each stage in the life cycle of our products. This will include further integrating energy efficiency goals into product design and operational activities and engaging our customers as we do this, making investments to realize our greenhouse gas goal, and taking the next steps in our supplier emissions engagement strategy. We also anticipate an expanding market for our products related to climate change research and mitigation. For example, scientists at the US Department of Energy's Oakridge National Laboratory are using our HDD technology to enable highly complex modelling and facilitate more accurate climate predictions that wouldn't otherwise be possible. The goal is to provide a source of reliable climate change prediction information which can help to inform decision-making. Models include a focus on the water cycle, including how precipitation patterns change, and how this will evolve during the next 40 years in a warming climate. Others will address the stability of the Antarctic ice sheet, and its contribution to the rise of sea levels. And they'll assess how carbon, nitrogen and phosphorous cycles help regulate climate system feedbacks. Once complete, the government plans to make the computer model publicly-available to enable further research.

5. Our efforts to manage our energy consumption serve to reduce operating costs; money which we can re-invest into our business and help maintain our competitiveness. Our efforts to address current and future customer expectations for the energy and carbon performance of our operations, products and supply chain help us to retain customers and potentially attract new business.

6. During calendar year 2018, we implemented numerous projects designed to reduce energy and water consumption and associated costs in our factories. These measures resulted in energy savings of over 60,400 MWh and water savings of nearly 843,900 cubic meters over the course of the year, for a cumulative operating expense avoidance of almost $3.2 million.

C3.1d

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios	Details
Other, please specify Internal Methodology	Western Digital conducted a study to identify and mitigate the effects of any future "Black Swan" or other events that may disrupt manufacturing operations in Asia and United States. Steps include a high-level identification of potential external hazards, hazardous situations and/or events that can cause harm to assets at a given facility. This is followed by a more refined study to gather specific data (e.g., geological maps, etc.), identification of extreme weather events, generation of specific data to understand and develop responses to specific events (e.g.,

	flooding, earthquake, etc.), developing probabilities, assessing operational impacts, and preparing a risk register and threat assessment summary. The study focused on events of low (1 in 500 years) and medium (1 in 100 years) probability of occurring, and identified site specific threats. Previous vulnerability assessments showed company operations being most likely to be impacted by low to medium probability events which could happen at any time. These macro inputs are further informed and refined by the more frequent business impact assessments conducted through implementation of Western Digital's detailed business continuity management system process, as previously described. The results of the scenario analysis provided a summary of anticipated risks and impacts to operations. The three greatest risks to Western Digital operations were identified to be floods, earthquakes, and tsunamis. Risk mitigation is strategically prioritized against OpEx and CapEx needs.

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

Scope

Scope 2 (location-based)

% emissions in Scope

100

Targeted % reduction from base year

1

Base year

2017

Start year

2018

Base year emissions covered by target (metric tons CO2e)

1,080,603.2

Target year

2018

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

% of target achieved

0

Target status

Expired

Please explain

Western Digital is promoting energy conservation globally. However, there are several near-term factors contributing to an increase in overall energy consumption (e.g., production mix changes lead to longer test time of products with corresponding energy consumption increases). Western Digital continues to closely monitor energy consumption and to promote efficient use of energy in its operations.

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	18	0
Implementation commenced*	41	24,441.64
Implemented*	77	12,164.61
Not to be implemented	4	226.89

C4.3b

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

Initiative type
Energy efficiency: Processes

Description of initiative
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
33,016

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
2,188,834

Investment required (unit currency – as specified in C0.4)
7,398,880

Payback period
<1 year

Estimated lifetime of the initiative
>30 years

Comment
Real Estate Operation team has been working cross-functionally to review current process of operations, and trying to identify the feasibility of process improvement without significant impact on manufacturing and other operation process. Most of project are related to the adjustment of process and facility based on production volume change, and most projects does not require much investment but they are contributing significant energy and CO2 reduction.

Initiative type
Energy efficiency: Processes

Description of initiative
Compressed air

Estimated annual CO2e savings (metric tonnes CO2e)

1,868.2

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

255,110

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

65,468

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

Compressed air system is identified as one of critical system in Western Digital operation. Most projects are related to the replacement with more energy efficient one, but others are related to the optimization of system operation without significant investment.

Initiative type

Energy efficiency: Processes

Description of initiative

Heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)

8.4

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1,234

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

7,500

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

One of R&D (reseach and development) site launched new heat recovery project. This project uses solar power and does not require carbon fuel.

Initiative type

Energy efficiency: Processes

Description of initiative

Machine replacement

Estimated annual CO2e savings (metric tonnes CO2e)

1,713.6

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

348,309

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

2,637,871

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

When machines are replaced due to end of life, Real Estate Operation team carefully reviews system requirement as well as energy efficiency. Capital investment related to end of life is reviewed in corporate capital review board, and energy efficiency is included in one of criteria for reviewing projects.

C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	In the regular CRB (Capital Review Board) process, the effect of improving energy efficiency is carefully evaluated, and projects are

	funded as appropriate to achieve energy efficiency and financial goals. Also, Western Digital's energy/resource management program office annually reviews global performance of efficiency investments to evaluate whether the funding levels are appropriate.
Dedicated budget for low-carbon product R&D	Western Digital continues to drive innovation with our HelioSeal® platform of high-capacity data center drives. With one of the lowest power profiles in the industry, our products help data center architects meet eco-environmental goals and requirements by delivering more capacity (storage density), more efficiency (watts/TB), more reliability and more value ($/TB).
Financial optimization calculations	The directive from our executive team is clear – we have the freedom to execute the programs we believe will be most impactful, but should demonstrate a clear ROI.
Employee engagement	Our ISO14001 management system assists Western Digital in establishing systems and programs that reduce energy, water usage and waste, as well as encouraging employees to become active participants in protecting our environment.
Internal incentives/recognition programs	The Western Digital energy/resource management program office formally recognizes and rewards significant accomplishments in facilities energy and CO2 reduction.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

No

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

50,190.3

Comment

Scope 2 (location-based)

Base year start
January 1, 2017

Base year end
December 31, 2017

Base year emissions (metric tons CO2e)
1,080,603.2

Comment

Scope 2 (market-based)

Base year start
January 1, 2017

Base year end
December 31, 2017

Base year emissions (metric tons CO2e)
1,068,073.4

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

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

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
46,269.3

Start date

January 1, 2018

End date

December 31, 2018

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

1,110,284.6

Scope 2, market-based (if applicable)

1,107,529.3

Start date

January 1, 2018

End date

December 31, 2018

Comment

C6.4

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

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

CO2e emission related to energy consumption at sales office

Relevance of Scope 1 emissions from this source

Emissions are not evaluated

Relevance of location-based Scope 2 emissions from this source

Emissions are not evaluated

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not evaluated

Explain why this source is excluded

Data is not available.

C6.5

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

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including purchased goods and services.

Capital goods

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including capital goods.

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

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including fuel-and-energy-related activities.

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including upstream transportation and distribution.

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including waste generated in operations.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

18,131.24

Emissions calculation methodology

Western Digital calculates Scope 3 emissions from business travel by converting total distance traveled by airplane to CO2e by short haul, medium haul, and long-haul emission factors per Greenhouse Gas Protocol methodology.

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

Explanation

Employee commuting

Evaluation status

Not relevant, explanation provided

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including employee commuting.

Upstream leased assets

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including upstream leased assets.

Downstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including downstream transportation and distribution.

Processing of sold products

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including processing of sold products.

Use of sold products

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including use of sold products.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including end of life treatment of sold products.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Explanation

Western Digital does not have downstream leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Explanation

Western Digital does not have franchises.

Investments

Evaluation status

Relevant, not yet calculated

Explanation

Western Digital is in the process of conducting an assessment of Scope 3 emissions, including investments.

Other (upstream)

Evaluation status

Explanation

Other (downstream)

Evaluation status

Explanation

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered 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
0.0000596

Metric numerator (Gross global combined Scope 1 and 2 emissions)
1,156,553.9

Metric denominator
unit total revenue

Metric denominator: Unit total
19,391,000,000

Scope 2 figure used
Location-based

% change from previous year
4

Direction of change
Increased

Reason for change
Due to product mix change, test time during manufacturing process is getting longer and it is leading to more energy consumption.

Intensity figure
2,862

Metric numerator (Gross global combined Scope 1 and 2 emissions)
1,156,553.9

Metric denominator
Other, please specify
Exabytes of memory

Metric denominator: Unit total
404

Scope 2 figure used
Location-based

% change from previous year

15

Direction of change

Decreased

Reason for change

Western Digital continually strives to produce more product (memory storage capacity), consume less energy. We have accomplished this level of energy reduction and by modernizing our equipment and changing our methods and habits.

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	40,298.2	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	1,414.2	Other, please specify Custom factor based on the internal technical review considering abatement process in manufacturing
NF3	8.8	Other, please specify Custom factor based on the internal technical review considering abatement process in manufacturing
Other, please specify CF4	995.5	Other, please specify Custom factor based on the internal technical review considering abatement process in manufacturing
Other, please specify C4F8	23.3	Other, please specify Custom factor based on the internal technical review considering abatement process in manufacturing
Other, please specify HFE7100	2,748.7	Other, please specify Greenhouse Gas Protocol Calculation Tools, May 2015, Global Warming Potential Values
Other, please specify HCFC-22	586.3	Other, please specify Greenhouse Gas Protocol Calculation Tools, May 2015, Global Warming Potential Values

Other, please specify R-404A	26.1	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	154	Other, please specify Custom factor based on the internal technical review considering abatement process in manufacturing
Other, please specify HCFC-123	14.2	Other, please specify Greenhouse Gas Protocol Calculation Tools, May 2015, Global Warming Potential Values

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
India	188.1
Israel	4
Japan	1,580.8
Malaysia	2,499.5
Philippines	1,202.4
Thailand	7,340.2
United States of America	32,350.2
China	1,104.1

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Hard Disk Drive (HDD) manufacturing and development	45,078
Solid State Drive (SSD) manufacturing and development	1,191

C7.5

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

Country/Region	Scope 2, location-	Scope 2, market-based	Purchased and consumed electricity, heat,	Purchased and consumed low-carbon electricity, heat, steam or

	based (metric tons CO2e)	(metric tons CO2e)	steam or cooling (MWh)	cooling accounted in market-based approach (MWh)
India	8,489	8,489	9,167	0
Israel	11,195	11,195	14,602	0
Japan	11,251	11,251	27,129	0
Malaysia	391,107	369,122	582,555.9	0
Philippines	48,249	48,249	96,043,653	0
Thailand	331,811	363,518.5	651,640.9	0
United States of America	79,286	79,224	281,034.8	79,477.4
China	228,894	216,478	312,730.5	0
Singapore	0	0	0	0

C7.6

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

By business division

C7.6a

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

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Hard Disk Drive (HDD)	870,315	879,976
Solid State Drive (SSD)	239,968	227,552

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?

Increased

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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption				
Other emissions reduction activities				
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified	25,760	Increased	2.2	Western Digital is not ready to provide precise numeric data of breakdown of year to year CO2e increase. Thus, all changes are keyed here as unidentified one.
Other				

C7.9b

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

Location-based

C8. Energy

C8.1

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

Don't know

C8.2

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

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

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	Unable to confirm heating value	0	185,161.5	185,161.5
Consumption of purchased or acquired electricity		79,477.4	1,950,074.7	2,029,552.1
Consumption of self-generated non-fuel renewable energy				

Total energy consumption		79,477.4	2,135,236.2	22,147,136

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	No
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.

Fuels (excluding feedstocks)

Diesel

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

8,258.62

Comment

Fuels (excluding feedstocks)

Kerosene

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

6,229.81

Comment

Fuels (excluding feedstocks)
Natural Gas

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
162,977.79

Comment

Fuels (excluding feedstocks)
Liquefied Natural Gas (LNG)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
1,176.25

Comment

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
6,091.64

Comment

Fuels (excluding feedstocks)
Petrol

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization

427.36

Comment

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Diesel

Emission factor

167,649.8

Unit

lb CO2e per 1000 cubic ft3

Emission factor source

World Resources Institute (2008). GHG Protocol tool for stationary combustion. Version 4.; Energy Conversion Factors are from the GHG Protocol tool, Emission-Factors-from-Cross-Sector-Tools. August 2012.

Comment

Kerosene

Emission factor

157,823.5

Unit

lb CO2e per 1000 cubic ft3

Emission factor source

World Resources Institute (2008). GHG Protocol tool for stationary combustion. Version 4.; Energy Conversion Factors are from the GHG Protocol tool, Emission-Factors-from-Cross-Sector-Tools. August 2012.

Comment

Liquefied Natural Gas (LNG)

Emission factor

401.126

Unit

lb CO2e per MWh

Emission factor source

World Resources Institute (2008). GHG Protocol tool for stationary combustion. Version 4.; Energy Conversion Factors are from the GHG Protocol tool, Emission-Factors-from-Cross-Sector-Tools. August 2012.

Comment

Liquefied Petroleum Gas (LPG)

Emission factor

100,702.62

Unit

lb CO2e per 1000 cubic ft3

Emission factor source

World Resources Institute (2008). GHG Protocol tool for stationary combustion. Version 4.; Energy Conversion Factors are from the GHG Protocol tool, Emission-Factors-from-Cross-Sector-Tools. August 2012.

Comment

Natural Gas

Emission factor

401.126

Unit

lb CO2e per MWh

Emission factor source

World Resources Institute (2008). GHG Protocol tool for stationary combustion. Version 4.; Energy Conversion Factors are from the GHG Protocol tool, Emission-Factors-from-Cross-Sector-Tools. August 2012.

Comment

Petrol

Emission factor

451.12952

Unit

lb CO2e per MWh

Emission factor source

GHG Protocol tool for stationary combustion. Version 4.; Energy Conversion Factors are from the GHG Protocol tool, Emission-Factors-from-Cross-Sector-Tools. August 2012.

Comment

C8.2e

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	636	636	636	636
Heat				
Steam				
Cooling				

C8.2f

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

Basis for applying a low-carbon emission factor

Contract with suppliers or utilities (e.g. green tariff), supported by energy attribute certificates

Low-carbon technology type

Other low-carbon technology, please specify

Various

Region of consumption of low-carbon electricity, heat, steam or cooling

North America

MWh consumed associated with low-carbon electricity, heat, steam or cooling

79,477.4

Emission factor (in units of metric tons CO2e per MWh)

0.67848

Comment

C9. Additional metrics

C9.1

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

Description
Waste

Metric value
461,889

Metric numerator
kilograms of blister paper

Metric denominator (intensity metric only)

% change from previous year

Direction of change

Please explain
We reduced the size of our retail packaging this year, reducing waste by more than 450,000 kg this year.

Description
Waste

Metric value
20,170

Metric numerator
kilograms of PET

Metric denominator (intensity metric only)

% change from previous year

Direction of change

Please explain

We replaced more than 20,000 kg of new PET material in our packaging with recycled PET this year.

Description

Waste

Metric value

216,000

Metric numerator

kilograms of paper

Metric denominator (intensity metric only)

% change from previous year

Direction of change

Please explain

We reduced the thickness of paper used in our packaging this year, saving 216,000 kg of paper.

Description

Waste

Metric value

264,700

Metric numerator

kilograms of PET

Metric denominator (intensity metric only)

% change from previous year

Direction of change

Please explain

We redesigned trays used to handle products during manufacturing, resulting in a reduction of RPET used by 250,000 kg.

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	No third-party verification or assurance

C10.1a

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

Scope

Scope 1

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

Cameron-Cole Verification Report_Western Digital - CY2018.pdf

Page/ section reference

CY2018 Verification Report: Page19-20. Please note that the same report covers all of Scope1, Scope2-location based and Scope2- market based.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope

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

Cameron-Cole Verification Report_Western Digital - CY2018.pdf

Page/ section reference

CY18 Verification Report: Page19-20. Please note that the same report covers all of Scope1, Scope2-location based and Scope2- market based.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope

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

Cameron-Cole Verification Report_Western Digital - CY2018.pdf

Page/ section reference

CY18 Verification Report: Page19-20. Please note that the same report covers all of Scope1, Scope2-location based and Scope2- market based.

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 originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

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

No, but we 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

C12.1a

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

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

9.6

% total procurement spend (direct and indirect)

80

% Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Western Digital selected this group of suppliers based on several factors: 80% of total spend, and/or high energy usage. The top 80 % spend suppliers are the critical and key components suppliers who manufacture the high- volume components and use the highest amount of energy for part manufacturing which generate the huge amount of CO2eq.

Impact of engagement, including measures of success

The response rate to Western Digital's outreach to our suppliers has been strong. Several suppliers started to collect the data of resource usage in the factory (electricity, water, fuel consumption, LPG, etc..) For one of our locations we are nearly at 90% acknowledgement rate. Going forward we anticipate measuring percent CO2e reduction as a measure of effective impact.

Comment

Following multiple, large-scale acquisitions, Western Digital has centralized a team to comprehensively review and transform its sustainability reporting and governance processes. At this juncture Western Digital is in the first phase of integrating our supply chain program, whereby we want to ensure the onsite suppliers are aligned with our requirements in order for them to establish a trading relationship with Western Digital. Our approach includes integration of the suppliers from our multiple acquisitions and communication of a consolidated Western Digital's message regarding essential CSER/RBA Code requirements and, finally, collection of environmental footprint data. Western Digital engages the suppliers by sending the annual letter called "The Global Citizenship Commitment Letter" to the suppliers. The detail in the letter includes the GHG and Carbon Footprint implementation in order to alert the suppliers to prepare for the program.

In 2018, Western Digital started the training about the GHG/Carbon Footprint calculation to suppliers in Malaysia, Singapore, and Thailand

---

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Run a campaign to encourage innovation to reduce climate impacts on products and services

% of suppliers by number

9.6

% total procurement spend (direct and indirect)

80

% Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Western Digital selected this group of suppliers based on several factors: 80% of total spend, and/or high energy usage.

Impact of engagement, including measures of success

The response rate to Western Digital's outreach to our suppliers has been strong. For one of our locations we are nearly at 90% acknowledgement rate. Going forward we anticipate measuring percent CO2e reduction as a measure of effective impact.

Comment

Following multiple, large-scale acquisitions, Western Digital has centralized a team to comprehensively review and transform its sustainability reporting and governance processes. At this juncture Western Digital is in the first phase of integrating our supply chain program, whereby we want to ensure the onsite suppliers are aligned with our requirements in order for them to establish a trading relationship with Western Digital. Our approach includes integration of the suppliers from our multiple acquisitions and communication of a consolidated Western Digital's message regarding essential CSER/RBA Code requirements and, finally, collection of environmental footprint data. Western Digital engages the suppliers by sending the annual letter called "The Global Citizenship Commitment Letter" to the suppliers. The detail in the letter includes the GHG and Carbon Footprint implementation in order to alert the suppliers to prepare for the program.

In 2018, Western Digital started the training about the GHG/Carbon Footprint calculation to suppliers in Malaysia, Singapore, and Thailand.

C12.1b

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

Type of engagement

Collaboration & innovation

Western Digital publishes GHG emission reports and CDP submission every year. This information is publicly available to our customers, investors and interested parties. In addition to that, we provide customer specific climate related information upon request.

Details of engagement

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

100

% Scope 3 emissions as reported in C6.5

0

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

Western Digital has established a streamlined, centrally managed process so that customers can engage directly with Western Digital on any corporate social and environmental responsibility (CSER) topic including but not limited to climate change, and their related information and data needs. Additionally, Western Digital shares climate change performance and strategy progress with customers through mechanisms such as CDP's and RBA's On Line reporting platforms; and by publishing annually our corporate environmental report on our web site - Please see our latest report which covers CY2017 at: https://www.wdc.com/content/dam/wdc/website/about-wd/global-citizenship/WDC-GHG-Report-CY2017-Digital.pdf. Using the above combinations of reporting mechanisms helps assure our climate change-related environmental programs and performance is available to the vast majority of our growing and diverse global customers and other stakeholders who have an interest in this topic. We engage these customers in particular to ensure their needs are being met and questions answered.

Impact of engagement, including measures of success

Western Digital's openness to direct engagement has been noticed and is appreciated by a growing number of major customers. The measure of success has been positive customer feedback regarding our responsiveness to their climate change-related and other CSER needs and initiatives; and is increasingly being recognized in customer feedback during quarterly Quality Business Reviews.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Trade associations

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

No

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Western Digital participates in the Responsible Business Alliance (RBA) and may provide input on relevant climate change policies. As stated on Western Digital's website, Western Digital seeks to affect government action only on issues and areas that directly impact our business. Potential support of any climate change-related policy initiative would need to be presented to the appropriate senior executives, legal and government affairs staff for discussion. Following multiple, large-scale acquisitions, Western Digital has centralized a team to comprehensively review and transform its sustainability reporting and governance processes. The company is implementing a consolidated, long-term sustainability strategy, while it continues to focus on delivering immediate sustainable value for customers and other stakeholders. Decisions on matters such as these will take into consideration degree of alignment between the proposed initiative and Western Digital's overall CSER and climate change strategies.

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 voluntary sustainability report

Status

Underway – previous year attached

Attach the document

WDC-GHG-Report-CY2017-Digital.pdf

Page/Section reference

Section "OUR CARBON FOOTPRINT, WATER FOOTPRINT AND WASTE FOOTPRINT"

Content elements

Governance
Strategy
Emissions figures
Emission targets
Other metrics

Comment

Western Digital is publishing our first GRI-compliant materiality assessment as part of our corporate sustainability report. This publication is scheduled to be released in late summer of 2019, so it is not published as of the CDP submittal date.

C14. 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.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Senior Director, Global EHS & Security	Environmental, health and safety manager