Bank of Nova Scotia (Scotiabank) - Climate Change 2019

C0. Introduction

C0.1

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

The Bank of Nova Scotia (Scotiabank) is Canada's international bank and leading financial services provider to the Americas. We are dedicated to helping our 25 million customers become better off through a broad range of advice, products and services, including personal and commercial banking, wealth management and private banking, corporate and investment banking, and capital markets. With a team of more than 97,000 employees and assets of CAD $998 billion (as of October 31, 2018), Scotiabank trades on the Toronto (TSV: BNS) and New York Exchanges (NYSE:BNS).

The focus of Scotiabank’s Sustainable Business strategy is on the long term success of our Bank and the world around us. The strategy is integrated into the core business objectives and competencies of the organization and embedded in the day-to-day business culture and operations. By paying careful attention to the areas where we feel we can have the biggest impact - Trust, Climate Change, Economic Inclusion and Young People - we create economic, social and environmental value for our customers, employees, communities and our planet while also delivering returns for our shareholders over the long-term.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	November 1 2017	October 31 2018	Yes	2 years

C0.3

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

Anguilla
Antigua and Barbuda
Australia
Bahamas
Barbados
Belize
Brazil
British Virgin Islands
Canada
Cayman Islands
Chile
China
China, Hong Kong Special Administrative Region
Colombia
Costa Rica
Cuba
Dominica
Dominican Republic
El Salvador
Grenada
Guatemala
Guyana
Haiti
India
Ireland
Jamaica
Japan
Malaysia
Mexico
Netherlands
Panama
Peru
Puerto Rico
Republic of Korea
Saint Kitts and Nevis
Saint Vincent and the Grenadines
Singapore
Trinidad and Tobago
Turks and Caicos Islands
United Kingdom of Great Britain and Northern Ireland
United States of America
United States Virgin Islands
Uruguay

C0.4

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

CAD

C0.5

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

Operational control

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Board-level committee	The Corporate Governance Committee of the Board oversees the Sustainable Business strategy (of which climate change is one of four key priorities where we feel we can make the biggest impact) and the annual Sustainable Business report. The Corporate Governance Committee (composed entirely of independent directors) evaluates our environmental and social performance and benchmarks our performance against our industry peers.
Board-level committee	The Audit and Conduct Review Committee of the Board oversees our climate change-related disclosure as part of our financial reporting. This includes our TCFD disclosures in the Annual Report.
Board-level committee	The Risk Committee of the Board retains primary oversight for climate change risks and opportunities for the Bank. As climate change is identified as an emerging risk, updates are provided to the Committee on a quarterly basis. Environmental Risk (including climate change risk) is a Principal Risk type for the Bank, as documented in the Board approved Enterprise- Wide Risk Management Framework. Climate change risk and opportunities are integrated into the Bank's Environmental Policy, Credit Risk Policy, and Operational Risk Management Policy (all approved by the Risk Committee).
Director on board	Our Risk Committee Chair was appointed the Chair of the Expert Panel on Sustainable Finance by the Government of Canada. In this crucial role, he has gathered insights from Canadian businesses within the financial sector on the constraints and opportunities that sustainable finance can provide. Given this dual role, and the role the Risk Committee plays in addressing climate change risk, he has brought forward insights from the recommendations of the Expert Panel and has encouraged the Bank to consider the opportunities climate change brings to our business.
Chief Risk Officer (CRO)	At the management level, the management of climate change risk is ultimately overseen by the Chief Risk Officer, who reports directly to the CEO and also has a functional reporting line directly to the Risk Committee of the Board, which is composed entirely of independent directors. This is aided through a cross-departmental senior management committee on Reputational Risk which meets quarterly and is chaired by the Executive Vice President and General Counsel.
Other C-Suite Officer	Our Group Head & Chief Human Resources Officer oversees the Sustainable Business strategy (of which climate change is one of the Bank's four key priorities) and the annual Sustainable Business report. The Chief reports directly to our CEO and regularly reports to the Corporate Governance Committee of the Board on sustainability.
Other, please specify (Climate Change Strategy Project Steering Committee)	The Climate Change Strategy Steering Committee is comprised of a group of cross departmental senior leaders with the goal of furthering the development of a comprehensive climate change strategy which will be reviewed and approved by the Board.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	Climate change is addressed by several committees of the Board. Climate issues are integrated into the review and guidance of the Sustainable Business strategy. For example, the Risk Committee of the Board reviews, guides and retains primary oversight of climate change risks and opportunities for the Bank. As climate change is identified as an emerging risk, updates are provided to the Risk Committee on a quarterly basis. A presentation on climate risk was presented at the Risk Committee meeting in April 2019. The Corporate Governance Committee of the Board reviews the Sustainable Business strategy of which climate change is one of our four key priorities. This past year, it was reviewed by the Board and its committees at meetings in February 2018 and October 2018. The agenda item was brought forward by the Group Head and Chief Human Resources Officer, as this person retains management oversight of the Sustainable Business strategy. The Audit and Conduct Review Committee of the Board oversees our climate change-related disclosures; for example, TCFD disclosures were included in our 2018 Annual Report, which is ultimately reviewed and approved by the Board. Looking forward, it is planned that the Climate Change Strategy Steering Committee led by Senior Management will bring the climate change strategy to the Board within FY2019.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Risks Officer (CRO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify (Group Head & Chief Human Resources Officer)	Both assessing and managing climate-related risks and opportunities	Half-yearly
Other committee, please specify (Climate Change Strategy Project Steering Committee)	Both assessing and managing climate-related risks and opportunities	As important matters arise
Environment/ Sustainability manager	Both assessing and managing climate-related risks and opportunities	Half-yearly
Business unit manager	Both assessing and managing climate-related risks and opportunities	Not reported to the board
Energy manager	Both assessing and managing climate-related risks and opportunities	Not reported to the board
Risk manager	Both assessing and managing climate-related risks and opportunities	Not reported to the board
Facility manager	Both assessing and managing climate-related risks and opportunities	Not reported to the board

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated

responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Chief Risk Officer (CRO):

The CRO sits on the Operating Committee of the Bank (all members of this committee report to the CEO) and chairs various risk committees, and also has a functional reporting line directly to the Risk Committee of the Board which is composed entirely of independent directors. The CRO is responsible for global management of risk, including several climate-related issues, including from hurricane damage to our branches (operational risk), to implementation of the TCFD recommendations (reputational risk), and reviewing our loan portfolio for credit risk from both physical and transitional risks (e.g., changing weather patterns or how changes in carbon pricing policy could impact our clients). Climate risk assessment at the Bank forms part of the credit risk process. The CRO is a decision-making figure in regard to the Bank’s position on climate change and actions to mitigate the risks. The CRO monitors climate related issues through regular risk committee meetings and from briefings from the Environmental and Social Risk team. Information is shared with the Board as and when needed.

Group Head & Chief Human Resources Officer:

Our Group Head & Chief Human Resources Officer oversees the Sustainable Business strategy (of which climate change is one of the Bank's four key priorities) and the annual Sustainable Business report. The Chief reports directly to our CEO and regularly reports to the Corporate Governance Committee of the Board on sustainability matters.

Climate Change Strategy Project Steering Committee:

The Climate Change Strategy Project Steering Committee is comprised of a group of cross departmental senior leaders with the goal of furthering the development of a comprehensive climate change strategy. This Committee will report to the Board.

Environment/ Sustainability Manager- Chief Sustainability Officer:

The Sustainable Business team is responsible for producing the Bank's Sustainable Business strategy and the annual Sustainable Business report, including reporting on GHG emissions, renewable energy financing, Equator Principles transactions, and other climate change related targets.

The Sustainable Business report is a key way Scotiabank reports on the management of its environmental footprint.

Energy Manager:

Our Energy and Sustainability Manager sits within the Real Estate team and supports the management of our data pertaining to GHG emissions, water, waste and energy. This role works with various teams including local international staff to support tracking and monitoring of data for reporting purposes and to help implement opportunities for efficiency savings.

Business Unit Manager – Senior Vice President (SVP), Real Estate:

The Real Estate team is responsible for assessing and managing climate related issues as they link to efficiency savings and opportunities in our operational footprint. The team sets targets and monitors GHG emissions, as reported annually in the Sustainable Business report. Amongst other things in a broad portfolio, the SVP of Real Estate is tasked with lowering the Bank's environmental footprint to ensure efficiency savings across the organization. This includes setting GHG reduction targets and implementing plans to support this. In 2018, we implemented an internal carbon price, and established an internal tax of CAD$15 per tonne of CO2 for our global Scope 1 and 2 emissions.

Risk Manager (Environmental and Social Risk):

Within Global Risk Management, this team works with non-retail banking and credit colleagues on reviewing loan deals to ensure E&S issues are considered (for example, applying the Equator Principles to Project Finance transactions or identifying climate related risks and opportunities), and is responsible for loan portfolio reporting in alignment with the TCFD recommendations.

Environmental and social risk management is led by the Vice President Enterprise Risk who reports to the Chief Enterprise Risk Officer.

Facility Manager:

The Senior Manager in Real Estate's Occupancy Costs and Energy Control team works toward reducing energy in all new buildings and retrofits and implementing energy reduction initiatives, which have resulted in significant cost savings. This position sits within

Real Estate as it works with property managers, property owners and developers to achieve climate-related targets and improved efficiency. Climate- related issues are managed through capital expenditure planning as well as working towards GHG emissions reduction targets.

C1.3

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

Yes

C1.3a

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

Who is entitled to benefit from these incentives?
Business unit manager

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction project

Comment
Our Senior Vice President of Real Estate has senior-level responsibility for our energy efficiency initiatives and greenhouse gas emission reduction target. As this is part of a job description, fulfilling this task would thus be linked to annual compensation.

Who is entitled to benefit from these incentives?
Environment/Sustainability manager

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction target

Comment
The Energy & Sustainability Manager is responsible for management of the Bank's 10% absolute global GHG reduction target as well as the ongoing search and implementation of initiatives to support this GHG reduction. As this is part of a job description, fulfilling this task would thus be linked to annual compensation. The Energy and Sustainability Manager is responsible for reviewing the utility data for Canadian and International branches/offices and calculating the EUI (Energy Use Intensity) and other metrics to complete benchmarking (comparing energy efficiency status of locations with ENERGYSTAR or other median EUI numbers). This will provide the Real Estate team with a better understanding of the locations with poor energy efficiency, allowing them to focus on these locations and implement energy projects to reduce energy consumption that will lead to reduced GHG emissions.

Who is entitled to benefit from these incentives?
Facilities manager

Types of incentives
Monetary reward

Activity incentivized
Efficiency project

Comment
The Real Estate Facility Manager is responsible for the selection and analysis of facilities initiatives and vendors which uses energy savings as a criterion.

Who is entitled to benefit from these incentives?
Environment/Sustainability manager

Types of incentives
Monetary reward

Activity incentivized
Other, please specify (ESG Reporting)

Comment
Our Chief Sustainability Officer oversees the Bank’s Sustainable Business strategy, including ESG reporting, and works with Procurement to influence vendor selection criteria based on ESG, and also the Real Estate team on managing our Internal Carbon Price. As this is part of a job description, fulfilling this task would thus be linked to annual compensation.

C2. Risks and opportunities

C2.1

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

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	5	
Long-term	5	100	Anything above 5 years is considered long-term

C2.2

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

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

C2.2a

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

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	1 to 3 years	To safeguard the Bank and its stakeholders against climate-related risks, Scotiabank has a number of policies approved by the Board and integrated into a multi-disciplinary company-wide risk identification, assessment, and management process. The Environmental Policy guides day-to-day operations, lending practices, supplier agreements, management of real estate holdings and external reporting. Climate change risks associated with the Bank's non-retail clients are governed by the Credit Risk Policy and are identified, assessed and managed through the Bank's credit risk and environmental risk due diligence and adjudication processes. Climate change risks associated with the Bank's operational footprint are governed by the Operational Risk Policy and are identified, assessed and managed through the Bank's Global Operational Risk team. Material issues are raised to related risk committees and reported quarterly in the Enterprise Risk Report to the Risk Committee of the Board.

C2.2b

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

Process for identifying operational risks:

Climate change risks associated with the Bank's operational footprint are governed by the Operational Risk Policy. These risks are identified, assessed and managed through the Bank's Global Operational Risk team. Material issues are raised to related risk committees and reported monthly in the Enterprise Risk Report to the Risk Committee of the Board.

For the Bank's own operations, the main climate related risks are from severe weather events such as hurricanes. These severe weather event risks (Physical Risks) are highest in the Caribbean region of the Bank's operational footprint due to the increasing number, frequency and severity of hurricanes in this region. These Physical Risks to the Bank's operations have been identified as a short, medium and long-term climate related risk with risk probability and severity increasing over time. Severe weather events have had a damaging impact on the Bank's physical assets in the Caribbean region impacted by hurricanes. Specifically, in 2017 hurricanes that significantly affected our operations in the Caribbean generated approximately $15 million in damages and $1 million in preventative measures. This is less than 0.06% of total revenue in FY2017, hence not a material loss to the Bank. The Bank was not materially impacted by any severe weather events such as hurricanes in FY2018.

Process for identifying client-related risks:

We need to be aware of and understand the climate change risks posed to our clients' businesses, which may affect their ability to repay their financing. For the Bank's non-retail clients, a climate change risk assessment is part of the normal due diligence process. These reviews outline the climate change risks (Transition and Physical) associated with the specific industry. An internal guidance document is to be used by Bankers and Credit managers to assess a Company's management of its environmental and climate change risks. The risks raised by this due diligence document, and their mitigants, are to be summarized under the heading Environmental Risks in the Risks and Mitigants section of the Credit Presentation. Climate change risks are assessed as to whether they could pose a material risk to the client's business and their ability to pay back their commitments to the Bank. The Bank also takes a portfolio approach by performing Industry Reviews that cover the 26 main industry sectors to which the Bank lends. Included in these Industry Reviews is an assessment of the climate-related risks and opportunities for that industry.

How we define a "substantive financial impact":

For CDP reporting, Scotiabank considers a substantive financial impact as one that has a material impact on any business line over a defined time period.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current climate-related regulation is relevant and included in the risk assessment because the Bank is exposed to credit and reputational risk from regulatory pressures on suppliers and clients. For example, in Canada, the Greenhouse Gas Pollution Pricing Act (GGPPA) may affect the Bank's value chain. This piece of legislation imposes an increasing carbon price over the next 5 years, which may present additional implications for the Bank's suppliers and/or clients. Corporate and Commercial Banking clients are subject to an assessment of climate change risks and opportunities as part of the overall due diligence process. An internal guidance document is also to be used by Bankers and Credit managers to assess a Company's management of its environmental and climate change risks. The risks raised by this due diligence document, and their mitigants, are to be summarized under the heading Environmental Risks in the Risks and Mitigants section of the Credit Presentation. Scotiabank is also implementing climate change credit risk ratings, which will be incorporated into the due diligence process. As part of the implementation, bankers and credit managers are receiving enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	The Bank's clients could be impacted by changes in government policies around extracting, transporting, refining and distributing of fossil fuels. The Bank's Government Affairs group maintains contact with several levels of government in Canada and across our operational footprint. They monitor any proposed changes to government policies, guidelines or regulations. Scotiabank's international offices maintain contact with several levels of government in their respective country and monitor for proposed changes to government policies that may have an impact on local operations and business. The Bank's Global Banking and Markets group maintains regular contact with existing and potential clients which may have information about proposed changes that could impact the client's business or operations. An example of emerging regulation that may affect the Bank includes Peru's upcoming Climate Change Framework Law "Ley Marco sobre Cambio Climático", intended to combat climate change in the country. The Framework has the potential to affect the expansion of branches or offices in Peru (for instance sustainable building development may result in higher costs to expand operations). Additionally this emerging regulation could impact our customers. The Bank's Environmental and Social Risk team and Sustainable Business team utilize their network of contacts with governments and NGOs for information about proposed changes to government policies, guidelines or regulations that could impact the Bank's clients' business or the Bank's own operations. Corporate and Commercial Banking clients are subject to an assessment of climate change risks and opportunities as part of the due diligence process. An internal guidance document is also to be used by Bankers and Credit managers to assess a company's management of its environmental and climate change risks. Risks raised by this due diligence document, and their mitigants, are to be summarized under Environmental Risks in the Risks and Mitigants section of the Credit Presentation. Scotiabank is also implementing climate change credit risk ratings, which will be incorporated into the due diligence process. As part of the implementation, bankers and credit managers are receiving enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments.
Technology	Relevant, always included	Technology risks are relevant in the context of climate change to the extent that the transition towards the low-carbon economy could represent different types of client risks. Emerging innovations and low-carbon technologies (for example: renewable energy) may challenge clients for marketshare, potentially leading to increased credit or investment risk. At the same time, emerging technologies may also present new financing opportunities. Non-retail clients are subject to an assessment of climate change risks and opportunities as part of the overall due diligence process. An internal guidance document is to be used by Bankers and Credit Managers to assess a Company's management of its environmental and climate change risks. The risks raised by this due diligence document, and their mitigants, are to be summarized under the heading Environmental Risks in the Risks and Mitigants section of the Credit Presentation. Scotiabank is also implementing climate change credit risk ratings, which will be incorporated into the due diligence process. As part of the implementation, bankers and credit managers are receiving enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments.
Legal	Relevant, always included	From the client perspective, climate-related litigations may present credit risk. Large emitting companies in Canada are subject to the Greenhouse Gas Pollution Pricing Act (GGPPA). If companies decide not to comply with this carbon pricing legislation or do not properly report on their emissions, this could result in litigation or financial penalty, which places increasing limitations on their financial condition. Corporate and Commercial Banking clients are subject to an assessment of climate change risks and opportunities as part of the overall due diligence process. An internal guidance document is also to be used by Bankers and Credit managers to assess a Company's management of its environmental and climate change risks. The risks raised by this due diligence document, and their mitigants, are to be summarized under the heading Environmental Risks in the Risks and Mitigants section of the Credit Presentation. Scotiabank is also implementing climate change credit risk ratings, which will be incorporated into the due diligence process. As part of the implementation, bankers and credit managers are receiving enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments.
Market	Relevant, always included	Shifts in the supply and demand for green products is one example that represents both risk and opportunity. These are considered throughout the climate change risk assessment and due diligence processes for Corporate and Commercial banking clients. In terms of opportunities, the Global Banking and Markets division was involved in multiple renewable energy transactions in 2018. For example, in January 2018, Scotiabank acted as Joint Bookrunner on a USD$700 million 30-year bond offering for MidAmerican Energy Company to finance eligible green projects. Non-retail clients are subject to an assessment of climate change risks and opportunities as part of the overall due diligence process. An internal guidance document is also to be used by Bankers and Credit managers to assess a Company's management of its environmental and climate change risks. The risks raised by this due diligence document, and their mitigants, are to be summarized under the heading Environmental Risks in the Risks and Mitigants section of the Credit Presentation. Scotiabank is also implementing climate change credit risk ratings, which will be incorporated into the due diligence process. As part of the implementation, bankers and credit managers are receiving enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments.
Reputation	Relevant, always included	Reputational Risk is assessed by a number of players across the Bank including Sustainable Business, Social and Environmental Risk, Legal and Communications. Reputational risks could arise if the Bank does not make meaningful and transparent commitments to address climate change, or if the Bank does not succeed in meeting its own internal commitments. This could prompt external shareholders such as ENGOs to speak out against the Bank for not being accountable or committed, which could damage the Bank's brand value and stakeholder relationships. In 2016, Scotiabank joined the Carbon Pricing Leadership Coalition (CPLC). As part of the Bank's membership commitment, the Bank set an internal price on carbon of $15 CDN / tonne of CO2 this year. In February 2018, Scotiabank announced its support of the TCFD Recommendations. Both initiatives are examples that have also been raised by investors. The Bank met these two obligations in an effort to minimize reputational risk.

	Relevance & inclusion	Please explain
Acute physical	Relevant, always included	The Bank's Real Estate and Operational Risk teams have detailed and comprehensive protocols for being prepared and learning how to do things better in the future. In certain regions, extreme weather events such as hurricanes can represent acute physical risks to the infrastructure of bank branches, the safety of employees and clients, and the accessibility of suppliers. For example, during the 2017 hurricane season in the Caribbean, the following items were identified as part of a long list of activities to assure preparedness: - Inventory, maintain and test generators, fuel topped up, update/validate spare parts on hand, ensure preferred supplier contracts for fuel. - All countries were asked to test their satellite phones and order additional or replacement phones and batteries as required to ensure up to date technology. Orders were received in May and equipment has been deployed to all countries. Testing of new phones and adding of phone owners/backup names were completed in 2018. - Conducted pre-hurricane season maintenance to protect our buildings. - Developed a playbook/protocol for local execution for pre-storm preparedness, closing shutters, sand bags, generators shut down, etc. - External communication protocol to keep in touch with external providers and landlords before, during and after the emergency. - Ensure Container Branches are distributed throughout the Caribbean for quick deployment. - Updated C&CA lease abstracts in RED database for landlord vs tenant responsibilities in a disaster. Corporate and Commercial Banking clients are subject to an assessment of climate change risks and opportunities as part of the overall due diligence process. An internal guidance document is to be used by Bankers and Credit Managers to assess a Company's management of its environmental and climate change risks. The risks raised by this due diligence document, and their mitigants, are to be summarized under the heading of Environmental Risks in the Risks and Mitigants section of the Credit Presentation. Scotiabank is also implementing climate change credit risk ratings, which will be incorporated into the due diligence process. As part of the implementation, bankers and credit managers are receiving enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments.
Chronic physical	Relevant, always included	With its global footprint, Scotiabank is exposed to the chronic physical risks of climate change both directly and through our clients. For example, sea-level rise, the increase in frequency and duration of heat waves, and impacts on water all could impact our employees and customers. Chronic impacts related to water availability and biodiversity loss may impact our non-retail clients. For example, in Peru, El Nino-related seasonal weather patterns have impacted our clients within the fisheries (due to change in water temperature) and agricultural industries in this region. As El Nino becomes more frequent, this is increasingly impacting our business. Corporate and Commercial Banking clients are subject to an assessment of climate change risks and opportunities as part of the overall due diligence process. An internal guidance document is also to be used by Bankers and Credit managers to assess a Company's management of its environmental and climate change risks. The risks raised by this due diligence document, and their mitigants, are to be summarized under the heading Environmental Risks in the Risks and Mitigants section of the Credit Presentation. Scotiabank is also implementing climate change credit risk ratings, which will be incorporated into the due diligence process. As part of the implementation, bankers and credit managers are receiving enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments.
Upstream	Relevant, sometimes included	It is important that Scotiabank suppliers reflect our own core values of respect, integrity, passion, and accountability, and that our Suppliers comply with applicable laws. This is important to ensure Scotiabank's reputation is not compromised or put at-risk by the suppliers we work with. Scotiabank's Supplier Code of Conduct outlines an obligation for suppliers to conduct their business and operation in an environmentally responsible way. Suppliers are encouraged to track and mitigate their greenhouse gas (GHG) emissions and to incorporate climate change risk assessments into their risk management procedures.
Downstream	Relevant, always included	Scotiabank's clients may also be exposed to climate change risks including regulatory, technological, legal, market, reputational, physical, and supply chain risks. These are likely to vary depending on specific sector, region of operations, business size, and type of products and services. For example, a client's financial condition may be impacted by losses from extreme weather events or increasing costs from new regulations related to climate change, thus potentially making it difficult to pay back their loans. Corporate and Commercial Banking clients are subject to an assessment of climate change risks and opportunities as part of the overall due diligence process. An internal guidance document is to be used by Bankers and Credit Managers to assess a Company's management of its environmental and climate change risks. The risks raised by this due diligence document, and their mitigants, are to be summarized under the heading of Environmental Risks in the Risks and Mitigants section of the Credit Presentation. Scotiabank is also implementing climate change credit risk ratings, which will be incorporated into the due diligence process. As part of the implementation, bankers and credit managers are receiving enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments. Further, as a signatory to the Equator Principles (EP) since 2006, Scotiabank's banking and credit teams are required to assess transactions while considering the potential impacts of major projects on people, communities, and the environment (which includes potential climate change impacts). In 2018, Scotiabank screened 13 transactions for EP eligibility.

C2.2d

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

At Scotiabank, physical and transitional risks and opportunities are managed through defined policies and processes. The Bank's Operational Risk Policy, Credit Risk Policy, and Environmental Risk Policy all contribute to managing both physical and transition risks related to climate change. The Global Operational Risk team is mainly responsible for identifying, assessing, and managing the climate change risks associated with the Bank's operational footprint. From the client perspective, environmental risks associated with the business operations of each borrower and any real property offered as security are considered in the Bank's credit evaluation procedures. This includes an environmental assessment where applicable, and commentary on the impact of climate change (including regulatory, physical or reputational impacts) on the borrower. Global Risk Management has primary responsibility for establishing the related policies, processes and standards associated with mitigating environmental risk in the Bank's lending activities. Decisions are taken in the context of the overall credit risk management framework.

In addition to the above policies, the Bank also manages physical and transition risks and opportunities through environmental training initiatives for credit and banking officers. In 2016, the Bank launched enhanced mandatory Environmental Risk e-learning courses, and to date more than 4,700 non-retail banking and credit officers across the Bank's global footprint have completed the training. The course focuses on the identification and assessment of environmental and climate change risks and enhancing the understanding of climate change issues inherent in the borrower's operations. This training is mandatory, automatic and on-going for existing non-retail credit and banking officers as well as for new hires. Scotiabank is implementing climate change credit risk ratings, which will be incorporated into the due diligence process. As part of this implementation, bankers and credit managers are receiving enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments, and the mandatory courses will be updated in 2019 with a series of new training to help assess the climate change impacts of the Bank's non-retail portfolio.

Physical risks and opportunities:

Scotiabank manages physical risks and opportunities both from the perspective of our own operations and those of our clients. One example of the Bank's approach to managing physical opportunities related to our operations includes the establishment of an internal carbon price in order to fund energy efficiency initiatives. In July 2016, Scotiabank joined the Carbon Pricing Leadership Coalition (CPLC). In 2017, we established a cross-functional team to develop an internal carbon price and strategy. We reviewed best practice examples and spoke to experts in the field to help determine the best route for our business. We introduced a price of $15/tonne of carbon in FY2018 from our capital expenditure budget. In Year One, the funds supported HVAC replacements and a solar panel pilot in our Caribbean branches. The internal carbon price allows us to invest in initiatives that may have a higher short-term cost but will generate longer-term financial and energy efficiency benefits.

Transition risks and opportunities:

Scotiabank manages transition risks and opportunities both from the perspective of our own operations and those of our clients. In addition to the description of the policies and procedures above, Scotiabank also manages transition risk and opportunities through the activities of certain cross-functional groups. One example of the Bank's approach includes the lending activities associated with the low-carbon economy. The Environmental and Social Risk teams and Sustainable Business teams support the lines of business and functions to develop climate-related business opportunities. For example, the Bank's Global Banking and Markets division has a team dedicated to building and growing the Bank's financing of the renewable energy sector. In 2018, Scotiabank financed CAD$8.5 billion in renewable energy projects globally, up from CAD$4.7 billion in 2017.

In addition, in July of 2019, the Bank announced the closing of our inaugural USD$500 million 3.5 year Green Bond offering. The net proceeds will be used to fund the financing or refinancing, in whole or in part, of eligible green assets, which refer to new or existing assets, businesses or projects that meet the Scotiabank Green Bond Framework Eligibility Criteria, including renewable energy, clean transportation and green buildings. Other areas of investment may include sustainable water and wastewater management, environmentally sustainable management of living natural resources and land use, energy efficiency, terrestrial and aquatic biodiversity conservation, and pollution prevention and control.

C2.3

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

Yes

C2.3a

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

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type
Transition risk

Primary climate-related risk driver
Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact
Reduction in capital availability

Company- specific description
How the Bank is perceived to be managing its environmental risks (and, more specifically, its climate change-related risks) can have a direct impact on its stock price. For example, institutional investors and asset managers may choose to increase or decrease their allocation to Scotiabank based upon its perceived ranking (such as CDP) against peers in terms of managing climate change-related risks and supporting the transition to a low carbon economy. In 2018, Scotiabank received shareholder proposals related to how the Bank was addressing climate change risks, indicating shareholder interest for robust climate-related risk management.

Time horizon
Current

Likelihood
Very likely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
0

Potential financial impact figure – maximum (currency)
10000000

Explanation of financial impact figure
This is an estimate based on the volumes of shares institutional investors invest in banking sector stocks.

Management method
Reputational Risk is managed mainly through continuous disclosure of ESG information. This is done through our annual Sustainable Business Report, our website https://www.scotiabank.com/corporate/en/home/corporate-responsibility.html and through surveys such as CDP. The Bank has developed and implemented an assessment of climate change risks into the due diligence processes for Commercial and Corporate clients across the Bank. Over 4,700 Banking and Credit Officers across the Bank have received climate change due diligence training. Climate change risks and opportunities are reviewed at the Senior and Executive Management levels of the Bank. The Bank maintains frequent dialogue with current and potential institutional investors to better understand their management expectations. The cost of management is based on the cost of internal resources and the use of external subject matter experts and consultants.

Cost of management
500000

Comment

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
Please select

Company- specific description
Scotiabank has branches and office locations in Central America and the Caribbean. These regions are geographically exposed to tropical storms, severe weather and hurricanes. Experts are predicting that the number, frequency and intensity of severe weather of events in Central America and the Caribbean is increasing. Extreme weather events could create an increase in the operational risks associated with these areas. The severe weather events could affect Scotiabank's ability to conduct business in these areas and could result in additional capital costs due to damage to physical assets. Examples could include broken windows, wall and roof damage, flooding, power and infrastructure damage. These costs would be highest for the impacted properties the Bank owns but could also be associated with properties the Bank leases in affected areas.

Time horizon
Long-term

Likelihood
Virtually certain

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
500000

Potential financial impact figure – maximum (currency)
15000000

Explanation of financial impact figure
The potential financial impact of a severe weather event in the Central American and Caribbean regions could range depending on the severity of the event. We understand that extreme weather events are expected to increase in frequency and severity, and could occur now and into the future.

Management method
The key pieces to management are preparedness and response. The Bank's Real Estate and Operational Risk teams have detailed and comprehensive protocols for being best prepared and for learning how to do things better in the future. For example, from the 2017 hurricane season in the Caribbean, the following 2 items were identified as part of a long list of activities to assure preparedness: - Catalog, maintain and test generators; top-up fuel, update and validate available spare parts, ensure preferred supplier contracts for fuel. - All countries were asked to test their satellite phones and order additional or replacement phones and batteries as required to ensure updated technology. Orders were received in May and equipment has been deployed to all countries. The Bank was not materially impacted by any severe weather events such as hurricanes in FY2018. In addition, for all new construction, we are updating our specifications to ensure further storm resiliency.

Cost of management
1000000

Comment
Cost of management: The costs of installing new preventative measures for future severe weather events.

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Customer

Risk type
Transition risk

Primary climate-related risk driver
Policy and legal: Other

Type of financial impact
Other, please specify (Market: Changes in revenue mix and sources resulting in decreased revenues)

Company- specific description
Scotiabank faces indirect risk associated with government policies, guidelines or regulations relating to climate change through its clients. Our clients could be significantly impacted by changes in related government policies, guidelines or regulations. For example, clients operating in the renewable energy sector may become dependent upon government programs and subsidies, and face liquidation if those programs and subsidies are suddenly withdrawn. Similarly, clients in the fossil fuel sector can be negatively impacted by the imposition of carbon taxes, such as the current Greenhouse Gas Pollution Pricing Act (GGPPA) in Canada or government refusals to grant construction permits. Emerging regulations, such as Peru's upcoming Climate Change Framework Law “Ley Marco sobre Cambio Climático” may impact our client portfolio by placing increasing pressures on clients with more carbon-intensive business and/or supply chains.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
0

Potential financial impact figure – maximum (currency)
10000000

Explanation of financial impact figure
The estimated financial impact is project-dependent i.e. on the size and geographic location of the company, nature of product, and project duration.

Management method
The Bank utilizes several methods to manage this risk. The Bank's Government Affairs group maintains contact with several levels of government in Canada and with governments in our operational footprint. The Government Affairs group monitors for any proposed changes to government policies, guidelines or regulations around the extraction, transporting, refining and distributing of fossil fuels. Outside of Canada, in countries where the Bank operates, Scotiabank offices maintain contact with several levels of government in their respective country and monitor for any proposed changes to government policies that may have an impact on Scotiabank's operations and business. The Bank's Global Banking and Markets group maintains contact with existing and potential clients which may have information about proposed changes to government policies, guidelines or regulations that impact the clients' business or operations. The Bank's Environmental and Social Risk team and the Sustainable Business team utilize their network of contacts with government, NGO and ENGO organizations for information about proposed changes to government policies, guidelines or regulations that impact the Bank's clients' business or the Bank's operations. There is no additional cost to manage these risk beyond the internal expertise provided by the Government Affairs group i.e. the cost of management is estimated based on salaries and other internal costs.

Cost of management
500000

Comment

C2.4

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

Yes

C2.4a

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

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Move to more efficient buildings

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

Company-specific description
The Bank owns or leases a large number of office properties internationally. There is a clear opportunity to reduce operating costs to the Bank by implementing energy reduction initiatives.

Time horizon
Current

Likelihood
Virtually certain

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
550000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The financial impact of this opportunity for FY2018 was a savings of approximately CAD$550,000. These saving were calculated based on the installation and implementation of energy reduction initiatives.

Strategy to realize opportunity
The Bank's Real Estate group has dedicated resources for identifying and implementing energy reduction initiatives. For example, site-by-site comparisons and monthly consumption audits are conducted to identify consumption anomalies and high-use locations. This information is used to investigate potential payback of retrofits or new projects that would reduce consumption. FY2017 also saw repairs and improvements (e.g. caulking, weather stripping doors and windows, installation of HVAC thermostats and astronomical clocks) as well as lighting and ballast retrofits on a large portion of the Canadian branch portfolio and the Peruvian office portfolio. Retrofits will see optimal installation of LED and fluorescent lighting in each branch across the respective portfolios. Lastly, in FY2017, the Bank began the proactive replacement of HVAC units for more efficient units across the Canadian branch portfolio. These initiatives will result in emissions reductions.

Cost to realize opportunity

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resilience

Primary climate-related opportunity driver
Participation in renewable energy programs and adoption of energy-efficiency measures

Type of financial impact
Other, please specify (Long-term investment)

Company-specific description
Scotiabank occupies real estate globally and invests in energy efficiency measures in order to help reduce operational costs. In July 2016 Scotiabank joined the Carbon Pricing Leadership Coalition (CPLC). In 2017, we established a cross-functional team to develop an internal carbon price and strategy. We reviewed best practice examples and spoke to experts in the field to help determine the best route for our business. We introduced a price of $15/tonne of carbon in FY2018 from our capital expenditure budget. In Year One, the funds supported HVAC replacements and a solar panel pilot in our Caribbean branches. The internal carbon price allows us to invest in initiatives that may have a higher short-term cost but will generate longer-term financial and energy efficiency benefits.

Time horizon
Current

Likelihood
Virtually certain

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
2000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
This $2,000,000 comes from taxing our Scope 1 and 2 emissions at $15/tonne of CO2.

Strategy to realize opportunity
To demonstrate our commitment to the Carbon Pricing Leadership Coalition (CPLC), in 2017 the Bank established a cross-functional team to develop an internal carbon price and strategy. The Bank implemented this internal carbon price of CAD$15/tonne in 2018. Through the funds generated via our commitment to the CPLC and the internal carbon price, we have invested in HVAC replacement as well as solar panels in our branches in the Caribbean. Our internal price on Scope 1 and 2 emissions amounted to just under CAD$2,000,000 of our capital expenditure to invest in energy efficiency initiatives which may have a higher up front cost. We set a new, global GHG emissions reduction target in 2017, taking our global operations into account. Our new target is 10% absolute reduction of global Scope 1 and 2 emissions by 2021, compared to 2016. These initiatives will help us to continue to reduce our GHG emissions.

Cost to realize opportunity
2000000

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Customer

Opportunity type
Products and services

Primary climate-related opportunity driver
Ability to diversify business activities

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

Company-specific description
In 2018, we continued to focus on financing the renewable energy sector. Scotiabank's Global Banking and Markets division provided bank financing, totaling CAD$8.5 billion to the renewable energy sector, as follows: • CAD$3.0 billion in Canada • CAD$1.9 billion in the United States • CAD$4.7 billion in authorized credits in Latin America These figures are based on each client's credit exposure, multiplied by the client's renewable energy generation capacity as a percentage of its total power generation mix. The proportion of each client's renewable energy generation was obtained from client-produced publicly available sources and reporting documents. In addition, in July of 2019, the Bank announced the closing of our inaugural USD$500 million 3.5 year Green Bond offering. The net proceeds will be used to fund the financing or refinancing, in whole or in part, of eligible green assets, which refer to new or existing assets, businesses or projects that meet the Scotiabank Green Bond Framework Eligibility Criteria, including renewable energy, clean transportation and green buildings. Other areas of investment may include sustainable water and wastewater management, environmentally sustainable management of living natural resources and land use, energy efficiency, terrestrial and aquatic biodiversity conservation, and pollution prevention and control.

Time horizon
Current

Likelihood
Virtually certain

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
8500000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Scotiabank's Global Banking and Markets division provided bank financing, totaling CAD$8.5 billion to the renewable energy sector in 2018.

Strategy to realize opportunity
Scotiabank's Global Banking and Markets division has a team of financial professionals and sector experts dedicated to supporting the renewable energy sector around the world, which represents a high-level estimate of the cost of human resources needed to realize the opportunity. Examples of renewable energy projects we have supported can be found on page 42 of our 2018 Sustainable Business report, for example a number of different wind and solar projects in both the Americas and Europe.

Cost to realize opportunity
500000

Comment

C2.5

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

	Impact	Description
Products and services	Impacted for some suppliers, facilities, or product lines	The potential opportunity to support the transition to a low-carbon economy is considered significant in the medium to long-term. The total amount of financing to the renewable energy sector was $8.5 billion in 2018, up from $4.7 billion in 2017.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	It is important that Scotiabank's Suppliers reflect our own core values of respect, integrity, passion, and accountability and that our Suppliers comply with applicable laws. This is important to ensure Scotiabank's reputation is not compromised or put at-risk by the suppliers we work with. Scotiabank's Supplier Code of Conduct outlines an obligation for suppliers to conduct their business and operation in an environmentally responsible way. Suppliers are encouraged to track and mitigate their greenhouse gas (GHG) emissions and to incorporate climate change risk assessments into their risk management procedures.
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	The risk as a result of adaptation and mitigation activities has been moderate. Scotiabank has branches and office locations in Central America and the Caribbean. These regions are geographically exposed to tropical storms, sever weather and hurricanes. Experts are predicting that the number, frequency and intensity of severe weather of events in Central America and the Caribbean is increasing. Extreme weather events could create an increase in the operational risks associated with these areas over the long-term.
Investment in R&D	Impacted	The opportunity of investment in R&D has been moderate. The Bank is using geo-spatial analysis and various climate change scenarios for assessing the potential climate related physical risks to the Bank's operations and loan book. A small investment is needed to acquire data sets.
Operations	Impacted for some suppliers, facilities, or product lines	The impact on the Bank's operations has been moderate. Scotiabank has branches and office locations in Central America and the Caribbean. These regions are geographically exposed to tropical storms, severe weather and hurricanes. Experts are predicting that the number, frequency and intensity of severe weather of events in Central America and the Caribbean is increasing. Extreme weather events could create an increase in the operational risks associated with these areas.
Other, please specify	Please select	

C2.6

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

	Relevance	Description
Revenues	Impacted for some suppliers, facilities, or product lines	The Bank is not currently experiencing a material impact on revenue due to climate change risks or opportunities. The Environmental Policy, which guides day-to-day operations, lending practices, supplier agreements, management of real estate holdings and external reporting, as well as the Credit Risk Policy have managed to help identify material climate change risks and safeguard the Bank from any significant revenue impacts.
Operating costs	Impacted for some suppliers, facilities, or product lines	As extreme weather events continue to increase in frequency and intensity, operating costs have the potential to be impacted over the medium to long-term.
Capital expenditures / capital allocation	Impacted for some suppliers, facilities, or product lines	As part of our commitment to the Carbon Pricing Leadership Coalition, we implemented an internal carbon price in 2018. We established an internal tax of CAD $15 per tonne of CO2 for our global Scope 1 and 2 emissions. By taxing our emissions, we were able to allocate $2,000,000 in our Capex budget which can be reinvested back into energy efficiency initiatives for the business. In year one of implementation, these funds supported the HVAC upgrades and a solar panel initiative.
Acquisitions and divestments	Impacted for some suppliers, facilities, or product lines	Two of Scotiabank's acquisitions in 2018 were financial institutions, both of which are signatories to the Principles of Responsible Investment (PRI). In addition, the recent purchase of BBVA Chile (a subsidiary of BBVA, a Spanish bank) has increased the amount of renewable energy financing.
Access to capital	Impacted for some suppliers, facilities, or product lines	The Bank has not experienced a material impact on access to capital due to climate change risks or opportunities.
Assets	Impacted for some suppliers, facilities, or product lines	The Bank's physical assets in the Caribbean have been impacted by severe weather events but the impact has not been material to the Bank in relation to overall revenue. For this reason, the magnitude of the impact on assets has been low to moderate.
Liabilities	Not impacted	The Bank has not experienced a material impact on liabilities due to climate change risks or opportunities.
Other	Impacted for some suppliers, facilities, or product lines	The Bank has not experienced impact on any Other areas due to climate change risks or opportunities.

C3. Business Strategy

C3.1

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

Yes

C3.1a

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

Yes, qualitative and quantitative

C3.1c

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

i. Scotiabank is Canada's most international bank and a leading financial services provider in the Americas. Our business strategy is focused on helping our more than 25 million customers become better off through a broad range of financial products and services and advice. Climate change influences our business and has been identified as one of four priorities in our Sustainable Business strategy. Climate change can influence our business through several risk and opportunity factors related to costs, the regulatory environment, and reputation. These factors can impact both Scotiabank directly, as well as indirectly through our clients' exposure to climate risks and opportunities.

ii. As part of our strategy, Scotiabank has established an absolute GHG emissions reduction target and has implemented an internal price on carbon in order to support energy efficiency initiatives. We also provided $8.5 billion in financing to the renewable energy sector globally in FY2018.

iii. In FY2018, we made the decision to identify climate change as one of four key priorities of our Sustainable Business strategy, which was reviewed by the Corporate Governance Committee of the Board. As a result, we are developing an enterprise-wide climate change strategy. This strategy will aim to address the two main risk types associated with climate change:

· Transition Risks: the risks and opportunities that flow from moving towards a low carbon economy, e.g. emerging regulations, new innovations

· Physical Risks: physical impacts of climate change, e.g. sea level rise, extreme weather events.

These risks present both challenges and opportunities in the short-, medium- and long-term. For example, in the short-term, we have the opportunity to support our customers investing in sustainable solutions (e.g. our Global Banking and Markets division financed more than CAD$8.5 billion in the renewable energy sector in 2018, up from CAD$4.7 billion in 2017). Meanwhile in the mid to longer-term, the physical impacts of climate change, such as the increased frequency of severe weather events, pose a risk to our operations and our customers globally. Further, our decision to implement our internal price on carbon in FY2018 helps to support internal energy efficiency and GHG reduction initiatives, while also signalling to employees and other stakeholders our commitment to mitigating the impacts of climate change. By taxing our emissions, we were able to allocate $2million in our Capex budget which can be reinvested back into energy efficiency initiatives for the business. In year one of implementation, these funds supported HVAC upgrades at branches and a solar panel initiative. Also in FY2018, we made the decision to adopt the TCFD recommendations, and included our first set of TCFD disclosures in our 2018 Annual Report and our 2018 Sustainable Business Report.

C3.1d

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

Climate-related scenarios	Details
Other, please specify (Internal propietary methodology)	The Bank has begun to use climate-related scenario analysis, most notably in three ways: 1. Internal climate-related scenario-analysis: We have applied an internally-developed methodology to assess climate risk in our non-retail portfolio. The analysis was completed at the sector-level and considered both current and potential future exposure to climate risks. We are currently focused on applying more defined criteria for assessing climate risk at the borrower-level. 2. Partnership with University of Waterloo on climate risk assessment: We have engaged the Intact Centre for Climate Adaptation at the University of Waterloo to support with the assessment of climate risks for two sectors with a focus on Canada. 3. UNEP FI TCFD Pilot: We have joined the second UNEP FI pilot on TCFD. This project will explore transition and physical risks of climate change across four sectors. Participation in the pilot will help us gain valuable insight into best practices from other banks also participating that we can bring back to our business.

C4. Targets and performance

C4.1

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

C4.1a

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

Target reference number
Abs 1

Scope
Scope 1+2 (location-based)

% emissions in Scope
100

Targeted % reduction from base year
10

Base year
2016

Start year
2017

Base year emissions covered by target (metric tons CO2e)
137462

Target year
2021

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

% of target achieved
88.7

Target status
Underway

Please explain
The Bank's target is on Scope 1 and 2 Global emissions. The base year reflects the Bank's 2016 fiscal year end (November 1, 2015 - October 31, 2016). By the end of fiscal 2021, the Bank aims to reduce its global absolute Scope 1 and 2 emissions by 10%.

C4.2

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

C4.3

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

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	3	1003
Implementation commenced*	0	0
Implemented*	4	1649
Not to be implemented	0	0

C4.3b

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

Initiative type
Energy efficiency: Building services

Description of initiative
Other, please specify (Green roof)

Estimated annual CO2e savings (metric tonnes CO2e)
10

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
34821

Investment required (unit currency – as specified in C0.4)
300000

Payback period
4 - 10 years

Estimated lifetime of the initiative
Ongoing

Comment
During the 2018, The bank retrofitted one of its buildings (90 Wynford Dr.) with a green roof, providing energy reduction benefits through insulation, slowing storm water run-off and regulating building temperature.

Initiative type
Energy efficiency: Building services

Description of initiative
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
31

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
28000

Investment required (unit currency – as specified in C0.4)
16566

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
For Peru office premises, the Bank has begun transitioning from fluorescent lamps to low-energy LED lamps.

Initiative type
Energy efficiency: Building services

Description of initiative
HVAC

Estimated annual CO2e savings (metric tonnes CO2e)
1413

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
354515

Investment required (unit currency – as specified in C0.4)
3895768

Payback period
11-15 years

Estimated lifetime of the initiative
6-10 years

Comment
The Bank has begun to replace HVAC units across Canada and internationally. New equipment will be more energy efficient.

Initiative type
Energy efficiency: Building services

Description of initiative
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
195

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
130714

Investment required (unit currency – as specified in C0.4)
900000

Payback period
4 - 10 years

Estimated lifetime of the initiative

6-10 years

Comment

The Bank performed LED signage retrofits in several branches in the Canadian portfolio. Retrofits saw optimal installation of LED and fluorescent lighting in each branch across Canada. Canadian branch retrofits were completed in FY2018.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	The Bank complies or exceeds the energy efficiency requirements as required by the Canadian building code. In addition, the Bank maintains the highest standards in buildings in international locations by following all local building codes and regulations, and by implementing global environmental best practices where feasible.
Dedicated budget for energy efficiency	Bank branches are budgeted to include environmentally friendly materials and equipment to reduce energy consumption. Emission reduction programs, such as Branch Energy Reviews (in Canada) and large scale environmental projects, have a dedicated annual budget or access to available funds. In addition, the Bank has a dedicated budget for green building certification (for example, LEED and Green Globes in Canada), third party emission verification and resources for carbon disclosure. As part of our commitment to the Carbon Pricing Leadership Coalition, we implemented an internal carbon price in 2018. After consultations with external experts and a thorough peer review, we established an internal tax of CAD$15 per tonne of CO2 for our global Scope 1 and 2 emissions. This allowed us to fairly compare projects that required higher upfront costs (but delivered longer term energy savings), with those that were more cost-effective but short-term solutions.

C4.5

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

Yes

C4.5a

(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.

Level of aggregation

Product

Description of product/Group of products

The Scotiabank's CrediAuto® program in Mexico makes owning an ecologically friendly vehicle more affordable for more customers. The program offers a host of benefits to green car buyers, including a special discounted loan rate, free unemployment insurance, and a cash back "bonus for the environment" when opening an account.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify (Along with fuel savings and government incentives, the program seeks to make owning cleaner-running vehicles accessible to more people.)

% revenue from low carbon product(s) in the reporting year

Comment

Please see page 44 in the 2018 Sustainable Business Report for a description of the CrediAuto product.
https://www.scotiabank.com/content/dam/scotiabank/canada/en/documents/about/2018_Sustainable_Business_Report_Final_ENG.pdf

Level of aggregation

Group of products

Description of product/Group of products
In 2018, we continued to focus on providing products and services to support the development of renewable energy. Scotiabank's Global Banking and Markets division provided bank financing totaling CAD$8.5 billion to the renewable energy sector globally. This includes: CAD$3.0 billion in Canada, CAD$1.9 billion in the United States, and CAD$3.6 billion in authorizes credits in Latin America.

Are these low-carbon product(s) or do they enable avoided emissions?
Low-carbon product

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Investment in renewable energy)

% revenue from low carbon product(s) in the reporting year

Comment
More information on our renewable energy financing can be found on p. 42-43 of our 2018 Sustainable Business Report.
https://www.scotiabank.com/content/dam/scotiabank/canada/en/documents/about/2018_Sustainable_Business_Report_Final_ENG.pdf

---

Level of aggregation
Product

Description of product/Group of products
Our Mortgages website includes a Home Energy Saving financial calculator which allows users to create customized plans for environmentally friendly renovations. It is available to everyone but targeted at Scotiabank customers. The calculator provides upgrade options with the fastest break-even return, and shows the CO2 equivalent savings that would be generated. As energy prices continue to increase and residential energy efficiency continues to be a factor in renovation trends, the calculator is a resource that provides users with the tools to make informed decisions to lower emissions and save costs.

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Tool to plan for home energy efficiency)

% revenue from low carbon product(s) in the reporting year
0

Comment
There is no revenue generated from this product as it is a value-add for our customers. Link to calculator:
http://www.scotiabank.com/eco-calc/en/

Level of aggregation
Product

Description of product/Group of products
Advisory services related to ESG risks: Scotiabank's Commodities Derivatives group provides its clients with a suite of environmental market products needed to address climate change issues and manage their carbon footprint and liabilities including cap and trade schemes.

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Helping clients manage carbon footprint)

% revenue from low carbon product(s) in the reporting year

Comment
This is not a product but a service. Revenue from this service is proprietary information.

Level of aggregation
Product

Description of product/Group of products
In 2017, Scotia iTRADE offered Canada's first sustainable investing tools for direct investors that help combine financial investments with positive social impact. In partnership with Sustainalytics, comprehensive performance ratings based on ESG

factors are provided for over 1,200 companies on the Toronto Stock Exchange and Russell® 1000 Index. Users can map out their own particular views and beliefs pertaining to issues such as deforestation, water scarcity, labour standards and governance issues to help identify companies to invest in that align with their values. In 2018, around 28,000 users interacted with the tool.

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Tool to help make low-carbon investments)

% revenue from low carbon product(s) in the reporting year

Comment
The iTrade platform showcases more information about this Sustainable Investing tool: https://www.scotiabank.com/itrade/en/0,,11414,00.html The percentage of revenue from this product is proprietary information.

C5. Emissions methodology

C5.1

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

Scope 1

Base year start
November 1 2015

Base year end
October 31 2016

Base year emissions (metric tons CO2e)
12409

Comment

Scope 2 (location-based)

Base year start
November 1 2015

Base year end
October 31 2016

Base year emissions (metric tons CO2e)
125053

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.2

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

ISO 14064-1

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

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

13476

Start date

November 1 2017

End date

October 31 2018

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

13950

Start date

November 1 2016

End date

October 31 2017

Comment

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

12409

Start date

November 1 2015

End date

October 31 2016

Comment

C6.2

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

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

C6.3

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

Reporting year

Scope 2, location-based
111990

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
November 1 2017

End date
October 31 2018

Comment

Past year 1

Scope 2, location-based
114183

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
November 1 2016

End date
October 31 2017

Comment

Past year 2

Scope 2, location-based
125053

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
November 1 2015

End date
October 31 2016

Comment

C6.4

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

No

C6.5

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

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Capital goods

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

The Bank's suite of products do not involve Capital goods.

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

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Scotiabank's fuel and energy consumption not included in Scope 1 and Scope 2 is limited to employee business travel, indicated below.

Upstream transportation and distribution

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Waste generated in operations

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
In 2018 Scotiabank continued to reduce the amount of paper consumption through a variety of initiatives. Scotiabank's newly implemented Activity-Based Working culture is allowing us to dramatically reduce our use of paper and our need for square footage. In year one, we reduced paper use by 2.2 million sheets. Once fully implemented, based on initial trials, we estimate that this new way of working will reduce paper consumption by approximately 86% compared to the more traditional workplace culture.

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
20020

Emissions calculation methodology
Defra. 2015 Dataset, Version 1.2 Produced by AEA for the Department of Energy and Climate Change (DECC) and the Department for Environment, Food and Rural Affairs (Defra)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation
Business travel (air/rail) is the only source of scope 3 emissions that Scotiabank currently reports.

Employee commuting

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
All upstream leased assets accounted for under scope 1 and 2.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
The nature of the Bank's business does not require for the transportation and distribution of goods or services

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
Due to the nature of services provided in the financial services sector, Scotiabank does not produce products that are consumed or produce waste on behalf of the end user.

Use of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
Due to the nature of services provided in the financial services sector, Scotiabank does not sell products that are consumed or produce waste on behalf of the end user.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
Due to the nature of services provided in the financial services sector, Scotiabank does not produce or sell products that are consumed or produce waste on behalf of the end user.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
All downstream leased assets accounted for under Scope 1 and 2.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
Scotiabank does not franchise.

Investments

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Other (upstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
No other Scope 3 emissions applicable to the Bank.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
No other Scope 3 emissions applicable to the Bank.

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?
No

C6.10

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

Intensity figure
0.0000043602

Metric numerator (Gross global combined Scope 1 and 2 emissions)
125466

Metric denominator
unit total revenue

Metric denominator: Unit total
28775000000

Scope 2 figure used
Location-based

% change from previous year
3.05

Direction of change
Decreased

Reason for change
Fiscal 2018 revenue is CAD$28,775,000,000 representing an increase over Fiscal 2017. Scope 1 & 2 emissions are 125,466 tCO2e which has increased relative to CDP reported 2017 figures. The intensity figure is calculated as 125,466/28.775 billion = 0.0000043602 tCO2e/$CAD. As noted in section 7.9a, total emissions have increased due to acquisitions. However, the rise in the Bank's revenue increased the denominator, and implementation of energy efficiency projects (such as HVAC replacement, lighting retrofits) decreased the numerator. This resulted in a net decrease in intensity of 3.05%.

Intensity figure
1.49

Metric numerator (Gross global combined Scope 1 and 2 emissions)
125466

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
84381

Scope 2 figure used
Location-based

% change from previous year
1.32

Direction of change
Decreased

Reason for change
As noted in section 7.9a, total emissions have increased to 125,466 tCO2e relative to CDP reported FY2017 figures due to acquisitions. However, the Bank's global FTE count has increased to 84,381. The intensity figure is calculated as 125,466 /84,381 = 1.49. Overall the intensity metric decreased slightly due to a greater percentage increase in FTE count and implementation of energy efficiency projects (such as HVAC replacement and lighting retrofits).

Intensity figure
0.056

Metric numerator (Gross global combined Scope 1 and 2 emissions)
125466

Metric denominator
square meter

Metric denominator: Unit total
2241599

Scope 2 figure used
Location-based

% change from previous year
2.1

Direction of change
Decreased

Reason for change
As noted in section 7.9a, total emissions have increased to 125,466 tCO2e relative to CDP reported FY2017 figures due to acquisitions. The Bank's reported space occupied increased to 2,241,599 square meters also because of acquisitions. The intensity figure is calculated as 125,466 /2,241,599= 0.0560. Overall, the intensity metric decreased slightly due to a greater percentage increase in square meters occupied as well as energy efficiency projects (for example: HVAC replacement, lighting retrofits).

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	13476	IPCC Fifth Assessment Report (AR5 – 20 year)
CH4	1.26	IPCC Fifth Assessment Report (AR5 – 20 year)
N2O	0.04	IPCC Fifth Assessment Report (AR5 – 20 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Canada	12931
Chile	45.67
Costa Rica	7.64
Mexico	430.51
Peru	58.21
Panama	2.32
Puerto Rico	0.63

C7.3

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

By business division

By facility

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Canadian Banking (Canadian retail branches)	10503
Executive Office (all Canadian office buildings)	2428
International Banking (all retail banking and offices outside of Canada)	545

C7.3b

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

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Canadian Banking and Executive Office (all Canadian branches and offices)	12931	43.64944	-79.3795
International Banking - Chile	45.67	-33.5231	-70.6531
International Banking - Costa Rica	7.64	9.928	-84.0907
International Banking - Mexico	430.51	19.43159	-99.135
International Banking - Peru	58.21	-12.095	-77.024
International Banking - Panama	2.32	8.538	-80.7821
International Banking - Puerto Rico	0.63	18.2208	-66.5901

C7.5

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

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)
Canada	38880		276482.73	
Chile	9680		22084	
Costa Rica	45		6874	
Dominican Republic	5106		8520	
El Salvador	2148		8095	
Jamaica	6801		10559	
Mexico	20983		45654	
Peru	4864		19911	
Trinidad and Tobago	8075		13829	
Puerto Rico	1066		4596	
Barbados	1240.49		5351	
Caribbean				
Guatemala	31.44		74	
Ireland	129.15		309	
Brazil	40.56		259	
Japan	27.29		51	
Republic of Korea	99.95		190	
Singapore	202.15		465	
United States of America	2939.56		6452	
Australia	57.91		77	
India	371.31		481	
Malaysia	301.85		1303	
Belize	188.7		814	
Cayman Islands	302.08		1303	
Turks and Caicos Islands	135.14		583	
Cuba	17.47		23	
Panama	1629		5207	
United States Virgin Islands	72.68		313	
British Virgin Islands	93.92		405	
Uruguay	219		25026	
Bahamas	909.67		3923	
Haiti	224.73		224	

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)
Colombia	3068.12		15318	
Guyana	234.41		1010	
China	801.5		1219	
Anguilla	36.41		157	
Antigua and Barbuda	66.1		285	
Dominica	55.01		237	
Other, please specify (England)	407.28		1168	
Grenada	91.16		393	
Other, please specify (Netherlands Antilles)	107.07		462	
Saint Kitts and Nevis	100.67		434	
Saint Vincent and the Grenadines	139.84		603	

C7.6

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

By business division

By facility

C7.6a

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

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Canadian Banking (Canadian retail branches)	20882	
Executive Offices (all Canadian office buildings)	17997	
International Banking (all retail/office outside of Canada)	73111	

C7.6b

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

Facility	Scope 2 location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
International Banking - Chile	9680	
Canadian Banking & Executive Office (all Canadian branches and offices)	38880	
International Banking - Costa Rica	45	
International Banking - Dominican Republic	5106	
International Banking - El Salvador	2148	
International Banking - Jamaica	6801	
International Banking - Mexico	20983	
International Banking - Peru	4864	
International Banking - Trinidad and Tobago	8075	
International Banking - Puerto Rico	1066	
International Banking - Barbados	1240.49	
International Banking - Guatemala	31.44	
International Banking - Ireland	129.15	
International Banking - Brazil	40.56	
International Banking - Japan	27.29	
International Banking - South Korea	99.95	
International Banking - Singapore	202.15	
International Banking - United States	2939.56	
International Banking - Australia	57.91	
International Banking - India	371.31	
International Banking - China	801.5	
International Banking - Malaysia	301.85	
International Banking - Belize	188.7	
International Banking - Cayman Islands	302.08	
International Banking - Turks & Caicos	135.14	
International Banking - Cuba	17.47	
International Banking - Panama	1629	
International Banking - US Virgin Islands	72.68	
International Banking - British Virgin Islands	93.92	
International Banking- Uruguay	219	
International Banking - Bahamas	909.67	
International Banking - Haiti	224.73	
International Banking - Colombia	3068	
International Banking - Guyana	234.41	
International Banking - Anguila	36.41	
International Banking - Antigua and Barbuda	66.1	
International Banking - Dominica	55.01	
International Banking - England	407.28	
International Banking - Grenada	91.16	
International Banking - Netherlands Antilles	107.07	
International Banking - Saint Kitts and Nevis	100.67	
International Banking - Saint Vincent, The Grenadines	139.84	

C7.9

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

Increased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<Not Applicable>		
Other emissions reduction activities	2331	Decreased	1.91	In FY2018 (Nov. 1, 2017 - Oct. 31, 2018), branch lighting retrofits, HVAC replacements, and a number of smaller efficiency projects, combined to resulting savings of 1,649 tCO2e. In 2018 a total of 1,649 tCO2e were reduced as a result of emissions reduction projects. Further, branch network and office space optimization contributed to an additional decrease of 682 tCO2e. In FY2018 a total of 2,331 tCO2e were reduced as a result of emissions reduction projects. Scope 1 and Scope 2 emissions reported to CDP in the previous year FY2017 (Nov. 1, 2016 - Oct. 31, 2017) totalled 122,131 tCO2e. Therefore the 1.91% decrease was determined by the following calculation: (2,331 / 122,131)*100.
Divestment		<Not Applicable>		
Acquisitions	5909	Increased	4.84	In FY2018 (Nov. 1, 2017 - Oct. 31, 2018), major acquisitions occurred internationally, which contributed to increased emissions of 5,909 tCO2e. Scope 1 and Scope 2 emissions reported to CDP in the previous year FY2017 (Nov. 1, 2016 - Oct. 31, 2017) totalled 122,131 tCO2e. For our 10% target we have adjusted for the increased portfolio size.
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology	242	Decreased	0.2	In FY2018, Canadian provincial electricity emissions factors were updated to Canada's 2018 UNFCCC Submission – Annex 13. Overall cleaner generation in some provinces contributed to an overall decrease in Canadian Scope 2 emissions of 242 tCO2e. Scope 1 and Scope 2 emissions reported to CDP in the previous year FY2017 totalled 122,131 tCO2e. Therefore the 0.20% decrease was determined by the following calculation: (242/122,131)*100.
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

C7.9b

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

Location-based

C8. Energy

C8.1

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

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

C8.2

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

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

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	Unable to confirm heating value	0	73624	73624
Consumption of purchased or acquired electricity	<Not Applicable>	0	428190	428190
Consumption of purchased or acquired heat	<Not Applicable>	0	40928	40928
Consumption of purchased or acquired steam	<Not Applicable>	0	9299	9299
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>		547080	547080

C8.2b

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

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

C8.2c

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

Fuels (excluding feedstocks)

Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
68841.52

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat
68841.52

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Diesel

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
1964.01

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat
1964.01

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Propane Gas

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
333.42

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat
333.42

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)

Burning Oil

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
2485.3

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat
2485.3

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Diesel

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
1964.01

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat
1964.01

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Propane Gas

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
333.42

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat
333.42

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Burning Oil

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
2485.3

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat
2485.3

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

C8.2d

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

Burning Oil

Emission factor
0.00294

Unit
metric tons CO2e per liter

Emission factor source
GHG Protocol V4.0 2010 Release

Comment

Diesel

Emission factor
0.00268

Unit
metric tons CO2e per liter

Emission factor source
GHG Protocol V4.0 2010

Comment

Natural Gas

Emission factor
0.00188

Unit
metric tons CO2e per m3

Emission factor source
GHG Protocol V4.0 2010

Comment

Propane Gas

Emission factor
0.00161

Unit
metric tons CO2e per m3

Emission factor source
GHG Protocol V4.0 2010

Comment

C8.2f

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

Basis for applying a low-carbon emission factor
No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

Low-carbon technology type
<Not Applicable>

Region of consumption of low-carbon electricity, heat, steam or cooling
<Not Applicable>

MWh consumed associated with low-carbon electricity, heat, steam or cooling
<Not Applicable>

Emission factor (in units of metric tons CO2e per MWh)
<Not Applicable>

Comment

Basis for applying a low-carbon emission factor
No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

Low-carbon technology type
<Not Applicable>

Region of consumption of low-carbon electricity, heat, steam or cooling
<Not Applicable>

MWh consumed associated with low-carbon electricity, heat, steam or cooling
<Not Applicable>

Emission factor (in units of metric tons CO2e per MWh)
<Not Applicable>

Comment

C9. Additional metrics

C9.1

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

C10. Verification

C10.1

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

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

C10.1a

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

Scope
Scope 1

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
Scotiabank_FY2018_MH_GHG Verification Statement.pdf

Page/ section reference
Page 2; 4% is limited assurance

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Scotiabank_FY2018_MH_GHG Verification Statement.pdf

Page/ section reference
Page 5; 65% is limited assurance, 35% is reasonable assurance.

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100
Scotiabank_FY2018_MH_GHG Verification Statement.pdf

C10.1b

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

Scope
Scope 3- at least one applicable category

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Attach the statement
Scotiabank_FY2018_MH_GHG Verification Statement.pdf

Page/section reference
Page 2

Relevant standard
ISO14064-3

Scope
Scope 3- at least one applicable category

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Attach the statement
Scotiabank_FY2018_MH_GHG Verification Statement.pdf

Page/section reference
Page 2

Relevant standard
ISO14064-3

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

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

Yes

C11.3a

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

Objective for implementing an internal carbon price

Stakeholder expectations
Change internal behavior
Drive energy efficiency
Identify and seize low-carbon opportunities

GHG Scope

Scope 1
Scope 2

Application

The price is applied company-wide, at C$15 per tonne of CO_2. The price will be applied to CO_2e emissions, to create an internal pool of funding that will then be used to fund energy efficiency and GHG emissions reduction initiatives for the Bank (for example: HVAC replacement and lighting retrofits).

Actual price(s) used (Currency /metric ton)

15

Variance of price(s) used

Uniform pricing, applied company-wide, regardless of geography. It is also an evolutionary price, that may change or develop over time.

Type of internal carbon price

Internal fee

Impact & implication

In July 2016, Scotiabank joined the Carbon Price Leadership Coalition (CPLC), a World Bank initiative focused on promoting carbon pricing among corporate organizations and developing carbon pricing policies through public-private sector dialogue. To demonstrate our commitment, in 2017 we established a cross-functional team to develop an internal carbon price and strategy. We have implemented our internal carbon price of CAD$15/tonne in 2018. In this way, we will advance our emissions reduction efforts by generating a pool of funding for the Bank's carbon reduction and energy efficiency projects (for example, HVAC replacement and lighting retrofits).

C12. Engagement

C12.1

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

Yes, our suppliers
Yes, our customers
Yes, other partners in the value chain

C12.1a

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

Type of engagement
Compliance & onboarding

Details of engagement
Included climate change in supplier selection / management mechanism
Climate change is integrated into supplier evaluation processes

% of suppliers by number

% total procurement spend (direct and indirect)

% Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
Within Real Estate, engagement and success are determined by both the extent to which materials or services provided will have an environmental impact. This is important to Scotiabank as we have hundreds of physical branches globally, and within which our employees, as well as customers, spend time in. Certain specifications, including regionally manufactured materials, pre and post-consumer recycled materials, non-toxic finished and features (including non-VOC paints and non-VOC or PVC millwork), use of ENERGYSTAR equipment and "Green Seal" or EcoLogo standards are considered in its janitorial materials. Scotiabank purchases environmentally friendly carpet modular tiles that use 50% - 80% recycled fiber and bio-based materials including flax, hemp, polyactic acid and wool.

Impact of engagement, including measures of success
The impacts from our engagement with these suppliers includes the identification of products that are energy efficient, locally-sourced and have other sustainability attributes, such as third-party certifications, recycled content and low VOC content, identified in our Materials Selection Policy. Our engagement with brands, designers, and procurement partners also support these results. When evaluating suppliers, we also engage to assess potential physical supply risks, which includes impacts from climate change volatility. In collaboration with our procurement partners, we also perform a full 3-year financial review of new suppliers to ensure that they are viable. Additionally, we try to ensure that we have multiple sources and various options for items, and maintain strong supplier relationships so that we can take appropriate measures to identify solutions and alternatives when physical events occur. To mitigate physical risks, we assess whether suppliers have flood prevention measures in place when we visit factories. Measures of success include quantified Scope 3 emissions reductions for major renovation projects that consider all phases of the product lifecycle. To measure success, we are focused on developing strategic partnerships with design firms. Additionally, we developed Sustainable Operating Procedures for product selection. These foundational efforts will enable us to collect more robust data on our suppliers' sustainability programs, with which we can track and enhance performance key metrics, including energy reductions, sustainable procurement and waste to landfill diversion.

Comment
We have thousands of suppliers globally. All have to adhere to our Supplier Code of Conduct. We cannot currently measure % of suppliers by number, however, we are working towards doing so. We are in the process of ensuring additional ESG screening criteria for all suppliers.

Type of engagement
Compliance & onboarding

Details of engagement
Included climate change in supplier selection / management mechanism

% of suppliers by number

% total procurement spend (direct and indirect)
75

% Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
Scotiabank's suppliers are currently expected to uphold the principles set out in the Bank's Supplier Code of Conduct, including environmental policies that are set out in contractual agreements as appropriate. For supplier engagement we have moved to a category focus, and within each category, suppliers are prioritized based on size of contract, impact to the business/business continuity, and risk to the business/type of service provided, for example - these suppliers are engaged with as its felt, based on the criteria listed above, this is where the biggest area of impact lies. Additionally, we are implementing a third party management program for our top tier suppliers. Sustainability-themed questions are included in strategic sourcing processes, including for example, asking suppliers to provide information on their environmental management system (EMS), if any, and if they track their own energy and GHG emissions. The responses are considered when reviewing the proposals.

Impact of engagement, including measures of success
All suppliers have to adhere to our Supplier Code of Conduct, but we are still in the process of ensuring additional ESG screening criteria for all suppliers. While we do not currently have environmental impact KPIs with suppliers, we are currently enhancing the supplier information we have in order to establish benchmarks and measure certain environmental/social KPIs, including those related to climate change. Given we are just rolling out the third party management program, this will give us a baseline in 2018/19 and then we can establish measures of success going forward.

Comment
We have thousands of suppliers globally. All have to adhere to our Code of Conduct. We cannot currently measure % of suppliers by number, however, we are working towards doing so. We are in the process of ensuring additional ESG screening criteria for all suppliers.

C12.1b

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

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number
100

% Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
Scotiabank's annual 2018 Sustainable Business Report shares our performance and achievements related to Environmental, Social and Governance (ESG) factors and outlines how Scotiabank engages with its stakeholders. Customers, and the general public which includes prospective customers, are an important stakeholder group to build trust with through transparency and reporting. The Report focuses on core themes that Scotiabank and its stakeholders consider to be most important to the Bank, providing highlights of our progress our Sustainable Business priorities. This report is publicly available to all customers, as well as other stakeholders, so they may see the progress we have made on our priorities. Specifically regarding climate-related issues, the report details our initiatives and performance on our Sustainable Financing and Climate Change priorities, with further information on emissions in the GRI Index. Our comprehensive reporting helps us to build and maintain trust with our customers and other stakeholders, as they can see how we strive to enhance customer protection, lend fairly, balance stakeholder interest and operate with integrity.
https://www.scotiabank.com/content/dam/scotiabank/canada/en/documents/about/2018_Sustainable_Business_Report_Final_ENG.pdf

Impact of engagement, including measures of success
This report is available to all customers, as well as to the general public so that they may see our progress on our Sustainable Business commitments.. The impact of reporting publicly and being transparent is enhanced trust. In the month it was released, it was downloaded over 600 times from our website. This is an annual report to inform our stakeholders on our progress, our measures of success in engagement are seen in our year-on-year progress in achieving our KPIs and improving other metrics, as seen on pages 15-17 in the section 'Our Progress'.

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number
100

% Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
Our Sustainable Business website is an accompaniment to our annual Sustainable Business Report, and showcases stories that

demonstrate the impact we're making on our priority areas. Customers, and the general public which includes prospective customers, are important stakeholder groups to build trust with through transparency and reporting. Specifically related to the Environment, our Climate Change page includes stories about Scotiabank's internal carbon price, supporting indigenous education and the renewable energy sector, and incentivizing auto loans for EV and hybrid vehicles in Mexico. Additionally on our website, stakeholders can view our greenhouse gas emissions verification statement, a link to our 2018 Sustainable Business Report, and see how climate-related issues sit within our Sustainable Business strategy. These pages are publicly available for our customers and other stakeholders to view. Our website and stories help us to recognize important bank-wide initiatives throughout the year, and also build and maintain trust with our customers and other stakeholders. We also communicate about these stories through our company social media channels for a wider reach.

Impact of engagement, including measures of success

When customers and prospective customers visit our website, the impact of this engagement can lead to a stronger trust of Scotiabank, which can in turn translate into positive business outcomes and new customers. Stories are updated throughout the year and they themselves are a reflection of our success in engaging with our stakeholders. Strategy: https://www.scotiabank.com/corporate/en/home/corporate-responsibility/strategy.html Climate change: https://www.scotiabank.com/corporate/en/home/corporate-responsibility/strategy/climate-change.html Download page for Sustainable Business Report and GHG Verification Statement: https://www.scotiabank.com/corporate/en/home/corporate-responsibility/downloads.html

---

Type of engagement

Collaboration & innovation

Details of engagement

Run a campaign to encourage innovation to reduce climate change impacts

% 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

"The Go Paperless Record Keeping Contest" engages customers to reduce their environmental impact by switching to paperless record keeping for all of their Scotiabank accounts. By reducing paper usage, customers are indirectly reducing their climate change impacts that could arise from waste and/or deforestation.

Impact of engagement, including measures of success

The contest runs until September 30, 2019, at 11:59PM (EDT), thus the impacts of engagement are not yet known.

Type of engagement

Education/information sharing

Details of engagement

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

% of customers by number

1

% Scope 3 emissions as reported in C6.5

0

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

Our Mortgages website includes a Home Energy Savings Calculator, a financial calculator which allows users to create customized plans for environmentally friendly renovations. The calculator provides upgrade options with the fastest break-even return, and shows the CO_2 equivalent savings that would be generated. As energy prices continue to increase and residential energy efficiency continues to be a factor in renovation trends, the calculator is a resource that provides users with the tools to make informed decisions.

Impact of engagement, including measures of success

The calculator is used by around 3000 current and potential customers annually. The size of engagement is calculated using the total number of people who completed the calculator usage, divided by the total number of people who visited the main Ecoliving website. Website to access the tool: https://www.scotiabank.com/ca/en/personal/mortgages/mortgage-calculator.html Link directly to the tool: https://dmts.scotiabank.com/tools/eco-calc/en/

Type of engagement

Collaboration & innovation

Details of engagement
Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number
100

% Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
The CrediAuto program in Mexico incentivizes the use/purchase of hybrid, electric and cleaner vehicles as opposed to conventional vehicles. Customers looking to purchase a vehicle are the main audience, as it is an opportunity to incentivize change to lower GHGs and cost for the customer.

Impact of engagement, including measures of success
Lending under CreditAuto continues to increase year-on-year. In 2018, bookings increased by 162% compared to 2017.

C12.1c

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

Partners in our value chain, other than customers and suppliers include, investors, the Government and external partners.

1. Investors

Over the course of the year, we engage with shareholders such as institutional investors on the issue of climate change. This can include discussions of our environmental commitments, climate strategy, or our approach to international frameworks such as the Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Scotiabank has received several requests from investors to discuss our approach to implementing the TCFD Recommendations in particular, since their release in 2017. This engagement has clarified what is expected from our institutional investors in terms of climate disclosure and has informed our approach towards managing climate change risks and opportunities.

2. The Government

Our Director of Sustainable Business has participated in several round-table meetings with the Canadian Environment and Climate Change Minister to discuss internal carbon pricing in Canada, and the role business can play. From 2018 to 2019, Scotiabank provided the Government of Canada with a submission to their consultation on Sustainable Finance, highlighting the opportunity to better align risk management and climate change in financial services. The final report from the Expert Panel focused on many suggestions put forward by Scotiabank's submission, and aligned with the need to embed climate change criteria into every day products and services decisions. Our Chief Risk Officer also met with members of the Expert Panel. The government-appointed Chair of the Sustainable Finance Expert Panel is also a Director of the Board of Scotiabank and the Chair of the Board's Risk Committee, providing valuable insights as the Bank moves forward in this area.

3. External Partners

We partner with external organizations with whom we share similar values. These include Enactus and Relay Education in Canada.

· Enactus Canada: We sponsor the Scotiabank Ecoliving Green Challenge. This is a national competition empowering post-secondary students to develop and deliver projects that teach others viable solutions to relevant environmental issues. Since 2010, 67,864 students have helped conserve 35,604,157 litres of water, diverted 174,907,630 pounds of waste and introduced 9,488 organizations to green business practices.

Link to Enactus Canada: http://enactus.ca/

· Relay Education: we sponsor this educational charity as their National Youth Partner. Relay delivers renewable energy education programs in classrooms and communities across Canada – creating systemic change for a greener future and fostering the next generation of renewable energy leaders. They directly engage more than 10,000 students and adults each year.

Link to Relay Education: https://relayeducation.com

4. Business Partners

In 2017 Scotiabank's retail investing division, Scotia iTrade, launched Sustainable Investing tools in partnership with Sustainalytics.

Using their ESG data in the background, the tool enables direct investors to integrate ESG into their investment decisions. In 2018, around 28,000 users interacted with the tool.

C12.3

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

Direct engagement with policy makers
Trade associations
Funding research organizations

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Energy efficiency	Support	Scotiabank is a formal Partner of the Carbon Pricing Leadership Council (CPLC), led by our Chief Economist and Senior Vice President. The Government of Canada is also a formal Partner of the CPLC, led by Canada's Minister of Environment and Climate Change. The CPLC launched at COP21 in Paris in 2015. As part of this commitment, Scotiabank established an Internal Carbon Price at $15/tonne in 2017 and began implementing it internally to fund energy efficiency initiatives in 2018.	The goal of the CPLC is to expand the use of carbon pricing policies that can maintain competitiveness, create jobs, encourage innovation and deliver emissions reductions. Members of the CPLC (including both Scotiabank and the Government of Canada) demonstrate their own leadership by committing to set a price on carbon and calling on their peers to follow suit.
Other, please specify (Sustainable Finance)	Support with minor exceptions	In February of 2019, Scotiabank provided the Government of Canada with a submission to their consultation on Sustainable Finance, highlighting the opportunity to better align risk management and climate change in financial services. The final report from the Expert Panel focused on many suggestions put forward by Scotiabank's submission, and aligned with the need to embed climate change criteria into every day products and services decisions. Our Chief Risk Officer also met with members of the Panel. The government-appointed Chair of the Sustainable Finance Expert Panel is also a Director of the Board of Scotiabank, providing valuable insights as the Bank moves forward in this area.	The work of Canada's Expert Panel on Sustainable Finance builds on the recent review of climate-related financial impacts by the Canadian Securities Administrators (CSA). The Expert Panel released an interim report in October 2018 and its final report in June 2019. Several of the Expert Panel's recommendations pertain to climate change specifically, including the importance of Canada pursuing a path to implement the recommendations of the Task Force on Climate-related Disclosures (TCFD).

C12.3b

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

Yes

C12.3c

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

Trade association

Canadian Bankers Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Environmental sustainability is a key part of Canada's banks' social responsibility efforts. Banks have established environmental policies, goals and practices that help guide their activities inside and out. Environmentally-oriented thinking is incorporated into a range of bank operations, lending, products and services, and community activities.

How have you influenced, or are you attempting to influence their position?

Scotiabank is a member of the CBA and supports the CBA's position on environmental sustainability through sustainable operations, sustainable lending, green products and services, and community activities.

Trade association

Institute of International Finance

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The IIF is the global association of the financial industry. Its mission is to support the financial industry in the management of risks; to develop sound industry practices; and to advocate for regulatory, financial and economic policies that are in the broad interests of its members and foster global financial stability and sustainable economic growth. In response to the final recommendations of the TCFD, the IIF stated its support in 2017 by saying, "We support the aims of the Task Force on Climate-related Financial

Disclosures and welcome the publication of the final recommendations report. The establishment of a voluntary, market-based approach to the disclosure of financial risks arising from climate change is an important step towards incorporating environmental risk factors in financial activity. Enhanced disclosure will offer benefits for lenders, insurers and investors, and will help borrowers as they scale up the green finance market."

How have you influenced, or are you attempting to influence their position?
The Bank's current President and CEO is on the Board of the IIF. Scotiabank also actively participates in work accomplished at the Committee level of the IIF, including providing input on IIF reports and papers.

Trade association
Business Council of Canada

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The Business Council of Canada (BCC) is a non-profit, non-partisan organization composed of the chief executives of Canada's leading enterprises, representing companies from every Region and sector of the economy. It brings business leaders together to shape public policy in the interests of a stronger Canadian public policy landscape. The BCC believes that "Sustainable environmental policies go hand-in-hand with long-term prosperity. As the world's demand for energy continues to increase, the Business Council is strongly committed to making Canada a global leader in sustainable development through showing that healthy economic growth, high living standards and environmental protection can be mutually supportive. The Council's work on energy and the environment includes: supporting innovation in green and clean technology, advocating on the responsible transfer and development of natural resources, and working alongside government and industry on developing policies to combat climate change". In a letter to the Government of Canada dated June 28 2017, the BCC notes its support of carbon pricing as the most effective means to reduce GHG emissions (as well as its recommendations for its most effective implementation).

How have you influenced, or are you attempting to influence their position?
The Bank is an active member of the BCC and the Bank's current President and CEO is on the Board of the BCC.

Trade association
Toronto Region Board of Trade

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Through their advocacy initiatives to promote a competitive Toronto region, the Toronto Region Board of Trade supports sustainable, efficient and reliable energy systems, including those that reduce greenhouse gas emissions while remaining reliable and cost competitive. In addition, the Board focuses on improving transport in the Greater Toronto Area in order to improve the mobility of goods and people and to reduce emissions of air pollutants and GHGs caused by transportation.

How have you influenced, or are you attempting to influence their position?
Scotiabank's Executive Vice President, Canadian Banking is a Director of the Toronto Region Board of Trade.

Trade association
Carbon Pricing Leadership Coalition

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The Carbon Pricing Leadership Coalition launched at COP21 in Paris in 2015. Its goal is to expand the use of carbon pricing policies that can maintain competitiveness, create jobs, encourage innovation and deliver emissions reductions. Members of the CPLC demonstrate their own leadership by committing to setting an internal carbon price and calling on their peers to follow suit.

How have you influenced, or are you attempting to influence their position?
Scotiabank's Chief Economist and SVP is a member of the CPLC. We established a Carbon Price at $15/tonne in 2017 and has been implemented in 2018.

Trade association
United Nations Environment Program Finance Initiative (UNEP FI)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Banks, investors and insurers can, and should, play a pivotal role in supporting societies to gradually move to the low-carbon and climate-change-resilient economies needed. Not on grounds of philanthropy and corporate social responsibility, but with a view of strategic, long-term positioning, of securing access to new environmental markets and gaining a competitive advantage with regards to what has become one of the economic and social macro-trends of the 21st century.

How have you influenced, or are you attempting to influence their position?
Scotiabank has been a member of UNEP FI since 2005 and participates on both the North American and the Latin American task force.

Trade association
United Nations Global Compact (UNGC)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The United Nations Global Compact (UNGC) environment principles are: business should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility, and; encourage the development and diffusion of environmentally friendly technologies.

How have you influenced, or are you attempting to influence their position?
Scotiabank is a founding member of the UNGC - Canada Network and maintains an “Active” status.

Trade association
Conference Board's Centre on the Low-Carbon Growth Economy (LCGE)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The goal of the Centre on the Low-Carbon Growth Economy is to use research and dialogue to inform an effective and efficient transition to a low-carbon future in Canada and globally, without sacrificing economic growth potential. The Centre provides advice on low-carbon policy and practice for the benefit of business, governments, and key stakeholders in order to frame the journey toward a low-carbon economy.

How have you influenced, or are you attempting to influence their position?
Scotiabank's Chief Economist and Senior Vice President is a lead investor in the Conference Board's Centre on the Low-Carbon Growth Economy (LCGE). Scotiabank's Chief Economist is a member of both the steering group and the Business Roundtable on Low-Carbon Best Practices. We participate in the overall planning and conduct of the Centre, including specific activities, such as helping to define the research agenda and selecting research projects and have input on research.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?
No

C12.3f

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

To ensure all of our activities that influence policy are consistent with our overall climate change strategy, we have climate change related policies, lending practices, scenario planning, green business initiatives and consumer programs in place. The Enterprise Risk and Sustainable Business departments are responsible for updating the Bank's Environmental Policy, which includes climate change risks and opportunities, and is adopted across all business lines and functional areas in all geographies in which the Bank operates, to ensure alignment. This is reviewed and updated every two years and approved by the Risk Committee of the Board of Directors. The Environmental Policy was last updated in FY2016.

Where possible, we work with the above organizations as they develop their policies. We contribute based on our internal policy positions and work to ensure that is captured in any advocacy by organizations we are a part of. For UNEP FI, while we are not one of the 16 participating global banks in the TCFD pilot, we have been watching closely to learn from their findings to inform our approach. As a member of the UNGC Canada network, we ensure alignment with best practices across our global footprint and link our initiatives to SDGs, in particular SDG #13, Climate Action, with regards to climate-related issues.

C12.4

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

Publication
In mainstream reports, incorporating the TCFD recommendations

Status
Complete

Attach the document
BNS_Annual_Report_2018.pdf

Page/Section reference
P.87-88, P.108 - Management's Discussion and Analysis, Risk Management

Content elements
Governance
Strategy
Risks & opportunities

Comment

Publication
In voluntary communications

Status
Complete

Attach the document
Scotiabank_FY2018_MH_GHG Verification Statement.pdf
Scotiabank Sustainable Business Website.docx

Page/Section reference
We publish information on our response to climate change and GHG emissions performance in multiple different areas in our voluntary communications. This includes our Sustainable Business website. Here we have included several links to relevant pages including our Climate Change page, which is one of our main priorities as outlined in our strategy, as well as our TCFD response page and our GHG Verification statement. All materials are publicly available.

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Other metrics

Comment

Publication
In voluntary sustainability report

Status
Complete

Attach the document
2018_Sustainable_Business_Report_Final_ENG.pdf

Page/Section reference
2018 Sustainable Business Report and GRI Index in particular. Please see the following: P.10 - Our Sustainable Business Strategy, of which climate change is one of our key priorities P.37 - Climate Change P.41 - Sustainable Finance P.45 - Operational Footprint Appendix, including the TCFD Reference guide and the GRI Index on P.91-93.

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C14. Signoff

C-FI

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

C14.1

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

	Job title	Corresponding job category
Row 1	This submission was signed-off by the Sr. Vice President, Global Communications, Sustainability and Social Enterprise and the Chief Sustainability Officer.	Other C-Suite Officer

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

Please confirm below

I have read and accept the applicable Terms