# **C0 Introduction**

## Introduction

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

No change from 2018. This is an open text question with a limit of 5,000 characters.

The Toronto-Dominion Bank and its subsidiaries are collectively known as TD Bank Group (TD or the Bank). TD is the sixth largest bank in North America by branches and serves more than 25 million customers in three key businesses operating in a number of locations in financial centres around the globe: Canadian Retail, which includes the results of the Canadian personal and commercial banking, wealth and insurance businesses; U.S. Retail, which includes the results of the U.S. personal and business banking operations, wealth management services, and the Bank's investment in TD Ameritrade; and Wholesale Banking. TD also ranks among the world's leading online financial services firms, with more than 12 million active online and mobile customers. TD had \$1.3 trillion in assets on October 31, 2018, and 84,383 average full-time equivalent employees in fiscal 2018.

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

No change from 2018. Please complete the following table.

Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
From: [DD/MM/YYYY] 01/08/2017	To: [DD/MM/YYYY] 31/07/2018	Select from: • Yes • No	Select from: • 1 year • 2 years • 3 years

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

Minor change from 2018. Please complete the following table:

#### **Country/Region**

Select all that apply:
[Country/region drop-down list]
Canada
China
China, Hong Kong Special Administrative Region
India
Ireland
Japan
Netherlands
Republic of Korea
Singapore
United Kingdom of Great Britain and Northern Island
United States of America

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

No change from 2018. Please complete the following table:

Currency	
Select from:	
Currency drop-down list]	
CAD	

(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.

No change from 2018. Select one of the following options:

• Financial control

- Operational control
- Equity share
- Other, please specify

# **C1 Governance**

## Board oversight

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

No change from 2018. Select one of the following options:

- Yes
- No

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

Minor change from 2018. This question only appears if you select "Yes" in response to C1.1. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Position of individual(s)	Please explain
Select from: • Board Chair • Director on board • Chief Executive Officer (CEO) • Chief Financial Officer (CFO) • Chief Operating Officer (COO) • Chief Procurement Officer (CPO) • Chief Risk Officer (CRO) • Chief Sustainability Officer (CSO) • Other C-Suite Officer • President • Board-level committee • Other, please specify	Text field [maximum 1,000 characters] Provide a description of the position(s)/committee(s) in the corporate structure and the level of responsibility they have towards climate-related issues; Note that this question asks about the position and not about the names of the staff holding these positions. Do not include the name of any individual or any other personal data in your response. Provide a rationale for the assignment of responsibilities for climate-related issues to this/these position(s)/committee(s); for example, because the individual has subject matter expertise or qualifications, or because the committee is charged with delivering a relevant strategic goal.
Board-level committee	TD's Board accomplishes its risk management mandate through the Risk Committee of the Board (RCOB) and Corporate Governance Committee (CGC). The Board reviews the Risk Appetite Statement, monitors the risk profile and performance

	against risk appetite and has responsibility for climate related issues. The Board receives periodic reports on E&S matters affecting TD. RCOB oversees management of TD's risk profile, including environmental risk, which TD defines as possibility of loss of strategic, financial, operational or reputational value resulting from the impact of environmental issues, including climate change and related social risk. Management reports periodically to RCOB on TD's approach to E&S risk management, including climate risk. CGC oversees TD's global corporate citizenship framework and reviews TD's strategy and reporting on corporate responsibility for E&S matters. CGC reviews TD's ESG Report and receives updates on E&S trends, best practices and our performance.
Chief Executive Officer (CEO)	The Chief Executive Officer has ultimate responsibility for ensuring TD acts as a leading corporate citizen.
Other, please specify (Environmental Champion)	Since 2009 TD has designated a member of the Senior Executive Team as TD's 'Environmental Champion'. The Group Head, Customer & Colleague Experience is the current Environmental Champion. The Environmental Champion has oversight of TD's global corporate citizenship strategy and is responsible for promoting considerations of climate change matters at TD.
	TD has an enterprise-wide Corporate Citizenship Council (CCC) composed of senior executives from TD's business and corporate segments. It is chaired by the Environmental Champion and is responsible for meeting performance standards and communicating results to the business. They discuss corporate responsibility topics and provide guidance on TD's strategy, current performance and future direction. The CCC is expected to stay informed on emerging environmental and social issues and impact on stakeholders. TD's business segments are responsible for implementing the environmental strategy and managing associated risks within their units.
Other, please specify (Executive Vice President and Chief Marketing Officer)	The Executive Vice President and Chief Marketing Officer holds senior executive accountability for environmental management. The EVP is support by the Vice President of Global Corporate Citizenship who providers operational oversight, and the Head of Environment who has management responsibility.

[Add Row]

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

No change from 2018. This question only appears if you select "Yes" in response to C1.1. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

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

Select from:	Select all that apply:	Text field [maximum 3,000 characters]
<ul> <li>Scheduled - all meetings</li> <li>Scheduled - some meetings</li> <li>Sporadic - as important matters arise</li> <li>Other, please specify</li> </ul>	<ul> <li>Reviewing and guiding strategy</li> <li>Reviewing and guiding major plans of action</li> <li>Reviewing and guiding risk management policies</li> <li>Reviewing and guiding annual budgets</li> <li>Reviewing and guiding business plans</li> <li>Setting performance objectives</li> <li>Monitoring implementation and performance of objectives</li> <li>Overseeing major capital expenditures, acquisitions and divestitures</li> <li>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</li> <li>Other, please specify</li> </ul>	Describe the governance mechanisms selected in column 2 and how, given the frequency reported in column 1, these mechanisms contribute to the board's overall oversight of climate- related issues. You may also include such details as who briefs the board and on which matters (e.g. "a report from each Business Head regarding performance against climate targets is reviewed quarterly.") As much as possible, please give examples from the reporting year.
Scheduled – some meetings	Reviewing and guiding major plans of action Reviewing and guiding risk management policies	In 2018, the Board and its Committees focused on TD's environmental strategy, including the following: (1) reviewing the Bank's annual ESG Report with management focusing on enhanced disclosures on environmental issues; (2) receiving management's presentation on international ESG trends, including the Bank's disclosures in alignment with the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosure; (3) receiving briefings on the development and launch of the Bank's "The Ready Commitment" including the Bank's involvement in contributing to sustainable development goals. The Corporate Governance Committee also led the Board in various meetings with shareholders which included several ESG-focused meetings, with many pertaining to environmental and climate-related issues.
		updates on environmental risks and the Board received updates on environmental risks and the Bank's support for the transition to a low-carbon economy. As a part of our direct engagement with the board on TD's environment strategy, TD's Head of Environment presented to the Risk Committee and the Corporate Governance Committee.

## [Add Row]

(C1.1c) Why is there no board-level oversight of climate-related issues and what are your plans to change this in the future?

No change from 2018. This question only appears if you select "No" in response to C1.1. Please complete the following table:

Primary reason	Board-level oversight of climate-related issues will be introduced in the next two years.	Please explain
Text field [maximum 1,000 characters]	Select from:	Text field [maximum 2,400 characters]
Provide your organization's rationale for not currently having board-level oversight of climate-related issues. While there may be multiple reasons for this, please describe the overarching primary justification.	<ul> <li>Yes, we plan to do so within the next two years</li> <li>No, we do not currently plan to do so</li> </ul>	Use this column to provide any explanation of what you plan to implement in the next two years, or why you do not currently plan to do so.

## Management responsibility

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

Minor change from 2018. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Select from:	Select from:	Select from:
<ul><li>Chief Executive Officer (CEO)</li><li>Chief Financial Officer (CFO)</li></ul>	<ul><li>Assessing climate-related risks and opportunities</li><li>Managing climate-related risks and opportunities</li></ul>	<ul><li>More frequently than quarterly</li><li>Quarterly</li><li>Half-yearly</li></ul>
<ul> <li>Chief Operating Officer (COO)</li> <li>Chief Procurement Officer (CPO)</li> <li>Chief Risks Officer (CRO)</li> </ul>	<ul> <li>Both assessing and managing climate-related risks and opportunities</li> <li>Other, please specify</li> </ul>	<ul><li>Annually</li><li>Less frequently than annually</li><li>As important matters arise</li></ul>
<ul><li>Chief Sustainability Officer (CSO)</li><li>Other C-Suite Officer, please specify</li></ul>		Not reported to the board



<ul> <li>President</li> <li>Risk committee</li> <li>Sustainability committee</li> <li>Safety, Health, Environment and Quality committee</li> <li>Corporate responsibility committee</li> <li>Other committee, please specify</li> <li>Business unit manager</li> <li>Energy manager</li> <li>Environmental, Health, and Safety manager</li> <li>Environment/Sustainability manager</li> <li>Facility manager</li> <li>Process operation manager</li> <li>Procurement manager</li> <li>Public affairs manager</li> <li>Risk manager</li> <li>There is no management level responsibility for climate-related issues</li> <li>Other, please specify</li> </ul>		
Other C-Suite Officer, please specify (Senior Executive Environment Champion)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Chief Risk Officer (CRO)	Both assessing and managing climate-related risks and opportunities	Quarterly

# (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).

Minor change from 2018. This is an open text question with a limit of 5,000 characters. Use the text box to describe where the highest managementlevel position(s) or committee(s) with responsibility for climate-related issues sit in the organizational structure, their responsibilities, and how climaterelated issues are monitored. Your answer should be company-specific and cover the following:

- i. Where in the organizational structure this position(s) and/or committee(s) lie;
- ii. A rationale of why responsibilities for climate-related issues have been assigned to this/these position(s) or committee(s); and
- iii. Specific responsibilities of every position and/or committee with regard to assessment and management of climate-related issues.

Note that this question asks about the position and not about the names of the staff holding these positions. Do not include the name of any individual or any other personal data in your response.

If there is no management level responsibility for climate-related issues below the board-level, please state so here.

Within TD's organizational structure, management for climate related issues reports to the Senior Executive Environmental Champion, who is currently the Group Head, Customer & Colleague Experience, through the Corporate Citizenship Team (under Marketing). The structure forges a closer link between our customer and our climate strategy.

The Senior Executive Environmental Champion is responsible for promoting the considerations of climate change matters and issues at TD and is supported by the Corporate Citizenship team. Within the Corporate Citizenship team, the Head of Environment leads the Corporate Environmental Affairs (CEA) team, which is responsible for developing the environmental strategy, setting environmental performance standards and targets, and reporting on performance in accordance with the environmental management system (EMS) which is based on ISO 14001. As the Corporate Environmental Affairs team sits within Marketing, the responsibility of managing climate related issues lies with the Group Head, Customer & Colleague Experience.

TD also has an enterprise-wide Corporate Citizenship Council (CCC) composed of senior executives from TD's main business segments and corporate functions. The CCC is responsible for meeting performance standards and communicating results throughout the business. TD's business segments are responsible for implementing the environmental strategy and managing associated risks within their units.

## **Employee incentives**

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

Minor change from 2018. Select one of the following options:

• Yes

• No

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

Minor change from 2018. This question only appears if you select "Yes" in response to C1.3. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Who is entitled to benefit from these	Types of incentives	Activity incentivized	Comment
incentives?			

Select from:	Select from:	Select from:	Text field [maximum 2,400 characters]
<ul> <li>Board Chair</li> <li>Board/Executive board</li> <li>Director on board</li> <li>Corporate executive team</li> <li>Chief Executive Officer (CEO)</li> <li>Chief Financial Officer (CFO)</li> <li>Chief Operating Officer (COO)</li> <li>Chief Procurement Officer (CPO)</li> <li>Chief Risk Officer (CRO)</li> <li>Chief Sustainability Officer (CSO)</li> <li>Other C-Suite Officer</li> <li>President</li> <li>Executive officer</li> <li>Management group</li> <li>Business unit manager</li> <li>Energy manager</li> <li>Environmental, health, and safety manager</li> <li>Facilities manager</li> <li>Process operation manager</li> <li>Procurement manager</li> <li>Public affairs manager</li> <li>Risk manager</li> <li>Buyers/purchasers</li> <li>All employees</li> <li>Other, please specify</li> </ul>	<ul> <li>Monetary reward</li> <li>Recognition (non-monetary)</li> <li>Other non-monetary reward</li> </ul>	<ul> <li>Emissions reduction project</li> <li>Emissions reduction target</li> <li>Energy reduction project</li> <li>Efficiency project</li> <li>Efficiency target</li> <li>Behavior change related indicator</li> <li>Environmental criteria included in purchases</li> <li>Supply chain engagement</li> <li>Other, please specify</li> </ul>	You can use this text field to enter any additional relevant information. Note that this question asks about the position of employees receiving incentives. Do not include the name of any individual or any other personal data in your response.
Corporate executive team	Monetary reward	Other, please specify (Executing against environmental strategy and environmental risk policies)	The objective of the bank's executive compensation program is to reward executives for successfully executing the bank's strategy and delivering long-term value to shareholders, which requires successful execution of contributing sub-strategies dealing with a range of matters, including ESG. An executive's compensation can be impacted where such objectives are not achieved. The bank's ESG scorecard sets out the

			bank's ESG related objectives and goals across a number of key categories, including the environment. The performance of executives is assessed against its consistency with the bank's Risk Appetite Statement, Code of Conduct and other programs with principles embedded in the bank's management systems, which reflect and support the achievement of the bank's ESG objectives. These policies and programs include the reputational risk management elements of the bank's Risk Appetite Statement and related environmental risk policies. This assessment of performance has a direct impact on compensation, in alignment with the bank's pay-for performance philosophy.
Executive officer	Monetary reward	Other, please specify (Executing against environmental strategy and environmental risk policies)	The objective of the bank's executive compensation program is to reward executives for successfully executing the bank's strategy and delivering long-term value to shareholders, which requires successful execution of contributing sub-strategies dealing with a range of matters, including ESG. An executive's compensation can be impacted where such objectives are not achieved. The bank's ESG scorecard sets out the bank's ESG related objectives and goals across a number of key categories, including the environment. The performance of executives is assessed against its consistency with the bank's Risk Appetite Statement, Code of Conduct and other programs with principles embedded in the bank's management systems, which reflect and support the achievement of the bank's ESG objectives. These policies

Energy manager	Monetary reward	Energy reduction target	and programs include the reputational risk management elements of the bank's Risk Appetite Statement and related environmental risk policies. This assessment of performance has a direct impact on compensation, in alignment with the bank's pay-for performance philosophy. Meeting targets are a part of a comprehensive performance assessment, for which the conclusions directly influence compensation outcomes.
Facilities manager	Monetary reward	Efficiency target	Meeting targets are a part of a comprehensive performance assessment, for which the conclusions directly influence compensation outcomes.

[Add Row]

# **C2** Risks and opportunities

## Time horizons

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

No change from 2018. Please complete the following table:

	Numerical field [enter a number from 0-100 using no decimals or commas]	Numerical field [enter a number from 0-100 using no decimals or commas]	Text field [maximum 2,400 characters] Please specify if this time horizon for assessing climate-related risks and opportunities is aligned with other business practice time horizons. Provide any other relevant information.
Short-term	1	3	
Medium-term	3	5	
Long-term	5	10	

## Management processes

(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.

No change from 2018. Select one of the following options:

- Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes
- A specific climate change risk identification, assessment, and management process
- There are no documented processes for identifying, assessing, and managing climate-related issues

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

No change from 2018. This question only appears if you select "Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes" or "A specific climate change risk identification, assessment, and management process" in response to C2.2. Please complete the following table:

Frequency of monitoring	How far into the future are risks considered?	Comment
Select from: • Six-monthly or more frequently • Annually • Every two years • Not defined • Never	Select from: • Up to 1 year • 1 to 3 years • 3 to 6 years • > 6 years • Unknown	Text field [maximum 1,000 characters]
Six-monthly or more frequently	>6 years	TD considers climate-related risks in short, long and medium terms. Our work with UNEP-FI TCFD pilot studies focused on lending, investment, and insurance looks at several scenarios including 2020, 2030, and 2040. Monitoring of climate-related risk is quarterly and is embedded into our organizational structure and program management. Informal communications occur between subject matter experts in TD's Corporate Environmental Affairs team and key business segment managers on an ongoing basis. Formal assessments occur quarterly through relevant management committees. Environment subject matter experts maintain a log of risks. E&S risks related to businesses are flagged through the Enterprise Risk and Reputational Risk Committees. Risks related to strategy reside with the Corporate Citizenship Council which meet quarterly. The Risk Committee of the Board and the Corporate Governance Committee meet quarterly and climate-related risks are discussed as needed.

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

No change from 2018. This question only appears if you select "Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes" or "A specific climate change risk identification, assessment, and management process" in response to C2.2.

This is an open text question with a limit of 5,000 characters. Include in your answer:

- How climate-related risks are identified and assessed at a company level (e.g. reputational risk can impact the full corporation);

- How climate-related risks are identified and assessed at an asset level (e.g. physical impacts can affect individual facilities). Please note that asset level is defined as anything below company level, such as individual sites and subsidiaries;

- The process you have in place for assessing the potential size and scope of identified risks;

- The process by which your organization determines the relative significance of climate-related risks in relation to other risks;

- The definitions of risk terminologies used (or references to existing risk classification frameworks utilized by your c ompany);
- How your organization defines substantive financial or strategic impact on your business:

- What constitutes a substantive impact will vary between companies. For example, a 1% reduction in profits will have different effects on different companies depending on their respective profit margins.

Companies are therefore asked to provide details as to how they recognize an impact to be substantive at the corporate level and to include details of any qualitative or quantitative metrics. Factors to consider may include: (a) The proportion of business units affected; (b) The size of the impact on those business units, and (c) The potential for shareholder or customer concern. A substantive financial impact of relatively high magnitude could occur because of a large change in one of these aspects, or small changes in all three combining to create a larger impact.

#### **Company Level:**

TD's climate change risk identification process is integrated in our risk management and governance framework. Our processes for identifying climate related risks and opportunities are proactive and ongoing, and consider both physical and transition risks:

**Identification and assessment:** We maintain a view of current and emerging global, regional, and local climate-related issues through our internal subject matter experts and business segment managers, as well as through participation in multi-stakeholder groups, business networks, review of current literature and media. Risks and opportunities are assessed based on their potential to have a substantive impact on the business. We define "substantive impacts" as those that have the potential to adversely or beneficially impact business activities, customer, employee experience, or TD's brand in a material way. TD's environment subject matter experts maintain a log of all risks identified and work with business segments to determine appropriate management committees for review and prioritization. Given the broad nature of climate related risks, they may span a number of risk traditional risk categories including: Strategic Risk, Credit Risk, Market Risk, Operational Risk, Insurance Risk, Regulatory and Legal Risk, & Reputational Risk. TD also has a process for approving new products and business. This involves committees who represent the businesses and includes the consideration of reputational risk of new products.

**Measurement (assessing size, scope, and significance):** Quantification methodologies for climate-related impacts on financial institutions are still in the early days of development. TD is a member of the United Nations Environment Programme-Finance Initiative (UNEP FI), and is participating in several working groups with the objective of piloting the recommendations put forth by the Financial Stability Board's Task-Force on Climate-Related Financial Disclosures (TCFD). UNEP-FI's TCFD pilot projects for lenders, insurers, and investors aims to develop scenarios, models, and metrics to enable scenario-based, forward-looking assessment and disclosure of climate-related risks and opportunities. TD will assess climate risk to each of these three areas of the business to determine substantive impacts of climate risk at an enterprise level. TD has a cross-functional group focused on scenario analysis which includes expertise from credit management, asset management, insurance, operational risk management, enterprise risk management, sustainability, and stress testing. TD also collaborated with Bloomberg to develop an industry leading tool for assessing climate related physical risks in accordance with TCFD pilot methodology. TD is an active member of the Canadian Bankers Association (CBA). We have worked with the CBA on various industry initiatives, including the integration of the recommendations of the TCFD.

In addition to this, we have used a number of approaches to understand and measure climate related risks. These include: review of lending and investing exposure to both industries that are vulnerable to the impacts of climate change as well as industries that will thrive in the transition to a low carbon economy, natural capital valuation, GHG emissions and energy use avoided, clean energy generated, etc. These approaches are used in combination with qualitative approaches such as industry and peer comparison.

### Asset level:

Climate related risks and opportunities at the asset level includes the potential impact of climate change (both physical and transition risk) on TD's owned and operated facilities and operating costs, and the business activities of our customers (ex. lending, investment, or insurance). This includes the impact of climate change regulations, dependency on natural capital, or vulnerability of extreme weather events and changing temperature extremes.

TD's Business Continuity Management Group (BCM) identifies operational risk and routinely undertakes scenario testing to assess the potential impact of hurricanes, flooding and other severe weather. Parameters assessed include impacts to TD assets, clients, employees and overall ability to continue conducting business.

Climate-related risks are also identified as part of TD's credit and investment risk management processes which integrate environmental, social and governance (ESG) factors. TD identifies and mitigates credit risk thorough policies and procedures that value and manage financial and non-financial security.

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

This question only appears if you select "Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes" or "A specific climate change risk identification, assessment, and management process" in response to C2.2.

Please complete the following table:

Risk type	Relevance & inclusion	Please explain
	Select from: • Relevant, always included	Text field [maximum 2,400 characters] Your response should be company-specific and explain:
	<ul> <li>Relevant, sometimes included</li> <li>Relevant, not included</li> </ul>	- Your decision on the relevance and inclusion of this risk type in your risk assessment, in line with your organization process(es) described in C2.2b.
	<ul> <li>Not relevant, included</li> <li>Not relevant, explanation provided</li> <li>Not evaluated</li> </ul>	<ul> <li>For every risk type deemed relevant, an example of a specific risk considered in your assessment.</li> <li>Upstream and downstream risks are defined based on the location of the risks in your value chain and can also refer to any of the risk types above i.e emerging regulation, technology, legal, market, reputation etc.</li> <li>If you choose 'Not relevant, explanation provided': why this risk type is not deemed relevant.</li> </ul>
Current regulation	Relevant, always included	Current regulation includes carbon pricing schemes across multiple jurisdictions in which TD is active. This leads to upstream costs to clients, who may have increased costs due to these regulations. If clients were found not to be in compliance with these regulations, or unable to adapt to these regulations, this would lead to a risk for TD as a result of potential insolvency or costs resulting from fines. Current regulations have potential credit risk implications. TD's environmental due diligence tools for non-retail lending include considerations of disclosure of GHG emissions and readiness for GHG regulation for clients in carbon intensive industries.
Emerging regulation	Relevant, always included	Emerging regulation can also lead to upstream costs to clients, which can translate to credit risk implications for TD. TD's environmental due diligence tools for non-retail lending include considerations of disclosure of GHG emissions and readiness for emerging GHG regulation for clients in carbon intensive industries. This helps TD understand and manage against any potential credit impacts as a result of emerging regulations. Additionally, TD is monitoring regulatory development around climate risks as several regulators in Europe are beginning to develop potential regulations for financial institutions.
Technology	Relevant, sometimes included	Technological changes are necessary to respond to and take advantage of opportunities resulting from climate change and its impacts. TD is participating in several UNEP FI pilots focused on recommendations made by the TCFD. The pilots consider transition risk and opportunities – technology

		poses both a risk and opportunity. From a risk perspective, emerging technology has the potential to disrupt traditional business models (e.g., renewable energy competing with traditional energy generation), leading to increased credit or investment risk. Conversely, financing or investing in companies with emerging technologies designed to address climate issues could prove to be lucrative given their market demand, operating cost benefits, and/or revenue benefits from carbon policies.
Legal	Relevant, always included	Climate-related litigation, can impact TD's clients in carbon intensive sectors. This can indirectly translate into credit risk or reputational risk implications for TD. Climate-related legal claims and actions against clients are evaluated as part of TD's environmental due diligence processes for non-retail lending.
Market	Relevant, always included	TD monitors market development for shifts in supply and demand for green products and services. We adapt our offerings and review our products to best match these shifts. This is why TD was the first Canadian commercial bank to issue a green bond. In 2017, TD issued a second green bond (one of the largest in developed markets). TD also has a leading green bond underwriting practice.
Reputation	Relevant, always included	TD is aware of potential impacts to reputation resulting from increased activism around traditional energy financing and changing physical impacts of climate change. TD has an environmental and social credit review process to assess the reputational risk associated with doing business with certain clients in high risk industries
Acute physical	Relevant, always included	As an insurance provider, TD faces direct risks arising from extreme weather events. TD is part of UNEP- FI's TCFD pilot study to assess the potential impact of increase in both frequency and intensity of extreme weather events (including cyclones, flood, wildfire, drought and extreme heat) on its lending businesses. Extreme events can lead to damage, operational downtime and lost production for fixed assets, and potential changes to property value. An example of how TD responding to this risk: TD Insurance deployed Mobile Response Units (MRUs) to provide disaster relief to two cities experiencing catastrophic incidents related to climate change: Calgary, following a hail storm in August and in Ottawa, after tornadoes touched down in September. These vehicle-based units provide customer assistance in locations where catastrophic events (i.e., hail, flooding) have occurred. MRUs allow for on-site face-to- face assistance and immediate, on-the-spot assessment of damages.
Chronic physical	Relevant, sometimes included	As part of the TCFD pilot study, TD is assessing and considering the potential impact of incremental shifts in climate conditions (such as rising temperatures and changes in precipitation patterns) on its various businesses. Incremental climate changes can affect economic output and productively, and can impact TD's lending, insurance and investment portfolios as well as retail customers.
Upstream	Relevant, sometimes included	Climate-related risk, such as chronic physical risk, can have an impact on TD's suppliers. TD includes consideration of GHG emissions in some aspects of TD's supply chain through participation in the CDP Supply Chain Program.
Downstream	Relevant, always included	TD is aware of downstream impacts on clients in our insurance business. As a result, TD Insurance provides advice to customers as part of the Claims Advice Line, including advice on prevention related to damage from severe weather events. Additionally, TD Insurance offers the Green Car Discount insurance

pro	rogram, an insurance discount for hybrid and electric vehicles. This offer is promoted at the TD
Ins	nsurance sponsored Plug 'n Drive Electric Vehicle Discovery Centre; a centre enabling consumers to
lea	earn about and test drive electric vehicles. We are aware of the variety and diversity of potential risks
res	esulting from climate change and engage our clients in a variety of ways so that they are aware of
po	potential transition and physical risks, as reflected in the examples provided above.

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

No change from 2018. This question only appears if you select "Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes" or "A specific climate change risk identification, assessment, and management process" in response to C2.2. This is an open text question with a limit of 5,000 characters. Include in your response:

- How your organization makes decisions to mitigate, transfer, accept or control climate-related risks and to capitalize on opportunities;
- Your process for prioritizing climate-related risks and opportunities;
- Please provide a case study or example of how the process has been applied to at least one transition risk and one physical risk. If you have not identified any relevant risks in either of this risk categories, please state so; and
- You may also include examples or cases studies of your management processes related to opportunities.

### **Climate related risks:**

TD's comprehensive and proactive approach to risk management is comprised of four basic processes: risk identification and assessment, measurement, control, and monitoring and reporting. These processes are applied to the management of climate-related risks and opportunities (both physical and transition):

**Control:** TD's risk control processes are established and communicated through Risk Committee and management approved policies, and associated management approved procedures, control limits, and delegated authorities which reflect its risk appetite and risk tolerances. Once an environmental-related risk has been identified, assessed, and measured to the extent feasible (as described in C2.2b), TD's environmental subject matter experts from the Corporate Environmental Affairs team work with relevant business segments to determine whether to accept, transfer, or mitigate the risk. Based on the level of significance, a mitigation plan is developed, and residual risk is evaluated. This mitigation plan is reviewed by appropriate management committees (e.g. the Reputational Risk Committee), as described in C2.2a.

**Monitoring and reporting:** Once a course of action is approved by management, TD monitors and reports on risk levels on a regular basis against its risk appetite and Risk Management reports on its risk monitoring activities to senior management, the Board and its Committees, and appropriate executive and management committees. Complementing regular risk monitoring and reporting, ad hoc risk reporting is provided to senior management, the Risk Committee, and the Board, as appropriate, for new and emerging risks or any significant changes to the Bank's risk profile.

### **Climate related opportunities:**

Climate related opportunities are managed and pursued in a similar manner. Opportunities are identified by TD's environmental subject matter experts and then brought forward to the relevant business segments to evaluate the full benefit and size of the opportunity. Opportunities may also be identified by business segments

as well. Selected opportunities are executed leveraging various internal processes. For example, a new climate related product would follow TD's process for new products and services.'

#### **Examples:**

An example of management of both climate related risk and opportunity includes the development of TD's low carbon business target. In 2017, TD announced a target of \$100 billion, in total, in low-carbon lending, financing, asset management and internal corporate programs by 2030 that will support the transition to a low-carbon economy.

Another example of a climate related opportunity at TD is the development of TD's green bond strategy. TD's Corporate Environmental Affairs team identified the emergence of the green bond market and worked with relevant business areas to position TD as a leader in green bond issuance, as well as underwriting, and investment. As a result, TD was the first Canadian commercial bank to issue a green bond in 2014 and issued a second green bond in 2017 (one of the largest issuances to date), has a significant green bond underwriting desk, and has a growing treasury green bond investment portfolio.

(C2.2e) Why does your organization not have a process in place for identifying, assessing, and managing climate-related risks and opportunities, and do you plan to introduce such a process in the future?

No change from 2018. This question only appears if you select "There are no documented processes for identifying, assessing, and managing climate-related issues" in response to C2.2. Please complete the following table:

Primary reason	Please explain
Select from:	Text field Text field [maximum 1,500 characters]
<ul> <li>We are planning to introduce a risk identification, assessment, and management process in the next two years</li> <li>Important but not an immediate business priority</li> <li>Judged to be unimportant, explanation provided</li> <li>Lack of internal resources</li> <li>Insufficient data on operations</li> <li>No instruction from management</li> <li>Other, please specify</li> </ul>	Ensure your explanation is company-specific and provides additional details as to why you do not have a process in place, including any specific plans to create a process and the anticipated timeline for its creation. For instance, you may include details on how you are exploring creating a process, using concrete examples from your company's experience. Please also include details of how climate-related risks are addressed as they do arise (such as environmental legislation, weather-related events, or reputational risks related to climate change). Include company specific examples in your description.

## Risk disclosure

# (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

• No

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

## **Question dependencies**

Question modified from 2018. This question only appears if you select "Yes" in response to C2.3. Please complete the following table. For clarity, the table is displayed over several rows. You are able to add rows by using the "Add Row" function at the bottom of the table.

ldentifier	Where in the value chain does the risk driver occur?	Risk type	Primary climate- related risk driver	Type of financial impact	Company- specific description	Time horizon
Select from: • Risk1 - Risk100	Select from: • Direct operations • Supply chain • Customer • Investment chain	Select from: <ul> <li>Transition risk</li> <li>Physical risk</li> </ul>	See drop-down options below	See drop-down options below	Text field [maximum 2,400 characters] Provide further contextual information on the risk driver, including more detail on the exact nature, location and/or regulation of the effect concerned, as well as any notable geographic/regional examples. Be sure to include company-specific detail, such as references to activities, programs, products, services, methodologies, or operating locations specific to your company's business or operations.	Select from: • Current • Short-term • Medium-term • Long-term • Unknown

Likelihood	Magnitude of impact	Are you able to provide a potential financial impact figure?	Potential financial impact figure (currency)	Potential financial impact figure - minimum (currency)	Potential financial impact figure - maximum (currency)	Potential financial impact figure - maximum (currency)
Select from:	Select from:	Select from:	Numerical field [enter a nu 999,999,999,999,999,999,999	mber from 0 to using up to 2 decimal	Numerical field [enter a number from 0 to	Numerical field [enter a number from 0 to
<ul> <li>Virtually certain</li> </ul>	High	<ul> <li>Yes, a single figure</li> </ul>	places]		999,999,999,999,999,999,99	999,999,999,999,999,999,99
<ul> <li>Very likely</li> </ul>	Medium-high	estimate			9 using up to 2 decimal	9 using up to 2 decimal
Likely	Medium	<ul> <li>Yes, an estimated</li> </ul>			places]	places]
<ul> <li>More likely than not</li> </ul>	Medium-low	range				
<ul> <li>About as likely as not</li> </ul>	• Low	<ul> <li>No, we do not have</li> </ul>				
Unlikely	Unknown	this figure				

<ul><li>Very unlikely</li><li>Exceptionally unlikely</li><li>Unknown</li></ul>			

Explanation of financial impact figure	Management method	Cost of management	Comment
Text field [maximum 1,000 characters] Use this open text field to explain the figure provided in the "Potential financial impact" (columns 10, 11, 12); If 'We do not have this figure' was selected in column 10, use this column to provide a description of the financial impact in relative terms (for example as a percentage relative to a stated or publicly available figure) or give a qualitative estimate of the financial impact. Otherwise, if you have no information about the financial impact, please state "The impact has not been quantified financially". You can also describe here other financial impacts of the selected climate-related risk (other than the main impact identified in column 5), and provide more details on the nature of the impact in case you selected "Other, please specify" in column 5.	Text field [maximum 1,500 characters] Use this text field to provide information on the methods you are using to manage the risks. Make sure to include an example of company- specific activities, projects, products and/or services which are aiming to manage the risk.	Numerical field [enter a number from 0- 999,999,999,999,999 using a maximum of 2 decimal places]	Text field [maximum 1,000 characters] You can use this text field to enter any additional relevant information.

## [Add Row]

## Primary climate-related risk driver drop-down options (column 4)

Select one of the following options:

Transition risks	Physical risks
Policy and legal: Increased pricing of GHG emissions	Acute: Increased severity of extreme weather events such as cyclones and floods
Policy and legal: Enhanced emissions-reporting obligations	Acute: Other
Policy and legal: Mandates on and regulation of existing products and services	Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Policy and legal: Exposure to litigation	Chronic: Rising mean temperatures
Policy and legal: Other	Chronic: Rising sea levels
• Technology: Substitution of existing products and services with lower emissions options	Chronic: Other
Technology: Unsuccessful investment in new technologies	
Technology: Costs to transition to lower emissions technology	
Technology: Other	
Market: Changing customer behavior	
Market: Uncertainty in market signals	
Market: Increased cost of raw materials	
Market: Other	
Reputation: Shifts in consumer preferences	
Reputation: Stigmatization of sector	
Reputation: Increased stakeholder concern or negative stakeholder feedback	
Reputation: Other	

## *Type of financial impact drop-down options (column 5)*

## Select one of the following options:

Transition risks       Physical risks         If primary climate-related risk driver is Policy and legal:       • Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)         • Increased operating costs (e.g., higher compliance costs, increased insurance premiums)       • Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)         • Write-offs, asset impairment, and early retirement of existing assets due to policy changes       • Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism)         • Increased costs and/or reduced demand for products and services resulting from fines and judgments       • Write-offs and early retirement of existing assets (e.g., damage to property and assets in "high-risk" locations)         • Increased credit risk (e.g., increased probability of default and/or loss given default)       • Increased capital costs (e.g., damage to property and assets in "high-risk" locations)         • Increased services       • Increased capital costs (e.g., damage to property and assets in "high-risk" locations         • Other, please specify       • Increased capital costs (e.g., damage to facilities)         • Increased and early retirement of existing assets due to technology changes       • Reduced revenues from lower sales/output         • Write-offs and early retirement of existing assets due to technology changes       • Increased credit risk (e.g., increased probability of insurance on assets in "high-risk" locations         • Nortle-offs and early retiremen		
<ul> <li>If primary climate-related risk driver is Policy and legal:</li> <li>Increased operating costs (e.g., higher compliance costs, increased insurance premiums)</li> <li>Write-offs, asset impairment, and early retirement of existing assets due to policy changes</li> <li>Increased costs and/or reduced demand for products and services resulting from fines and judgments</li> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> <li>Increased insurance claims liability arising from climate-related impacts</li> <li>Other, please specify</li> <li>If primary climate-related risk driver is Technology:</li> <li>Write-offs and early retirement of existing assets due to technology changes</li> <li>Reduced demand for products and services</li> <li>Research and development (R&amp;D) expenditures in new and alternative technologies</li> </ul>	Transition risks	Physical risks
<ul> <li>Increased operating costs (e.g., higher compliance costs, increased insurance premiums)</li> <li>Write-offs, asset impairment, and early retirement of existing assets due to policy changes</li> <li>Increased costs and/or reduced demand for products and services resulting from fines and judgments</li> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> <li>Increased insurance claims liability arising from climate-related impacts</li> <li>Other, please specify</li> <li>If primary climate-related risk driver is Technology:</li> <li>Write-offs and early retirement of existing assets due to technology changes</li> <li>Reduced demand for products and services</li> <li>Reduced demand for products and services</li> <li>Research and development (R&amp;D) expenditures in new and alternative technologies</li> <li>Research and development (R&amp;D) expenditures in new and alternative technologies</li> <li>Research and development (R&amp;D) expenditures in new and alternative technologies</li> </ul>	If primary climate-related risk driver is Policy and legal:	• Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)
<ul> <li>Increased costs and/or reduced demand for products and services resulting from fines and judgments</li> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> <li>Increased insurance claims liability arising from climate-related impacts</li> <li>Other, please specify</li> <li>If primary climate-related risk driver is Technology:</li> <li>Write-offs and early retirement of existing assets due to technology changes</li> <li>Reduced demand for products and services</li> <li>Research and development (R&amp;D) expenditures in new and alternative technologies</li> <li>Write-offs and early retirement (R&amp;D) expenditures in new and alternative technologies</li> <li>Write-offs and early retirement (R&amp;D) expenditures in new and alternative technologies</li> <li>Write-offs and early retirement (R&amp;D) expenditures in new and alternative technologies</li> <li>Write-offs and early retirement (R&amp;D) expenditures in new and alternative technologies</li> <li>Write-offs and early retirement (R&amp;D) expenditures in new and alternative technologies</li> <li>Write-offs and early retirement (R&amp;D) expenditures in new and alternative technologies</li> <li>Write-offs and early retirement (R&amp;D) expenditures in new and alternative technologies</li> <li>Write-offs and early retirement (R&amp;D) expenditures in new and alternative technologies</li> </ul>	<ul> <li>Increased operating costs (e.g., higher compliance costs, increased insurance premiums)</li> <li>Write-offs, asset impairment, and early retirement of existing assets due to policy changes</li> </ul>	<ul> <li>Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism)</li> </ul>
<ul> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> <li>Increased insurance claims liability arising from climate-related impacts</li> <li>Other, please specify</li> <li>If primary climate-related risk driver is Technology:</li> <li>Write-offs and early retirement of existing assets due to technology changes</li> <li>Reduced demand for products and services</li> <li>Research and development (R&amp;D) expenditures in new and alternative technologies</li> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> <li>Increased capital costs (e.g., damage to facilities)</li> <li>Reduced revenues from lower sales/output</li> <li>Increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations</li> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> <li>Increased insurance claims liability arising from climate-related impacts</li> <li>Other please specify</li> </ul>	<ul> <li>Increased costs and/or reduced demand for products and services resulting from fines and judgments</li> </ul>	• Write-offs and early retirement of existing assets (e.g., damage to property and assets in "high-risk" locations)
<ul> <li>Other, please specify</li> <li>Other, please specify</li> <li>Increased capital costs (e.g., damage to facilities)</li> <li>Reduced revenues from lower sales/output</li> <li>Increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations</li> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> <li>Increased insurance claims liability arising from climate-related impacts</li> <li>Other please specify</li> </ul>	<ul> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> <li>Increased insurance claims liability arising from climate-related impacts</li> </ul>	<ul> <li>Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)</li> </ul>
If primary climate-related risk driver is Technology:         • Write-offs and early retirement of existing assets due to technology changes         • Reduced demand for products and services         • Research and development (R&D) expenditures in new and alternative technologies	<ul> <li>Other, please specify</li> </ul>	<ul> <li>Increased capital costs (e.g., damage to facilities)</li> <li>Reduced revenues from lower sales/output</li> </ul>
<ul> <li>Write-offs and early retirement of existing assets due to technology changes</li> <li>Reduced demand for products and services</li> <li>Research and development (R&amp;D) expenditures in new and alternative technologies</li> <li>Increased insurance claims liability arising from climate-related impacts</li> <li>Other please specify</li> </ul>	If primary climate-related risk driver is Technology:	<ul> <li>Increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations</li> </ul>
	<ul> <li>Write-offs and early retirement of existing assets due to technology changes</li> <li>Reduced demand for products and services</li> <li>Research and development (R&amp;D) expenditures in new and alternative technologies</li> </ul>	<ul> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> <li>Increased insurance claims liability arising from climate-related impacts</li> <li>Other please specify</li> </ul>

Capital investments in technology development
Costs to adopt/deploy new practices and processes
<ul> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> </ul>
<ul> <li>Increased insurance claims liability arising from climate-related impacts</li> </ul>
Other, please specify
If primary climate-related risk driver is Market:
<ul> <li>Reduced demand for goods and/or services due to shift in consumer preferences</li> </ul>
<ul> <li>Increased production costs due to changing input prices (e.g., energy, water) and output</li> </ul>
requirements (e.g., waste treatment)
<ul> <li>Abrupt and unexpected shifts in energy costs</li> </ul>
Change in revenue mix and sources resulting in decreased revenues
• Re-pricing of assets (e.g., fossil fuel reserves, land valuations, securities valuations)
<ul> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> </ul>
<ul> <li>Increased insurance claims liability arising from climate-related impacts</li> </ul>
Other, please specify
If primary climate-related risk driver is Reputation:
Reduced revenue from decreased demand for goods/services
• Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply
chain interruptions)
• Reduced revenue from negative impacts on workforce management and planning (e.g.,
employee attraction and retention)
Reduction in capital availability
<ul> <li>Increased credit risk (e.g., increased probability of default and/or loss given default)</li> </ul>
<ul> <li>Increased insurance claims liability arising from climate-related impacts</li> </ul>

• Other, please specify

## <u>Risk #1</u>

Identifier: Risk 1

Where in the value chain does the risk driver occur: Direct Operations

Risk type: Transition risk

Primary climate-related risk driver: Market: Increased cost of raw materials

Type of financial impact driver: Market: Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatment)

**Company specific description:** Changes in fuel/energy taxes and regulation (relating to fuel, energy providers, such as Clean Fuel, Carbon Pricing, etc.) resulting in increased fuel/energy costs may directly impact TD by increasing our operating expenses for retail and corporate buildings, data centres, fleet and business travel.

Increased energy costs may also have an indirect impact on TD both upstream and downstream in our value chain. Increased energy costs will impact our suppliers, resulting in increased costs of goods and services for TD. These changes may also impact TD through impacts to our clients and customers in the fuel/energy sectors or their supply chains, which decrease the ability of our clients to maintain their debt commitments or decrease the valuation of our investment portfolio and profitability.

Time horizon: Short term

Likelihood: More likely than 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): N/A

Potential financial impact figure – minimum (currency): N/A

Potential financial impact figure – maximum (currency): N/A

**Explanation of financial impact:** TD's energy costs are approximately \$102 million. TD realizes annual savings from energy and GHG reduction initiatives, which may offset increased energy cost

**Management method:** Changes in regulation impacting energy costs pose a risk, and we routinely review our strategy to optimize energy use, increase energy efficiency, and incorporate on-site renewable energy generation. To manage environmental performance, we have implemented an Environmental Management System (EMS) based on ISO 14001. TD was the first Canadian financial institution to fully adopt Energy Star Portfolio Manager for our entire North American real-estate portfolio, allowing us to focus on building-by-building opportunities for improvements.

Examples to reduce energy use/cost include energy, GHG and water reduction initiatives, such as an exterior lighting program to replace older lighting fixtures with LED lights. Phase I and II of the U.S. interior and exterior retail LED Lighting Retrofit Program was completed across over 1,500 locations in 2017 and generated close to 18.1 million kWh in annual savings. In 2018 we rolled out a Pilot Phase of U.S. Corporate LED retrofits at 2 corporate sites in Mt. Laurel NJ and rolled out LED lighting retrofit upgrades to 770 branches across Canada.

TD's green strategy includes the improvement of real-estate eco-efficiency through retrofits and design of our new builds. To execute this building designing and operations strategy, we work closely with our facility management and landlord partners. As of 2018, 232 retail and corporate TD locations have received LEED certification, totaling over 1.4 million square feet.

Cost of management: 11,016,079 Comment:

### <u>Risk #2</u>

Identifier: Risk 2

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 driver: Write-offs and early retirement of existing assets (e.g., damage to property and assets in "high-risk" locations)

**Company- specific description:** Increased extreme weather events (including cyclones, flood, wildfire, drought and extreme heat) have the potential to adversely impact our Lending, Insurance and Investment businesses, as well as our own operations. Extreme weather could affect our borrowers' revenues, costs and property values, which could translate to increased credit risks and losses for TD due to the potential for mortgage and loan defaults. Increased extreme events could also result in missed investment opportunities for TD and disruption in business continuity for our facilities or suppliers located in areas affected by these weather events, including impacts to our buildings and operations, employee and customer accessibility; this has a negative impact on our business by increasing insurance costs, building repairs, employee support, and reducing customer revenues. In addition, extreme weather events (e.g. hurricanes) are currently impacting the property insurance business in geographical locations that are prone to flooding and hurricanes. This results in a risk of increased insurance payouts and loss of profit for TD. We manage resilience of our physical assets through our building design and business operational procedures. We are also one of 16 global banks participating in a UNEP-FI led pilot study that is working to develop a consistent methodology for assessing climate-related risk in bank lending portfolios under a number of climate scenarios.

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): N/A

Potential financial impact figure – minimum (currency): N/A

Potential financial impact figure – maximum (currency): N/A

**Explanation of financial impact**: In 2012, TD provided \$62 million (net of tax, \$37 million) for certain estimated losses resulting from Superstorm Sandy. While it is difficult to quantify the potential financial impacts of this risk, TD is part of banking sector pilots coordinated by the UNEP FI to study the TCFD recommendation and assess the impacts of climate risk under three scenarios: a 1.5°C, 2°C, and 4°C global average temperature increase by the end of the century. The financial implications of increased extreme weather events could result in decreased profits and market values for TD if the risks are not properly managed. **Management method:** TD is part of the UNEP-FI pilots to study the TCFD recommendations, actively participating in the Lending Pilot to help develop a methodology for assessing climate risks and opportunities. TD collaborated with Bloomberg and Acclimatise to develop a geospatial solution for assessing physical risks using the Bloomberg MAPS tool. Internally, TD has formed a cross-functional team to support the annual assessment of materiality of climate risks to TD. We embed environmental considerations into our lending due diligence procedures and investment decision-making. We work with our non-retail clients to understand the nature, extent and potential significance of environmental risks in their business including climate change regulation. In 2017, TD Asset Management (TDAM) undertook 27 company engagements, with climate risk being a major topic. As signatory to UN Principles for Responsible Investment, TDAM incorporates

environmental considerations into investment decision-making.

Techniques to reduce/mitigate credit risk include written policies/procedures to value, collateral and to review and negotiate lending agreements.

TD implemented a Business Continuity Management (BCM) system which assesses/manages operational risk, including climate-related risks.

The cost reflects approximate time committed by the cross-function team, including a designated resource in the environment team, subject matter experts and executive sponsors across TD's businesses, as well as professional costs.

Cost of management: \$300,000 Comment:

#### <u>Risk #3</u>

Identifier: Risk 3

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 driver: Reputation: Reduced revenue from decreased demand for goods/services

#### Company- specific description:

TD is aware of changing consumer awareness and attitudes relating to use of fossil fuels. Our market research shows that while 70% of consumers in our footprint support responsible resource development there are a minority (approx. 10%) who are actively against continued fossil fuel energy resource development and use and are prepared to take action against TD for our involvement in financing those businesses. These actions can be in the form of protests, social media campaigns, shareholder proposals, account closure or divestment which can result in loss of business and investors, impacts to employee morale, and brand impacts. **Time horizon:** Current

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): N/A

Potential financial impact figure – minimum (currency): N/A

Potential financial impact figure – maximum (currency): N/A

Explanation of financial impact:

While it is difficult to quantify financial value, TD has tracked number of protests, account closings, divestment and brand impact over the past year through our customer feedback processes and reputational risk tracking

### Management method:

TD's subject matter experts provide advice to clients on management of E&S risks and actively participate in industry transformation initiatives such as American Petroleum Institute's E&S due diligence guidance, Equator Principles, UNEP FI TCFD pilot groups, Carbon Pricing Leadership Council and thought leadership pieces on FPIC in a Canadian context. We have positioned ourselves to be a leader in the transition to the low carbon economy, with our carbon neutral operations. We have issued two green bonds. TD has an E&S Credit Risk Policy for assessing risk within all non-retail credit business lines.

In 2018 TD launched our corporate citizenship platform, The Ready Commitment (TRC). As part of TRC TD is targeting CAD\$1 billion, in total, in community giving by 2030 in 4 areas. TD is aligned with 9 UN Sustainable Development Goals. Vibrant Planet is one of the 4 drivers as we focus on helping elevate the quality of our environment to ensure people and economies can thrive. TD recognizes that the transition to a low-carbon economy must be balanced, taking into consideration the energy needs and economic realities of today while building for the future. TD has targeted CAD\$100 billion, in total towards initiatives in low-carbon lending, financing, asset management and internal corporate programs by 2030.

Cost of management is based on the direct program costs of maintaining a leading environmental practice (does not include additional business costs within business segments).

Cost of management: \$12,000,000

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

No change from 2018. This question only appears if you select "No" in response to C2.3. Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 2,400 characters]
<ul> <li>Risks exist, but none with potential to have a substantive financial or strategic impact on business</li> <li>Evaluation in process</li> </ul>	Your explanation should include company-specific details such as your evaluation process or specific reasons why you have not yet conducted a risk assessment or why there are no climate-related risks to your organization.
<ul><li>Not yet evaluated</li><li>Other, please specify</li></ul>	

## Opportunity disclosure

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

No change from 2018. Select one of the following options:

• Yes

- Yes, we have identified opportunities but are unable to realize them
- No

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

Question modified from 2018. This question only appears if you select "Yes" in response to C2.4. Please complete the following table. For clarity, the table is displayed over several rows. You are able to add rows by using the "Add Row" button at the bottom of the table.

Identifier	Where in the value chain does the opportunity occur?	Opportunity type	Primary climate- related opportunity driver	Type of financial impact	Company-specific description	Time horizon
Select from: • Opp1 - Opp100	Select from: • Direct operations • Supply Chain • Customer • Investment chain	Select from: • Resource efficiency • Energy source • Products and services • Markets • Resilience	See drop-down options below	See drop-down options below	Text field [maximum 2,400 characters] Provide further context on the opportunity driver, including more detail on the exact nature, location, and/or regulation of the effect concerned, as well as any notable geographic/regional examples. Be sure to include company-specific detail, such as references to activities, programs, products, services, methodologies, or operating locations specific to your company's business or operations.	Select from: • Current • Short-term • Medium-term • Long-term

Likelihood	Magnitude of impact	Are you able to provide a potential financial impact figure?	Potential financial impact figure (currency)	Potential financial impact figure - minimum (currency)	Potential financial impact figure - maximum (currency)
Select from: • Virtually certain • Very likely • Likely • More likely than not • About as likely as not • Unlikely • Very unlikely • Exceptionally unlikely • Unknown	Select from: • High • Medium-high • Medium • Medium-low • Low • Unknown	<ul> <li>Select from:</li> <li>Yes, a single figure estimate</li> <li>Yes, an estimated range</li> <li>No, we do not have this figure</li> </ul>	Numerical field [enter a number from 0 to 999,999,999,999,999,999 using up to 2 decimal places]	Numerical field [enter a number from 0 to 999,999,999,999,999,999 using up to 2 decimal places]	Numerical field [enter a number from 0 to 999,999,999,999,999,999 using up to 2 decimal places]

Explanation of financial impact figure	Strategy to realize opportunity	Cost to realize opportunity	Comment
Text field [maximum 1,000 characters] Use this open text field to explain the figure provided in the "Potential financial impact" (columns 10, 11, 12). If 'We do not have this figure' was selected in column 10, use this column to provide a description of the financial impact in relative terms (for example as a percentage relative to a stated or publicly available figure) or give a qualitative estimate of the financial impact. Otherwise, if you have no information about the financial impact, please state "The impact has not been quantified financially". You can also describe here other financial impacts of the selected climate-related opportunity (other than the main impact identified in column 5), and provide more details on the nature of the impact in case you selected "Other, please specify" in column 5.	Text field [maximum 1,500 characters] Use this text field to provide information on methods you are using or plan to use to exploit the opportunity and maximize its potential realization. Make sure to include an example of company specific activities, projects, products and/or services which are aiming to realize the opportunity.	Numerical field [enter a number from 0 to 999,999,999,999,999 using up to 2 decimal places]	Text field [maximum 1,000 characters] You can use this text field to enter any additional relevant information.

## [Add Row]

1

## Primary climate-related opportunity driver drop-down options (column 4)

Select one of the following options:

Resource efficiency	Products and services
Use of more efficient modes of transport	<ul> <li>Development and/or expansion of low emission goods and services</li> </ul>
• Use of more efficient production and distribution processes	<ul> <li>Development of climate adaptation and insurance risk solutions</li> </ul>
Use of recycling	<ul> <li>Development of new products or services through R&amp;D and innovation</li> </ul>
Move to more efficient buildings	Ability to diversify business activities
Reduced water usage and consumption	Shift in consumer preferences
• Other	• Other

Energy source	Markets
<ul><li>Use of lower-emission sources of energy</li><li>Use of supportive policy incentives</li></ul>	<ul><li>Access to new markets</li><li>Use of public-sector incentives</li></ul>
Use of new technologies	<ul> <li>Access to new assets and locations needing insurance coverage</li> </ul>
Participation in carbon market	• Other
<ul><li>Shift toward decentralized energy generation</li><li>Other</li></ul>	Resilience
	Participation in renewable energy programs and adoption of energy-efficiency measures
	Resource substitutes/diversification
	• Other

## *Type of financial impact drop-down options (column 5)*

## Select one of the following options:

Resource efficiency	Products and services		
<ul> <li>Reduced operating costs (e.g., through efficiency gains and cost reductions)</li> <li>Increased production capacity, resulting in increased revenues</li> <li>Increased value of fixed assets (e.g., highly rated energy-efficient buildings)</li> <li>Benefits to workforce management and planning (e.g., improved health and safety, employee satisfaction resulting in lower costs)</li> <li>Other, please specify</li> <li>Energy source</li> </ul>	<ul> <li>Increased revenue through demand for lower emissions products and services</li> <li>Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)</li> <li>Better competitive position to reflect shifting consumer preferences, resulting in increased revenues</li> <li>Other, please specify</li> <li>Markets</li> <li>Increased revenues through access to new and emerging markets (e.g., partnerships with</li> </ul>		
<ul> <li>Reduced operational costs (e.g., through use of lowest cost abatement)</li> <li>Reduced exposure to future fossil fuel price increases</li> <li>Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon</li> <li>Returns on investment in low-emission technology</li> <li>Increased capital availability (e.g., as more investors favor lower-emissions producers)</li> <li>Reputational benefits resulting in increased demand for goods/services</li> <li>Other, please specify</li> </ul>	<ul> <li>Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks)</li> <li>Increased diversification of financial assets (e.g., green bonds and infrastructure)</li> <li>Other, please specify</li> <li>Resilience</li> <li>Increased market valuation through resilience planning (e.g., infrastructure, land, buildings)</li> <li>Increased reliability of supply chain and ability to operate under various conditions</li> <li>Increased revenue through new products and services related to ensuring resiliency</li> <li>Other, please specify</li> </ul>		

### Opportunity #1

Identifier: OPP1

Where in the value chain does the opportunity occur: Direct Operations

Opportunity type: Resource efficiency

Primary climate-related opportunity: Move to more efficient buildings

Type of financial impact: Reduced operating costs (e.g., through efficiency gains and cost reductions)

**Company- specific description:** Continued innovation related to energy performance of buildings provides opportunities for TD to further develop and implement its Green Building Standards. Due to industry demand and changes in regulation, there will likely be more energy efficiency products available for TD to use to retrofit and construct new facilities. This will help us meet our goals with lower energy consumption and costs as well as reduce the cost of RECs and carbon offsets to meet our carbon neutrality commitment. Mandatory energy reporting in some of our key markets is also resulting in better engagement and access to data with our landlords. Further standardization and wider adoption of green building standards provides opportunities to TD by giving more prominence to our green building programs, and may also have the benefit of driving prices for green building products down as market demand increases.

Time horizon: Short-term

Likelihood: Virtually certain

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): N/A

Potential financial impact figure – minimum (currency): N/A

Potential financial impact figure – maximum (currency): N/A

**Explanation of financial impact:** Changes in market related to building performance provide opportunities to further develop and implement our Green Building Standards to lower our energy consumption and costs, as well as the cost of carbon neutrality. Over the last year TD reduced its energy consumption by 3% which facilitates an opportunity to reduce our energy costs

**Strategy to realize opportunity:** TD has voluntarily implemented a Green Building Standard. By the end of 2018 we had completed 232 LEED projects totaling over 1.4 million square feet (6% of occupied space). Additionally, TD's landlord certified LEED locations bring the total of LEED certified occupied space to 20% of total space. 85% of total LEED projects are at the Gold or Platinum certification levels. 100% of new retail locations in the U.S. are built to achieve LEED certification. Additionally, TD was the first Canadian financial institution to fully adopt Energy Star Portfolio Manager to manage our entire North American real-estate portfolio. This allowed us to assess our real estate portfolio on a building by building basis and focus on identifying significant opportunities for improvement relating to electricity and fuel use from heating and cooling. Finally, TD has been proactive in some of our key markets by developing industry leading green lease standards and working collaboratively with landlords to share data.

For example: In 2018, we achieved WELL Gold certification for the TD16 project in Toronto. This is a 25,000 square foot executive level floor in TD Tower (Tower) and was a major accomplishment for TD in fiscal 2018.

TD makes capital investments as part of our commitment to energy efficiency within the facilities that we own and manage, through our LEED certified buildings, Green Building Standards and Green Leases. Costs to meet Green Building Standards were approximately \$16.5 million.

Cost to realize opportunity: 16,500,000

Comment:

## Opportunity #2

Identifier: OPP2 Where in the value chain does the opportunity occur: Customer Opportunity type: Products and Services Primary climate-related opportunity: Products and Services: Development and/or expansion of low emission goods and services

Type of financial impact: Better competitive position to reflect shifting consumer preferences, resulting in increased revenues"

**Company- specific description:** TD has been carbon neutral since 2010, providing our customers with the opportunity to reduce their own footprint through carbon free banking. Changing customer preferences presents an opportunity for TD to increase profits and market share by making new offerings to the market and making capital investments to address climate change issues while creating value for the Bank. It also allows us to attract environmentally conscious customers and employees. For example, we work to understand opportunities to provide our customers with green product options and services, focusing on: providing financing to companies with low carbon operations or projects, e-banking options, financing and insurance of hybrid and electric vehicles, investment funds with high sustainability ratings, and the TD Green Bond. Recognizing this shift in demand, TD has targeted CAD\$100 billion in total, towards initiatives in low-carbon lending, financing, asset management and internal corporate programs, to support the transition to the low carbon economy.

In addition to new products, TD's focus on sustainability also drives international recognition and therefore brand value. For example, TD is the only Canadian bank on the DJSI World index.

Time horizon: Current

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): N/A

Potential financial impact figure – minimum (currency): N/A

### Potential financial impact figure – maximum (currency): N/A

**Explanation of financial impact:** As a part of the Ready Commitment, TD has targeted CAD\$100 billion, in total, towards initiatives in low-carbon lending, financing, asset management and internal corporate programs by 2030. This CAD\$100 billion target includes TD's products and services related to the low carbon economy, including issued green bonds, green bond underwriting, low carbon lending and investment, and other low carbon activities. These flows of capital expand the low carbon market and provide demonstrable paths towards low carbon investment. New or expanded products and services in these areas will help TD gain customer share in the low carbon economy as customer preferences shift. As of FY18 end, TD has supported a cumulative total of \$30 billion under this initiative. **Strategy to realize opportunity:** In 2017, TD issued a 2<sup>nd</sup> green bond (US\$1 billion), attracting new 'green' investors. Since 2010, TD Securities was a joint-lead underwriter for close to CAD\$15 billion in green bonds, developing in-house sustainability expertise TD provided over CAD\$65million in financing for hybrid/ electric vehicles. TD was a key sponsor of Plug N' Drive and the EV Discovery Centre in Toronto –the world's 1<sup>st</sup> experiential learning facility dedicated to EV education, with an on-site TD Insurance kiosk for discounts on green car insurance.

Consumer trends are assessed through TD's marketing team, which reviews public market research and performs an annual environmental survey including climate change issues and customer behaviour changes. The CEA team connects with businesses across the bank to understand how customers are responding to these trends and to develop strategies for new products/services. As a part of the CAD\$100 billion low-carbon target, we convened a cross-functional group with executives across the bank, to identify low carbon opportunities and strategize on prioritizing/executing. We've engaged Finance to set up tracking systems and external consultants to develop a low carbon framework.

Low carbon economy products are integrated into each business line and cannot be sectioned out as a specific cost. Cost of management is based on the direct program costs of maintaining a leading environmental practice (does not include additional business costs within business segments). **Cost to realize opportunity:** \$12 million

Comment:

### Opportunity #3

Identifier: OPP3

Where in the value chain does the opportunity occur: Customer

**Opportunity type:** Markets

Primary climate-related opportunity: Other -Expanding markets

Type of financial impact: Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks) Company- specific description:

The successful management of our own environmental footprint creates positive perceptions of TD among customers, employees and investors. For example, we were the first North American-based bank to become carbon neutral. As part of this commitment we actively manage our energy and carbon emissions, including the implementation of green building practices. Our experience in green building, and our commitment to environmental leadership, has attracted new clients within the low carbon industry, such as property developers seeking financing for the construction of net zero or positive, and energy efficient buildings. With TD's expertise in ESG issues, TD is able to provide valued advice to clients to proactively manage ESG risks in financing and investing activities. By engaging with our clients in this way, we strengthen our relationships with existing clients and attract new clients to the bank, increasing revenue for TD.

Time horizon: Current

Likelihood: Very Likely

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): N/A

Potential financial impact figure – minimum (currency): N/A

Potential financial impact figure – maximum (currency): N/A

#### **Explanation of financial impact:**

Our ability to manage public perception affects TD's share value and assets under management. In addition, a portion of our total financing involves clients operating in environmentally sensitive industries. By engaging with our clients and stakeholders to proactively mitigate ESG risks in our lending and investing we strengthen our long term relationships with existing and potential clients which in turn increases the profitability and valuation of TD.

#### Strategy to realize opportunity:

TD has established policies, procedures and reporting mechanisms that provide a set of consistent standards for the identification of ESG risks that are applied to applicable lending, credit, project finance and fixed-asset finance.

For example: To help individuals and communities prosper in a changing world, TD launched The Ready Commitment, our new corporate citizenship platform that opens doors for a more inclusive and sustainable tomorrow. As part of The Ready Commitment, TD is targeting a total of CAD \$1 billion by 2030 towards community giving in four areas critical to building an inclusive future – Financial Security, Vibrant Planet, Connected Communities and Better Health. TD is also aligned with nine of the UN Sustainable Development Goals for 2030. Vibrant Planet is one of four drivers because TD is focused on helping elevate the quality of our environment to ensure both people and economies can thrive.

The CAD\$1 billon target covers all four of the critical areas under the Ready Commitment, including Vibrant Planet.

Cost to realize opportunity: \$1,000,000,000 Comment:

## (C2.4b) Why do you not consider your organization to have climate-related opportunities?

No change from 2018. This question only appears if you select "No" or "Yes, we have identified opportunities but are unable to realize them" in

response to C2.4.

Please complete the following table:

Primary reason	Please explain
Select from:	Text field [maximum 2,400 characters]
Opportunities exist, we are unable to realize them	

• Opportunities exist, but none with potential to have a substantive financial or strategic impact on	Please explain further why there are no climate-related opportunities for your company or, if they
business	exist, why you are unable to realize them;
Evaluation in progress	If relevant to your selection in column 1, please:
Judged to be unimportant	- make reference to how you identified opportunities;
No instruction from management to seek out opportunities	- include how you have defined 'substantive' impact in the context of an opportunity, and reference
Not yet evaluated	the definition of substantive impact you gave in C2.2b if applicable;
Other, please specify	- describe when you will next repeat an assessment of opportunities;
	- include specific reasons why you have not yet conducted an opportunity assessment/why it is
	considered unimportant for your business;
	- provide any other company-specific details such as your evaluation process.

## Business impact assessment

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

No change from 2018. This question only appears if you select "Yes" in response to C2.3 and/or C2.4.

Please complete the following table:

Area	Impact	Description
	Select from:	Text field [maximum 2,400 characters]
	<ul> <li>Impacted</li> <li>Impacted for some suppliers, facilities, or product lines</li> <li>Not yet impacted</li> <li>Not impacted</li> <li>Not evaluated</li> <li>We have not identified any risks or opportunities</li> </ul>	Include a company-specific description of how each business area will be impacted by the risks and opportunities identified in C2.3 and C2.4. For example, if in C2.3 you identified that extreme weather events may pose a risk to your supply chain, explain in column 3 how you have integrated this risk into your business strategy and planning when evaluating your supply chain. If the business area will not be impacted, explain why not. If you are reporting in the "Other, please specify" row, please specify what area this applies to here. When 'Impacted' OR 'Impacted for some suppliers, facilities or product lines' is selected, include: - A company specific description of how each business area will be impacted by the identified risks and opportunities; - A description of the magnitude of this impact. When 'Not yet impacted' is selected, include: - A company-specific description of how each business area could be impacted (potential/predicted impact); - A description of the potential/predicted magnitude; - A description of the potential/predicted magnitude; - A description of the potential/predicted timeline for the impact. When 'Not impacted' is selected, include:
		- A company-specific description of why the impact has not affected this area of your business.

Products and services	Impacted	Climate related opportunities have created many product opportunities for TD. A specific example is the green bond. TD issued a CAD\$500MM green bond in 2014 and in 2017 issued a \$1B (USD) green bond. Proceeds of these bonds finance 'green' loans in our business bank, with a focus on renewable energy, energy efficiency, and green infrastructure projects. We have also participated in underwriting \$15 billion in green bonds and invested \$940 million through TD's treasury group to date. TD has also targeted \$100 billion, total, towards initiatives in low-carbon lending, financing, asset management and internal corporate programs by 2030 to accelerate the development of the low-carbon economy. Our contribution was \$30.3 billion in 2017 and 2018.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	TD is a member of the CDP Supply chain program. In 2018, as a part of our involvement in the CDP Supply Chain Program, TD achieved an A- rating for supplier engagement.
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	TD Insurance is actively involved in undertaking research related to adaptation and impacts on our insurance clients. We are a member of the UN Principles for Sustainable Insurance and in 2018 we offered the following climate change related insurance products and services to our customers: - Insurance for Hybrid and Electric Vehicles - Solar Panel Insurance – Mobile Response Units - My Insurance self-service tool - Resilience-Related Discount
Investment in R&D	Impacted for some suppliers, facilities, or product lines	TD's environment strategy includes the development of green products and services. There is an annual budget allocated towards the exploration of green product opportunities, including our support for the growth of the Electrical Vehicle market through our sponsorship of Plug'n Drive.
		TD also invests in thought leadership and innovation. An example of TD's thought leadership is developing research papers on applying FPIC (free, prior and informed consent (with respect to indigenous rights)) in a Canadian context. An example of innovation is TD's collaborative work with Bloomberg in applying geospatial mapping tool to assess physical climate risks to lending portfolios. An additional example of innovation is TD's contribution of \$1 million to the Accelerator Centre to support the development of the TD Sustainable Future Lab within EvolvGREEN, a collaborative workspace for entrepreneurs, researchers and clean economy supporters in Waterloo, Ontario.
Operations	Impacted	<ul> <li>TD has been carbon neutral since 2010. In 2018 TD's carbon neutral strategy included:</li> <li>Energy reduction: Saved 16.2 million kWh and over 3,200 tonnes of CO2e through our 2018 energy reduction initiatives.</li> <li>Offsets: Close to \$780,000 invested in carbon offset projects across our footprint in 2018.</li> <li>RECs: Purchased RECs (Renewable Energy Credits) for 100% of our emissions from electricity, investing over \$730,000 in renewable projects in 2018.</li> </ul>
Other, please specify		

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

No change from 2018. This question only appears if you select "Yes" in response to C2.3 and/or C2.4. Please complete the following table:

Area	Relevance	Description
	<ul> <li>Select from:</li> <li>Impacted</li> <li>Impacted for some suppliers, facilities, or product lines</li> <li>Not impacted</li> <li>Not yet impacted</li> <li>Not evaluated</li> <li>We have not identified any risks or opportunities</li> </ul>	Text field [maximum 2,400 characters] Include a company-specific description of how each business area will be impacted by the risks and opportunities identified in C2.3 and C2.4. If a specific type of financial planning will not be impacted, explain why not. If you are reporting in the "Other" row, please specify what area this applies to here. When 'Impacted' is selected, include: - A company specific description of the impact on your business; and - A description of the magnitude of this impact When 'Not Impacted' is selected, include: - A description of why the impact has not affected your business
Revenues	Impacted	In 2018 TD recognized an opportunity relating to climate change by committing to a target of CAD\$100B in total, by 2030 in sustainable finance and investment and corporate activities toward the transition to the low carbon economy. Financial planning involves annual tracking of results and forecasting for the next fiscal year.
Operating costs	Impacted	Costs related to energy efficiency of our facilities are included in our annual facilities budget. In addition, TD sets aside approximately \$2MMper year for purchase of RECs and offsets. Continuing to invest in eco-efficiency initiatives, bringing total funds invested since 2010 to \$108 million, our Corporate Environmental Affairs team has an annual budget to fund environmental risk and opportunity work. The impact of the team's work is reported in TD's annual ESG report.
Capital expenditures/capital allocation	Impacted	Costs related to construction of new facilities that meet TD's green building standards and green leases are included in our facilities capital budgets. As of 2018, 232 retail and corporate TD locations have received LEED certification, totaling over 1.4 million square feet.
Acquisitions and divestments	Impacted for some suppliers, facilities, or product lines	TD looks for acquisition opportunities that align with our core values and allow us to build on existing strengths. For example: TD has acquired Greystone Managed Investments Inc., which is a signatory to UN PRI.

Access to capital	Impacted for some suppliers, facilities, or product lines	Green bonds have provided an opportunity to access new 'green' funding channels. TD's two green bond issuances were oversubscribed and attracted new investors to the Bank allowing them to help fulfill their respective green investment mandates.
Assets	Impacted for some suppliers, facilities, or product lines	In 2018, TD became the only financial institution to be engaged in all three of the United Nations Environment Programme – Finance Initiative (UNEP FI) TCFD Pilot Projects for banks, investors and insurers. TD is participating in these pilots to better understand the resilience of our credit, investment and insurance portfolios to climate-related impacts. In support of the UNEP FI initiative, we have convened an internal cross-functional team to test the methodologies being developed to assess climate risk at the enterprise level and to provide feedback on the methodology to assist in its refinement.
Liabilities	Impacted for some suppliers, facilities, or product lines	In 2018, TDI joined a group of 16 PSI signatories that have committed to participating in the UNEP FI–supported pilot project to implement the recommendations of the TCFD in the insurance industry.

# **C3 Business strategy**

## **Business strategy**

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

No change from 2018. Select one of the following options:

- Yes
- No

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

### **Question dependencies**

No change from 2018. This question only appears if you select "Yes" in response to C3.1. Select one of the following options:

- Yes, qualitative
- Yes, quantitative
- Yes, qualitative and quantitative
- No, but we anticipate doing so in the next two years
- No, and we do not anticipate doing so in the next two years

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

No change from 2018. This question only appears if you select "Yes" in response to C3.1. This is an open text question with a limit of 7,000 characters. Your response should cover the following points:

i. A company-specific explanation of how business objectives and strategy have been influenced by climate-related issues;

ii. Explanation of whether your business strategy is linked to an emissions reductions target or energy reduction target;

iii. What have been the most substantial business decisions made during the reporting year that have been influenced by the climate change driven aspects of the strategy (e.g. investment, location, procurement,

mergers and acquisitions (M&A), research and development (R&D). Both the business decision and the aspect of climate change that has influenced the business decision must be made clear in the answer. If there

are none to report, this should be stated;

You may also wish to include in your response (optional):

iv. What aspects of climate change have influenced the strategy (e.g. need for adaptation, regulatory changes, or opportunities to develop green business);

v. How the short-term strategy has been influenced by climate change;

vi. How the long-term strategy has been influenced by climate change;

vii. How this is gaining a strategic advantage over your competitors;

viii. How the Paris Agreement has influenced the business strategy (e.g. the process of transition planning alongside the ratcheting of Intended Nationally Determined Contributions (INDCs)).

In case you chose to cover points v. and vi., indicate whether the short- and long-term time horizons referenced there, are consistent with the time horizons used in C2.1.

It is preferable, although not essential, that your response is formatted to distinguish between the points set out above, numbering your paragraphs to coincide with the relevant points.

i) TD's business strategy is to produce long-term profitable growth by building great franchises and delivering value to our customers, shareholders and communities; including demonstrating responsibility for the environment. This is influenced by climate change through a range of business risks & opportunities including reduced costs, increased revenue or market share, market differentiation through thought leadership, product innovation, and reputational benefit.

These risks and opportunities are identified by the TD environment subject matter experts, business segment managers, and are approved by relevant management committees. Business segments are responsible for implementing the environmental strategy and managing associated risks. The Corporate Environmental Affairs team is responsible for tracking their performance against targets including our GHG target of zero net increase over our 2015 baseline and our commitment to carbon neutrality. Results are reviewed by TD's Corporate Citizenship Council (CCC) quarterly.

ii) With the Paris agreement GHG reduction commitments, TD understands that transitioning to the low carbon economy is needed in order to meet these global goals. An example of how TD's strategy has been influenced by these global climate action goals includes TD's CAD\$100 billion target to support the transition to the low carbon economy through our lending, financing, asset management and internal corporate programs, developed in fiscal year 2017 and announced in fiscal year 2018. Incorporating environmental considerations is one of the many ways our business strategy contributes to the overall integrity of the economy and long-term sustainability of the environment.

iii) The most substantial decision made has been our \$100 billion target described above. This impacts all aspects of the bank's business but most importantly enables new flows of capital towards low carbon products and services – the focus is on climate-related transition risk, but will also include relevant programs related to adaption.

iv) Our low carbon strategy has been influenced both by risk and opportunity. On the risk side we are actively assessing the business impact of our involvement in fossil fuels through our involvement in the TCFD pilot projects. On the opportunity side, we see momentum in the market that will lead to new business models and revenues: ranging from green loans, insurance for hybrid and electric vehicles, to investment in renewable energy and energy efficiency initiatives, to green infrastructure such as public transit.

v) The development of green products/services and investment & lending to sectors that contribute to the low carbon economy are integral to TD's business strategy over the next 5-10 years. These have been influenced by developing climate policy and regulations, customer preferences and emerging market opportunities. Examples of this are TD's issuance of the first green bond from commercial bank in Canada and more recently our 2017 green bond issuance (with proceeds dedicated to supporting projects that reduce GHG emissions), TD's growth in green bond underwriting, and investment in green bonds as part of TD's investment portfolio.

vi) Our involvement in the TCFD pilot study for banks involves developing methodologies for scenario analysis of our lending, insurance (future), and investment (future) portfolio out to 2040. We believe that developing this scalable methodology will help us to assess risk and opportunity at an enterprise level.
vii) TD's environmental leadership is increasingly recognized by our customers, business clients and investors alike. Our strong position in ESG ratings combined with our proactive initiatives in areas such as green bonds and our recent \$100 billion low carbon target described above is frequently cited as a reason to do business with TD. Our employees also value our leadership as evidenced through our strong score for the environment on employee surveys, and our leadership in this area is frequently cited by prospective employees as a reason to join TD.

viii) Our \$100 billion target to support the transition to the low carbon economy through our lending, financing, asset management and internal corporate programs, is directly tied into the Paris Accord timeline of 2030.

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

Minor change from 2018. This question only appears if you select "Yes, qualitative", "Yes, quantitative" or "Yes, qualitative and quantitative" in response to C3.1a. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Climate-related scenarios Details	
-----------------------------------	--

Select all that apply:	Organizations should disclose their inputs, assumptions and analytical methods used for this scenario.
<ul> <li>2DS</li> <li>IEA 450</li> <li>Greenpeace</li> <li>DDPP</li> <li>IRENA</li> <li>RCP 2.6</li> <li>RCP 4.5</li> <li>RCP 6</li> <li>RCP 8.5</li> <li>IEA B2DS</li> <li>IEA Sustainable development scenario</li> <li>IEA NPS</li> <li>IEA CPS</li> <li>BNEF NEO</li> <li>REMIND</li> <li>MESSAGE-GLOBIOM</li> <li>Nationally determined contributions (NDCs)</li> <li>Other, please specify</li> </ul>	For existing scenarios (e.g. IEA 450 etc.), organizations should disclose how they have altered/changed the inputs, assumptions or analytical methods to cater to their needs. Text field [maximum 4,000 characters] The details provided should be company-specific and include:         - What boundaries and time horizons were used in the organizations scenario analysis?         - Provide details of the methodology used including:         - Inputs;         - Assumptions;         - Analytical methods, and;         - Changes from the reference scenario analysis, how they are used within the organization, and indicate how they were reported.         - Were there any changes to the organization's strategy or business model resulting from the climate change scenario analysis? If yes, describe any major changes.         - Provide a case study/example of how the results of scenario analysis have directly influenced your business objectives and strategy.         - Have any monitoring procedures been implemented as a result?         - To whom are the results reported to within the organization, and are the results made public?         - Provide any other relevant information.
IEA 450	<ul> <li>Climate risk can be divided into transition risk and physical risk. TD and fifteen other banks participated in phase 1 of the lending pilot convened by the UNEP-FI to test the impacts of climate risk under three scenarios: a 1.5°C, 2°C, and 4°C global average temperature increase by the end of the century.</li> <li>Transition Risk (1.5°C, 2°C and 4°C): the 4°C scenario represents the baseline or reference scenario where business-as-usual policies are assumed to continue in a world that follows historical trends. The 2°C scenario is consistent with the objective from the 2015 Paris Agreement (to strengthen the global response to climate change in order to limit "the increase in the global average temperature to well below 2°C above pre-industrial levels"), and one of the 11 TCFD recommendations ("by taking into consideration different climate-related scenario, including a 2°C or lower scenario."). It is important to note that many policy and technology combinations can be assumed in a 2°C scenario across a number of economic environments; the 2°C scenario assumes a more aggressive climate target and achieves a reduction of warming to 1.5°C in 2100 with 50% likelihood after a temporary overshoot.</li> <li>The pilot is conducted using outputs through the year 2040. On the transition side, more severe transition risks are likely to evolve over longer time horizons, so scenarios should project impacts to at least 2040. On the physical side, in the near and mid-term, changes in climate due to past and present-day greenhouse gas emissions are already locked into the climate system, and the physical risks are already being felt. Hence, there is no significant difference in physical risk in the near to mid-term under different greenhouse gas emissions scenaries; however a small divergence is expected by 2040s. The 2040 time horizon allows for the evaluation of transition and physical risks and assumptions for the bank and available climate data projections. Through our participation in the UNEP FI TCFD lendi</li></ul>
RCP 2.6, RCP 8.5	Climate risk can be divided into transition risk and physical risk. TD and fifteen other banks participated in phase 1 of the lending pilot convened by the UNEP-FI to test the impacts of climate risk under three scenarios: a 1.5°C, 2°C, and 4°C global average temperature increase by the end of the century.

	<ul> <li>Physical Risk (2°C and 4°C): The 2°C scenario corresponds to RCP 2.6. The 4°C scenario corresponds to RCP 8.5 and represents the current trajectory based on present-day emissions. Physical risks assessed included extreme weather event impacts (storms, floods, wildfires), as well as impacts from incremental changes in climate (temperature increases, precipitation pattern changes, etc.)</li> <li>The pilot is conducted using outputs through the year 2040. On the transition side, more severe transition risks are likely to evolve over longer time horizons, so scenarios should project impacts to at least 2040. On the physical side, in the near and mid-term, changes in climate due to past and present-day greenhouse gas emissions are already locked into the climate system, and the physical risks are already being felt. Hence, there is no significant difference in physical risk in the near to mid-term under different greenhouse gas emissions scenarios; however a small divergence is expected by 2040s. The 2040 time horizon allows for the evaluation of transition and physical risks that can also be supported by reasonable assumptions for the bank and available climate data projections. Through our participation in the UNEP FI TCFD lending pilot we are working toward a better understanding of the physical, transition and climate risks in our current portfolio, which we expect to integrate into relevant future strategic discussions. TD is still in the early stages of conducting climate scenario analysis.</li> </ul>
Nationally determined contributions (NDCs) REMIND	As part of the UNEP-FI TCFD Investment pilot, TD assessed two TD Asset Management (TDAM) portfolios under a 2°C scenario. The UNEP-FI TCFD Investment pilot requires companies to apply the following methodology: The transition risk analysis uses the pledged GHG goals found in the NDCs of the Paris Agreement to help quantify company-level GHG reduction targets, and the policy-based price estimates based on the REMIND model to calculate a company's costs associated with reaching GHG reduction targets. The assumption made is that the future costs can then be present valued using classic financial discounting models to estimate the effect on company's share price. On the physical risk side, past 35 years of observed weather patterns are used to set a historical baseline to predict both acute and chronic climate development for the coming 15 years. The physical climate risk data are sourced from PIK (Potsdam Institute for Climate Impact Research) and other scientific institutes, and all calculations are based on a database of more than 500000 company locations and 22000 publicly traded companies run globally on a grid of a minimum of 0.5-degree resolution.
	The additional climate data and scenarios provided by Carbon Delta have further enriched the way TDAM thinks about climate risks. However, continual comparison of the more highly used environmental data providers could be worthwhile in order for the industry to become more acutely aware of the similarities, differences, and areas seeing or in need of improvement when it comes to measuring environmental risks to investments. As we proceed in our endeavour to assess bank-wide climate risks, lessons from all three pilots will help refine our processes and build consistency in climate risk analysis across bank activities. TD is taking an enterprise view of climate-related risks and opportunities and starting to assess business segments more materially exposed to climate risks. TD is still in the early stages of conducting climate scenario analysis and we view this as a multi-year journey. With refinements to scenario analysis methods, data, and tools over time, TD intends to continue to build its expertise for managing climate risks and opportunities.

(C3.1f) Why are climate-related issues not integrated into your business objectives and strategy?

**Question dependencies** 

No change from 2018. This question only appears if you select "No" in response to C3.1. This is an open text question with a limit of 5,000 characters.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

Your answer should be company-specific and include:

i. Why climate-related issues are not integrated into your business strategy, and;

ii. Whether you expect them to be in the future. For example, climate change may have little effect on your business because of the nature of your goods/services. Please give as complete an explanation as possible.

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

No change from 2018. This question only appears if you select "No, but we anticipate doing so in the next two years" or "No, and we do not anticipate doing so in the next two years" in response to C3.1a. This is an open text question with a limit of 5,000 characters. Please note that when copying from another document into the disclosure platform, formatting is not retained.

Your answer should be company-specific and include:

i. Why climate-related scenario analysis is not used to inform your business strategy, and;

ii. Whether you expect it to be in the future.

# **C4 Targets and performance**

# Targets

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

No change from 2018. Select one of the following options:

- Absolute target
- Intensity target
- Both absolute and intensity targets
- No target

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

Minor change from 2018. This question only appears if you select "Absolute target" or "Both absolute and intensity targets" in response to C4.1. Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Target reference	Scope	% emissions in Scope	% reduction from base	Base year	Start year	Base year emissions
number			year			covered by target
						(metric tons CO2e)

Select from: Abs1-Abs100	Select from drop-down options below	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Numerical field [enter a number between 1900- 2019]	Numerical field [enter a number between 1900- 2019]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]
Abs 1	Scope 1+2 (location- based)	100	0	2015	2015	200676
Abs 2	Scope 1+2 (market- based) +3 (upstream)	100	100	2015	2016	62133

Target year	Is this a science- based target?	% achieved (emissions)	Target status	Please explain
Numerical field [enter a whole number between 2000- 2100]	Select from drop- down options below	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: New Underway Achieved Expired Revised Replaced Retired	Text field [maximum 2,400 characters] If 100% of emissions in Scope are not covered in this target, explain what areas of your business this target applies to (e.g. geographies, business units, products, etc.) and what is not covered by this target. If you reported a target to CDP in 2018 and are reporting progress against the same target in 2019, you can outline it in this column. If you have access to the reference number used to report the target in 2018 then outline this here. You can use this column to identify where you have a financial year or average year based target (see above, "Base year emissions covered by target"). If your target was originally in a different format, you may a wish to give the original target before it was converted into a % reduction format for the purposes of this table. If your target is part of a wider carbon neutrality goal, a regulatory requirement, or a longer term target, you can also explain this here.
2020	No, but we anticipate setting one in the next 2 years	100	Underway	In 2015, TD introduced a new GHG reduction target of zero increase in absolute GHG location-based emissions by 2020, relative to a 2015 baseline. This target aims to stabilize TD's GHG emissions at 2015 levels, despite any future growth in our business.

2040	No, but we anticipate setting one in the next 2 years	100	Underway	In 2018 TD's absolute target was to maintain carbon neutrality over our global operations and this was achieved for the eighth consecutive year. In 2018 we neutralized our greenhouse gas emissions with 111,373 tonnes of CO2e of renewable energy certificates (representing 548,691 MWh) and 79,959 tonnes CO2e of carbon offsets.
i i				

## Scope drop-down options:

Select one of the following options:

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

- Scope 3: Upstream leased assets
- Scope 3: Investments
- Scope 3: Downstream transportation and distribution
- Scope 3: Processing of sold products
- Scope 3: Use of sold products
- Scope 3: End-of-life treatment of sold products
- Scope 3: Downstream leased assets
- Scope 3: Franchises
- Other, please specify

## Is this a science-based target? drop-down options:

Select one of the following options:

- Yes, this target has been approved as science-based by the Science-Based Targets initiative
- Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative
- No, but we are reporting another target that is science-based
- No, but we anticipate setting one in the next 2 years
- No, and we do not anticipate setting one in the next 2 years

## (C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Minor change from 2018. This question only appears if you select "Intensity target" or "Both absolute and intensity target" in response to C4.1. Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Target reference number	Scope	% emissions in Scope	% reduction from baseline year	Metric	Base year	Start year
Select from: Int1-Int100	Select from drop-down options below	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from drop-down options below	Numerical field [enter a whole number between 1900- 2019]	Numerical field [enter a whole number between 1900- 2019]

Normalized baseline year emissions covered by target (metric tons CO2e)	Target year	Is this a science-based target?	% achieved (emissions)	Target status	Please explain	% change anticipated in absolute Scope 1+2 emissions	% change anticipated in absolute Scope 3 emissions
Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 15 decimal places and no commas]	Numerical field [enter a whole number between 2000- 2100]	Select from drop- down options below	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: New Underway Achieved Expired Revised Replaced Retired	Text field [maximum 2,400 characters] If 100% of emissions in Scope are not covered in this target, explain what areas of your business this target applies to (e.g. geographies, business units, products, etc.) and what is not covered by this target. If you reported a target to CDP in 2018 and are reporting progress against the same target in 2019, you can outline it in this column. If you have access to the reference number used to report the target in 2018 then outline this here. You can use this column to identify where you have a financial year or average year based target (see above, "Base year emissions covered by target"). If your target was originally in a different format, you may a wish to give the original target before it was converted into a % reduction format for the purposes of this table. If your target is part of a wider carbon neutrality goal, a regulatory requirement, or a longer term target, you can also explain this here.	Percentage field [enter a percentage from -999 - 999 using a maximum of 2 decimal places]	Percentage field [enter a percentage from -999 - 999 using a maximum of 2 decimal places]

## Scope drop-down (column 2)

Select one of the following options:

Scope 1	Scope 3: Upstream transportation and distribution
Scope 2 (location-based)	Scope 3: Waste generated in operations
• Scope 2 (market-based)	Scope 3: Business travel
• Scope 1+2 (location-based)	Scope 3: Employee commuting
• Scope 1+2 (market-based)	Scope 3: Upstream leased assets
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<ul> <li>Scope 1+2 (location-based) +3 (upstream)</li> </ul>	Scope 3: Investments
<ul> <li>Scope 1+2 (location-based) +3 (downstream)</li> </ul>	Scope 3: Downstream transportation and distribution
<ul> <li>Scope 1+2 (location-based) +3 (upstream &amp; downstream)</li> </ul>	Scope 3: Processing of sold products
<ul> <li>Scope 1+2 (market-based) +3 (upstream)</li> </ul>	Scope 3: Use of sold products
<ul> <li>Scope 1+2 (market-based) +3 (downstream)</li> </ul>	Scope 3: End-of-life treatment of sold products
<ul> <li>Scope 1+2 (market-based) +3 (upstream &amp; downstream)</li> </ul>	Scope 3: Downstream leased assets
• Scope 3 (upstream)	Scope 3: Franchises
• Scope 3 (downstream)	Other, please specify
• Scope 3 (upstream & downstream)	
Scope 3: Purchased goods and services	
Scope 3: Capital goods	
• Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)	

#### Metric drop-down options (column 5)

Select one of the following options from the drop-down menu below. Those with an asterisk (\*) are the metrics that can be evaluated against science-based target setting methods (see Technical Note on Science-Based Targets:

<ul> <li>Grams CO2e per revenue passenger kilometer*</li> </ul>	<ul> <li>Metric tons CO2e per unit of service provided</li> </ul>
<ul> <li>Metric tons CO2e per USD(\$) value-added*</li> </ul>	Metric tons CO2e per square foot*
<ul> <li>Metric tons CO2e per square meter*</li> </ul>	Metric tons CO2e per kilometer
<ul> <li>Metric tons CO2e per metric ton of aluminum*</li> </ul>	<ul> <li>Metric tons CO2e per passenger kilometer*</li> </ul>
<ul> <li>Metric tons CO2e per metric ton of steel*</li> </ul>	<ul> <li>Metric tons CO2e per megawatt hour (MWh)*</li> </ul>
<ul> <li>Metric tons CO2e per metric ton of cement*</li> </ul>	Metric tons CO2e per barrel of oil equivalent (BOE)
<ul> <li>Metric tons CO2e per metric ton of cardboard*</li> </ul>	Metric tons CO2e per vehicle produced
Grams CO2e per kilometer*	Metric tons CO2e per metric ton of ore processed
Metric tons CO2e per unit revenue	Metric tons CO2e per ounce of gold
Metric tons CO2e per unit FTE employee	Metric tons CO2e per ounce of platinum
Metric tons CO2e per unit hour worked	Metric tons of CO2e per metric ton of aggregate
Metric tons CO2e per metric ton of product	<ul> <li>Metric tons of CO2e per billion (currency) funds under management</li> </ul>
Metric tons of CO2e per liter of product	Other, please specify
Metric tons CO2e per unit of production	

Is this a science-based target? drop-down options (column 10)

#### Select one of the following options:

- Yes, this target has been approved as science-based by the Science Based Targets initiative
- Yes, we consider this a science-based target, but this target has not been approved as sciencebased by the Science Based Targets initiative
- No, but we are reporting another target that is science-based
- No, but we anticipate setting one in the next 2 years
- No, and we do not anticipate setting one in the next 2 years

(C4.1c) Explain why you do not have an emissions target, and forecast how your emissions will change over the next five years. Guidance modified from 2018. This question only appears if you select "No target" in response to C4.1. Please complete the following table:

Primary reason	Five-year forecast	Please explain
Select from:	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]
<ul> <li>We are planning to introduce a target in the next two years</li> <li>Important but not an immediate business priority</li> <li>Judged to be unimportant, explanation provided</li> <li>Lack of internal resources</li> <li>Insufficient data on operations</li> <li>No instruction from management</li> <li>Other, please specify</li> </ul>	<ul> <li>Provide a qualitative and quantitative description of how you forecast your emissions will change over the next five years. It is acknowledged that this forecast will be an estimate, but it is expected that companies will:</li> <li>forecast the expected direction of change (e.g. whether their emissions will increase, decrease or experience no change overall over the next five years).</li> <li>provide a quantitative description of the forecasted change in emissions (e.g. Scope 1 emissions forecasted to decrease by 30 metric tons CO2e/ Scope 1 and Scope 2 emissions forecasted to increase by 10%).</li> <li>provide a brief description of the reasons you forecast this change, or in the unlikely event no change, in emissions over the next five years. For example, this could be due to forecasted changes in output or expected emissions reduction activities.</li> </ul>	Provide an explanation of why you do not have a target and the timeline to implement one, if applicable.

# Other climate-related targets

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

Minor change from 2018. Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Target	KPI – Metric numerator	KPI – Metric denominator (intensity targets only)	Base year	Start year	Target year
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<ul> <li>Select from:</li> <li>Energy productivity</li> <li>Renewable electricity consumption</li> <li>Renewable electricity production</li> <li>Renewable energy target including electricity, heat, steam and cooling</li> <li>Renewable fuel</li> <li>Waste</li> <li>Zero/low-carbon vehicle</li> <li>Energy usage</li> <li>Land use</li> <li>Methane reduction target</li> <li>Engagement with suppliers</li> <li>R&amp;D investments</li> <li>Other, please specify</li> </ul>	Text field [maximum 200 characters]	Text field [maximum 200 characters]	Numerical field [enter a number between 1900- 2019]	Numerical field [enter a number between 1900- 2019]	Numerical field [enter a whole number between 2000- 2100]
Renewable energy consumption	Percentage of renewable energy purchased		2017	2017	2018
Waste	Volume of e-waste diversion from landfill	100%	2017	2017	2018

KPI in baseline year	KPI in target year	% achieved in reporting year	Target Status	Please explain	Part of emissions target	Is this target part of an overarching initiative?
Numerical field [enter a number from 0 to 999,999,999,999 using up to 15 decimal places and no commas	Numerical field [enter a number from 0 to 999,999,999,999 using up to 15 decimal places and no commas	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: • New • Underway • Achieved • Expired • Revised	Text field [maximum 2,400 characters] Explain what areas of your business this target applies to (e.g. geographies, business	Text field [maximum 2,400 characters] [emissions reduction target ID]	Select from: • RE100 • EP100 • EV100 • Below50 – sustainable fuels

			Replaced     Retired	units, products, etc.) and what is not covered by this target. You can use this column to identify where you have a financial year or average year based target. If your target is part of a wider carbon neutrality goal, a regulatory requirement, or a longer term target, you can also explain this here.	If the climate-related target is part of an emissions reduction target, please enter the emissions reduction target reference number here.	<ul> <li>Science-based targets initiative</li> <li>Reduce short-lived climate pollutants</li> <li>Remove deforestation</li> <li>Low-Carbon Technology Partnerships initiative</li> <li>No, it's not part of an overarching initiative</li> <li>Other, please specify</li> </ul>
100	100	100	Underway	Canadian company to join RE100 initiative in 2015. Additionally, TD has been Carbon Neutral since 2010	ABS2	RE100
100	100	100	Underway	Diverted 100% of e- waste from landfill.		

# Emissions reduction initiatives

(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.

No change from 2018. Select one of the following options:

• Yes

• No

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

Minor change from 2018. This question only appears if you select "Yes" in response to C4.3. Please complete the following table:

Stage of development	Number of initiatives	Total estimated annual CO2e savings in metric tons CO2e (only for rows marked *)
	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	6	3,298
Not to be implemented	0	0

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

Minor change from 2018. This question only appears if you select "Yes" in response to C4.3.

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Initiative type	Description of initiative	Estimated annual CO2e savings (metric tons CO2e)	Scope	Voluntary/ Mandatory
Select from:	Select from drop-down options below	Numerical field [enter a number from	Select from:	Select from:
Energy efficiency: Building fabric	Use this column to select from the	of 2 decimal places and no commas]	Scope 1	Voluntary
Energy efficiency: Building services	drop-down options provided the		Scope 2 (location-based)	Mandatory
Energy efficiency: Processes	initiative you have undertaken or are		<ul> <li>Scope 2 (market-based)</li> </ul>	
Fugitive emissions reductions	planning to undertake.		• Scope 3	
<ul> <li>Low-carbon energy purchase</li> </ul>				

<ul> <li>Low-carbon energy installation</li> <li>Process emissions reductions</li> <li>Other, please specify</li> </ul>	If you select "Other, please specify," provide a label for the Description of initiative type.			
Energy efficiency: Building services	Lighting (US Corporate)	415	Scope 2 (location-based)	Voluntary
Energy efficiency: Building services	Lighting (Canadian Retail)	1,838	Scope 2 (location-based)	Voluntary
Low-carbon energy installation	Solar PV	30	Scope 2 (location-based)	Voluntary
Energy efficiency: Building fabric	Maintenance program	206	Scope 2 (location-based)	Voluntary
Energy efficiency: Building services	Building controls	395	Scope 2 (location-based)	Voluntary
Energy efficiency: Building services	Variable frequency drive retrofits	414	Scope 2 (location-based)	Voluntary

Annual monetary savings (unit currency, as specified in C0.4)	Investment required (unit currency, as specified in C0.4)	Payback period	Estimated lifetime of the initiative	Comment
Numerical field [enter a number from 0-999,999,999,999,999 using no decimal places, and no commas]	Numerical field [enter a number from 0-999,999,999,999,999 using no decimal places, and no commas]	Select from: • <1 year • 1-3 years • 4-10 years • 11-15 years	Select from: • <1 year • 1-2 years • 3-5 years • 6-10 years	Text field [maximum 1,500 characters]

		<ul> <li>16-20 years</li> <li>21-25 years</li> <li>&gt;25 years</li> <li>No payback</li> </ul>	<ul> <li>11-15 years</li> <li>16-20 years</li> <li>21-30 years</li> <li>&gt;30 years</li> <li>Ongoing</li> </ul>	
\$ 195,162	\$ 266,951	1-3 years	11-15 years	Pilot Phase of US Corporate LED retrofits at 2 sites in Mt. Laurel NJ.
\$ 2,996,828	\$ 6,324,263	1-3 years	11-15 years	Rollout of LED retrofit interior lighting upgrades to Canadian Retail across 770 branches.
\$ 11,636	\$ 1,066,609	16-20 years	16-20 years	On-site solar energy generation continues to be developed across our retail locations. In 2018, TD added 11 new sites with 189 kW of additional solar capacity. This contributed to a total of 14,641 MWh of solar energy across 158 sites in North America.
\$ 62,646	\$ 1,267,003	1-3 years	Ongoing	As part of the US Retail Renovations Process, TD developed and implemented a retro-commissioning program to target major energy consumption sources and to improve the overall performance for close to 550 retail locations to date. The RCx's implementation process follows performance improvement recommendations identified through the individual RCx reports, which include programmable thermostats and occupancy sensors to target

				energy performance improvements.
\$ 150,646	\$ 1,727,580	4-10 years	6-10 years	In 2018, TD rolled out an innovative smart building system for select retail locations to provide real-time visibility, control and performance opportunity, along with improving employee comfort within our real estate portfolio.
\$129,767	\$363,672	1-3 years	11-15 years	Variable frequency drives were retrofit on HVAC equipment larger than 6.5 tonnes in 92 retail/corporate locations in the US.

## Description of initiative drop-down options (column 2)

## Select one of the following options:

Energy efficiency: Building fabric	Low-carbon energy purchase
Insulation	• Biomass
Maintenance program	• Biogas
Other, please specify	Fuel Cells
Energy efficiency: Building services	Geothermal
	• Hydro
Building controls	Solar Hot Water
• HVAC	Solar PV
Lighting	Solar CPV
Motors and drives	Nuclear
Combined heat and power	• Wind
• Other, please specify	Other, please specify
Energy efficiency: Processes	Low-carbon energy installation

Heat recovery	• Biomass
Cooling technology	• Biogas
Refrigeration	Carbon Capture & Storage
Process optimization	Fuel Cells
Fuel switch	Geothermal
Compressed air	Hydro
Combined heat and power	Solar Hot Water
Waste water treatment	Solar PV
Water reuse	Solar CPV
Reuse of steam	Natural Gas
Machine replacement	• Wind
Waste recovery	Other, please specify
Other, please specify	Process emissions reductions
Fugitive emissions reductions	
	New equipment
Agriculture methane capture	Product design
Agriculture N2O reductions,	Changes in operations
Landfill methane capture,	Behavioral change
Oil/natural gas methane leak capture/prevention	Process materials selection
Refrigerant leakage reduction	Process water
Other, please specify	Other, please specify

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

No change from 2018. This question only appears if you select "Yes" in response to C4.3.

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Method	Comment
Select from:	Text field [maximum 2,400 characters]
<ul> <li>Compliance with regulatory requirements/standards</li> <li>Dedicated budget for energy efficiency</li> <li>Dedicated budget for low-carbon product R&amp;D</li> <li>Dedicated budget for other emissions reduction activities</li> </ul>	Provide additional details or examples as necessary.

<ul> <li>Employee engagement</li> <li>Financial optimization calculations</li> <li>Internal price on carbon</li> <li>Internal incentives/recognition programs</li> <li>Internal finance mechanisms</li> <li>Lower return on investment (ROI) specification</li> <li>Marginal abatement cost curve</li> <li>Partnering with governments on technology development</li> <li>Other</li> </ul>	
Financial optimization calculations	The Enterprise Real Estate group's Energy and Sustainability Team works with our facilities management group to identify key opportunities and creates business cases and project plans for approval. Projects are recommended based on maximum efficiency and carbon reduction. Energy Star is used to identify segments of the portfolio with the largest ROI.
Internal price on carbon	We measure our cost of carbon based on the costs of our carbon commitment, measured through the purchase of renewable energy credits (RECs) and carbon offsets. These costs are calculated on an annual basis and are charged back to our businesses based on their relative contribution, representing an internal price on carbon of approximately \$8 per tonne of CO2e. The price on carbon is used to drive decision making and investment to manage future risks related to climate change.
Dedicated budget for energy efficiency	TD's Retail and Corporate Facilities management groups continue to look at various projects that will lower our energy consumption and operational costs. Working with the Energy and Sustainability Team in Enterprise Real Estate, projects and initiatives are developed that will maximize energy reduction and provide the quickest payback. Once identified and approved, budget funds from Retail and Corporate are set aside for the initiatives.
Dedicated budget for other emissions reduction activities	TD Enterprise Real Estate group has an Energy & Sustainability Team dedicated to improving energy efficiency and lowering the Bank's carbon footprint. The Energy & Sustainability Team puts together strategies to achieve real reductions across the portfolio, and to meet the 2020 energy target.
Employee engagement	TD has approximately 80 voluntary Green Teams in our corporate offices across Canada. Green Team leaders act as point persons for environmental initiatives and campaigns and deliver these programs to employees in their respective units with the support of their Green Teams. TD Environment has developed an employee engagement strategy aimed at influencing behaviour and reducing environmental impacts, including energy and paper use. To support these efforts, there has been continual development of Green Team

	resources, increased growth amongst new green teams and campaign challenges amongst green teams.
Other (Targets and commitments)	TD has targeted CAD\$100 billion, in total, towards initiatives in low-carbon lending, financing, asset management and internal corporate programs by 2030. This CAD\$100 billion target includes TD's products and services related to the low carbon economy, including issued green bonds, green bond underwriting, low carbon lending and investment, and other low carbon activities. As a part of the Ready Commitment, TD is targeting CAD\$1 billion, in total, in community giving by 2030 in four areas: financial security, vibrant planet, connected communities and better health. TD has a target of zero percentage increase in absolute scope 1 and 2 GHG emissions by 2020, as well as a 100% renewable energy commitment in which renewable energy will be sourced to account for 100% of GHG emissions from electricity. TD has been carbon neutral since 2010, providing our customers with the opportunity to reduce their own footprint through carbon free banking.

(C4.3d) Why did you not have any emissions reduction initiatives active during the reporting year?

No change from 2018. This question only appears if you select "No" in response to C4.3. This is an open text question with a limit of 5,000 characters. Provide a company-specific explanation as to why you do not have any emissions reduction initiatives active in the reporting year, and if you have any plans to implement them in the future. If you plan to pursue emissions reduction initiatives in the future, estimate a timeframe of when you will begin to implement them.

If you do not have active emissions reduction initiatives in the reporting year because you have not identified any, provide more information regarding your process for identifying potential initiatives and a specific example of an area of activities that were investigated but did not result in potential initiatives and why these investigated activities did not come to fruition.

Question C4.4 only applies to organizations with activities in the following sectors:

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry
- Page 56

# Low-carbon products

(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 change from 2018. Select one of the following options:

- Yes
- No

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

No change from 2018. This question only appears if you select "Yes" in response to C4.5. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Level of aggregation	Description of product/ Group of products	Are these low-carbon product(s) or do they enable avoided emissions?	Taxonomy, project, or methodology used to classify product(s) as low- carbon or to calculate avoided emissions	% revenue from low-carbon product(s) in the reporting year	Comment
<ul><li>Select from:</li><li>Product</li><li>Group of products</li><li>Company-wide</li></ul>	Text field [maximum 2,400 characters] Use this column to describe the product/s that you are disclosing in this row.	<ul> <li>Select from:</li> <li>Low-carbon product</li> <li>Avoided emissions</li> <li>Low-carbon product and avoided emissions</li> </ul>	<ul> <li>Select from:</li> <li>Low-Carbon Investment (LCI) Registry Taxonomy</li> <li>Climate Bonds Taxonomy</li> <li>Addressing the Avoided Emissions Challenge- Chemicals sector</li> <li>Evaluating the carbon reducing impacts of ICT</li> <li>Other, please specify</li> </ul>	Numerical field [enter a number from 0-100 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters] You can use this text field to enter any other information that you consider relevant. This could include how you expect to change your investments in low carbon products, the estimated emissions savings from avoided emissions, or how you expect to meet stakeholder expectations.
Product	To encourage customers to reduce their carbon footprint, TD offers financing & insurance of hybrid & electric vehicles (HEVs). Our	Avoided emissions	Other, please specify (Scenario methodology, see comments)	0.00	TD automobile insurance customers avoided an estimated 18,569 tCO2e of GHG emissions through the use of their hybrid and

		1	
business reflects a steady increase			electric vehicles in FY2018. TD
in consumer purchases of these			seeks to support customers'
fuel-efficient vehicles. In 2017 TD			decisions to purchase these
Auto Insurance customers reduced			vehicles by offering automobile
			insurance discounts for hybrid and
their GHG emissions by an			electric vehicle ownership.
estimated 18,569 tCO2e through			Methodology: The approach
the use of HEVs			assumes the avoided GHG
			emissions associated with the
			incurance discounts are the
			difference between the emissions
			difference between the emissions
			from the hybrid of EV that was
			purchased and the emissions of a
			conventional vehicle that would
			have been purchased otherwise.
			For both scenarios it is assumed
			that the annual distance travelled
			by vehicle is 20,000 km, as
			suggested by NRCan1. Emissions
			are calculated using the same
			gasoline emissions factor that was
			used in TD's 2018 Inventory:
			Scenario 1: Calculation of base
			case (i.e. if hybrid or EV was not
			purchased): - Vehicles insured by
			TD are categorized as "Light
			Duty Vehicle Short Wheelbase
			(WB)" (i.e. passenger car) or "Light
			Duty Vehicles Long WB" (i.e. pick-
			up truck, large sport utility vehicle).
			- Data provided by the US federal
			highway administration was used
			to estimate the average distance
			(km) traveled per litre of fuel
			consumed, as no Canadian data
			exists at this time In this scenario
			it is assumed that if TD's insurance
			customers did not purchase a
			hybrid or EV, then they might have
			nurchased any other non-hybrid or
			EV vehicle, rather than a non
			hybrid version of the same model
			hybrid version of the same model.

					Scenario 2: Calculation of emissions from the HEV vehicles: - Matching the exact vehicle insured by TD, the fuel efficiency (L/100 km or kWh/100 km) as provided in NRCan's fuel consumption guide was used to calculate emissions produced by vehicles insured by TD.
Product	TD Green Bond (and underlying Green Loans) TD allocated USD \$997.5 million in green bond funding in FY 2018 to solar power, wind energy, building efficiency and transportation efficiency projects.	Low-carbon product	Other, please specify (Scenario methodology, see comments)	0.00	Funded projects in FY 2018 are estimated to yield approximately 24,337tCO2e in annual GHG avoided (scaled per proportion of the project funded by TD's committed green bond capital). This environmental impact reduction is associated with a Natural Capital Value of \$ 4,232,379. Assumptions: For buildings, Energy efficiency savings (MWh) are calculated as the difference in performance between a typical building and a highly energy-efficient building. Energy efficiency savings are then multiplied by appropriate electricity emissions factors, to calculate GHG emissions avoided. Canadian provincial marginal emissions factors are approximated by WSP using information sourced from Environment and Climate Change Canada's National Inventory Report 1990-2016 and based on principles for marginal emission factor calculation from the eGRID database. Methodology change: In FY2018, a methodology change has been applied to quantify emissions avoided using marginal grid

		emissions factors. The updated methodology aligns with The Greenhouse Gas Protocol for Project Accounting and Guidelines for Grid-Connected Electricity Projects. Projects that supply electricity to the grid or that reduce consumption of grid electricity displace electricity from other sources, often fossil fuel combustion (e.g. natural gas, oil) used to meet electricity demand above a baseload. Therefore, marginal or non-baseload grid emissions factors are used to quantify benefits from these types of projects; such factors capture the emissions intensity of electricity generation from combustion.

# **C5 Emissions methodology**

# Base year emissions

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

**No change** from 2018. Please complete the following table:

Scope     Base year start     Base year end     Base year emissions (metric tons     Comment       CO2e)     CO2e)     CO2e     CO2e <t< th=""><th></th></t<>	
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

	Use the calendar button or enter dates manually in the format DD/MM/YYYY	Use the calendar button or enter dates manually in the format DD/MM/YYYY	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]
Scope 1	01/11/2014	31/10/2015	53680	
Scope 2 (location-based)	01/11/2014	31/10/2015	146996	
Scope 2 (market-based)	01/11/2014	31/10/2015	8453	

# **Emissions methodology**

(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.

No change form 2018. Select all that apply from the following options:

- ABI Energia Linee Guida
- Act on the Rational Use of Energy
- American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009
- Australia National Greenhouse and Energy Reporting Act
- Bilan Carbone
- Brazil GHG Protocol Programme
- Canadian Association of Petroleum Producers, Calculating Greenhouse Gas Emissions, 2003
- China Corporate Energy Conservation and GHG Management Programme
- Defra Voluntary 2017 Reporting Guidelines
- ENCORD: Construction CO2e Measurement Protocol
- Energy Information Administration 1605B
- Environment Canada, Sulphur hexafluoride (SF6) Emission Estimation and Reporting Protocol for Electric Utilities Page 61

- Environment Canada, Aluminum Production, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Base Metals Smelting/Refining, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Cement Production, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Primary Iron and Steel Production, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Lime Production, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Primary Magnesium Production and Casting, Guidance Manual for Estimating Greenhouse Gas Emissions
- Environment Canada, Metal Mining, Guidance Manual for Estimating Greenhouse Gas Emissions
- EPRA (European Public Real Estate Association) guidelines, 2011
- European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) General guidance for installations
- European Union Emissions Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) General guidance for aircraft operators
- Hong Kong Environmental Protection Department, Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings, 2010
- ICLEI Local Government GHG Protocol
- India GHG Inventory Programme
- International Wine Industry Greenhouse Gas Protocol and Accounting Tool
- IPCC Guidelines for National Greenhouse Gas Inventories, 2006
- IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2003
- IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011
- ISO 14064-1
- Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)
- Korea GHG and Energy Target Management System Operating Guidelines
- New Zealand Guidance for Voluntary, Corporate Greenhouse Gas Reporting
- Philippine Greenhouse Gas Accounting and Reporting Programme (PhilGARP)
- Programa GEI Mexico
- Regional Greenhouse Gas Initiative (RGGI) Model Rule
- Smart Freight Centre: GLEC Framework for Logistics Emissions Methodologies
- Taiwan GHG Reduction Act
- Thailand Greenhouse Gas Management Organization: The National Guideline Carbon Footprint for organization
- The Climate Registry: Electric Power Sector (EPS) Protocol

- The Climate Registry: General Reporting Protocol
- The Climate Registry: Local Government Operations (LGO) Protocol
- The Climate Registry: Oil & Gas Protocol
- The Cool Farm Tool
- The GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organizations
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- The Greenhouse Gas Protocol Agricultural Guidance: Interpreting the Corporate Accounting and Reporting Standard for the Agricultural Sector
- The Greenhouse Gas Protocol: Public Sector Standard
- The Tokyo Cap-and Trade Program
- US EPA Climate Leaders: Direct Emissions from Iron and Steel Production
- US EPA Climate Leaders: Direct Emissions from Municipal Solid Waste Landfilling
- US EPA Climate Leaders: Direct HFC and PFC Emissions from Manufacturing Refrigeration and Air Conditioning Equipment
- US EPA Climate Leaders: Direct HFC and PFC Emissions from Use of Refrigeration and Air Conditioning Equipment
- US EPA Climate Leaders: Indirect Emissions from Purchases/ Sales of Electricity and Steam
- US EPA Climate Leaders: Direct Emissions from Stationary Combustion
- US EPA Climate Leaders: Direct Emissions from Mobile Combustion Sources
- US EPA Mandatory Greenhouse Gas Reporting Rule
- WBCSD: The Cement CO2 and Energy Protocol
- World Steel Association CO2 emissions data collection guidelines
- Other, please specify

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

No change from 2018. This question only appears if you select "Other, please specify" in response to C5.2. This is an open text question with a limit of 5,000 characters. Use the text box provided to give a description of the methodology(ies) you used to collect activity data and calculate your Scope 1 and Scope 2 emissions. Please give the name of the published methodology you have used that is not on the list in question C5.2 or give a description of an in-house methodology or a combination of in-house and published methodologies.

# **C6 Emissions data**

# Scope 1 emissions data

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

**No change** from 2018. Complete the following table:

Gross global Scope 1 emissions (metric tons CO2e)	Comment
Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]
53,270	

# Scope 2 emissions reporting

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

**No change** from 2018. Please complete the following table:

Scope 2, location-based	Scope 2, market-based	Comment
Select from:	Select from:	Text field [maximum 2,400 characters]
<ul> <li>We are reporting a Scope 2, location-based figure</li> <li>We are not reporting a Scope 2, location-based figure</li> </ul>	<ul> <li>We are reporting a Scope 2, market-based figure</li> <li>We have no operations where we are able to access electricity supplier emission factors or residual emission factors, and are unable to report a Scope 2, market-based figure</li> </ul>	

	• We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure	
We are reporting a Scope 2, location-based figure	We are reporting a Scope 2, market-based figure	

# Scope 2 emissions data

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

**No change** from 2018. Please complete the following table:

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]
119, 205	7,833	

# Exclusions

(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?

No change from 2018. Select one of the following options:

Yes

• No

(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.

No change from 2018. This question only appears if you select "Yes" in response to C6.4. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market- based Scope 2 emissions from this source (if applicable)	Explain why this source is excluded
Text field [maximum 2,400 characters] Use this text field to name and briefly describe the source you are excluding. E.g. a geographic region, business activity, or type of facility.	<ul> <li>Select from:</li> <li>No emissions excluded</li> <li>No emissions from this source</li> <li>Emissions are not relevant</li> <li>Emissions are relevant but not yet calculated</li> <li>Emissions are relevant and calculated, but not disclosed</li> <li>Emissions excluded due to recent acquisition</li> <li>Emissions are not evaluated</li> </ul>	<ul> <li>Select from:</li> <li>No emissions excluded</li> <li>No emissions from this source</li> <li>Emissions are not relevant</li> <li>Emissions are relevant but not yet calculated</li> <li>Emissions are relevant and calculated, but not disclosed</li> <li>Emissions excluded due to a recent acquisition</li> <li>Emissions are not evaluated</li> </ul>	<ul> <li>Select from:</li> <li>No emissions excluded</li> <li>No emissions from this source</li> <li>Emissions are not relevant</li> <li>Emissions are relevant but not yet calculated</li> <li>Emissions are relevant and calculated, but not disclosed</li> <li>Emissions excluded due to a recent acquisition</li> <li>Emissions are not</li> </ul>	Text field [maximum 2,400 characters] Use this text field to describe why the source is excluded and its significance. If possible, provide an estimate of the percentage of total emissions contained within the reported boundary that the exclusion represents. If a recent acquisition has taken place, please include the time of acquisition in this text field. Note that this question asks you to report only excluded sources of emissions. If you select 'No emissions excluded' or "No emissions from this source" for every column in every row indicating that there are no sources of emissions that have been excluded from your reported Scope 1 or Scope 2 figures in C6.1 and 6.3, you should review your answer to C6.4 and select "No"
			evaluated	

# Scope 3 emissions data

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

No change from 2018. Please complete the following table:

Sources of Scope	Evaluation status	Metric tons CO2e	Emissions calculation methodology	Percentage of emissions	Explanation
3 emissions				calculated using data obtained	
				from suppliers or value chain	
				partners	

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	<ul> <li>Select from:</li> <li>Relevant, calculated</li> <li>Relevant, not yet calculated</li> <li>Not relevant, calculated</li> <li>Not relevant, explanation provided</li> <li>Not evaluated</li> </ul>	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters] Complete this column for all sources that you have identified as "Relevant, calculated" or "Not relevant, calculated" in the Evaluation status column. Your response should include a short description of the types and sources of data used to calculate emissions (e.g. activity data, emission factors and GWP values), and a short description of the methodologies, assumptions and allocation methods used to calculate emissions.	Numerical field [enter a number from 0-100 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters] Complete this column for all sources that you have identified as "Not relevant, explanation provided" in the Evaluation status column. You should provide details of how you have reached the conclusion that the source is not relevant and include any qualitative or quantitative reasoning. If you wish to provide additional context to any of the other rows in the table, including any exclusions within a source, or to explain why emissions have decreased or increased, you can also do that in this column.
Purchased goods and services	Relevant, calculated	602,049	Types and sources of data used (activity data, emission factors and GWPs): Activity data for purchased goods and services was spend data on the following items: business operations transport and services, human resource services, computer services, marketing and print services, professional services, real estate services and construction and travel services not included in business travel (e.g. hotels, catering, etc.). Data was obtained by TD's internal finance team. Emission Factors were taken from two places. Where possible CDP Supply chain data was used to calculate specific emission factors for different commodity as listed above. Where that data was not available from the CDP supply chain data emission factors are taken from Defra, table 13- Indirect emission from supply chain, March 2014. The following Global Warming Potentials were used: CO2: 1 CH4: 25 N2O: 298. Description of methodology	38	



			(assumptions, allocation methods): Supplier spend data was used. It was allocated by commodity type and breakdown of services, and then multiplied by the appropriate emission factor.		
Capital goods	Relevant, calculated	133,176	Types and sources of data used (activity data, emission factors and GWPs): Activity data for purchased goods and services was spend data on the following items: business operations transport and services, human resource services, computer services, marketing and print services, professional services, real estate services and construction and travel services not included in business travel (e.g. hotels, catering, etc.). Data was obtained by TD's internal finance team. Emission Factors were taken from two places. Where possible CDP Supply chain data was used to calculate specific emission factors for different commodity as listed above. Where that data was not available from the CDP supply chain data emission factors are taken from Defra, table 13- Indirect emission from supply chain, March 2014. The following Global Warming Potentials were used: CO2: 1 CH4: 25 N2O: 298. Description of methodology (assumptions, allocation methods): Supplier spend data was used. It was allocated by commodity type and breakdown of services, and then multiplied by the appropriate emission factor.	28	
Fuel-and-energy- related activities	Relevant, calculated	37,563	Types and sources of data used (activity data, emission factors and GWPs): Activity data for fuel-and-	65	

(not included in Scope 1 or 2)			energy-related activities (not included in Scope 1 or 2) was obtained directly from landlords and utility invoices in units of kWh or GJ. Emission factors for fuel-and-energy related activities (not included in Scope 1 and 2), were obtained from Argonne Labs GREET1_2013 model, based on Year 2010 eGrid grid generation mix (eGRID 9th Edition Version 1.0, Feb 2014). Global Warming Potentials were used: CO2: 1 CH4: 25 N2O: 298. Data quality: Landlord and utility invoice data is considered to be of high quality in terms of accuracy and completeness. Description of methodology (assumptions, allocation methods): Emissions were calculated by multiplying energy use allocated to scope 1 and 2 emissions to the appropriate emission factor.		
Upstream transportation and distribution	Not relevant, explanation provided				TD Bank does not have significant upstream transportation and distribution in our operations; therefore we believe that emissions in this category would be minimal and therefore not relevant.
Waste generated in operations	Not relevant, explanation provided				As a financial institution, TD does not have any significant sources of waste; therefore emissions from waste generated in operations would not be material.
Business travel	Relevant, calculated	18,856	Types and sources of data used (activity data, emission factors and GWPs): Activity data for business travel was comprised of private and commercial air travel, commercial rail travel, fleet vehicles, car rentals, chartered shuttles, and personal vehicles used	100	

	for hereite and meaning of the detailed	1
	for business purposes. Activity data	
	was typically obtained in terms of	
	volume of fuel consumed, distance	
	travelled and dollars reimbursed. Data	
	was obtained from a combination of	
	sources including travel agencies, car	
	rental agencies, fleet management	
	companies and other TD personnel.	
	Various emission factors were used	
	for different modes of travel, and were	
	obtained from Environment Canada,	
	U.S. Department of Transportation	
	(DOT), IPCC and GHG Protocol, The	
	following Global Warming Potentials	
	were used: CO2: 1 CH4: 25 N2O: 298	
	Data quality: Business travel data is	
	mostly obtained from third party travel	
	agencies and is considered to be of	
	high quality in terms of accuracy and	
	completeness. These Scope 3	
	emissions were independently verified	
	by TD's auditors Ernst & Young, LLP.	
	Description of methodology	
	(assumptions allocation methods)	
	Emissions associated with business	
	travel were calculated in various	
	ways depending on available data	
	Air and rail travel emissions were	
	calculated by multiplying distance	
	travelled by emission factors for	
	different flight lengths. Fleet vehicle	
	and car rental emissions were	
	calculated by multiplying fuel use by	
	emission factors for different classes	
	of vehicles. If fuel use was not	
	available distance travelled was	
	multiplied by rated fuel efficiency for	
	the particular vehicle type to obtain an	
	estimate of fuel used Personal	
	vehicle emissions were calculated on	
	the basis of reimbursed amount	
	divided by average fuel cost to obtain	
	arriada by average ruer cost to obtain	

			fuel used, then multiplied by the emission factor.		
Employee commuting	Relevant, not yet calculated				
Upstream leased assets	Not relevant, explanation provided				Emissions from our upstream leased assets are included in our Scope 1 and 2 emissions in accordance with the Greenhouse Gas Protocol operational control approach.
Downstream transportation and distribution	Relevant, not yet calculated				
Processing of sold products	Not relevant, explanation provided				TD does not sell products that require downstream processing.
Use of sold products	Not relevant, explanation provided				There are not significant emissions associated with customers using TD's products
End of life treatment of sold products	Not relevant, explanation provided				There are not significant emissions associated with disposing of TD's products.
Downstream leased assets	Relevant, calculated	48	Types and sources of data used (activity data, emission factors and GWPs): Sources of emissions from downstream leased assets include TD's subleased locations. Energy activity data for subleased locations was obtained directly from landlords and utility invoices in units of kWh or	100	

		GJ. Emission factors for electricity use, in the form of grid intensity factors, were obtained from the National Inventory Report 2017(Canada) and EPA eGRID 2012(U.S.). Emission factors for heating fuels such as propane, natural gas, fuel oil, diesel, wood and steam were obtained from the National Inventory Report (Canada) and EIA Appendix H (U.S.). Emission factors for cooling energy were obtained from grid intensity factors (for electric chillers), and from utility company Enwave (for deep lake cooling in Ontario). The following Global Warming Potentials were used: CO2: 1 CH4: 25 N2O: 298. Data quality: Landlord and utility invoice data is considered to be of high quality in terms of accuracy and completeness. These Scope 3 emissions were independently verified by TD's auditors Ernst & Young, LLP. Description of methodology (assumptions, allocation methods): Emissions were calculated by multiplying	
Franchises	Not relevant, explanation provided		TD Bank does not operate any franchises.
Investments	Relevant, not yet calculated		
Other (upstream)	Not relevant, explanation provided		We do not have other sources of Scope 3 emissions.
Other	Not relevant,		We do not have other sources of
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(downstream)	explanation		Scope 3 emissions.
	provided		

## Emissions from biologically sequestered carbon

### (C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No change from 2018. Select one of the following options:

• Yes

• No

(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.

Minor change from 2018. This question only appears if you select "Yes" in response to C6.7. Please complete the following table:

Emissions from biologically sequestered carbon (metric tons CO2)	Comment
Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]

**Questions C6.8 and C6.9 only apply to organizations with activities in the following sectors:** 

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry

## **Emissions intensities**

# (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.

Guidance modified from 2018. Please complete the following table. It is requested that you first report your emissions intensity figure per unit of currency total revenue. You are able to add rows by using the "Add Row" button at the bottom of the table.

Intensity figure Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change	Reason for change
Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 15 decimal places and no commas]Metric tons CO2eNumerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: • unit total revenue • barrel of oil equivalent (BOE) • billion (currency) funds under management • full time equivalent (FTE) employee • kilometer • liter of product • megawatt hour generated (MWh) • megawatt hour transmitted (MWh) • megawatt hour transmitted (MWh) • metric ton of product • ounce of gold • ounce of platinum • passenger kilometer • room night produced • square meter • metric ton of aggregate • metric ton of aluminum	Numerical field [enter a number from 0- 999,999,999,999,999, 999 using a maximum of 2 decimal places and no commas]	Select from: • Location-based • Market-based	Numerical field [enter a number from 0-999 using a maximum of 2 decimal places]	Select from: • Increased • Decreased • No change	Text field [maximum 2,400 characters] Describe why your emissions intensity has changed. Explain the primary reasons behind the change and the degree to which different factors have influenced the figures.



		<ul> <li>metric ton of coal</li> <li>metric ton of ore processed</li> <li>metric ton of steel</li> <li>unit hour worked</li> <li>unit of production</li> <li>unit of service provided</li> <li>vehicle produced</li> <li>Other, please specify</li> </ul>					
0.000044	172,475	Unit total revenue	3892300000	Location-based	10	Decreased	In 2018, absolute emissions decreased by 2%, while revenue increased by 8%, resulting in a 10% decrease in emissions per unit revenue. The decrease from emission reduction activities in both Canadian and U.S. operations was 2%. These include LED lighting installations, retro- commissioning, solar panel installations, consolidation of space, printer

							reduction, travel reduction, and data centre optimization and reduced GHG intensity from the electricity grid.
0.0069	172,475	Square foot	25,029,209	Location-based	2.8	Decreased	In 2018, absolute emissions decreased by 2%, while square footage remained constant thus resulting in 2.8% decrease in emissions per square foot. The decrease from emission reduction activities in both Canadian and U.S. operations was 2%. These include LED lighting installations, retro- commissioning, solar panel installations, consolidation of space, printer reduction, and data centre optimization and reduced GHG

	intensity from the electricity grid.
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# **C7 Emissions breakdown**

### Scope 1 breakdown: GHGs

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

Minor change from 2018. Select one of the following options:

- Yes
- No
- Don't know

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

No change from 2018. This question only appears if you select "Yes" in response to C7.1. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Greenhouse gas	Scope 1 emissions (metric tons in CO2e)	GWP Reference
Select from: • CO2 • CH4 • N2O • HFCs • PFCs • SF6 • NF3 • Other, please specify	Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	<ul> <li>Select from:</li> <li>IPCC Fifth Assessment Report (AR5 – 100 year)</li> <li>IPCC Fourth Assessment Report (AR4 - 100 year)</li> <li>IPCC Third Assessment Report (TAR - 100 year)</li> <li>IPCC Second Assessment Report (SAR - 100 year)</li> <li>IPCC Fourth Assessment Report (AR4 - 50 year)</li> <li>IPCC Third Assessment Report (TAR - 50 year)</li> <li>IPCC Second Assessment Report (SAR - 50 year)</li> <li>IPCC Second Assessment Report (AR5 – 20 year)</li> <li>IPCC Fourth Assessment Report (AR4 - 20 year)</li> <li>IPCC Fourth Assessment Report (TAR - 20 year)</li> <li>IPCC Third Assessment Report (SAR - 20 year)</li> <li>IPCC Second Assessment Report (SAR - 20 year)</li> <li>Other, please specify</li> </ul>



CO2	48,855	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	28	IPCC Fourth Assessment Report (AR4 - 100 year)
N20	184	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	4203	IPCC Fourth Assessment Report (AR4 - 100 year)

## Scope 1 breakdown: country

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

No change from 2018. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Country/Region	Scope 1 emissions (metric tons CO2e)
Select from a drop-down list of countries and regions. Please see the Technical Note "Country Regions" for details around the available regions and their constituent countries.	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]
Canada	31,905
United States of America	21,169
Other, please specify (ROW)	196

### [Add Row]

### Scope 1 breakdown: business breakdown

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

No change from 2018. Select all that apply from the following options:

- By business division
- By facility
- By activity

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

No change from 2018. This question only appears if you select "By business division" in response to C7.3. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Business division	Scope 1 emissions (metric tons CO2e)
Text field [maximum 500 characters] State the business division you are disclosing Scope 1 emissions for. For more details on reporting your business divisions, see guidance to C7.3.	Numerical field [enter a range of 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]

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

Guidance modified from 2018. This question only appears if you select "By facility" in response to C7.3. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Text field [maximum 500 characters]	Numerical field [enter a range of 0- 999,999,999,999 using a maximum of 2 decimal	Enter the latitude of your facility here using numbers between 90.000000 and -90.000000,	Enter the longitude of your facility using numbers between 180.000000 and -
Identify the facility you are disclosing Scope 1	places and no commas]	e.g. 51.524810	180.000000, e.g0.106958
emissions for. For more details on reporting your			
facilities, see guidance to C7.3.			
If your organization has Scope 1 emissions from			
non-stationary sources (i.e. transportation			



vehicles) that cannot be attributed to a specific		
facility then you can report the emissions from		
these sources collectively in one		
row. You can identify these emissions by		
inputting 'Non-stationary sources' in this column.		

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

No change from 2018. This question only appears if you select "By activity" in response to C7.3. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Activity	Scope 1 emissions (metric tons CO2e)
Text field [maximum 500 characters] State the activity you are disclosing Scope 1 emissions for. For more details on which activities to report, see guidance to C7.3.	Numerical field [enter a range of 0-999,999,999,999 using a maximum of 2 decimal places and no commas]
Stationary Combustion	42,667
Mobile Combustion	6,379
Refrigerants	4,224

### [Add Row]

**Question C7.4 only applies to organizations with activities in the following sectors:** 

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry
- Coal

- Electric utilities
- Oil and gas
- Cement
- Chemical
- Metals and mining
- Steel
- Transport OEMs
- Transport services

## Scope 2 breakdown: country

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

No change from 2018. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low- carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Select from a drop-down list of countries and regions. Please see the Technical Note "Country Regions", for details around the available regions and their constituent countries.	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number of 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number of 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]
Canada	40,292	6802	374593	321621
United States of America	78,190	1022	229497	224987

Other, please specify (ROW)	724	9	2125	2083
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### Scope 2 breakdown: business breakdowns

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

No change. Select all that apply from the following options:

- By business division
- By facility
- By activity

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

No change from 2018. This question only appears if you select "By business division" in response to C7.6. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Text field [500 maximum characters] State the business division you are disclosing Scope 2 emissions for.	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]

[Add Row]

### (C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Guidance modified from 2018. This question only appears if you select "By facility" in response to C7.6. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)

Text field [maximum 500 characters]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]
Identify the facility you are disclosing Scope 1 emissions for. If		
your organization has Scope 2 emissions from non-stationary		
sources that cannot be attributed to a specific facility then you		
can report the emissions from these sources collectively in one		
row. You can identify these emissions by inputting 'Non-		
stationary sources' in this column.		

[Add Row]

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

No change from 2018. This question only appears if you select "By activity" in response to C7.6. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Text field [maximum 500 characters] Disclose the activity you are disclosing Scope 2 emissions for.	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]
Electricity	111,373	0
Steam	7,653	7,653
Chilled Water	180	180

### [Add Row]

Question C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7 only applies to organizations with activities in the following sectors:

- Cement
- Chemicals
- Coal
- Metals & mining
- Oil & gas
- Steel
- Transport OEMS
- Transport services

**Question C7.8 only applies to organizations with activities in the following sectors:** 

- Chemicals
- Transport manufacturers

## **Emissions performance**

(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?

No change from 2018. Select one of the following options:

- Increased
- Decreased
- Remained the same overall
- This is our first year of reporting, so we cannot compare to last year
- We don't have any emissions data

(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.

No change from 2018. This question only appears if you select "Increased", "Decreased" or "Remained the same overall" in response to C7.9. Please complete the following table:

Reason	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
	Numerical field [enter a number from 0-999,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: • Increased • Decreased • No change	Numerical field [enter a number from 0-999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters] Report the figures used in the calculation for the figure in the 'emissions value %' column. Refer to Example responses for further guidance. You may also use this text box to provide any additional explanation that is relevant to capture the full complexity of the emissions changes.
Change in renewable energy consumption	0	No Change	0	
Other emissions reduction activities	23284	Decreased	13	13% of the decrease in emissions was due to continued reduction initiatives in both Canadian and U.S. operations. These include LED lighting installations, retro-commissioning, solar panel installations, consolidation of space, printer reduction, travel reduction, data centre optimization and reduced GHG intensity from the electricity grid. TD's 2017 scope 1 and 2 emissions were

				172,475, therefore we arrived at (23284/176458)100= 13%
Divestment	0	No Change	0	
Acquisitions	0	No Change	0	
Mergers	0	No Change	0	
Change in output	0	No Change	0	
Change in methodology	0	No Change	0	
Change in boundary	0	No Change	0	
Change in physical operating conditions	0	No Change	0	
Unidentified	0	No Change	0	
Other	0	No Change	0	

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a marketbased Scope 2 emissions figure? No change form 2018. This question only appears if you select "Increased", "Decreased" or "Remained the same overall" in response to C7.9. Select one of the following options:

- Location-based
- Market-based
- Don't know

# **C8 Energy**

### Energy spend

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

No change from 2018. Select one of the following options:

- 0%
- More than 0% but less than or equal to 5%
- More than 5% but less than or equal to 10%
- More than 10% but less than or equal to 15%
- More than 15% but less than or equal to 20%
- More than 20% but less than or equal to 25%
- More than 25% but less than or equal to 30%
- More than 30% but less than or equal to 35%
- More than 35% but less than or equal to 40%
- More than 40% but less than or equal to 45%
- More than 45% but less than or equal to 50%
- More than 50% but less than or equal to 55%
- More than 55% but less than or equal to 60%
- More than 60% but less than or equal to 65%

- More than 65% but less than or equal to 70%
- More than 70% but less than or equal to 75%
- More than 75% but less than or equal to 80%
- More than 80% but less than or equal to 85%
- More than 85% but less than or equal to 90%
- More than 90% but less than or equal to 95%
- More than 95% but less than or equal to 100%
- Don't know
- •

### **Energy-related activities**

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

No change from 2018. The energy-related activities that you select in response to C8.2 determine which energy breakdowns you will be prompted to respond to in the proceeding questions. Please note, if your response to C8.2 is amended, data in dependent questions may be erased. Please complete the following table:

Activity	Indicate whether your organization undertakes this energy-related activity
	Select from:
	• Yes • No
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Νο

Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes

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

### **Question dependencies**

No change from 2018. This question only appears if you select "Yes" to any of the activities listed in C8.2. A row will appear in this table for each energy-related activity selected in C8.2. The "Total energy consumption" row will always appear. Please complete the following table:

Activity	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
	<ul><li>Select from:</li><li>LHV (lower heating value)</li><li>HHV (higher heating value)</li><li>Unable to confirm heating value</li></ul>	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]
Consumption of fuel (excluding feedstock)	HHV	0	258283	258283
Consumption of purchased or acquired electricity	N/A	548,691	0	548,691
Consumption of purchased or acquired steam	N/A	N/A	33782	33782

Consumption of purchased or acquired heat	N/A	N/A	N/A	N/A
Consumption of purchased or acquired cooling	N/A	0	23743	23743
Consumption of self-generated non- fuel renewable energy	N/A	2689	N/A	2689
Total energy consumption	N/A	Ad 551380	315808	867188

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

Minor change from 2018. This question only appears if you select "Yes" to "Consumption of fuel" in response to C8.2. Each option that you select in this table will appear as an additional column in C8.2c. Please complete the following table:

Fuel application	Indicate whether your organization undertakes this fuel application
	Select from:
	• Yes • No
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Νο

Consumption of fuel for the generation of cooling	Νο
Consumption of fuel for co-generation or tri-generation	No

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

Minor change from 2018. This question only appears if you select "Consumption of fuel" in C8.2. For each fuel application selected in C8.2b a column appears in the table in addition to the "MWh fuel consumed for self-generation of heat" and "Total MWh consumed by the organization" columns. If no fuel application is selected in C8.2b then only the "Total MWh consumed by the organization" column will appear. Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Fuels	Heating value	Total MWh consumed by the organization	MWh consumed for self-generation of electricity
Select from: Acetylene; Agricultural Waste; Alternative Kiln Fuel (Wastes); Animal Fat; Animal/Bone Meal; Anthracite Coal; Asphalt; Aviation Gasoline; Bagasse; Bamboo; Basic Oxygen Furnace Gas (LD Gas); Biodiesel; Biodiesel Tallow; Biodiesel Waste Cooking Oil; Bioethanol; Biogas; Biogasoline; Biomass Municipal Waste; Biomethane; Bitumen; Bituminous Coal; Black Liquor; Blast Furnace Gas; Brown Coal Briquettes (BKB); Burning Oil; Butane; Butylene; Charcoal; Coal; Coal Tar; Coke; Coke Oven Gas; Coking Coal; Compressed Natural Gas (CNG); Condensate; Crude Oil; Crude Oil Extra Heavy; Crude Oil Heavy; Crude Oil Light; Diesel; Distillate Oil; Dried Sewage Sludge; Ethane; Ethylene; Fuel Gas; Fuel Oil Number 1; Fuel Oil Number 2; Fuel Oil Number 4; Fuel Oil Number 5; Fuel Oil Number 6; Gas Coke; Gas Oil; Gas Works Gas; GCI Coal; General	Select from: • LHV • HHV • Unable to confirm heating value	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]

Municipal Waste; Grass; Hardwood; Heavy Gas Oil; Hydrogen; Industrial Wastes; Isobutane; Isobutylene; Jet Gasoline; Jet Kerosene; Kerosene; Landfill Gas; Light Distillate; Lignite Coal; Liquefied Natural Gas (LNG); Liquefied Petroleum Gas (LPG); Liquid Biofuel; Lubricants; Marine Fuel Oil; Marine Gas Oil; Metallurgical Coal; Methane; Motor Gasoline; Naphtha; Natural Gas; Natural Gas Liquids (NGL); Natural Gasoline; Non-Biomass Municipal Waste; Non-Biomass Waste; Oil Sands; Oil Shale; Orimulsion; Other Petroleum Gas; Paraffin Waxes; Patent Fuel; PCI Coal; Peat; Pentanes Plus; Petrochemical Feedstocks; Petrol; Petroleum Coke; Petroleum Products; Pitch; Plastics; Primary Solid Biomass; Propane Gas; Propane Liquid; Propylene; Refinery Feedstocks; Refinery Gas; Refinery Oil; Residual Fuel Oil; Road Oil; SBP; Shale Oil; Sludge Gas; Softwood; Solid Biomass Waste; Special Naphtha; Still Gas; Straw; Subbituminous Coal; Sulphite Lyes; Tar; Tar Sands; Thermal Coal Domestic; Thermal Coal Industrial; Tires; Town Gas; Unfinished Oils; Vegetable Oil; Waste Oils; Waste Paper and Card; Waste Plastics; Wood Logs; Wood Pellets; Wood; Wood Chips; Wood Logs; Wood Pellets; Wood; Waste; Other, please specify			
Natural Gas	HHV	219177	N/A
Propane Gas	HHV	3924	N/A
Distillate Oil	HHV	9322	N/A

Motor Gasoline	HHV	22711	N/A
Jet Kerosene	HHV	3149	N/A

MWh consumed for self-generation of heat	MWh consumed for self-generation of steam	MWh consumed for self-generation of cooling	MWh consumed self-cogeneration or self-trigeneration	Comment
Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Text field [maximum 2,400 characters]
219177	N/A	N/A	N/A	N/A
3924	N/A	N/A	N/A	N/A
9322	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A

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

Minor change from 2018; guidance modified from 2018. This question only appears if you input data into C8.2c. A corresponding row will appear for each fuel that you reported in C8.2c. Please complete the following table:

Fuel	Emission factor	Unit	Emission factor source	Comment
------	-----------------	------	------------------------	---------

Select from:	Numerical field [enter a number from	Select from:	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]
(Options for this column driven by	places and no commas!	<ul> <li>metric tons CO2e per m3</li> </ul>		
fuel's selected in C8.2c)		• metric tons CO2 per m3		
,		metric tons CO2e per liter		
		metric tons CO2 per liter		
		metric tons CO2e per barrel		
		metric tons CO2 per barrel		
		metric tons CO2e per Ma		
		metric tons CO2 per Ma		
		metric tons CO2e per metric ton		
		metric tons CO2 per metric ton		
		<ul> <li>metric tons CO2e per short ton</li> </ul>		
		metric tons CO2 per short ton		
		<ul> <li>metric tons CO2e per kWh</li> </ul>		
		metric tons CO2 per kWh		
		metric tons CO2e per MWh		
		metric tons CO2 per MWh		
		metric tons CO2e per GJ		
		metric tons CO2 per GJ		
		<ul> <li>metric tons CO2e per million Btu</li> </ul>		
		metric tons CO2 per million Btu		
		metric tons CO2e per boe		
		metric tons CO2 per boe		
		metric tons CO2e per toe		
		<ul> <li>metric tons CO2 per toe</li> </ul>		
		metric tons CO2e per tce		
		metric tons CO2 per tce		
		metric tons CO2e per Gcal		
		metric tons CO2 per Gcal		
		• kg CO2e per m3		
		• kg CO2 per m3		
		kg CO2e per liter		
		kg CO2 per liter		
		kg CO2e per barrel		
		<ul> <li>kg CO2 per barrel</li> </ul>		
		<ul> <li>kg CO2e per gallon</li> </ul>		
		<ul> <li>kg CO2 per gallon</li> </ul>		
		kg CO2e per Mg		
		• kg CO2 per Mg		



	<ul> <li>kg CO2e per metric ton</li> </ul>	
	• kg CO2 per metric ton	
	<ul> <li>kg CO2e per short ton</li> </ul>	
	• kg CO2 per short ton	
	• kg CO2e per MWb	
	• kg CO2 per MW/b	
	• kg CO2 per MWII	
	• kg CO2 per C l	
	• Kg CO2 per GJ	
	• kg CO2e per million Btu	
	• kg CO2e per boe	
	• kg CO2 per boe	
	Kg CO2e per toe	
	Kg CO2 per toe	
	• kg CO2e per tce	
	kg CO2 per tce	
	kg CO2e per Gcal	
	kg CO2 per Gcal	
	Ib CO2e per 1000 cubic ft3	
	<ul> <li>Ib CO2 per 1000 cubic ft3</li> </ul>	
	<ul> <li>Ib CO2e per gallon</li> </ul>	
	<ul> <li>Ib CO2 per gallon</li> </ul>	
	<ul> <li>Ib CO2e per barrel</li> </ul>	
	<ul> <li>Ib CO2 per barrel</li> </ul>	
	<ul> <li>Ib CO2e per short ton</li> </ul>	
	<ul> <li>Ib CO2 per short ton</li> </ul>	
	<ul> <li>Ib CO2e per MWh</li> </ul>	
	<ul> <li>Ib CO2 per MWh</li> </ul>	
	Ib CO2e per GJ	
	Ib CO2 per GJ	
	<ul> <li>Ib CO2e per million Btu</li> </ul>	
	<ul> <li>Ib CO2 per million Btu</li> </ul>	
	Ib CO2e per boe	
	Ib CO2 per boe	
	Ib CO2e per toe	
	Ib CO2 per toe	
	Ib CO2e per tce	
	Ib CO2 per tce	
	Ib CO2e per Gcal	
	Ib CO2 per Gcal	



Natural gas	52.55	kg CO2e per million Btu	EPA Emission Factors for Greenhouse Gas Inventories, March 2018, Table 1 and National Inventory Report 1990-2016, Part 2, Annex 6, Year 2016 factors. From 2018 Release	
Propane Gas	61.96	kg CO2e per million Btu	EPA Emission Factors for Greenhouse Gas Inventories, March 2018, Table 1	
Distillate Oil	74.21	kg CO2e per million Btu	EPA Emission Factors for Greenhouse Gas Inventories, March 2018, Table 1	
Motor Gasoline	10.29	kg CO2e per gallon	EPA Emission Factors for Greenhouse Gas Inventories, March 2018, Table 2	
Jet Kerosene	9.84	kg CO2e per gallon	EPA Emission Factors for Greenhouse Gas Inventories, March 2018, Table 2	

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

No change from 2018. This question only appears if you select "Generation of electricity, heat, steam, or cooling" in response to C8.2. Please complete the following table:

Energy Carrier	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)
	Numerical field [enter a number from 0 to 999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 999,999,999 using up to 2 decimal places and no commas]
Electricity	2689	2689	2689	2689
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

# (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.

Question modified from 2018. This question only appears if you select "Consumption of purchased or acquired electricity", "Consumption of purchased or acquired heat", "Consumption of purchased or acquired steam" or "Consumption of purchased or acquired cooling" in response to C8.2. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Basis for applying a low- carbon emission factor	Low-carbon technology type	Region of consumption of low-carbon electricity, heat, steam or cooling	MWh consumed associated with low-carbon electricity, heat, steam or cooling	Emission factor (in units of metric tons CO2e per MWh)	Comment
Select from:	Select all that apply:	Select from: • Asia Pacific	Numerical field [enter a number from 0 to	Numerical field [enter a number from 0-99,999 using	Text field [maximum 2,400 characters]
generation of low-carbon		Africa	333,333,333,333,333 using up to 2		



<ul> <li>electricity, heat, steam or cooling accounted with a low-carbon emission factor</li> <li>Off-grid energy consumption from an on-site installation or through a direct line to an off-site generator owned by another company</li> <li>Power Purchase Agreement (PPA) with energy attribute certificates</li> <li>Power Purchase Agreement (PPA) without energy attribute certificates</li> <li>Contract with suppliers or utilities (e.g. green tariff), supported by energy attribute certificates</li> <li>Contract with suppliers or utilities (e.g. green tariff), not backed by electricity attribute certificates</li> <li>Energy attribute certificates, Guarantees of Origin</li> <li>Energy attribute certificates, Renewable Energy Certificates (RECs)</li> <li>Energy attribute certificates, I-RECs</li> <li>Grid mix of renewable electricity</li> <li>Other, please specify</li> </ul>	<ul> <li>Concentrated solar power (CSP)</li> <li>Wind</li> <li>Hydropower</li> <li>Nuclear</li> <li>Biomass (including biogas)</li> <li>Tidal</li> <li>Other low-carbon technology, please specify</li> </ul>	<ul> <li>Europe</li> <li>Latin America</li> <li>Middle East</li> <li>North America</li> <li>Other, please specify</li> </ul>	decimal places and no commas]	up to 6 decimal places and no commas]	You may provide an accompanying narrative to your disclosure. For example, you can include here any other relevant information about the low-carbon electricity you have used in each of the cases, for instance the type of low-carbon electricity source (wind, solar, biomass, hydro, geothermal, etc.) or any information related to eligibility criteria for that source that might be particularly relevant for your company policy or your company.
Energy attribute certificates, Renewable Energy Certificates (RECs)	Wind	North America	321,621	0	In 2018 renewable energy credits were purchased in the quantity of 321,621 MWh for electricity consumption in Canadian

					owned and leased locations, representing 100% of our Canadian electricity consumption. The low carbon electricity source is wind.
Energy attribute certificates, Renewable Energy Certificates (RECs)	Wind	North America	224,987	0	In 2018 renewable energy credits were purchased in the quantity of 224,987 MWh for electricity consumption in U.S. owned and leased locations, representing 100% of our U.S. electricity consumption. The low carbon electricity source is wind.
Energy attribute certificates, Renewable Energy Certificates (RECs)	Hydro and Wind	Europe and Asia Pacific	2083	0	In 2018 renewable energy credits were purchased in the quantity of 2,083 MWh for electricity consumption in other international owned and leased locations, representing 100% of our international electricity consumption
Off-grid energy consumption from an on-site installation or through a direct line to an off- site generator owned by another company	Solar PV	North America	2689	0	In 2018 a total of 2689 MWh was generated through on-site solar power generation for company use, since the beginning of the program.

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# **C9 Additional metrics**

### Other climate-related metrics

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

No change from 2018. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Description	Metric value	Metric numerator	Metric denominator (intensity metric only)	% change from previous year	Direction of change	Please explain
Select from: Waste; Energy usage; Land use; Other, please specify	Numerical field [enter a number from 0 to 99,999,999,999 using up to 2 decimal places]	Text field [maximum 50 characters]	Text field [maximum 50 characters]	Numerical field [enter a number from 0 to 999 using up to 2 decimal places]	Select from: Increased Decreased No change	Text field [maximum 2,400 characters] Use this column to provide any additional context relevant to the metric you are reporting and to the direction of change. Additional information could include projects or initiatives implemented to achieve progress on this metric, or any timeframes included in these goals.

# **C10 Verification**

### Verification

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

No change from 2018. Please complete the following table:

Scope	Verification/assurance status
	Select from:
	No emissions data provided
	No third-party verification or assurance
	Third-party verification or assurance process in place
Scope 1	https://www.td.com/document/PDF/corporateresponsibility/2018-EY-Assurance- Statement.pdf Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	https://www.td.com/document/PDF/corporateresponsibility/2018-EY-Assurance-
	<u>Statement.pdf</u>
	Third-party verification or assurance process in place
Scope 3	https://www.td.com/document/PDF/corporateresponsibility/2018-EY-Assurance- Statement.pdf Third-party verification or assurance process in place

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

No change from 2018. This question only appears if you select "Third-party verification or assurance process in place" for Scope 1 and/or Scope 2 emissions in response to C10.1.Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Scope	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported emissions verified (%)
Select from: • Scope 1 • Scope 2 location- based • Scope 2 market- based	Select from: • Annual process • Biennial process • Triennial process	<ul> <li>Select from:</li> <li>No verification or assurance of current reporting year</li> <li>Underway but not complete for current reporting year – first year it has taken place</li> <li>Underway but not complete for reporting year – previous statement of process attached</li> <li>Complete</li> </ul>	Select from: Not applicable Limited assurance Moderate assurance Reasonable assurance High assurance Third party verification/assur ance underway	Attach your document here.	Text field [maximum 500 characters]	<ul> <li>Select from:</li> <li>AA1000AS</li> <li>Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)</li> <li>Airport Carbon Accreditation (ACA) des Airports Council International Europe</li> <li>Alberta Specified Gas Emitters Regulation (SGER)</li> <li>ASAE3000</li> <li>Attestation standards established by AICPA (AT105)</li> <li>Australian National GHG emission regulation (NGER)</li> <li>California Mandatory GHG Reporting Regulations (CARB)</li> <li>Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025</li> <li>Certified emissions measurement and reduction scheme (CEMARS)</li> <li>Chicago Climate Exchange (CCX) verification standard</li> <li>Compagnie Nationale des Commissaires aux Comptes (CNCC)</li> <li>Corporate GHG verification guidelines from ERT</li> <li>DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting</li> <li>Earthcheck Certification</li> <li>ERM GHG Performance Data Assurance Methodology</li> </ul>	Numerical field [enter a number from 0-100 using no decimals or commas]

		<ul> <li>European Union Emissions Trading System (EU ETS)</li> <li>IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichtenim Bereich der Nachhaltigkeit</li> <li>IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues</li> <li>ISAE 3000</li> <li>ISAE 3410</li> <li>ISO14064-3</li> <li>Japan voluntary emissions trading scheme (JVETS) guideline for verification</li> <li>Korean GHG and energy target management system</li> <li>NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C</li> <li>RevR6 procedure for assurance of sustainability report</li> <li>Saitama Prefecture Target-Setting Emissions Trading Program</li> <li>SGS Sustainability Report Assurance</li> <li>Spanish Institute of Registered Auditors (ICJCE)</li> <li>Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants</li> <li>State of Israel Ministry of Environmental Protection, Verification of GHG and emissions reduction in Israel Guidance Document</li> <li>Swiss Climate CO2 Label for Businesses</li> <li>Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG)</li> </ul>	
		<ul> <li>reduction in Israel Guidance Document</li> <li>Swiss Climate CO2 Label for Businesses</li> <li>Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol</li> <li>The Climate Registry's General Verification Protocol</li> <li>Tokyo cap-and-trade guideline for verification</li> </ul>	

						<ul> <li>Verification as part of Carbon Trust standard certification</li> <li>Other, please specify</li> </ul>	
Scope 1	Annual Process	Complete	Limited Assurance	https://www.td. com/document /PDF/corporat eresponsibility/ 2018-EY- Assurance- Statement.pdf	2-3	ISAE 3410	100
Scope 2 Location- based	Annual Process	Complete	Limited Assurance	https://www.td. com/document /PDF/corporat eresponsibility/ 2018-EY- Assurance- Statement.pdf	2-3	ISAE 3410	100
Scope 2 Market-based	Annual Process	Complete	Limited Assurance	https://www.td. com/document /PDF/corporat eresponsibility/ 2018-EY- Assurance- Statement.pdf	2-3	ISAE 3410	100

[Add Row]

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

No change from 2018. This question only appears if you select "Third-party verification or assurance process in place" for Scope 3 emissions in response to C10.1. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Scope Verification of	r Status in the current	Attach the	Page/ section	Relevant standard
assurance cy place	cle in reporting year	statement	reference	

Select from:	Select from:	Select from:	Attach your	Text field	Select from:
			document here.	[maximum 500	
Scope 3- all	<ul> <li>Annual process</li> </ul>	No verification or		characters]	• AA1000AS
relevant	Biennial process	assurance of current		-	Advanced technologies promotion Subsidy Scheme with Emission reduction Target
categories	Triennial process	reporting year			(ASSET)
Scope 3- at		<ul> <li>Underway but not</li> </ul>			Airport Carbon Accreditation (ACA) des Airports Council International Europe
least one		complete for current			Alberta Specified Gas Emitters Regulation (SGER)
applicable		reporting year – first year			• ASAE3000
category		it has taken place			Attestation standards established by AICPA (AT105)
		Underway but not			Australian National GHG emission regulation (NGER)
		complete for reporting			California Mandatory GHG Reporting Regulations (CARB)
		vear – previous statement			Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section
		of process attached			5025
		Complete			Certified emissions measurement and reduction scheme (CEMARS)
		e complete			Chicago Climate Exchange (CCX) verification standard
					Compagnie Nationale des Commissaires aux Comptes (CNCC)
					Compagnie Hatenaie des commissaires dux comptes (CHCC)
					DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
					Earthcheck Certification
					ERM GHG Performance Data Assurance Methodology
					European Union Emissions Trading System (ELLETS)
					<ul> <li>IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder</li> </ul>
					TDW 13 021. IDW 1400 gstandard. Ordnusatze ordnungsmansger 1400 goder
					IDW Ass 821: IDW Assurance Standard: Generally Accented Assurance Principles
					for the Audit or Review of Renorts on Sustainability Issues
					• ISAE 3410
					• ISAL 3410
					<ul> <li>Iso 14004-3</li> <li>Iso 14004-3</li> <li>Iso 14004-3</li> </ul>
					Koroon CHC and operavitarget management system
					NMX SAA 14064 3 IMMC: Institute Mexicone de Nermelización y Certificación A C
					NiviA-5704-14004-5-INVING. INStituto Mexicano de Normalizacion y Celulicación A.C     PovP6 procedure for assurance of custoinability report
					Solitama Profecture Target Setting Emissions Trading Program
					Sakama Prefecture Target-Setting Emissions Trading Program
					Soo Sustalliability Report Assurance     Spanish Institute of Registered Auditors (ICICE)
					Spanish institute of Registered Additors (ICJCE)     Standard 2910NL Acquirance angegements relating to subtainability reports of the
					Standard So for Assurance engagements relating to sustainability reports of the
					State of Jercel Ministry of Environmental Protection Marification of CHC and
					State or israel ministry of Environmental Protection, vehication of GHG and     aministry of Environmental Protection, vehication of GHG and
					emissions reduction in Israel Guidance Document
					Swiss Ciirnate CO2 Labei for Businesses

Scope 3 - at least one applicable category	Annual Process	Complete	https://www.td.co m/document/PD F/corporaterespo nsibility/2018- EY-Assurance- Statement.pdf	2-3	<ul> <li>Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol</li> <li>The Climate Registry's General Verification Protocol</li> <li>Tokyo cap-and-trade guideline for verification</li> <li>Verification as part of Carbon Trust standard certification</li> <li>Other, please specify</li> </ul>
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### [Add Row]

### Other verified data

# (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 change from 2018. Select one of the following options:

- Yes
- In progress
- No, but we are actively considering verifying within the next two years
- No, we are waiting for more mature verification standards and/or processes
- No, we do not verify any other climate-related information reported in our CDP disclosure

### (C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

No change from 2018. This question only appears if you select "Yes" in response to C10.2. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Disclosure module verification relates to	Data verified	Verification standard	Please explain
Select from:	Select from:	Text field [maximum 1,500 characters]	Text field [maximum 1,500 characters]
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
<ul> <li>C0. Introduction</li> <li>C1. Governance</li> <li>C2. Risks and opportunities</li> <li>C3. Business Strategy</li> <li>C4. Targets and performance</li> <li>C5. Emissions performance</li> <li>C6. Emissions data</li> <li>C7. Emissions breakdown</li> <li>C8. Energy</li> <li>C9. Additional metrics</li> <li>C11. Carbon pricing</li> <li>C12. Engagement</li> <li>C13. Other land management</li> <li>C14. Sign off</li> <li>SC. Supply chain module</li> </ul>	<ul> <li>Year on year change in emissions (Scope 1)</li> <li>Year on year change in emissions (Scope 2)</li> <li>Year on year change in emissions (Scope 1 and 2)</li> <li>Year on year change in emissions (Scope 3)</li> <li>Year on year emissions intensity figure</li> <li>Financial or other base year data points used to set a science-based target</li> <li>Progress against emissions reduction target</li> <li>Change in Scope 1 emissions against a base year (not target related)</li> <li>Change in Scope 2 emissions against a base year (not target related)</li> <li>Change in Scope 3 emissions against a base year (not target related)</li> <li>Product footprint verification</li> <li>Emissions reduction activities</li> <li>Renewable energy products</li> <li>Don't know</li> <li>Other, please specify</li> </ul>	This column captures the verification standard against which the verification process has been undertaken. It does not refer to the reporting or calculation standard. Clearly state the type of verification/assurance that has been given and the name of the verification standard used. CDP has produced criteria for what constitutes an acceptable verification standard. All accepted verification standards, and exceptions to their use, are listed <u>here</u> .	Explain here why your company has chosen to verify the selected data points with each given standard. Where possible, reference specific question numbers. You can also describe here the frequency with which you complete this verification and the scope it encompasses. Outline if you have sought organization wide verification or if you have only sought verification over a certain proportion of your operations. If you want to attach a document relating to the verification please click "File upload" button (paperclip icon) to drag and drop a file.
C4. Targets and performance	Renewable energy products	ISAE 3000	A limited assurance was provided for TD's carbon neutral schedule for its Canadian, United States and international operations for the 12-month period ended July 31, 2018. Assurance statement can be found here: https://www.td.com/document/PDF/corporat eresponsibility/2018-EY-Assurance- Statement.pdf
C8. Energy	Other, please specify (Energy Data)	ISAE 3000	A limited assurance was provided for TD's energy data for its Canadian, United States and international operations for the 12-month period ended July 31, 2018. Assurance statement can be found here: https://www.td.com/document/PDF/corporat eresponsibility/2018-EY-Assurance- Statement.pdf

## C11 Carbon pricing

### Carbon pricing systems

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

No change from 2018. Select one of the following options:

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

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

No change from 2018. This question only appears if you select "Yes" in response to C11.1. Select all that apply from the following options:

- Alberta carbon tax
- Alberta SGER
- Australia ERF Safeguard Mechanism
- BC carbon tax
- BC GGIRCA
- Beijing pilot ETS
- California CaT
- Chile carbon tax
- China national ETS
- Chongqing pilot ETS
- Colombia carbon tax
- Denmark carbon tax

- Estonia carbon tax
- EU ETS
- Finland carbon tax
- France carbon tax
- Fujian pilot ETS
- Guangdong pilot ETS
- Hubei pilot ETS
- Iceland carbon tax
- Ireland carbon tax
- Japan carbon tax
- Kazakhstan ETS
- Korea ETS
- Latvia carbon tax
- Liechtenstein carbon tax
- Mexico carbon tax
- New Zealand ETS
- Norway carbon tax
- Ontario CaT
- Poland carbon tax
- Portugal carbon tax
- Québec CaT
- RGGI
- Saitama ETS
- Shanghai pilot ETS
- Shenzhen pilot ETS
- Slovenia carbon tax
- Sweden carbon tax
- Switzerland carbon tax
- Switzerland ETS
- Tianjin pilot ETS

- Tokyo CaT
- UK carbon price floor
- Ukraine carbon tax
- Washington CAR
- Other ETS, please specify
- Other carbon tax, please specify

(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.

No change from 2018. This question only appears if you select an emissions trading option in response to C11.1a.

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

System name	% of Scope 1 emissions covered by the ETS	Period start date	Period end date
Fixed table rows are populated by selection in C11.1a	Numerical field [enter a number from 0-100 using a maximum of 2 decimal places and no commas]	Enter the start date that applies to the data in the row. Use the calendar button or enter dates manually in the format DD/MM/YYYY. Please note that the period reported should overlap with the reporting year.	Enter the finish date that applies to the data in the row. Use the calendar button or enter dates manually in the format DD/MM/YYYY. Please note that the period reported should overlap with the reporting year.

Allowances allocated	Allowances purchased	Verified emissions in metric tons CO2e	Details of ownership	Comment
Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places and no commas]	<ul> <li>Select from:</li> <li>Facilities we own and operate</li> <li>Facilities we own but do not operate</li> <li>Facilities we operate but do not own</li> <li>Other, please specify</li> </ul>	Text field [maximum 2,400 characters] If you have selected "Other ETS, please specify" in C11.1a then please provide the full name of the emission trading scheme in this column.

(C11.1c) Complete the following table for each of the tax systems in which you participate.

No change from 2018. This question only appears if you select a carbon tax system in response to C11.1a. Please complete the following table

Pricing system	Period start date	Period end date	% of emissions covered by tax	Total cost of tax paid	Comment
Fixed table rows are populated by selection in C11.1a	Enter the start date that applies to the data in the row. Use the calendar button or enter dates manually in the format DD/MM/YYYY. Please note that the period reported should overlap with the reporting year.	Enter the finish date that applies to the data in the row. Use the calendar button or enter dates manually in the format DD/MM/YYYY. Please note that the period reported should overlap with the reporting year.	Numerical field [enter a number from 0-100 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0- 999,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters] If you select "Other carbon tax, please specify" in C11.1a then please provide the full name of the carbon tax in this column.

(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

No change from 2018. This question only appears if you select "Yes" or "No, but we anticipate being regulated in the next three years" in response to This is an open text question with a limit of 5,000 characters. Please note that when copying from another document into the disclosure platform, formatting is not retained.

## Project-based carbon credits

### (C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No change from 2018. Select one of the following options:

- Yes
- No

### (C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Minor change from 2018. This question only appears if you select "Yes" in response to C11.2. Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Credit origination or credit purchase	Project type	Project identification	Verified to which standard
Select from: • Credit origination • Credit purchase	Select from: Agriculture Biomass energy Cement CO2 usage Coal mine/bed CH4 Energy distribution Energy efficiency: households Energy efficiency: industry Energy efficiency: own generation Energy efficiency: service Energy efficiency: supply side Forests Fossil fuel switch Fugitive Geothermal HFCs Hydro Landfill gas Methane avoidance N2O PFCs and SF6 Solar Tidal Transport Wind Other, please specify	Text field [maximum 2,400 characters]	<ul> <li>Select from:</li> <li>CDM (Clean Development Mechanism)</li> <li>JI (Joint Implementation)</li> <li>Gold Standard</li> <li>VCS (Verified Carbon Standard)</li> <li>VER+ (TÜV SÜD standard)</li> <li>CAR (The Climate Action Reserve)</li> <li>ACR (American Carbon Registry)</li> <li>CCBS (developed by the Climate, Community and Biodiversity Alliance, CCBA)</li> <li>Plan Vivo</li> <li>Emissions Reduction Fund of the Australian Government</li> <li>Not yet verified</li> <li>Other, please specify</li> </ul>
Credit Purchase	Other, please specify (Afforestation)	Quebec First Nations Forest Carbon Project	Other, please specify (ISO 14064-2)
Credit Purchase	Landfill gas	Georgia Landfill Gas Destruction Project	Other, please specify (ISO 14064-2)
Credit Purchase	Landfill gas	Utah (Montana) Landfill Gas Destruction Project	Climate Action Reserve (CAR)

Credit Purchase	Landfill Gas	North Caroline Landfill Gas Destruction Project	Climate Action Reserve (CAR)
Credit Purchase	Hydro	Gunaydin WPP (Turkey)	The Gold Standard
Credit Purchase	Wind	The Wulabo 30 MW Wind Farm (China)	Verified Carbon Standard (VCS)

Number of credits (metric tons CO2e)	Number of credits (metric tons CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places and no commas]	Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places and no commas]	Select from: • Yes • No • Not relevant	Select from: • Compliance • Voluntary Offsetting • Not applicable • Other, please specify
46,614	46,614	Yes	Voluntary Offsetting
1,702	1,702	Yes	Voluntary Offsetting
11,375	11,375	Yes	Voluntary Offsetting
19,962	19,962	Yes	Voluntary Offsetting
171	171	Yes	Voluntary Offsetting
135	135	Yes	Voluntary Offsetting

## Internal price on carbon

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

No change from 2018. Select one of the following options:

- Yes
- No, but we anticipate doing so in the next two years
- No, and we don't anticipate doing so in the next two years

### (C11.3a) Provide details of how your organization uses an internal price on carbon.

No change from 2018. This question only appears if you select "Yes" in response to C11.3. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Objective for implementing an internal carbon price	GHG Scope	Application	Actual price(s) used (Currency /metric ton)	Variance of price(s) used	Type of internal carbon price	Impact & implication
<ul> <li>Select all that apply:</li> <li>Navigate GHG regulations</li> <li>Stakeholder expectations</li> <li>Change internal behavior</li> <li>Drive energy efficiency</li> <li>Drive low-carbon investment</li> <li>Stress test investments</li> <li>Identify and seize low- carbon opportunities</li> <li>Supplier engagement</li> <li>Other, please specify</li> </ul>	Select all that apply: • Scope 1 • Scope 2 • Scope 3	Corporate structure that price is applied to (i.e. business units, corporate divisions, facilities) Text field [maximum 1,000 characters] Disclose the part(s) of the business decision-making process that the internal carbon pricing mechanism applies to, and the degree of influence it has on business decisions (i.e. to what degree does a company enforce the use of the price?). The steps and depth at which an internal	Numerical field [enter a number from 0- 99,999,999,999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters] For companies using internal carbon pricing in stress-testing or scenario analysis, it is particularly important to disclose assumptions made about how price(s) would develop over time; the geographic and economic scope of application; whether the price is applied across the entire company or to specific business units or decisions, and whether a uniform or differentiated price is used.	Select all that apply: Shadow price Internal fee Internal trading Implicit price Offsets Other, please specify	Text field [maximum 2,400 characters] Provide a company-specific description of how your organization uses internal price on carbon: - Disclose how/if the internal carbon price has impacted your business (i.e. has it revealed material risk or impacted business decisions?) Upon implementing a carbon price, it is important for a company to review its impact against its original intentions to refine its approach to better meet future goals. - For companies deliberately implementing an internal carbon price as a tool to achieve a climate-related goal: has there been a tangible impact? Has the tool shifted

	carbon price will be applied in the business decision-making process will vary by company. Commonly disclosed applications include decisions regarding capital expenditure, operations, procurement, product and R&D, and remuneration.				<ul> <li>investments toward energy efficiency measures, low-carbon initiatives, energy purchases, or product offerings?</li> <li>If the internal carbon price has not impacted your business in any way, it is equally important to explain why – are there specific challenges associated with your current mechanism? Are carbon-related risks immaterial or already managed?</li> </ul>
<ul> <li>Stakeholder expectations</li> <li>Change internal behavior</li> <li>Drive energy efficiency</li> <li>Scope 3</li> <li>Scope 3</li> </ul>	Company-wide (with local variations accepted)	\$8 CAD	TD uses both uniform and evolutionary pricing –a single price is applied throughout the company independent of geography, business unit or type of decision, and continues to evolve based on the price of RECs and Offsets.	Internal fee	Having an internal price on carbon aligns with our approach of embedding climate risks in our business strategy. Applying an internal price on carbon is an effective business incentive to drive investment in GHG reduction activities. The learnings from our carbon neutrality and internal price on carbon have also driven an increased commitment to developing a range of low-carbon financial products including the financing to companies that are facilitating the transition to the low carbon economy, insurance for hybrid and electric vehicles, and the issuance of a CAD\$500 million green bond in 2014 and a US\$1 billion green bond in 2017. It also provides a quantitative measure of the cost of carbon emissions as part of our operating costs. We use a carbon price to engage our 85,000 employees in our carbon neutral initiative. Our internal price on carbon is dependent on the cost of RECs and carbon offsets as well as the cost of managing TD's GHG inventory. Our internal price on

			carbon has decreased from \$10 to \$8
			since 2010 due to the implementation
			of energy and carbon reduction
			initiatives across our business. The
			price is calculated on an annual basis
			and charged back to our business
			groups based on the relative
			contribution of those groups to our
			overall carbon emissions. Every tonne
			of emissions signifies a real cost to our
			business groups; therefore, our
			internal price on carbon acts as a
			significant driver for investment in
			GHG reduction initiatives.
			business groups; therefore, our internal price on carbon acts as a significant driver for investment in GHG reduction initiatives.

## **C12 Engagement**

### Value chain engagement

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

No change from 2018. Select all that apply from the following options:

- Yes, our suppliers
- Yes, our customers
- Yes, other partners in the value chain
- No, we do not engage

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

No change from 2018. This question only appears if you select "Yes, our suppliers" in response to C12.1. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Type of engagement	Details of engagement	% of suppliers by number	% total procurement spend (direct and indirect)	% Scope 3 emissions as reported in C6.5	Rationale for the coverage of your engagement	Impact of engagement, including measures of success	Comment
<ul> <li>Select from:</li> <li>Compliance &amp; onboarding</li> <li>Information collection (understanding supplier behavior)</li> <li>Engagement &amp; incentivization</li> </ul>	<ul> <li>Select all that apply:</li> <li>Compliance &amp; onboarding</li> <li>Included climate change in supplier selection / management mechanism</li> </ul>	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters] Explain how and why this group of suppliers was chosen for the engagement selected in column 1 (e.g. proportion of spend, geographic location, etc.). The	Text field [maximum 2,400 characters] Use this column to discuss the impact of this engagement and how you measure its success. Please provide examples of positive outcomes achieved. For example, this could include supplier GHG	Text field [maximum 2,400 characters] Use this column to provide any additional explanation that is relevant to capture the full complexity of the emissions changes.

<ul> <li>(changing supplible)</li> <li>behavior)</li> <li>Innovation &amp; collaboration (changing market)</li> <li>Other, please specify</li> </ul>	<ul> <li>Code of conduct featuring climate change KPIs</li> <li>Climate change is integrated into supplier evaluation processes</li> <li>Other, please specify</li> </ul>	description should be company-specific and include details on what the engagement activity entails.	emissions reductions and/or improved climate change strategies including target setting.	
	Information collection (understanding supplier behavior)			
	<ul> <li>Collect climate change and carbon information at least annually from suppliers</li> <li>Other, please specify</li> </ul>			
	Engagement & incentivization (changing supplier behavior)			
	<ul> <li>Run an engagement campaign to educate suppliers about climate change</li> <li>Climate change</li> </ul>			
	<ul> <li>Offer financial incentives for</li> </ul>			

suppliers who			
reduce your			
operational			
emissions (Scopes			
1 &2)			
<ul> <li>Offer financial</li> </ul>			
incentives for			
suppliers who			
reduce your			
downstream			
emissions (Scopes			
3)			
Offer financial			
incentives for			
auppliors who			
suppliers who			
reduce your			
upstream			
emissions (Scopes			
3)			
<ul> <li>Other, please</li> </ul>			
specify			
Innovation &			
collaboration			
(changing markets)			
<ul> <li>Run a campaign to</li> </ul>			
encourage			
innovation to			
reduce climate			
impacts on			
products and			
Othermaleses			
• Other, please			
specify			
Other			
<ul> <li>Other, please</li> </ul>			
specify			
opoony			



Information collection (understanding supplier behavior)	Collect climate change and carbon information at least annually from suppliers	43%		Our decision to include suppliers in the CDP Supply Chain Program is based on supplier spend, as well as risk and opportunity. 43% represents 43% of our largest/top suppliers. We have engaged this 43% of our top suppliers through the CDP Supply Chain Program.	In early 2016, TD joined CDP's Supply Chain (SC) management program. Our goal is to fulfill an operational footprint mandate to green our supply chain. Our expectation is that suppliers we do business with understand their operational footprint and work towards enhancing environmental efficiency. In 2018 we invited 43% of our largest/top suppliers to complete CDP's Supply Chain questionnaire and we received a 75% response rate. We plan to increase the number of suppliers each year that we engage in this program.
Engagement & incentivization (changing supplier behavior)	Run an engagement campaign to educate suppliers about climate change	43%		TD's partnership with CDP through the Supply Chain Program offers educational opportunities (e.g. webinars, resources) to suppliers on how to measure carbon emissions. 43% represents 43% of our largest/top suppliers.	Through the CDP Supply Chain program TD offers training to the 43% of our largest/top suppliers that are engaged.

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

Minor change from 2018. This question only appears if you select "Yes, our customers" in response to C12.1. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Type of engagement	Details of engagement	% of customers by number	% Scope 3 emissions as reported in C6.5	Please explain the rationale for selecting this group of customers and scope of engagement	Impact of engagement, including measures of success
<ul> <li>Select from:</li> <li>Education/infor mation sharing</li> <li>Collaboration &amp; innovation</li> <li>Other, please specify</li> </ul>	<ul> <li>Select from:</li> <li>Education/ information sharing</li> <li>Run an engagement campaign to education customers about your climate change performance and strategy</li> <li>Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services</li> <li>Share information about your products and relevant certification schemes (i.e. Energy STAR)</li> </ul>	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Text field [maximum 2,400 characters] Explain how and why this group of customers was chosen for the engagement selected in column 1 (e.g. proportion of revenue generated, geographic location, etc.).	Text field [maximum 2,400 characters] Use this column to discuss the impact of this engagement and how you measure its success. Provide examples of positive outcomes achieved. For example, this could include customers reducing use-phase GHG emissions or increasing renewable energy procurement.
• Education/infor mation sharing	<ul> <li>Collaboration &amp; Innovation</li> <li>Run a campaign to encourage innovation to reduce climate change impacts</li> <li>Other – please provide information in column 5</li> <li>Run an engagement campaign to education customers about your climate change performance and strategy</li> </ul>	100	0	In branch TD FEF campaign and customer connection days: We use TD FEF to run customer campaigns to engage with banking customers -which are used to raise	The campaign provides resources, messaging and leaf bags (composting) to customer and allow them to recognize organizations that we support with TD FEF. Success is measured by the number of customers and employee engaged.

			awareness of issues related to customers about climate related issues.	
Collaboration & innovation	Other – please provide information in column 5	0	Tree days: TD Tree Days is a national volunteer tree planting program started by TD Friends of the Environment foundation (FEF). TD FEF supports a wide range of environmental initiatives, with a primary funding focus on revitalizing, animating and stewarding public green spaces. TD Tree Days plantings generated over \$54,000 in natural capital value in 2018.	Since 2010, TD Tree Dayshas captured 890.1 tonnes of CO2e. 2018 marked the ninth year of TD Tree Days, seeing more than 48,000 trees and shrubs planted from coast to coast. Since the start of TD Tree Days in 2010, over 390,000 trees and shrubs have been planted, which continue to grow and sequester carbon.
• Education/infor mation sharing	Share information about your products and relevant certification schemes (i.e. Energy STAR)	0	Plug'n drive: TD supports the Plug'n Drive program in creating the world's first Electric Vehicle Discovery Centre in order to drive awareness and education around electric vehicles, and growth of the EV market. The TD Zone offers information on insurance options that are exclusive to electric vehicles owners	The Centre drew close to 10,000 visitors and drove EV adoption within Ontario. TD automobile insurance customers avoided over 18,000 tCO2e of GHG emissions through the use of their hybrid and electric vehicles in FY2018. TD seeks to support customers' decisions to purchase these vehicles by offering automobile insurance discounts for hybrid and electric vehicle ownership.
Education/infor mation sharing	<ul> <li>Share information about your products and relevant certification schemes (i.e. Energy STAR)</li> </ul>	0	TD sponsored the Green Living Show held in Toronto, Ontario. The Green Living Show is Canada's largest environmental trade show. The	TD had an activation at the show that highlighted the Ready Commitment, focusing on the vibrant planet driver. Several TD-

			Green Living Show aims to highlight, reward and encourage sustainable living in four primary categories: global consumer innovations; global green initiatives and thought leadership; green initiatives and thought leadership in Toronto; and consumer products and services.	funded group and business partners also participated in the activation to talk to consumers, including representatives from TD Insurance, Private Investment Advice and Mobile Mortgage Specialists. The show garners350+ exhibitors, over 250 million media impressions, and 69,000+ social media subscribers.
Education/infor mation sharing	<ul> <li>Share information about your products and relevant certification schemes (i.e. Energy STAR)</li> </ul>	0	TD Insurance provides online information guides for its customers on various types of insurance, including Home Insurance 101, Condo Insurance 101 and Renter's Insurance 101. These insurance guides include information on how to protect against weather events through insurance products, as well as home energy efficiency tips.	These 101 guides are available publicly on the TD Insurance website for the benefit of anyone looking to gain more information on TD Insurance products and services. The Home Energy Efficiency Tips guide provides detailed actions that home owners can do to cut down their energy consumption.
Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts •	0	TD has contributed \$1 million to the Accelerator Centre to support the development of the TD Sustainable Future Lab with EvolvGREEN, a collaborative workspace for entrepreneurs, researchers and clean economy supports in Waterloo, Ontario. The lab, which is the first cleantech accelerator in Ontario, is designed to support and mentor startups working on developing innovative and sustainable cleantech solutions to transition to the low-carbon economy.	The program will support up to 40 companies over 5 years, will help entrepreneurs turn their ideas into businesses through mentorship and funding opportunities.

### (C12.1c) Give details of your climate-related engagement strategy with other partners in the value chain.

No change from 2018. This question only appears if you select "Yes, other partners in the value chain" in response to C12.1. This is an open text question with a limit of 5,000 characters.

(C12.1d) Why do you not engage with any elements of your value chain on climate-related issues, and what are your plans to do so in the future?

No change from 2018. This question only appears if you select "No, we do not engage" in response to C12.1. This is an open text question with a limit of 5,000 characters.

**Question C12.2 only applies to organizations with activities in the following sectors:** 

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry

## Public policy engagement

# (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?

No change from 2018. Select all that apply from the following options:

- Direct engagement with policy makers
- Trade associations
- Funding research organizations
- Other
- No

### (C12.3a) On what issues have you been engaging directly with policy makers?

No change from 2018. This question only appears if you select "Direct engagement with policy makers" in response to C12.3. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
<ul> <li>Select from:</li> <li>Mandatory carbon reporting</li> <li>Cap and trade</li> <li>Carbon tax</li> <li>Energy efficiency</li> <li>Clean energy generation</li> <li>Adaptation or resilience</li> <li>Climate finance</li> <li>Regulation of methane</li> <li>Emissions</li> <li>Other, please specify</li> </ul>	Select from: • Support • Support with minor exceptions • Support with major exceptions • Neutral • Oppose • Undecided	Text field [maximum 2,400 characters] This column gives an opportunity to provide more details on the particular legislation on which you are engaging. Provide details of how you are engaging (e.g., responding to a consultation, meeting directly with policy makers, etc.) and the legislation on which you are engaging. Give the name of the legislation and the geographies to which it applies. Only give details of the legislation that you have engaged on in the reporting year.	Text field [maximum 2,400 characters] This column gives an opportunity to provide more details on the actions you are advocating. If you support the legislation with no exceptions, you can state this. However, if you support it with exceptions, you should provide details of the exceptions and what you would propose in their place. If you oppose the legislation, please provide details of an alternative legislative approach that you feel would more effectively reduce carbon emissions in the corporate sector.
Adaptation or resilience	Support	TD supports certain government initiatives which may not be associated to legislation. We are engaged with policy makers through a multi-stakeholder working group co-chaired by the Insurance Bureau of Canada and the federal government. For example, TD supports the federal government's coordination of a national flood program. TDI participated in the federal government sponsored National Roundtable on Flood Risk in the fall of 2017 and has been working since that time as part of a multi – government /industry stakeholder advisory group to identify measures to ensure that Canadian homeowners understand their risk of	At this point it is too early to know whether a proposed legislative solution will be part of the advisory group and subcommittee recommendations, and if so, what form it would take.

		exposure to flooding and what they need to do to reduce that risk, and the requirements for developing a sustainable system for the financial management of flood risk. The group reported to the Federal/Provincial/Territorial Ministerial meeting in May 2018 on preliminary findings and proposals.	
Other (Canadian Expert Panel on Sustainable Finance)	Support	TD supports the Expert Panel on Sustainable Finance and has engaged with the Expert Panel on various topics. Primary engagement with the Expert Panel has been on sustainable finance and climate-change topics within the financial sector.	N/A - TD's support of the Expert Panel on Sustainable Finance is not associated to any particular legislation.

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

No change from 2018. This question only appears if you select "Trade associations" in response to C12.3. Select one of the following options:

• Yes

• No

### (C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

No change from 2018. This question only appears if you select "Yes" in response to C12.3b. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you influenced, or are you attempting to influence the position?
-------------------	------------------------------------------------------------	-------------------------------------------------	---------------------------------------------------------------------------

Text field [maximum 1,000 characters]	Select from:	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters]
Enter the name of the trade association(s) that you are on the Board of or provide funding beyond membership.	<ul> <li>Consistent</li> <li>Inconsistent</li> <li>Mixed</li> <li>Unknown</li> </ul>	Give details of the trade association's position on climate change (and explain how this position differs from your own if it does). Where appropriate, give examples of activities the trade association has undertaken in the reporting year to influence climate change policy.	Describe how you have worked, or are in the process of working with the trade association to promote the current or an alternative position.
The Insurance Bureau of Canada - Adaptation to Climate Change Committee	Consistent	Public and private sector leaders need information about regional climate trends in order to adapt for the future.	TD Insurance is involved with this industry initiative aimed at helping us understand the potential impacts on our customers and on our own facilities.
Advisory Committee of the Institute for Catastrophic Loss Reduction (ICLR)	Consistent	ICLR works to enhance the disaster resilience of homes, communities and businesses across Canada including from nature's extreme events.	TD Insurance is involved with this industry initiative aimed at helping us understand the potential impacts on our customers and on our own facilities.
Canadian Bankers Association (CBA)	Consistent	CBA recognizes that addressing climate and sustainability is a key part of Canadian banks' social responsibility. CBA is Canadian association that participates in the formation of public policy that contributes to a sound, thriving, banking system.	TD participates in a CBA working group with our Canadian peer banks to develop a consistent approach to assessing and disclosing climate risk, within a Canadian context.

### (C12.3d) Do you publicly disclose a list of all research organizations that you fund?

No change from 2018. This question only appears if you select "Funding research organizations" in response to C12.3. Select one of the following options:

### (C12.3e) Provide details of the other engagement activities that you undertake.

No change from 2018. This question only appears if you select "Other" in response to C12.3. This is an open text question with a limit of 5,000 characters.

Detail any other activities that you have engaged in the reporting year that could either directly or indirectly influence policy on climate change. For each activity, identify the method of engagement (individual or through a group), the topic of engagement (e.g., a piece of legislation or a tax), the nature of the engagement (i.e. what your activities were), and the actions that you are advocating as part of that engagement.

# (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?

No change from 2018. This question only appears if you select "Direct engagement with policy makers", "Trade associations", "Funding research organizations" and/or "Other" in response to C12.3. This is an open text question with a limit of 5,000 characters.

Explain the processes that you have in place, or if you do not have any in place, how you plan to address this potential for conflict in the future.

TD considers each opportunity to directly or indirectly influence policy in relation to the key risks and opportunities of the aspects of climate change that we have assessed as part of our environment and climate change strategy. Corporate Citizenship works closely with the Government Relations teams, who oversees all government engagement.

All activities are reviewed on a quarterly basis by the Corporate Citizenship Council (CCC) and monthly with the Senior Executive Environmental Champion.

(C12.3g) Why do you not engage with policy makers on climate-related issues?

No change from 2018. This question only appears if you select "No" in response to C12.3. This is an open text question with a limit of 5,000 characters.

Provide a company-specific explanation as to why you do not pursue activities that have the potential to influence climate change policy and any plans you have to change that in the future.

## Communications

# (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).

Question modified from 2018. Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Publication	Status	Attach the document	Page/Section reference	Content elements	Comment
<ul> <li>Select from:</li> <li>In mainstream reports</li> <li>In mainstream reports, in line with the CDSB framework (as amended to incorporate the TCFD recommendations)</li> <li>In mainstream reports, incorporating the TCFD recommendations</li> <li>In other regulatory filings</li> <li>In voluntary communications</li> <li>In voluntary sustainability report</li> <li>No publications with information about our response to climate-related issues and GHG emissions performance</li> <li>Other, please specify</li> </ul>	Select from: • Complete • Underway – previous year attached • Underway – this is our first year	Attach your document here.	Text field [maximum 500 characters]	Select all that apply: • Governance • Strategy • Risks & Opportunities • Emissions figures • Emission targets • Other metrics • Other, please specify	Text field [maximum 2,400 characters]
In mainstream reports in accordance with the CDSB Framework	Complete	https://www.td.com/docume nt/PDF/ar2018/ar2018- Complete-Report.pdf	1-224	Governance Strategy Risks & opportunities	
In mainstream reports, incorporating the TCFD recommendations	Complete	https://www.td.com/document/ PDF/corporateresponsibility/TC FD-report-final.pdf	1-11	Governance Strategy Risks & Opportunities	

In voluntary communications	Complete	https://www.td.com/docume nt/PDF/corporateresponsibi lity/2018-TD-ESG- Appendix.pdf	1-20	Governance Emissions figures Emission targets Other metrics	
In voluntary sustainability report	Complete	https://www.td.com/docume nt/PDF/corporateresponsibi lity/2018-ESG-Report.pdf	1-64	Governance Strategy Risks & opportunities Emissions figures Emission targets Other metrics	

## **C13 Other land management impacts**

Module C13 only applies to organizations with activities in the following sectors:

- Agricultural commodities
- Food, beverage & tobacco
- Paper & forestry

## C14 Signoff

### **Further information**

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

No change from 2018. This is an open text question with a limit of 9,999 characters. When copying from another document into the disclosure platform, formatting is not retained.

#### Note

• Click "File upload" button (paperclip icon) to drag and drop a file if you want to attach one.

## Signoff

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

No change from 2018. Please complete the following table:

Corresponding job category
Select from:
Board chair
Board/Executive board
Director on board
Chief Executive Officer (CEO)
Chief Financial Officer (CFO)
Chief Operating Officer (COO)
Chief Procurement Officer (CPO)
Chief Risk Officer (CRO)
Chief Sustainability Officer (CSO)
Other C-Suite Officer

	<ul> <li>President</li> <li>Business unit manager</li> <li>Energy manager</li> <li>Environmental, health and safety manager</li> <li>Environment/Sustainability manager</li> <li>Facilities manager</li> <li>Process operation manager</li> <li>Procurement manager</li> <li>Public affairs manager</li> <li>Risk manager</li> <li>Other, please specify</li> </ul>
Group Head, Customer & Colleague Experience	Other C-Suite Officer