

C0. Introduction

C0.1

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

The Bank of Nova Scotia ("Scotiabank") is a leading bank in the Americas. We are guided by our purpose, for every future. We help our customers, their families and their communities achieve success 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 100,000 employees and assets of over \$1 trillion (as at October 31, 2019), Scotiabank trades on the Toronto Stock Exchange (TSX: BNS) and New York Stock Exchange (NYSE: BNS). For more information, please visit www.scotiabank.com and follow us on Twitter @ScotiabankViews.

At the end of fiscal 2019, Scotiabank is the only bank with a significant presence in all the major countries in the Americas corridor: Canada, the United States, Mexico, Peru, Chile and Colombia, with these six core markets representing 87% of our earnings.

The Bank also operates a Global Wealth Management business segment focused on delivering comprehensive wealth management advice and solutions to clients across Scotiabank's footprint. Global Wealth Management includes our three core asset management businesses: 1832 Asset Management (\$142 billion AUM as of Oct 31, 2019), Jarislowsky Fraser (\$42.2 billion AUM as of Oct 31, 2019), and MD Financial Management (\$50 billion AUM as of Oct 31, 2019). 1832 and Jarislowsky Fraser collectively manage \$13.7 billion on behalf of MD Management, as of Oct 31, 2019. All responses in the survey related to "Investing (Asset manager)" are from the perspective of one or more of these asset managers.

The focus of Scotiabank's Social Impact and Sustainability 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 environment, social and governance (ESG) areas where we feel we can have the biggest impact, we create 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
Reporting year	November 1 2018	October 31 2019	Yes	3 years

C0.3

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

Anguilla
Antigua and Barbuda
Aruba
Australia
Bahamas
Barbados
Belize
Bonaire, Sint Eustatius and Saba
Brazil
British Virgin Islands
Canada
Cayman Islands
Chile
China
China, Hong Kong Special Administrative Region
Colombia
Costa Rica
Curaçao
Dominica
Dominican Republic
El Salvador
Grenada
Guyana
India
Ireland
Jamaica
Japan
Malaysia
Mexico
Panama
Peru
Puerto Rico
Republic of Korea
Saint Kitts and Nevis
Saint Lucia
Saint Martin (French part)
Saint Vincent and the Grenadines
Singapore
Thailand
Trinidad and Tobago
Turks and Caicos Islands
United Kingdom of Great Britain and Northern Ireland
United States of America
United States Virgin Islands
Uruguay
Venezuela (Bolivarian Republic of)

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 chosen approach for consolidating your GHG inventory.

Operational control

C-FS0.7

(C-FS0.7) Which organizational activities does your organization undertake?

Bank lending (Bank)
Investing (Asset manager)

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 ESG strategy (of which climate change is a key priority where we feel we can make the biggest impact) and the annual ESG report. The Corporate Governance Committee (composed entirely of independent directors) evaluates our ESG 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	In fiscal 2019, our former Risk Committee Chair served as the Chair of the Government of Canada's Expert Panel on Sustainable Finance. In this crucial role, he gathered insights from Canadian businesses within the financial sector on the constraints and opportunities that sustainable finance can provide. He brought forward insights from the recommendations of the Expert Panel and encouraged the Bank to consider the opportunities climate change brings to our business. In June 2020, this Director left his post on Scotiabank's Board in order to serve as the newly appointed Governor of the Bank of Canada. The newly appointed Chair of the Risk Committee will continue to focus on climate-related risks as part of its mandate to review the Bank's risk appetite and identify and monitor key financial and non-financial risks.

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	Scope of board-level oversight	Please explain
Scheduled – some meetings	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Climate-related risks and opportunities to our own operations Climate-related risks and opportunities to our bank lending activities 	<p>Scotiabank's entire Board of Directors was engaged on our bank-wide climate change strategy in late fiscal 2019, when the Climate Change Strategy Steering Committee led by Senior Management brought the Bank's new Climate Commitments to the Board for approval. The Commitments were publicly launched in November of 2019 (early fiscal 2020) and include a commitment to mobilizing \$100 billion by 2025 to reduce the impacts of climate change, as well as commitments to address climate change in our reporting, governance, risk management and in our own operations. The Commitments also included the establishment of a Climate Change Centre of Excellence. Climate change is also addressed by several committees of the Board given the cross-functional impact across the organization. The Risk Committee of the Board reviews, guides and retains primary oversight of climate change risks and opportunities for the Bank. An update on climate change risk is provided quarterly to the Risk Committee as part of the Top and Emerging Risks outlined in the Enterprise Risk Management Report. Additionally, a presentation on climate risk was presented at the Risk Committee meeting in April 2019. The Corporate Governance Committee of the Board reviews the Bank's Social Impact & Sustainability strategy of which climate change is one of the key priorities. In addition this committee reviews the annual ESG report, which is a key component of Scotiabank's reporting and transparency on climate change data. The Audit and Conduct Review Committee (ACRC) of the Board oversees our climate change-related disclosures; for example, TCFD disclosures were included in our 2019 Annual Report, which is ultimately reviewed and approved by the Board.</p>

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)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Risks Officer (CRO)	CEO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our investing activities Risks and opportunities related to our insurance underwriting activities Risks and opportunities related to our other products and services Risks and opportunities related to our own operations	Quarterly
Other C-Suite Officer, please specify (Executive Vice President and General Counsel)	CEO reporting line	Both assessing and managing climate-related risks and opportunities <i>The Executive President and General Counsel leads the Bank's Legal and Corporate Affairs team, and therefore has management oversight of the Bank's Social Impact & Sustainability Strategy.</i>	Risks and opportunities related to our bank lending activities Risks and opportunities related to our other products and services Risks and opportunities related to our own operations	Half-yearly
Other C-Suite Officer, please specify (Senior Vice President, Corporate Secretary and Chief Corporate Governance Officer)	Other, please specify (General Counsel and Chairman of the Board)	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our investing activities Risks and opportunities related to our insurance underwriting activities Risks and opportunities related to our other products and services Risks and opportunities related to our own operations	As important matters arise
Business unit manager <i>Executive Vice President (EVP), Enterprise Risk Governance reports to the EVP Chief Compliance Officer & Head of Enterprise Risk, who in turn reports to the Group Head & CRO.</i>	Risk - CRO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our own operations	As important matters arise
Other committee, please specify (Climate Change Steering Committee)	Risk - CRO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our other products and services Risks and opportunities related to our own operations	Annually
Other committee, please specify (Enterprise Core Risk Committee)	Risk - CRO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our own operations	As important matters arise
Other committee, please specify (Risk Policy Committee)	Risk - CRO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities	As important matters arise

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Other committee, please specify (Senior Credit Committee(s))	Risk - CRO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities	As important matters arise
Other C-Suite Officer, please specify (Group Heads, Global Banking and Markets, Canadian Banking, International Banking, and Global Wealth Management)	CEO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our investing activities Risks and opportunities related to our other products and services	Annually
Business unit manager <i>Senior Vice President, Global Communications and Social Impact, Legal and Corporate Affairs</i>	Other, please specify (The Senior Vice President of Global Communications and Social Impact reports to the Executive Vice President and General Counsel, who leads the Bank's Legal and Corporate Affairs team, and reports directly to the CEO)	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our investing activities Risks and opportunities related to our insurance underwriting activities Risks and opportunities related to our other products and services Risks and opportunities related to our own operations	Half-yearly
Business unit manager <i>Senior Vice President, Real Estate</i>	Other, please specify (The Senior Vice President of Real Estate reports to the Group Head and Chief Human Resources Officer, who has oversight of the Human Resources, Marketing and Real Estate team)	Both assessing and managing climate-related risks and opportunities <i>The Senior Vice President of Real Estate has oversight of the Bank's operational GHG emissions and has accountability for the GHG emissions reduction target and Internal Carbon Price.</i>	Risks and opportunities related to our own operations	As important matters arise
Business unit manager <i>Senior Vice President & Head, Corporate & Commercial Credit (reports directly to the CRO).</i>	Risk - CRO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities	As important matters arise

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 report to the CEO), chairs various risk committees, and also has unfettered access to the Risk Committee of the Board (composed entirely of independent directors). The CRO is responsible for global management of risk and communicating the Bank's Risk Policy to the Board. Climate-related risks ultimately managed by the CRO may include operational risk (e.g. from hurricane damage to our branches), reputational risk (e.g. through the implementation of the TCFD recommendations in our disclosures), and credit risk that arise from physical / transition risks (e.g. how changing weather patterns or changes in carbon pricing policy could impact our clients). The CRO monitors climate related issues through regular risk committee meetings and from briefings from the Environmental & Social Risk team. This specialized team sits within Global Risk Management and works with non-retail banking and credit teams on reviewing loan deals to ensure E&S issues are considered. Information on climate-related risk is shared with the Risk Committee of the Board through the quarterly Enterprise Risk Management Report, or otherwise as and when needed.

Executive Vice President (EVP) & General Counsel (Legal & Corporate Affairs):

Our EVP & General Counsel oversees the Bank's Social Impact & Sustainability strategy, the annual ESG Report, and has joint responsibility for Scotiabank's climate change strategy and Climate Commitments, along with the Chief Risk Officer and Group Heads. The EVP & General Counsel reports directly to the CEO.

Climate Change Strategy Steering Committee:

The objective of this cross-functional senior executive Committee is to support the development and implementation of the Bank's Climate Commitments, which were approved by the Board in late fiscal 2019 and announced publicly in early fiscal 2020. Members and their respective responsibilities include:

1. The **Senior Vice President Corporate Secretary & Chief Corporate Governance Officer (Legal & Corporate Affairs)** opines on all governance related matters relating to the implementation of the Bank's Climate Commitments, in particular governance and reporting on climate change in the annual ESG report, Annual Report and MD&A.
2. The **Executive Vice President, Enterprise Risk Governance** helps to oversee the achievement of our \$100 billion mobilization commitment and the integration of climate change into risk management processes.
3. The **Senior Vice President & Head, Corporate & Commercial Credit** helps to oversee the achievement of our \$100 billion mobilization commitment and integration of climate change considerations into non-retail lending.
4. The **Senior Vice President, Global Communications & Social Impact (Legal & Corporate Affairs)** oversees the Social Impact & Sustainability team, led by the Vice President, Social Impact & Sustainability. This team produces the Bank's Social Impact & Sustainability strategy and annual ESG Report, including how the Bank manages its response to climate change through the Scotiabank Climate Commitments. This includes, in addition to the above, the Bank's efforts to decarbonize our own operations, annual disclosures related to the recommendations of the Taskforce on Climate Related Financial Disclosures (TCFD), and the Climate Change Centre of Excellence.

Enterprise Core Risk Committee (ECRC), Risk Policy Committee & Senior Credit Committee(s):

The ECRC serves as the most senior point of management that establishes and enhances policies to mitigate operational and compliance risks. It reviews the Bank's top operational and compliance risks globally, including current and emerging trends such as climate change, and the related risk response to ensure appropriate action is taken.

The Risk Policy Committee (chaired by the CEO) is responsible for policies, limits, proposals, and other issues covering credit, market, reputational, legal and operational risk, as well as adjudicating on issues referred by the senior management committees. Environmental risk assessment, including climate-related risk, is also embedded in the Credit Policy Manual.

Senior Vice President (SVP), Real Estate:

Among 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, such as the establishment of an internal price on carbon in 2018.

Group Heads: Global Banking & Markets, Canadian Banking, International Banking, and Global Wealth Management:

All Group Heads of these revenue-generating business lines are responsible for meeting targets related to Scotiabank's Commitment to mobilize \$100 billion by 2025 to reduce the impacts of climate change. All report directly to the CEO.

C1.3

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

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

C1.3a

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

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Business unit manager	Monetary reward	Emissions reduction target	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.
Environment/Sustainability manager	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project	The Energy & Sustainability Manager reports to the VP, Real Estate, and is responsible for management of the Bank's 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.
Facilities manager	Monetary reward	Energy reduction project	The Real Estate Facility Manager is responsible for the selection and analysis of facilities initiatives and vendors which uses energy savings as a criterion.
Environment/Sustainability manager	Monetary reward	Company performance against a climate-related sustainability index Other (please specify) (The Vice President of Social Impact & Sustainability has responsibility for the Bank's Social Impact & Sustainability Strategy.)	The Vice President of Social Impact & Sustainability has responsibility for the Bank's Social Impact & Sustainability Strategy. This includes ensuring: annual publication of the ESG Report, annual submission to CDP and ensuring performance relative to peers, and annual submission to the Dow Jones Sustainability Index and performance relative to peers (which has a strong focus on climate change). These responsibilities are part of the VP's annual performance goals and thus linked to compensation.

C-FS1.4

(C-FS1.4) Does your organization offer its employees an employment-based retirement scheme that incorporates ESG principles, including climate change?

	We offer an employment-based retirement scheme that incorporates ESG principles, including climate change.	Comment
Row 1	No, but we plan to do so in the next two years	

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

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

C2.1b

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

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.

C2.2

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

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

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. Scotiabank operates 394 branches and office locations in Central America and the Caribbean. In 2019, branches and offices in these regions experienced 21 hurricanes and tropical storms that resulted in physical damage and/or closure at a small number of locations (less than 10).

Value chain stage(s) covered

Upstream

Risk management process

A specific climate-related risk management process

Frequency of assessment

Not defined

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

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. Through the Code, Suppliers are encouraged to track and mitigate their greenhouse gas (GHG) emissions and to incorporate climate change risk assessments into their risk management procedures.

Value chain stage(s) covered

Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

The Bank is exposed to a variety of top and emerging risks (as detailed on page 79 of the 2019 Annual Report). These risks can potentially adversely affect the Bank's business strategies, financial performance and reputation. As part of our risk management approach, we proactively identify, assess, review, monitor and manage a broad range of top and emerging risks and undertake appropriate risk mitigation strategies. A listing of top and emerging risks is generated using a comprehensive risk identification approach whereby information is gathered and consolidated from various sources including external research, senior management, and internal country/subsidiary risk reporting. External research is compiled from peer financial institution analysis and prominent sources for evaluating global risks. The results of this research, in conjunction with senior management's experience and the Bank's internal country/subsidiary risk reporting, help identify the Bank's top and emerging risks, which are then plotted on a risk heat map which indicates potential impact versus likelihood. This heat map and a brief discussion of selected top and emerging risks and mitigation strategies are presented to senior management and the Board of Directors on a quarterly basis. Through the risk identification process, Climate Risk has been identified as a Top and Emerging risk with physical and transition risk associated with it, which further can give rise to credit, reputation, operational and legal risks for the Bank. To safeguard the Bank and its stakeholders against climate-related risks, Scotiabank has several 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. Material issues are raised to related risk committees and reported quarterly in the Enterprise Risk Report to the Risk Committee of the Board. Process for assessing client-related (downstream) risks: We need to be aware of and understand credit risk stemming from the climate change risks posed to our clients' businesses, which may affect their ability to repay their financing. 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. For the Bank's non-retail clients, a climate change risk assessment (CCRA) 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. In addition, the Bank's new Climate Commitments were integrated into the environmental risk framework in 2019 to better identify transition and physical risks and opportunities for business lending. As stated in our 2019 ESG Report, the CCRA process evaluates both the physical (acute and chronic) and transition (reputational, market, technology, legal and compliance) risks a client may face, and their awareness level of such risks. The CCRA is conducted at the transaction level. For example, we assigned a CCRA of High to an Energy company because of the responses provided during the climate change risk due diligence assessment process, allowing for a better and more informed credit decision. The CCRA process will also support data collection to enable the Bank to effectively mitigate and manage risk across sectors and will support stress testing and scenario planning of our loan book. Banking officers and credit adjudicators participated in mandatory training on assessing climate-related risk to ensure effective implementation of the CCRA. Through our participation in the Canadian Bankers Association's Climate Change Disclosure Working Group, we engaged five other Canadian banks and led workshop sessions in 2019 on the development of a sector sensitivity methodology for climate change that identifies key physical and transition risk drivers to determine potential materiality and opportunities. The results were embedded into the risk profiles of the 28 main industry sectors to which the Bank lends. 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 2019, the Bank launched enhanced mandatory Environmental Risk e-learning courses, including modules specific to climate change risks. 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.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	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 3 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 has also implemented a mandatory climate change credit risk assessment (CCRA), a process which evaluates both the physical (acute and chronic) and transition (reputational, market, technology, legal and compliance) risks a client may face, and their awareness level of such risks. As part of the implementation, bankers and credit managers are receiving mandatory enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments.
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. Our international offices maintain contact with government in their respective country and monitor for proposed changes to 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 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 recently approved 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 regulation could impact our customers. The Bank's Environmental and Social Risk team and Sustainability 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. Scotiabank has also implemented a mandatory climate change risk assessment (CCRA), a process which evaluates both the physical (acute and chronic) and transition (reputational, market, technology, legal, and compliance) risks a client may face, and their awareness level of such risks. As part of the implementation, bankers and credit managers are receiving mandatory 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 market share, potentially leading to increased credit or investment risk for the Bank. 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 has also implemented a mandatory climate change credit risk assessment (CCRA), a process which evaluates both the physical (acute and chronic) and transition (reputational, market, technology, legal and compliance) risks a client may face, and their awareness level of such risks. As part of the implementation, bankers and credit managers are receiving mandatory 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 has also implemented a mandatory climate change credit risk assessment (CCRA), a process which evaluates both the physical (acute and chronic) and transition (reputational, market, technology, legal and compliance) risks a client may face, and their awareness level of such risks. As part of the implementation, bankers and credit managers are receiving mandatory 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. At Scotiabank, these are considered throughout the climate change risk assessment (CCRA) and due diligence processes for Corporate and Commercial banking clients. In terms of opportunities, the Global Banking and Markets division was involved in multiple transactions aligned to Scotiabank's Green and Transition Taxonomy in fiscal 2019. For example, in September 2019, Scotiabank acted as Joint Bookrunner to International Finance Corporation's CAD\$750 million five-year Green Bond to finance eligible green projects such as renewable energy, green buildings, sustainable forestry, and energy efficiency. Further, the Canadian Standards Association (CSA) Group is currently leading the development of a "Transition Finance Taxonomy" as part of a National Standard of Canada for Transition Finance. This work was initiated based on the recommendations put forward in the Government of Canada's Expert Panel on Sustainable Finance Final Report dated June 2019. This development will have market implications for key stakeholders, including: <ul style="list-style-type: none"> • Companies in Canada seeking capital for transition-oriented activities (e.g. reducing greenhouse gas emissions and their environmental footprint while advancing new technologies). • Institutional and retail investors who require assurance that their investments support the transition to a lower carbon economy. • Canadian financial institutions providing credit solutions, advisory services or access to capital markets to enable the transition to a low-carbon economy while also helping clients manage transition risk.
Reputation	Relevant, always included	Reputational Risk is assessed by several players across the Bank including Corporate Sustainability, Environmental and Social 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 fails in meeting its own internal commitments, such as the Bank's Climate Commitments announced in 2019. This could prompt external stakeholders such as NGOs 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) to show support for carbon pricing policies and set an internal price on carbon of \$15 CDN / tonne of CO2 in 2018. In 2019, the Bank committed to increasing this internal price on carbon to \$30 / tonne in 2020, and \$60 / tonne in 2022. In addition, in February 2018, Scotiabank announced its support of the TCFD Recommendations, which led to TCFD-aligned disclosures in both our 2018 and 2019 Annual Reports. Both the internal carbon price and TCFD reporting are examples that have also been raised by investors. The Bank met these two obligations to help minimize reputational risk.
Acute physical	Relevant, always included	In certain regions, extreme weather events such as hurricanes and floods can represent acute physical risks to the infrastructure of bank branches, the safety of employees and clients, and the accessibility of suppliers. For example, Scotiabank has a significant number of branches and office locations in Central America and the Caribbean. These regions are geographically exposed to tropical storms, severe weather, hurricanes and floods. Experts are predicting that the number, frequency and intensity of severe weather events in Central America and the Caribbean is increasing as a result of climate change. As a result, an increase in extreme weather events is expected to increase in the operational risks associated with these areas. Scotiabank operates 394 branches and office locations in Central America and the Caribbean. In 2019, branches and offices in these regions experienced 21 hurricanes and tropical storms that resulted in physical damage and/or closure. The Bank's Real Estate and Operational Risk teams have detailed and comprehensive protocols for enhancing preparedness: <ul style="list-style-type: none"> • International Master Construction Specifications are being updated for hurricane prone areas which include: Caribbean, Mexico, Costa Rica and Panama. In addition, Seismic Standards are being updated for earthquakes prone regions. • Real Estate is engaging a Climate Resiliency Consultant to complete a four-step approach to enhancing the Bank's preparedness for physical impacts of climate change. From a lending perspective, Corporate and Commercial Banking clients are subject to a climate change risk assessment (CCRA) 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. The CCRA evaluates both the physical (acute and chronic) and transition risks a client may face, and their awareness level of such risks. As part of the implementation, bankers and credit managers are receiving mandatory 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 availability and sanitation all could impact our employees and customers. Chronic impacts related to water availability and biodiversity loss may impact our non-retail clients also. For example, in Peru, El Niño-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 Niño 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 has also implemented a mandatory climate change credit risk assessment (CCRA), a process which evaluates both the physical (acute and chronic) and transition risks a client may face, and their awareness level of such risks. As part of the implementation, bankers and credit managers are receiving mandatory enhanced climate change training as part of the existing environmental risk training in order to further guide their climate change assessments.

C-FS2.2b

(C-FS2.2b) Do you assess your portfolio's exposure to climate-related risks and opportunities?

	We assess the portfolio's exposure	Please explain
Bank lending (Bank)	Yes	Scotiabank needs 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 (CCRA) is part of the normal due diligence process. 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. In terms of our retail client base, environmental site assessments are factored into the Bank's mortgage lending policies, which mainly focus on identifying land or groundwater contamination for certain types of properties.
Investing (Asset manager)	Yes	1832 Asset Management (1832): 1832 incorporates ESG issues, including climate-related risks and opportunities, into the investment analysis and decision-making processes. 1832's deep, bottom-up fundamental investment processes analyse scenarios that include energy prices, technology innovation, physical environmental changes, regulatory evolution and other factors to make investment decisions. At the portfolio level, the dedicated Investment Risk Team has developed portfolio reports on ESG factors using MSCI data. 1832 is currently developing portfolio reports on carbon intensity and climate-related risks. Overall assessment of climate-related risks and opportunities may involve, but is not limited to, fundamental bottom-up analysis using proprietary and/or third-party tools and data, company engagements, and information requests. Jarislowsky Fraser (JF): As with all material investment risks, climate risk is integrated into JF's bottom-up, fundamental analysis by the in-house research team and supplemented by external research from a variety of sources. JF's focus has generally been on the risks and opportunities that are material to its investment thesis for individual companies and broader portfolios related to a transition to a low-carbon economy. Potential regulatory and technological advancements, where material, are actively debated during regularly scheduled sector reviews and when assessing new and existing securities. In order to systematically integrate material climate-related risks and opportunities into investment decisions, JF leverages a variety of internal proprietary tools, conducts climate-related scenario analyses, and tracks several climate-related metrics including the weighted average carbon intensity and portfolio carbon footprint. MD Financial Management (MD): MD incorporates ESG issues, including climate-related risks and opportunities, into the investment analysis and decision-making processes. MD specifically assesses climate change risk by leveraging MSCI data to raise awareness of their risk exposures and engage, directly and indirectly, with investee companies for opportunities to improve climate-related outcomes.
Investing (Asset owner)	<Not Applicable >	<Not Applicable>
Insurance underwriting (Insurance company)	<Not Applicable >	<Not Applicable>
Other products and services, please specify	Not applicable	

C-FS2.2c

(C-FS2.2c) Describe how you assess your portfolio's exposure to climate-related risks and opportunities.

	Portfolio coverage	Assessment type	Description
Bank lending (Bank)	Majority of the portfolio	Qualitative and quantitative	For the Bank's non-retail clients, a climate change risk assessment (CCRA) 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. As stated in our 2019 ESG Report, in 2019 we developed a mandatory enhanced due diligence process for assessing the risks our corporate and commercial clients may face due to climate change. The climate change risk assessment (CCRA) process evaluates both the physical (acute and chronic) and transition (reputational, market, technology, legal and compliance) risks a client may face, and their awareness level of such risks. The CCRA is conducted at the transaction level and helps to inform credit decisions. Banking officers and credit adjudicators participated in mandatory training on assessing climate-related risk to ensure effective implementation of the CCRA. This process will also support data collection to enable the Bank to effectively mitigate and manage risk across sectors and will support stress testing and scenario planning of our loan book. The Bank is also developing a methodology for stress testing the business loan portfolio according to various internationally recognized climate change scenarios and models. Through our participation in the Canadian Bankers Association's Climate Change Disclosure Working Group, we engaged five other Canadian banks and led workshop sessions in 2019 on the development of a sector sensitivity methodology for climate change that identifies key physical and transition risk drivers to determine potential materiality and opportunities. The results were embedded into the risk profiles of the 28 main industry sectors to which the Bank lends. 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. In 2019, the training focused on physical risk, transition risk, management awareness, and opportunities. This training is mandatory, automatic and on-going for existing non-retail credit and banking officers as well as for new hires.
Investing (Asset manager)	Majority of the portfolio	Qualitative and quantitative	In this case, the portfolio coverage refers to the combined assets of 1832 Asset Management, Jarislowsky Fraser, and MD Financial Management, where climate-related risks and opportunities are assessed using the respective methods of each firm. 1832 Asset Management (1832): As part of the fundamental investment process 1832 analyses the ability of a company to adapt their business model to various climate-related scenarios over time, including its ability to generate revenue and manage its costs, using excel models and comparative fundamental assessments. Investment professionals identify companies that stand to benefit from technology innovation, including innovation that helps society adapt to and reduce climate-related risks. A key part of the process is direct management team engagement to assess their company's strategies and plans to handle climate change. 1832 differentiates companies based on whether they have a coherent and credible strategy to manage evolving regulatory and energy price scenarios. Where relevant, 1832 also incorporates MSCI ESG research and data into the fundamental assessment of companies. The ESG Investment Committee supports each of the portfolio management teams in integrating ESG and other risks into their respective investment processes. Jarislowsky Fraser (JF): JF has developed a number of proprietary tools to ensure that climate-related risks and opportunities, where material, are systematically integrated into the investment process: - Business Practice Scorecard: In addition to the summary report and financial model, analysts also include a Business Practice Scorecard that summarizes relative and absolute assessments of common ESG factors that may or may not be noted explicitly in other analyses. Emissions management strategy, CDP disclosure and other indicators of emissions strategy and efficiency are examples of the items assessed. - ESG&F Heatmap: JF's proprietary portfolio-level heatmap records a variety of environmental, social, governance and financial indicators of quality. Companies' CDP Scores are included in this heatmap. Companies that do not disclose to CDP are flagged and assessed for potential engagement, depending on the materiality of climate risk to the business model. - Portfolio Carbon Footprint: Included as part of the internal quarterly risk review, the portfolio carbon footprint compares both overall and sector level emissions vs. benchmarks, as well as a listing of the highest emitting companies. The goal of the risk review is to inform the firm's investment oversight body, the Investment Strategy Committee, of the risk exposures in each portfolio, and to potentially trigger a discussion of a company's overall emissions-management strategy, the expected future direction, relative risk exposure to current and future regulatory changes, and how that risk is reflected in the assessment of the risk-adjusted returns for the company. Analysts and portfolio managers include each company's carbon intensity on weekly earnings monitors alongside financial metrics and ratios. JF also tracks several other portfolio climate-related metrics, including, but not limited to, the weighted average carbon intensity (Scope 1 and 2 tons of CO2e per \$M US Sales) and exposure to carbon-related assets (fossil fuel reserves and stranded assets). The weighted average carbon intensity is the primary carbon metric used internally to track portfolio exposure to carbon intensive companies and industries, and to compare portfolio intensities to that of their respective index. This metric is also used for client reporting. Lastly, JF uses a variety of climate-related scenario analyses to better understand the resilience of its investments and portfolios. The use of scenarios is particularly prevalent in the analysis of energy-related and more energy-intense industries where the price of energy is an important input into the individual company forecasts. Over time managers may make adjustments to the portfolio based on, but not exclusively, a bottom-up view of the prospects for existing and future technologies, physical changes to the environment, public policy, and regulations related to climate change and carbon emissions. MD Financial Management (MD): Using MSCI ESG data, MD uses a scorecard approach for all equity holdings in MD Funds. This measurement and assessment process of companies allows MD to focus on specific ESG issues uniquely important to its Canadian Physician clients and engage with companies that score poorly relative to the industry. Negative screening is deployed in the management of MD Fossil Fuel Free Bond and MD Fossil Fuel Free Equity Funds.
Investing (Asset owner)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Insurance underwriting (Insurance company)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other products and services, please specify	<Not Applicable>	<Not Applicable>	<Not Applicable>

C-FS2.2d

(C-FS2.2d) Do you assess your portfolio's exposure to water-related risks and opportunities?

	We assess the portfolio's exposure	Portfolio coverage	Please explain
Bank lending (Bank)	Yes	Minority of the portfolio	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. These risks may include water-related risks. The credit evaluation includes an environmental risk assessment where applicable, and commentary on the potential impact on the borrower. More specifically, during the 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, which may include water-related risks.
Investing (Asset manager)	Yes	Majority of the portfolio	1832 Asset Management (1832): Where relevant, 1832's fundamental investment processes analyse a company's ability to access water necessary for their processes such as mining and energy producers, and industrial manufacturers. Risks related to potential water contamination or water shortages are part of the fundamental assessment of these companies. Where water-related factors are included in MSCI research and data, those factors are incorporated into the fundamental process. Jarislowsky Fraser (JF): To the extent it is seen as material for individual companies, industries or regions it invests in, JF monitors and assesses operations for metrics such as water use and waste disposal practices. MD Financial Management (MD): The assessment approach is based on all ESG factors and may include water-related issues.
Investing (Asset owner)	<Not Applicable >	<Not Applicable >	<Not Applicable>
Insurance underwriting (Insurance company)	<Not Applicable >	<Not Applicable >	<Not Applicable>
Other products and services, please specify	Not applicable	<Not Applicable >	

C-FS2.2e

(C-FS2.2e) Do you assess your portfolio's exposure to forests-related risks and opportunities?

	We assess the portfolio's exposure	Portfolio coverage	Please explain
Bank lending (Bank)	No, we don't assess this	<Not Applicable >	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.
Investing (Asset manager)	Yes	Majority of the portfolio	1832 Asset Management (1832): Where relevant, 1832's fundamental investment processes analyse a company's interaction with forests and required access to lumber for their processes, and exposure to forest-related regulation. These factors can be relevant for companies in industries such as mining and energy producers, paper and packaging, and industrial manufacturers. Risks related to forest issues are part of the fundamental assessment of these companies. Where forest related factors are included in MSCI research and data, those factors are incorporated into the fundamental process. Jarislowsky Fraser: To the extent it is seen as material for individual companies, industries or regions it invests in, JF monitors and assesses operations for issues such as sustainable forestry practices, land rights and supply chain transparency. MD Financial Management (MD): The assessment approach is based on all ESG factors and may include forest-related issues.
Investing (Asset owner)	<Not Applicable >	<Not Applicable >	<Not Applicable>
Insurance underwriting (Insurance company)	<Not Applicable >	<Not Applicable >	<Not Applicable>
Other products and services, please specify	Not applicable	<Not Applicable >	

C-FS2.2f

(C-FS2.f) Do you request climate-related information from your clients/investees as part of your due diligence and/or risk assessment practices?

	We request climate-related information	Please explain
Bank lending (Bank)	Yes	In 2019, the Bank standardized the process of performing Climate Change Risk Assessments (CCRAs) for all business borrowers. Banking officers and credit adjudicators are to collect information in consultation with borrowers based on a series of specific questions that evaluate both the physical and transition risks a borrower may face, and their awareness level of such risks. The CCRA is thus conducted at the transaction level and helps to inform credit decisions. Banking officers and credit adjudicators participated in mandatory training on assessing climate-related risk to ensure effective implementation of the CCRA.
Investing (Asset manager)	Yes, for some	1832 Asset Management (1832): As part of 1832's fundamental engagement with corporate management teams, they discuss their exposure to carbon emissions and their strategies to manage evolving regulatory aspects of climate change, where relevant. 1832 continues to encourage issuers to enhance their disclosure of climate-related data and information during their engagements. The ESG Investment Committee continues to support each of the portfolio management teams with the incorporation of ESG factors into their fundamental process, and the enhancement of the documentation of their assessment of these factors. Jarislowsky Fraser (JF): Analysts routinely engage with management teams on matters related to climate risk. This includes discussions around emissions management strategies, carbon pricing, and business resiliency. JF also leverages CDP Scores for its proprietary portfolio-level Environment, Social and Governance (ESG) heatmap, and flags companies that do not disclose to CDP for potential engagement. The investment team advocates for CDP-equivalent disclosure and progress towards TCFD-aligned reporting, while constructively engaging with outliers to implement best practices. Engagements are documented but the form and tactics of the engagement are left up to the analyst. The use of the information collected depends on the materiality of climate-related risks and opportunities to each individual company and an evaluation of systemic risk exposure of the portfolios. MD Financial Management (MD): MD actively engages with investees, either directly or indirectly, on identified climate change issues and opportunities for improvement. In addition, as part of MD's Fund oversight and Investment Management process, on an annual basis, MD collects and reviews the sustainability investment approach of all appointed Fund Advisors. These sustainability investment approaches may include information on assessing climate-related risks and opportunities.
Investing (Asset owner)	<Not Applicable>	<Not Applicable>
Insurance underwriting (Insurance company)	<Not Applicable>	<Not Applicable>
Other products and services, please specify	Not applicable	

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 & Primary climate-related risk driver

Reputation	Increased stakeholder concern or negative stakeholder feedback
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Primary potential financial impact

Decreased access to capital

Climate risk type mapped to traditional financial services industry risk classification

Funding risk

Company-specific description

Maintaining the trust of stakeholders is critical to the long-term success of our Bank. We recognize that climate change is one of the most pressing issues of our time. As an international financial institution, we have both the responsibility and opportunity to act, while enabling others for every future. Complacency and inaction on climate change, in addition to lending to carbon intensive sectors and projects, has the potential to result in negative publicity, thereby damaging the Bank's brand and reputation.

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. If climate change is inadequately managed, the Bank may face significant reputational damage that may impair the trust held by key stakeholders, including our investors, customers and the communities we operate in. As both the physical and transitional impacts associated with a changing climate becomes increasingly material, there is mounting pressure on financial institutions to develop robust climate strategies, be transparent on climate impacts and risks, and directly contribute to reducing of the impacts of climate change, including through financing and lending activities. Increasingly, our shareholders are actively engaging with us on the topic of climate change. Over the past few years, Scotiabank has received several shareholder proposals related to how the Bank was addressing climate change and related risks, indicating shareholder interest in climate-related risk management and decarbonization. As a case study, in 2018, an investor submitted a shareholder proposal on the topic of climate change and measures taken to support the transition to a low-carbon economy. After discussions with the Bank, the investor agreed to withdraw the proposal (details are provided on page 25-26 of the 2019 Management Proxy Circular).

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

We are unable to disclose an estimated financial impact figure associated with the potential reputational risks of climate change.

Cost of response to risk

500000

Description of response and explanation of cost calculation

In 2019, the Scotiabank launched an enterprise-wide climate strategy and the Climate Commitments to guide and communicate the Bank's approach to climate change, including a commitment to mobilize \$100 billion by 2025 to reduce the impacts of climate change. Through the Scotiabank Climate Commitments, we have also committed to ensuring robust climate-related governance and transparency in our reporting to meet growing shareholder interest and demand. We are committed to transparency on climate-related risks and will continue to align climate-related disclosures with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We disclose climate-related information in our Annual Report, ESG Report and annual CDP submission. Our commitment to transparency extends to continually reviewing our disclosures with a view to enhancements that meet evolving expectations and requirements, with the goal of mitigating reputational risk. The Bank maintains frequent dialogue with current and potential institutional investors to better understand their management expectations. The estimated cost of management of this risk is based on the cost of internal resources and the use of external subject matter experts and consultants, particularly, resources that supported the development of our enterprise-wide climate change strategy in fiscal 2019. In fiscal 2019, the approximate spend on climate change management strategies and related-activities was \$500,000. Finally, the Bank participates in several initiatives to contribute to global leadership and dialogue on climate change. Examples include: participation in UNEP FI TCFD pilot to harmonize industry-wide approaches for climate scenario analysis in bank lending portfolios, and involvement in the initiative to create a standard climate change financing taxonomy for Canada, run by the Canadian Standards Association (CSA).

Comment**Identifier**

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods
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Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

Operational risk

Company-specific description

Scotiabank's operations are vulnerable to the physical impacts of climate change. According to the Intergovernmental Panel on Climate Change (IPCC), as global average temperatures trend upwards, scientists predict a rise in the number, frequency and intensity of extreme weather events and severe weather conditions. Severe weather, such as floods, wildfires, hurricanes and extreme cold or heat, present a growing physical risk for the Bank. Severe weather events can damage Bank properties and disrupt operations, thereby negatively impacting Scotiabank's ability to conduct business and resulting in additional capital costs due to damage to physical assets. Examples could include broken windows, wall and roof damage, flooding, power and infrastructure damage. We operate 2,862 retail locations, of which some are particularly vulnerable to the physical impacts of climate change, extreme weather and corresponding damage may impede the accessibility of our branches to our customers. In 2019, Scotiabank's operations experienced 64 natural disaster events related to extreme weather, resulting in 7 branch and office closures. Importantly, Scotiabank has a significant number of 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 as a result of climate change. As a result, an increase in extreme weather events is expected to increase in the operational risks associated with these areas. Scotiabank operates 394 branches and office locations in Central America and the Caribbean. In 2019, branches and offices in these regions experienced 21 hurricanes and tropical storms that resulted in physical damage and/or closure.

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 depends 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. Based on recent experience, we believe the range of property damage on annual basis is 500,000 to 15,000,000.

Cost of response to risk

1000000

Description of response and explanation of cost calculation

Scotiabank's operations are vulnerable to the physical impacts of climate change. With growing frequency and severity of severe weather events, the Bank is faced with a growing operational risk that could result in physical property damage and interruptions to the provision of service to customers. Particularly, with a significant presence in Central America and the Caribbean, the Bank expects to be impacted by hurricanes and tropical storms that are intensifying in this region. To manage this growing operational risk, the Bank is committed to preparedness and response. The Bank's Real Estate and Operational Risk teams have detailed and comprehensive protocols for enhancing preparedness: • International Master Construction Specifications are being updated for hurricane prone areas which include: Caribbean, Mexico, Costa Rica and Panama. In addition, Seismic Standards are being updated for earthquakes prone regions. • Real Estate is engaging a Climate Resiliency Consultant to complete a four-step approach to enhancing the Bank's preparedness for physical impacts of climate change. The first step will be a preliminary vulnerability assessment to determine the locations most at risk for a climate event, and the type of climate event most likely to occur. Locations identified as being at higher risk of a weather-related impact will have a more detailed risk assessment to consider likelihood and consequences of climate events. The preliminary assessment and more detailed risk assessments are expected to be complete in 2020. Following the risk assessments, recommendations for next steps at each location will be requested and reviewed, and the information will be used for future capital planning. The last step is to have the consultant review day to day Real Estate functions and provide recommendations on how climate considerations can be incorporated into existing processes, including, but not limited to, site selection, leasing, construction standards and property management. By implementing these recommendations, the Bank is poised to enhance the resiliency of its operations in the face of the impacts of a changing climate. The preliminary estimates of the cost to conduct a climate resiliency study of our entire network (as described above) in order to help us manage climate change risks is \$1,000,000 CAD.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Market	Uncertainty in market signals
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Primary potential financial impact

Increased credit risk

Climate risk type mapped to traditional financial services industry risk classification

Credit risk

Company-specific description

Scotiabank considers environmental risk (including climate-related risks) as a principal risk type. Climate-related risk refers to the possibility that climate change issues associated with our customers could ultimately affect Bank performance by giving rise to credit risk. Climate change risk is the risk a Borrower faces in potential revenue losses, cost increases, liability exposures and/or asset impairment that threaten their viability based on physical and transition risks associated with climate change. Examples of physical risk considerations include severe weather (e.g. floods, hurricanes, extreme cold or heat). Examples of transition risk considerations include policy/regulatory actions such as subsidies, taxes or increased fuel costs, as well as changing market conditions. Climate change has the potential to impact the Bank's retail and business banking profitability through credit losses. Scotiabank is exposed to a variety of different sectors and types of borrowers experiencing varying degrees of climate-related risk. As outlined on page 85 of our 2019 Annual Report, excluding loans to households, the largest industry exposures were financial services (5.6% including banks and non-banks), real estate and construction (5.3%), wholesale and retail (4.5%), and energy (2.7%), all of which are subject to some degree of climate-related risk. As the impacts of climate change increase in prominence, so does the Bank's need to understand whether, and to what degree, its customers may be vulnerable to climate-related risks.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

In setting our allowance for credit losses, we account for a variety of different credit risks, including climate-related risk. We are unable to provide an accurate range that isolates credit losses due to climate-related risks, as we are still collecting the relevant data.

Cost of response to risk

500000

Description of response and explanation of cost calculation

For over a decade, the Bank has utilized and refined a comprehensive environmental risk management process. The identification, assessment and management of climate change risk is done through due diligence as part of the overall existing environmental risk assessment and credit adjudication processes. In fiscal 2019, we developed an

enhanced due diligence process for assessing the risks our corporate and commercial clients may face due to climate change. The Climate Change Risk Assessment (CCRA) process evaluates both the physical (acute and chronic) and transition (reputational, market, technology, legal and compliance) risks a client may face, and their awareness level of such risks. The CCRA is conducted at the transaction level and helps to inform credit decisions. This process will also support data collection to enable the Bank to effectively mitigate and manage risk across sectors, and will support stress testing and scenario planning of our loan book. Banking officers and credit adjudicators participated in mandatory training on assessing climate-related risk to ensure effective implementation of the CCRA. Through our participation in the Canadian Bankers Association's Climate Change Disclosure Working Group, we led a workshop in 2019 on the development of a sector sensitivity methodology for climate change that identifies key physical and transition risk drivers to determine potential materiality and opportunities. The results were embedded into the risk profiles of the 28 main industry sectors to which the Bank lends. Scotiabank's Environmental and Social Risk team collaborates with credit and lending teams across our business, including Corporate, Commercial, International, Small Business and Wealth Management, helping them to assess environmental and social risks for transactions in diverse sectors. In 2019, this team responded to more than 1,100 internal requests for technical advice and counsel on loan transactions involving real estate as security, and guidance on procedures or methods for conducting sound due diligence and adhering to the Bank's environmental and social risk processes. The estimated cost of management of this risk off \$500,000 is based on a high-level estimate and relevant assumptions related to annual human resource costs of the Environment and Social Risk team.

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

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

As stated by the Scotiabank Climate Commitments, the Bank works to address climate change mitigation and adaptation by decarbonizing our operations through energy efficiency and innovation. The Bank realizes that there is a significant opportunity to lower our operating costs by improving energy and resource efficiency at the buildings where we conduct business. In fiscal 2019, the Bank owned or leased 953 retail locations, and occupied space in 131 office buildings across Canada, representing approximately 1,049,770 square metres. Internationally, we operated 1,909 owned and leased retail locations and occupied space in 136 office buildings outside of Canada, representing approximately 1,263,440 square metres. Supplying electricity, power and water to these retail and office locations confers a significant operating cost for the Bank. By implementing energy reduction initiatives, such as HVAC retrofits, building system upgrades and thermostat replacements, the Bank is poised to operate its buildings more efficiently, thereby reducing its operating expenditures, such as water, heating and electricity. In addition to renovations and retrofits, the Bank realizes that it can further streamline its operations by densifying office spaces through the adoption of new workplace strategies that provide flexible office spaces. These strategies enable greater workforce flexibility while also reducing the space needed per employee by 40% (as stated in the 2018 Sustainable Business Report), conferring both cost and resource savings.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3636000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The potential financial impact figure describes the annualized energy savings calculated based on the installment and implementation of energy reduction initiatives in fiscal 2019. We project that the financial benefit of these energy efficiency initiatives will be approximately \$3,636,000 on an annualized basis.

Cost to realize opportunity

17487000

Strategy to realize opportunity and explanation of cost calculation

To realize this opportunity, the Bank has implemented an emissions reduction target and an internal price on carbon to incentivize investment in energy efficiency and renewable energy projects. In fiscal 2019, we set a new target to reduce our greenhouse gas emissions by 25% (from a 2016 baseline), after we achieved our previous

target two years early. In 2018, we set an internal price on our Scope 1 and 2 emissions from our capital expenditure budget. In fiscal 2019, Scotiabank's internal price on carbon raised nearly CAD\$2 million, to be re-invested in a variety of renewable energy and efficiency projects across our footprint. In 2020, we have doubled our internal carbon price from \$15 to \$30 per tonne of CO₂e, and it will rise again to \$60 by 2022. As our internal price on carbon incrementally increases, we have a growing pool of capital to re-invest to support the decarbonization of our operations and improve our operating efficiency. 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. In fiscal 2019, the Bank undertook a variety of efficiency initiatives that contributed to our overall resource efficiency. These included air-conditioning (HVAC) retrofits at 190 locations across our Canadian branch network, which are projected to result in \$1,820,000 in annualized energy savings and reduce our CO₂ emissions by 1,676 tonnes CO₂e. By implementing air-conditioning (HVAC) retrofits in our international locations, we could save \$1,240,000 and reduce our emissions by 1,573 tonnes CO₂e annually. In fiscal 2019, the Bank spent approximately \$17,487,000 on the installation and implementation of energy reduction initiatives in order to meet our emissions reductions target and realize the opportunity of enhancing our energy efficiency to lower the Bank's operating costs. The cost to realize the opportunity was calculated by totaling the Bank's energy efficiency initiatives (such as HVAC upgrades) and renewable energy projects (such as solar installations) for fiscal 2019.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Markets

Primary climate-related opportunity driver

The development of new revenue streams from new/emerging environmental markets and products

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

Climate change is significantly impacting natural systems and communities across the globe. Efforts to address climate change will require a significant mobilization of capital. Recognizing the critical role that the financial services sector plays in the transition to a low-carbon, more resilient and prosperous future, we launched the Scotiabank Climate Commitments to support clients in the transition to a low-carbon economy. As part of our climate commitments, we have committed to mobilize \$100 billion by 2025 to reduce the impacts of climate change. To support this goal, we continue our work across all business lines to grow markets for low-carbon and climate-resilient solutions and direct funding towards supporting the goals of the Paris Agreement. Our Global Banking and Markets (GBM) business line provides corporate clients with lending and transaction services, investment banking advice and access to capital markets. GBM is a full-service wholesale bank in the Americas, with operations in 21 countries, serving clients across Canada, the United States, Latin America, Europe and Asia-Pacific. GBM at Scotiabank has demonstrated leadership in green bonds financing, having participated in approximately 30 green bond offerings across six currencies, totalling more than CAD \$18 billion equivalent, over the past two years. In addition, Scotiabank recently launched a new Sustainable Finance Group within GBM to help further the Climate Commitments, working closely with Scotiabank partner teams to provide financial solutions and advice across sustainable finance products to corporate, financial, public sector and institutional clients across our global footprint. Scotiabank has also supported the Canadian Standards Association (CSA) in its development of a "Transition Finance Taxonomy", as it is imperative that Canada's climate change strategy includes transition-related investment opportunities that contribute meaningfully to Canadian and global climate objectives.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

100000000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Scotiabank is committed to mobilizing \$100 billion by 2025 to reduce the impacts of climate change. This includes lending, investing, financing and advisory, contributions to the Bank's direct operations and support for communities where it operates to reduce climate-related impacts. It also includes the creation of new products and services that will enable capital to be directed toward climate change mitigation and adaptation initiatives. At the end of fiscal 2019, Scotiabank has mobilized \$16 billion toward this commitment.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

Scotiabank's Global Banking and Markets (GBM) division has a team of financial professionals and sector experts dedicated to supporting the renewable energy sector around the world. In addition, Scotiabank recently launched a new Sustainable Finance Group within GBM to help further the Climate Commitments, working closely with Scotiabank partner teams to provide financial solutions and advice across sustainable finance products to corporate, financial, public sector and institutional clients across our global footprint. Scotiabank is committed to mobilizing \$100 billion by 2025 to reduce the impacts of climate change. This includes lending, investing, financing and advisory, contributions to the Bank's direct operations and support for communities where it operates to reduce climate-related impacts. It also includes the creation of new products and services that will enable capital to be directed toward climate change mitigation and adaptation initiatives. At the end of fiscal 2019, Scotiabank has mobilized \$16 billion toward this commitment. This includes lending, finance and advisory services aligned to our Green and Transition Taxonomy, which covers renewable energy, green buildings and clean transportation, among other categories. As a case study, in September 2019, Scotiabank acted as the Joint Bookrunner to International Finance Corporation's (IFC) \$750 million five-year Green Bond. IFC is a member of the World Bank Group and this was their first Canadian dollar green bond. The proceeds were used for projects such as renewable energy, green buildings, sustainable forestry and energy efficiency. Other recent examples that contribute to our target can be found on page 20 of our 2019 ESG Report.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Ability to diversify business activities

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

As a leading Bank in the Americas with strong market position in Canada and the Pacific Alliance growth markets of Mexico, Peru, Chile and Colombia, Scotiabank acknowledges the unique role we can play in transitioning to a low-carbon, more resilient economy by accelerating climate solutions through our core business activities. Guided by the Scotiabank Climate Commitments, we aim to play an active role in supporting the transition to a low-carbon, more resilient economy by accelerating climate solutions through our core business activities and enabling our customers, employees and communities to thrive. We also continue to innovate and develop new products and services to support clients in the transition to a low-carbon future. Shifts in the supply and demand for green products represents an opportunity for Scotiabank. Launched in June 2019, Scotiabank's Green Bond Framework enabled Scotiabank to develop green products to support climate change and energy transition in line with the internationally recognized Green Bond Principles. In fiscal 2019, we issued our inaugural USD\$500 million Green Bond. As part of our climate commitments, we have committed to mobilize \$100 billion by 2025 to reduce the impacts of climate change. We have also committed to establishing a Climate Change Centre of Excellence to mobilize collaboration, dialogue and information-sharing and contribute to the global conversation on climate change. In doing this, we are strengthening our position to offer green products and services, thereby supporting the transition to a low carbon economy across our international footprint.

Time horizon

Short-term

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)

651509254

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

This figure is the amount of net Green Bond proceeds in CAD, equivalent to the USD\$500 million issued on July 18, 2019 (settlement date), using the USD-CAD exchange rate on this date. The net proceeds from the Green Bond were used to refinance and allocated to eligible green assets, which refer to new or existing assets, businesses or projects that meet the Scotiabank Green Bond Framework Eligibility Criteria.

Cost to realize opportunity**Strategy to realize opportunity and explanation of cost calculation**

As demand grows for products and services aligned with a low carbon economy, there is a growing opportunity to offer financial products and services. In launching the Scotiabank Climate Commitments, we have committed to mobilizing \$100 billion by 2025 to reduce the impacts of climate change. In June 2019, Scotiabank engaged clients and industry members by hosting its inaugural ESG Conference in Toronto, Canada in order to contribute to the dialogue on ESG within capital markets. The conference included topics such as how conscious investing can create a better society; climate change, energy transition, and environmental stewardship in a global context; and theory and practices of ESG while investing for alpha. As a case study, in June 2019, Scotiabank's Green Bond Framework was developed in line with the International Capital Market Association's (ICMA) Green Bond Principles. Scotiabank's Green Bond Framework allows Scotiabank to utilize the debt capital markets for climate change and energy transition solutions in line with the internationally recognized Green Bond Principles, doing our part to building a sustainable future. In July 2019, Scotiabank issued its inaugural USD\$500 million Green Bond, of which proceeds were used to fund assets aligned to the Scotiabank Green Bond Framework, including the categories of Clean Transportation and Green Buildings. The net proceeds from the Green Bond were used to refinance and allocated to eligible green assets, which refer to new or existing assets, businesses or projects that meet the Scotiabank Green Bond Framework Eligibility Criteria. Scotiabank's loan share of the green building category includes approximately 1,350,995 square feet of certified green real estate space (LEED® Gold or Platinum) across Canada that, once completed and operational, will lead to an estimated: 20,735 eMWh of energy saved annually – the equivalent of powering 800 households in Canada and 2,511 tonnes of CO2e emissions avoided annually.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

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

Yes, qualitative and quantitative

C3.1b

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

Climate-related scenarios and models applied	Details
Other, please specify (Internal proprietary methodology)	The Bank has begun to use climate-related scenario analysis, most notably in two ways: 1. Internal sector sensitivity assessment: 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. For instance, in 2019, we developed the Climate Change Risk Assessment (CCRA), an enhanced due diligence process for assessing the climate-related risks our corporate and commercial clients. This process will also support data collection to enable the Bank to effectively mitigate and manage risk across sectors and will support stress testing and scenario planning of our loan book. Further, as stated in our 2019 Annual Report, the Bank is developing a methodology for stress testing the Bank's business loan portfolio according to various internationally recognized climate change scenarios and models. 2. UNEP FI TCFD Pilot: We have joined the second UNEP FI pilot on TCFD. This project will explore how to quantify the bank's portfolio exposure to transition and physical risks by suggesting amendments to existing credit risk ratings to incorporate a weighted climate loss given default rate. Participation in the pilot will help us shape and harmonize best practices for scenario analysis as we plan to add climate factors into our stress testing models.
IEA 450 IEA NPS	Jarislowsky Fraser (JF) analyses portfolios and investments under a variety of different forward-looking scenarios in order to better understand the resilience of its investments. The use of scenarios is particularly prevalent in the analysis of energy-related and more energy-intensive industries where the price of energy is an important input into the individual company forecasts. For this reason, the International Energy Agency (IEA) 450 Scenario (assumes 50% probability of limiting warming to 2 degrees) and the IEA New Policies Scenario (assumes 50% probability of limiting warming to 2.7 degrees) were chosen to review the potential implications for companies in several key sectors, including Energy, Utilities, and Transportation. These scenarios provide detailed long-term forecasts, which worked well with JF's long-term investment horizon. Detailed discussions of these scenarios are undertaken by the entire Global Investment Team to better understand the potential impacts on individual companies in the portfolio and their valuations. As a result of the analysis above, JF concluded that its portfolios would be resilient in a reasonable range of 2-degree scenarios for several reasons, including: • Management teams that are focused on long-term value creation through disciplined capital allocation and higher-quality business practices; • Companies with higher-quality asset bases that have the flexibility to respond to a changing environment within an appropriate time frame; • No exposure to thermal coal production. Limited exposure to coal fired power generation through diversified regulated utilities that also have a growing base of renewable power generation; • Limited direct exposure to segments of the auto parts industry that have a higher risk of disruption; • Selective exposure to oil and gas companies that are focused on lowering their own emissions, with an asset base that participates in a lower carbon economy through a diverse set of assets that include natural gas and petroleum products at lower risk of disruption. Overtime, JF may adjust the portfolio based on, but not exclusively, a bottom-up view of the prospects for existing and future technologies, physical changes to the environment, public policy and regulations related to climate change and carbon emissions. While no single issue is likely to drive significant changes in portfolio strategies, climate change scenarios have played a role in certain cases. For example, some scenarios considering climate change transition and adaptation have shed light on the potential longer-term headwinds associated with commodity prices and imbalances between supply and demand, thereby influencing the weighting in the utilities and energy sector. Additionally, JF's overweight position in green bonds in core fixed income mandates was in part due to its expectation for increased domestic and international demand for investment grade green bonds relative to the supply available in a period where investors seek to significantly increase their allocation and exposure to investments focused directly on the transition to a lower carbon economy.

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	The potential opportunity to support the transition to a low-carbon economy is considered significant in the medium to long-term. In 2019, we developed an enterprise wide climate strategy and announced the Bank's five Climate Commitments, including a commitment to mobilize \$100 billion by 2025 to reduce the impacts of climate change. As at October 31 2019, Scotiabank has mobilized \$16 billion toward our commitment of \$100 billion. This includes lending, finance and advisory services aligned to our Green and Transition Taxonomy, which covers renewable energy, green buildings and clean transportation, among other categories. In addition, we recently updated our approach to climate change risk management related to our lending activities. In 2019, we developed a mandatory enhanced due diligence process for assessing the risks our corporate and commercial clients may face due to climate change. The Climate Change Risk Assessment (CCRA) process evaluates both the physical and transition risks a client may face, and their awareness level of such risks. The CCRA was formally integrated into the Bank's Credit Policy Manual and is conducted at the transaction level to help inform credit decisions. Banking officers and credit adjudicators participated in mandatory training on assessing climate-related risk to ensure effective implementation of the CCRA. This process will also support data collection to enable the Bank to effectively mitigate and manage risk across sectors and will support stress testing and scenario planning of our loan book. The Bank is also developing a methodology for stress testing the business loan portfolio according to various internationally recognized climate change scenarios and models.
Supply chain and/or value chain	Yes	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.
Investment in R&D	Yes	The opportunity of investment in R&D has been moderate. One area of focus has been on measurement and reporting of portfolio carbon exposure in asset management. One of the Bank's primary asset management businesses, 1832 Asset Management, is actively engaging a third-party data provider and other data sources to produce portfolio-level reporting that would include carbon emissions data. They have produced draft portfolio reports that detail carbon data and intend to develop an active engagement framework with those reports over the coming 12 months. A small investment is needed to acquire data sets.
Operations	Yes	Scotiabank's Climate Commitments, launched in 2019, guide our approach to climate change. We are committed to decarbonizing our own operations and finding innovative solutions to reduce the Bank's impact on the climate. We incorporate climate-related physical risks in assessing potential impacts to our operations and continue to build resilience to protect our assets, business and communities where we operate. In fiscal 2019, we reduced our greenhouse gas emissions by 17% from a 2016 baseline, achieving our target of 10% two years early. We have set a new target to reduce emissions by 25% by 2025 (from 2016). A key strategic decision on our path to decarbonization was implementing an internal carbon price (ICP) in 2018. After consultations with external experts and a thorough peer review, we established an ICP of CAD\$15 per tonne of CO2 for our global Scope 1 and 2 emissions. This allowed us to fairly compare projects that require higher upfront costs (but delivered longer term energy savings), with those that were more cost-effective but short-term solutions. In 2020, we have doubled our ICP to \$30 per tonne of CO2e, and it will rise again to \$60 by 2022. To increase resiliency, we have updated our International Master Construction Specifications for hurricane prone areas which include: Caribbean, Mexico, Costa Rica and Panama. Real Estate is engaging a Climate Resiliency Consultant to enhance the Bank's preparedness for physical impacts of climate change. First, a preliminary vulnerability assessment will determine locations most at risk of a climate event. Higher risk locations will then undergo a detailed risk assessment to consider the likelihood and consequences of climate-related events. These assessments are expected to be completed in 2020. Following the risk assessments, localized recommendations will be requested and reviewed, and the information will be used for future capital planning. Lastly, the consultant will review day to day Real Estate functions and provide recommendations on how climate considerations can be incorporated into existing processes, including, but not limited to, site selection, leasing, construction standards and property management. The TCFD recommendations have also been key to informing our climate change strategy and our commitment to ensure robust climate-related governance and transparency in our reporting.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Indirect costs Capital expenditures Capital allocation Assets	In 2019, we developed an enterprise-wide climate strategy and announced the Bank's five Climate Commitments, including a commitment to mobilize \$100 billion by 2025 to reduce the impacts of climate change. As at October 31 2019, Scotiabank has mobilized \$16 billion toward our commitment of \$100 billion. This includes lending, finance and advisory services aligned to our Green and Transition Taxonomy, which covers renewable energy, green buildings and clean transportation, among other categories. In addition, Scotiabank recently launched a new Sustainable Finance Group within GBM to help further the Climate Commitments, working closely with Scotiabank partner teams to provide financial solutions and advice across sustainable finance products to corporate, financial, public sector and institutional clients across our global footprint. To meet our internal greenhouse gas reduction targets and reduce the risks associated with rising energy costs / demands that will result from a changing climate, we set an internal carbon price in 2018. We implemented an internal carbon price of CAD\$15 per tonne of CO2 from our global Scope 1 and 2 emissions in 2018. In 2020, we have doubled our internal carbon price from \$15 to \$30 per tonne of CO2e, and it will rise again to \$60 by 2022. In fiscal 2019, Scotiabank's internal price on carbon raised nearly CAD\$2 million, to be re-invested in a variety of renewable energy and efficiency projects across our footprints. These renewable and energy efficiency projects help us to increase our organizational resilience while simultaneously lowering our greenhouse gas consumption (thereby reducing our operating costs). The internal carbon price serves as internal financial incentive to prioritize projects to support the decarbonization of our operations, going beyond our greenhouse gas reduction target. The carbon price uses the financial planning process to allocate funds for energy efficiency projects on an annual basis. In addition to the internal carbon price, 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. In fiscal 2019, the Bank undertook a variety of efficiency initiatives that contributed to our overall resource efficiency (such as conducting HVAC upgrades at 190 Canadian branches). In fiscal 2019, the Bank invested \$17,487,000 in energy efficiency and renewable energy installations. These investments lower our carbon footprint, lower operating costs and mitigates the risk of rising energy costs.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C-FS3.2

(C-FS3.2) Are climate-related issues considered in the policy framework of your organization?

Yes, both of the above

C-FS3.2a

(C-FS3.2a) In which policies are climate-related issues integrated?

	Type of policy	Portfolio coverage of policy	Description
Bank lending (Bank)	Credit policy Risk policy Other, please specify (Environmental Policy)	Minority of the portfolio	To safeguard the Bank and its stakeholders against climate-related risks, Scotiabank has several policies approved by the Board and integrated into a multi-disciplinary company-wide risk identification, assessment, and management process. Climate change is a principle risk type and is therefore included in the Bank's Enterprise-Wide Risk Management Framework. The principles that the Bank applies when managing matters arising from environmental considerations, are embedded in a variety of management-level policies, including the Environmental Policy. The Environmental Policy guides initiatives to promote operational efficiency, lending and investing practices, supplier agreements, the management of real estate holdings, and external reporting practices. 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. Material issues are raised to related risk committees and reported quarterly in the Enterprise Risk Report to the Risk Committee of the Board.
Investing (Asset manager)	Sustainable/Responsible Investment Policy	All of the portfolio	1832 Asset Management (1832): 1832's Responsible Investment Policy formalizes the incorporation of Environment, Social and Governance (ESG) issues into the investment process and aligns with the Principles for Responsible Investment. The policy defines environmental factors as "issues impacting the natural environment, including climate change, greenhouse gas emissions, resource depletion and water scarcity, waste and pollution, biodiversity and deforestation, among others." The policy covers all portfolios managed by 1832 across all asset classes, sectors and countries in which it invests. Jarislawsky Fraser (JF): JF's Sustainable Investment Policy articulates the firm's approach to ESG integration as part of its bottom-up, fundamental investment process. Sustainable investing is consistent with the firm's overall investment philosophy, as long-term investors in quality businesses, and thus the policy applies to all assets managed by JF. MD Financial Management (MD): MD's Responsible Investment Policy formalizes the incorporation of Environment, Social and Governance (ESG) issues into the investment process and aligns with the Principles for Responsible Investment. The policy defines environmental factors as "issues impacting the natural environment, including climate change, greenhouse gas emissions, resource depletion and water scarcity, waste and pollution, biodiversity and deforestation, among others." The policy covers all portfolios managed by MD across all asset classes, sectors and countries in which they invest. MD offers their Canadian Physician clients two Fossil Fuel Free Funds as investment opportunities for those clients seeking to reduce their investment carbon footprint.
Investing (Asset owner)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Insurance underwriting (Insurance company)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other products and services, please specify	Please select	Please select	n/a

C-FS3.2b

(C-FS3.2b) Describe your exclusion policies related to industries and/or activities exposed or contributing to climate-related risks.

Type of exclusion policy	Portfolio	Application	Description
All fossil fuels	Investing (Asset manager)	Existing business/investment for existing projects	1832 Asset Management (1832): 1832 currently has a small number of mandates that specifically exclude fossil fuels in their investment objectives. 1832 does not currently have any formal policies across their mandates related to exclusions. The firm's philosophical view is that engagement with corporate management teams is the preferred approach to driving change and improved company behaviour.
All fossil fuels	Investing (Asset manager)	Existing business/investment for existing projects	Jarislowsky Fraser (JF): Within its full ESG integration approach, JF also manages investments on behalf of clients with a variety of unique values-based considerations, which can include using exclusionary screens. Included in this is JF's approach to managing its Fossil Fuel Free Strategies, which cover a select portion of the total AUM. The JF Fossil Fuel Free Funds, implemented in 2017, further respond to the emerging needs of investors with a core, actively-managed, quality investment vehicle that incorporates non-financial objectives alongside financial objectives. The JF Fossil Fuel Free Funds feature these additional parameters: 1. Exclusion of the GICs Energy Sector and FTSE Energy corporate group, with the exception of renewable energy entities as defined by JF. 2. The Funds also exclude non-energy corporate group companies that either a) own operating businesses with material proven thermal coal, oil or gas reserves, or b) have a significant amount of value attributable directly to the extraction and production of fossil fuels, or indirectly through transportation, distribution, equipment and services, or with significant exposure to power generation from fossil fuels. Exceptions may be made where a company has a clear strategy to meaningfully increase the percentage of renewables. 3. Active management of the portfolio carbon footprint using proprietary analysis, based on CDP and MSCI data. This includes fundamental analysis and assessment of overall emissions-management strategies and expected direction. 4. Exposure to green bonds with attractive risk/return profiles. Please note that these exclusions only apply to JF's Fossil Fuel Free (FFF) Funds and not its total AUM. As at September 30, 2019, the JF FFF Canadian Equity Fund's weighted average carbon intensity was 74% below its benchmark, the JF FFF Global Equity Fund was 73% below its benchmark, and the JF FFF Bond Fund was 76% below its benchmark.
All fossil fuels	Investing (Asset manager)	Existing business/investment for existing projects	MD Financial Management (MD): MD offers two fossil fuel free mutual funds: MD Fossil Fuel Free Equity Fund and MD Fossil Fuel Free Bond Fund. Both funds seek to avoid investment in companies involved in extracting, transporting and processing of fossil fuels, such as: • companies involved in oil and gas refining, marketing, storage & transportation • oil, gas, coal & consumable fuels producers • energy equipment & energy services companies • companies that have significant involvement in transporting fossil fuels and the fossil fuel transportation infrastructure (includes marine, marine ports and services, railroads and trucking) • any companies in the utilities sector that have significant involvement in the fossil fuel industry

C-FS3.3

(C-FS3.3) Are climate-related issues factored into your external asset manager selection process?

Yes, for some assets managed externally

C-FS3.3a

(C-FS3.3a) How are climate-related issues factored into your external asset manager selection process?

	Process for factoring climate-related issues into external asset management selection	Comment
Row 1	Review asset manager's climate-related policies	1832 Asset Management (1832): As part of the due diligence and assessment of sub-advisors, 1832 reviews the ESG policies of investment managers, including climate-related policies. Jarislowsky Fraser (JF): JF does not currently use any external asset managers. MD Financial Management (MD): As part of MD's Fund oversight and Investment Management process, on an annual basis, MD collects and reviews the sustainability investment approach of all appointed Fund Advisors. These sustainability investment approaches may include information on assessing climate-related risks and opportunities.

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

Year target was set

2017

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2016

Covered emissions in base year (metric tons CO2e)

138753

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2021

Targeted reduction from base year (%)

10

Covered emissions in target year (metric tons CO2e) [auto-calculated]

124877.7

Covered emissions in reporting year (metric tons CO2e)

114614

% of target achieved [auto-calculated]

173.971013239353

Target status in reporting year

Replaced

Is this a science-based target?

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

Please explain (including target coverage)

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). In fiscal 2019, the Bank surpassed its initial target of 10% decrease in Scope 1 and 2 GHG emissions by 2021. The Bank has set a new target of reducing its global absolute Scope 1 and 2 emissions by 25% by 2025. Note: As per the GHG Protocol, Scope 1 emissions for 2016 have been restated to reflect a change in our reporting methodology. These figures replace previously published data. (see page 18 of our 2019 ESG report).

Target reference number

Abs 2

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2016

Covered emissions in base year (metric tons CO2e)

138753

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2025

Targeted reduction from base year (%)

25

Covered emissions in target year (metric tons CO2e) [auto-calculated]

104064.75

Covered emissions in reporting year (metric tons CO2e)

114614

% of target achieved [auto-calculated]

69.5884052957414

Target status in reporting year

New

Is this a science-based target?

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

Please explain (including target coverage)

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). In fiscal 2019, the Bank surpassed its initial target of 10% decrease in Scope 1 and 2 GHG emissions by 2021. The Bank has set a new target of reducing its global absolute Scope 1 and 2 emissions by 25% by 2025. Note: As per the GHG Protocol, Scope 1 emissions for 2016 have been restated to reflect a change in our reporting methodology. These figures replace previously published data. (see page 18 of our 2019 ESG report).

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

Other climate-related target(s)

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

Oth 1

Year target was set

2019

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

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

Green finance	Other, please specify (Capital mobilized to reduce the impacts of climate change)
---------------	---

Target denominator (intensity targets only)

<Not Applicable>

Base year

2018

Figure or percentage in base year

0

Target year

2025

Figure or percentage in target year

100000000000

Figure or percentage in reporting year

16000000000

% of target achieved [auto-calculated]

16

Target status in reporting year

Underway

Is this target part of an emissions target?

No

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

In 2019, Scotiabank announced a sustainable finance target. With the launch of the Scotiabank Climate Commitments, we committed to mobilize CAD\$100 billion to reduce the impacts of climate change. This commitment includes lending, investing, financing and advisory, as well as investments in the Bank's direct operations and communities where it operates to reduce the impacts of climate change. Initiatives underlying this commitment align to Scotiabank's Green and Transition Taxonomy including renewable energy, energy efficiency, emissions reduction, green buildings, sustainable transportation, infrastructure resilience, biodiversity conservation, pollution prevention and control, waste management and/or sustainable water and land use. To support this goal, we will continue our work across all business lines to grow markets for low-carbon and climate-resilient solutions and direct funding towards supporting the goals of the Paris Agreement. We will also continue to innovate and develop new products and services to support clients in the transition to a low-carbon future.

Target reference number

Oth 2

Year target was set

2018

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

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

Please select

Target denominator (intensity targets only)

<Not Applicable>

Base year

2018

Figure or percentage in base year

15

Target year

2022

Figure or percentage in target year

60

Figure or percentage in reporting year

15

% of target achieved [auto-calculated]

0

Target status in reporting year

Underway

Is this target part of an emissions target?

No

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

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. We have increased our internal carbon price in 2020 from \$15 to \$30 per tonne of CO2e, and it will rise to \$60 by 2022.

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	2	189
Implemented*	3	3624
Not to be implemented	0	0

C4.3b

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

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)
--------------------------------	--

Estimated annual CO2e savings (metric tonnes CO2e)

1676

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1820000

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

10000000

Payback period

11-15 years

Estimated lifetime of the initiative

16-20 years

Comment

We are proactively replacing the HVAC systems at our Canadian branches as we work to phase out HFACs. The new HVAC systems are more energy efficient and will lower costs associated with energy consumption.

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)
--------------------------------	--

Estimated annual CO2e savings (metric tonnes CO2e)

1573

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1240000

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

5886000

Payback period

11-15 years

Estimated lifetime of the initiative

16-20 years

Comment

We are also proactively upgrading to HVAC units at our international locations. The new HVAC systems are more energy efficient and will lower costs associated with energy consumption.

Initiative category & Initiative type

Low-carbon energy generation	Solar PV
------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

375

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

476000

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

1601000

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

In fiscal 2019, the Bank installed solar panels in the Dominican Republic to generate low-carbon, supplemental electricity. We are implementing Solar panel projects in 3 locations in Jamaica.

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.
Internal price on carbon	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. We have increased our internal carbon price in 2020 from \$15 to \$30 per tonne of CO2e, and it will rise to \$60 by 2022.

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) 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

Company-wide

Description of product/Group of products

In 2019, as part of our Climate Commitments, Scotiabank committed to mobilizing \$100 billion by 2025 to reduce the impacts of climate change. This includes lending, investing, financing and advisory, contributions to the Bank's direct operations and support for communities where it operates to reduce climate-related impacts. It also includes the creation of new products and services that will enable capital to be directed toward climate change mitigation and adaptation initiatives. As of October 31 2019, Scotiabank mobilized \$16 billion toward this commitment.

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 (Scotiabank's Green, Transition, Social and Sustainable Taxonomy - Eligibility categories are applicable for Bank clients and for Bank operations (Real Estate and Operations).)

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

% of total portfolio value

Asset classes/ product types

Bank lending	Other, please specify (Various asset classes and product types are included in our \$100 billion commitment.)
--------------	---

Comment

More information on our Climate Commitments and examples of projects that contribute to our \$100 billion target can be found in our 2019 ESG Report (p.19-20). https://www.scotiabank.com/content/dam/scotiabank/canada/en/documents/about/Scotiabank_2019_ESG_Report.pdf

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

Please select

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

% of total portfolio value

Asset classes/ product types

Bank lending	Retail Loans
--------------	--------------

Comment

Please see page 24 in the 2019 ESG Report for a description of the CrediAuto product. https://www.scotiabank.com/content/dam/scotiabank/canada/en/documents/about/Scotiabank_2019_ESG_Report.pdf

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

Please select

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

% of total portfolio value

Asset classes/ product types

Please select

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)

13700

Comment

Note: As per the GHG Protocol, Scope 1 emissions for 2016-2018 have been restated to reflect a change in our reporting methodology. These figures replace previously reported data. Please refer to page 18 of our 2019 ESG Report.

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 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)
15221

Start date
November 1 2018

End date
October 31 2019

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
15729

Start date
November 1 2017

End date
October 31 2018

Comment

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)
15527

Start date
November 1 2016

End date
October 31 2017

Comment

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)
13700

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

99393

Scope 2, market-based (if applicable)

<Not Applicable>

Start date

November 1 2018

End date

October 31 2019

Comment

Past year 1

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 2

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 3

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 gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

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>

Please explain

Based on a preliminary assessment using the Quantis Scope 3 Evaluator tool, purchased goods and services only represent a small fraction (1-2%) of our total Scope 3 emissions. As a financial institution, more than 60% of our supplier spend is related to services with relatively low emissions impact - these include information & technology, human resources, marketing, professional and corporate services (see 2019 ESG Report, p.54; emissions related to Banking Operations and Real Estate are captured in Scope 1 and Scope 2 emissions). In addition, with that considered, this category of Scope 3 emissions does not significantly contribute to our climate risk exposure.

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>

Please explain

The Bank's suite of products and services does not involve capital goods. As per our preliminary assessment using the Quantis Scope 3 Evaluator tool, there are virtually no Scope 3 emissions related to 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>

Please explain

Based on a preliminary assessment using the Quantis Scope 3 Evaluator tool, emissions from fuel and energy-related activities not included in Scope 1 and 2 represent a negligible portion (less than 1%) of our total Scope 3 emissions. Approximately 60% of the Bank's total energy consumption globally comes from renewable and nuclear sources, which reduces the upstream emissions of purchased electricity. Please refer to section 8 for more details on the Bank's energy consumption.

Upstream 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>

Please explain

The Bank's suite of products and services do not involve transportation and distribution activities (i.e inbound or outbound logistics) from our suppliers or third-party transportation and distribution services. As per our preliminary assessment using the Quantis Scope 3 Evaluator tool, there are virtually no Scope 3 emissions related to upstream transportation and distribution.

Waste generated in operations

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>

Please explain

As a financial institution, due to the nature of our operations, emissions from waste do not represent a significant portion of our total Scope 3 emissions. Paper likely represents the single largest source of generated waste across our operations, to which a significant portion is shredded and recycled. Based on a preliminary assessment using the Quantis Scope 3 Evaluator tool, the estimated emissions from waste represents a negligible portion (less than 1%) of our total Scope 3 emissions.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

20168

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). Air travel will be classed as Scope 3 emission, unless an aircraft is owned or leased by an organisation and used by employees to travel on business. If the aircraft is owned or leased then the scope of emissions will depend on how the asset and emissions have been accounted for. The conversion factor for air travel will be influenced by: • The type of flight, whether it is a domestic, short haul or long haul; • The cabin class of the flight, whether it is economy, premium economy, business class or in first class; • The application of the flight distance uplift factor; and • The application of the radiative forcing uplift factor.

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

100

Please explain

Based on a preliminary assessment using the Quantis Scope 3 Evaluator tool, emissions from business travel represent a negligible portion (less than 1%) of our total Scope 3 emissions. However, as a Bank with an international footprint, business travel is often essential for the day-to-day operations of the company and there may be opportunities for emissions reductions. For this reason, these emissions were calculated (global coverage) and verified by an independent verifier (see 2019 ESG Report, p.10-11, and our 2019 GHG Verification Statement).

Employee commuting

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>

Please explain

Based on a preliminary assessment using the Quantis Scope 3 Evaluator tool, emissions from employee commuting represent a negligible portion (less than 1%) of our total Scope 3 emissions and are therefore not relevant.

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>

Please explain

Emissions from all of the Bank's upstream leased assets (for example, emissions from facilities that the Bank leases and occupies) have been accounted for under Scope 1 and 2. As a result, there are virtually no Scope 3 emissions from any other leased asset (also confirmed from the preliminary assessment using Quantis Scope 3 Evaluator tool).

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>

Please explain

The Bank's suite of products and services do not involve transportation and distribution activities (i.e inbound or outbound logistics) with our suppliers or third-party transportation and distribution services. As per our preliminary assessment using the Quantis Scope 3 Evaluator tool, there are virtually no Scope 3 emissions related to downstream transportation and distribution.

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>

Please explain

Due to the nature of services provided in the financial services sector, Scotiabank does not produce products that are come from intermediate products or require processing. As per our preliminary assessment using the Quantis Scope 3 Evaluator tool, there are virtually no Scope 3 emissions related to the processing of sold products.

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>

Please explain

Due to the nature of services provided in the financial services sector, Scotiabank does not produce products with significant emissions impact during use. There may be indirect emissions from data centers / servers related to online banking products, however, as per our preliminary assessment using the Quantis Scope 3 Evaluator tool, these emissions are negligible and insignificant in comparison to other categories.

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>

Please explain

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. As per our preliminary assessment using the Quantis Scope 3 Evaluator tool, there are virtually no Scope 3 emissions related to the end of life treatment of sold products.

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>

Please explain

All downstream leased assets are accounted for under Scope 1 and 2. As such, based on our preliminary assessment using the Quantis Scope 3 Evaluator tool, there are virtually no Scope 3 emissions related to downstream leased assets.

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>

Please explain

Scotiabank does not franchise, thus there are no relevant Scope 3 emissions for this category (confirmed by our preliminary assessment using the Quantis Scope 3 Evaluator tool).

Other (upstream)

Evaluation status

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>

Please explain

Other (downstream)

Evaluation status

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>

Please explain

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

0.000003693

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

114614

Metric denominator

unit total revenue

Metric denominator: Unit total

31034000000

Scope 2 figure used

Location-based

% change from previous year

16.8

Direction of change

Decreased

Reason for change

Fiscal 2019 revenue is CAD\$31,034,000,000 representing an increase over Fiscal 2018. Scope 1 & 2 emissions are 114,614 tonnes of CO2e which has decreased relative to CDP reported 2018 figures. The intensity figure is calculated as $114,614/31.034 \text{ billion} = 0.000003693$ tonnes of CO2e/\$CAD. The rise in the Bank's revenue increased the denominator, and implementation of energy efficiency projects (such as HVAC replacement by annual reduction of 3,249 tonnes of CO2e, solar panel installations by annual reduction of 375 tonnes of CO2e) decreased the numerator. This resulted in a net decrease in intensity of 16.8%. Importantly, lower emission energy sources in some of the countries where we operate also reduced our carbon emissions and contributed to the decline in the intensity figure. Note - As we restated the scope 1 and 2 emissions in our 2019 ESG report, we have recalculated the intensity figure from fiscal 2018. In fiscal 2018, Scope 1 and 2 emissions = 127,719 tonnes CO2e. With revenues of \$28.775 billion, emissions intensity for revenues in fiscal 2018 = $127,719 \text{ tonnes CO2e} / \$28.775 \text{ billion} = 0.000004439$ tonnes CO2e / \$ revenue. Given $(0.000004439 - 0.000003693) / 0.000004439 * 100 = 16.8\%$

Intensity figure

1.13

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

114614

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

101813

Scope 2 figure used

Location-based

% change from previous year

14.39

Direction of change

Decreased

Reason for change

In fiscal 2019, Scotiabank had 101,813 FTE employees (up from 97,021 FTE employees in fiscal 2018). In 2019, Scope 1 & 2 emissions are 114,614 tonnes of CO2e which have decreased relative to fiscal 2018 figures. The intensity figure is calculated as $114,614/101,813 = 1.13$ tonnes of CO2e/FTE. The rise in the Bank's FTE employees increased the denominator, and implementation of energy efficiency projects (such as HVAC replacement by annual reduction of 3,249 tonnes of CO2e, solar panel installations by annual reduction of 375 tonnes of CO2e) decreased the numerator. Energy efficiency projects that significantly contributed to the decline in our emissions. This resulted in a net decrease in intensity/employee of 14.39%. Importantly, lower emission energy sources in some of the countries where we operate also reduced our carbon emissions and contributed to the decline in the intensity figure. Note - As we restated the scope 1 and 2 emissions in our 2019 ESG report, we have recalculated the intensity figure from fiscal 2018. In fiscal 2018, Scope 1 and 2 emissions = 127,719 tonnes CO2e. With 97,021 FTEs emissions intensity for revenues in fiscal 2018 = $127,719 \text{ tonnes CO2e} / 97,021 \text{ FTEs} = 1.32/\text{FTE}$. Given $(1.32 - 1.13) / 1.32 * 100 = 14.39\%$

C7. Emissions breakdowns

C7.9

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

Decreased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	We did not have any changes to our renewable energy generation in 2019 but we invested in a number of number energy projects that will supply us with renewable energy in the future.
Other emissions reduction activities	5084	Decreased	4	In fiscal 2019 (Nov. 1, 2018- Oct. 31, 2019), branch HVAC replacements, solar panel installations, and a number of smaller efficiency projects, combined to resulting savings of 4,343 tonnes of CO2e. In 2019 a total of 4,343 tonnes of CO2e were reduced as a result of emissions reduction projects. Further, branch network and office space optimization contributed to an additional decrease of 741 tonnes of CO2e. In fiscal 2019 a total of 5,084 tonnes of CO2e were reduced as a result of emissions reduction projects. Scope 1 and Scope 2 emissions reported to CDP in the previous year fiscal 2018 (Nov. 1, 2017 - Oct. 31, 2018) totalled 127,719 tonnes of CO2e. Therefore the 4.0% decrease was determined by the following calculation: (5,084/ 127,719) *100.
Divestment		<Not Applicable >		
Acquisitions		<Not Applicable >		
Mergers		<Not Applicable >		
Change in output		<Not Applicable >		
Change in methodology	8021	Decreased	6.3	In fiscal 2019, Canadian provincial electricity emissions factors were updated to Canada's 2019 UNFCCC Submission – Annex 13. International electricity emission factors were updated based on 2019 International Energy Agency (IEA). Overall cleaner generation in some provinces and countries contributed to an overall decrease in Canadian and international Scope 2 emissions of 8,021 tonnes of CO2e. Scope 1 and Scope 2 emissions reported to CDP in the previous year fiscal 2018 totalled 127,719 tonnes of CO2e. Therefore the 6.3% decrease was determined by the following calculation: (8,021 /127,719) *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 undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	Unable to confirm heating value	0	82247	82247
Consumption of purchased or acquired electricity	<Not Applicable>	156329	236351	392680
Consumption of purchased or acquired heat	<Not Applicable>	0	40802	40802
Consumption of purchased or acquired steam	<Not Applicable>	0	10950	10950
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	11.35	<Not Applicable>	11.35
Total energy consumption	<Not Applicable>	156340.35	370350	526690

C9. Additional metrics

C9.1

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

C10. Verification

C10.1

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

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

C10.1a

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

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

2019_Greenhouse_Gas_Emissions_Verification.pdf

Page/ section reference

Page 2; 2% limited assurance

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

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

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

2019_Greenhouse_Gas_Emissions_Verification.pdf

Page/ section reference

Page 5; 34% reasonable assurance

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

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

Scope 3 category

Scope 3: Business travel

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

2019_Greenhouse_Gas_Emissions_Verification.pdf

Page/section reference

Page 2

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

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

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

C11. Carbon pricing

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 CO₂. The price will be applied to CO₂e 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). In 2020, we increased our internal price on carbon to C\$30 per tonne of CO₂, and it will increase to C\$60 per tonne of CO₂ in 2022. In fiscal 2019, we reduced our greenhouse gas emissions by 17% from a 2016 baseline, achieving our target of 10% two years early. As a result, we set a new target of 25% by 2025 (from 2016).

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. In fiscal year 2019, air-conditioning (HVAC) retrofits at 190 locations across our Canadian branch network, which are projected to result in \$1,820,000 in annualized energy savings and reduce our CO₂ emissions by 1,676 tonnes of CO₂e. By implementing air-conditioning (HVAC) retrofits in our international locations, we could save \$1,240,000 and reduce our emissions by 1,573 tonnes of CO₂e annually.) In fiscal 2019, Scotiabank's internal price on carbon resulted in nearly CAD\$2 million re-invested in a variety of renewable energy and efficiency projects across our footprint. In 2020, our internal carbon price doubled to CAD\$30 / tonne, and it will increase to C\$60 per tonne of CO₂ in 2022.

C12. Engagement

C12.1

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

Yes, our suppliers
Yes, our customers
Yes, our investee companies
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

Code of conduct featuring climate change KPIs

% of suppliers by number

% total procurement spend (direct and indirect)

75

% of supplier-related 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.

Comment

We have thousands of suppliers globally. All suppliers are expected 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
Climate change is integrated into supplier evaluation processes

% of suppliers by number

% total procurement spend (direct and indirect)

0

% of supplier-related 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 postconsumer 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.

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

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

0

Portfolio coverage (total or outstanding)

Unknown

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

Scotiabank's annual 2019 Environment, Social and Governance (ESG) Report shares our performance and achievements related to ESG factors, including on our Climate Commitments, 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 ESG 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/Scotiabank_2019_ESG_Report.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 ESG commitments. The impact of reporting publicly and being transparent is enhanced trust. 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 10-11 in the section 'Our Progress'.

Type of engagement

Collaboration & innovation

Details of engagement

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

100

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

0

Portfolio coverage (total or outstanding)

Unknown

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

Scotiabank encourages its customers to select electronic statements as their preferred method of delivery for their banking information (Link: <https://www.scotiabank.com/ca/en/personal/ways-to-bank/manage-accounts/paperless-recordkeeping.html>) . For example, "The Go Paperless Record Keeping Contest" engaged 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 ended September 30, 2019. As stated in the 2019 ESG Report, by driving customer awareness about the benefits of digital banking and electronic statements, Scotiabank delivered over 400 million digital statements in 2019 in Canada, representing a 10% reduction in paper statements from 2018 (or 4.5 million fewer paper statements).

Type of engagement

Information collection (understanding customer behavior)

This response is in reference to Scotiabank's non-retail customer base (corporate and commercial)

Details of engagement

Collect climate change and carbon information from new customers as part of initial due diligence

% of customers by number

100

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

0

Portfolio coverage (total or outstanding)

All of the portfolio

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

In 2019, climate change was formally integrated into the normal due diligence process for all corporate and commercial banking clients. The Climate Change Risk Assessment (CCRA) process evaluates both the physical (acute and chronic) and transition (reputational, market, technology, legal and compliance) risks a client may face, and their awareness level of such risks.

Impact of engagement, including measures of success

The CCRA is conducted at the transaction level and helps to inform credit decisions. Banking officers and credit adjudicators participate in mandatory training on assessing climate-related risk to ensure effective implementation of the CCRA.

(C-FS12.1c) Give details of your climate-related engagement strategy with your investee companies.

Type of engagement

Engagement & incentivization (changing investee behavior)

Details of engagement

Exercise active ownership

% of investees by number

% Scope 3 emissions as reported in C-FS14.1a/C-FS14.1b

Portfolio coverage

Majority of the portfolio

Rationale for the coverage of your engagement

Portfolio coverage is based on the combined assets under management of 1832 Asset Management (1832), Jarislowsky Fraser (JF) and MD Financial Management (MD). Each asset manager exercises active ownership according to their respective methods. 1832: Approximately 100% of 1832's AUM is represented by an active ownership approach that directly engages on all factors that will materially impact security value, including climate related factors where relevant. As part of the fundamental engagement with corporate management teams, 1832 discusses their exposure to carbon emissions and their strategies to manage evolving regulatory aspects of climate change. JF: JF will actively engage with management teams, and in some cases the Boards of Directors, on matters related to climate risks and opportunities to the extent that these issues are material. This includes discussions around emissions management strategies, carbon pricing, and business resiliency. JF also leverages CDP Scores for its proprietary portfolio-level Environment, Social and Governance (ESG) heatmap, and flags companies that do not disclose to CDP for potential engagement. MD: MD actively engages with investees, either directly or indirectly, on identified climate change issues and opportunities for improvement. In addition, as part of MD's Fund oversight and Investment Management process, on an annual basis, MD collects and reviews the sustainability investment approach of all appointed Fund Advisors. These sustainability investment approaches may include information on assessing climate-related risks and opportunities. MD's review and engagement efforts with advisors and investee companies were informed by a recent survey of their Canadian Physician clients, which revealed that climate-related issues were of highest concern.

Impact of engagement, including measures of success

Direct data for the results of previous or ongoing engagements for overall AUM is either sensitive or not available.

Type of engagement

Engagement & incentivization (changing investee behavior)

Details of engagement

Encourage better climate-related disclosure practices among investees

% of investees by number

% Scope 3 emissions as reported in C-FS14.1a/C-FS14.1b

Portfolio coverage

Majority of the portfolio

Rationale for the coverage of your engagement

Portfolio coverage is based on the combined assets under management of 1832 Asset Management (1832), Jarislowsky Fraser (JF) and MD Financial Management (MD). Each asset manager encourages better climate-related disclosure practices among investees according to their respective methods. 1832: Where climate-related risks and opportunities are determined to be material, 1832 continues to encourage issuers to enhance their disclosure of climate-related data and information during their engagements. JF: The investment team at JF advocates for CDP-equivalent disclosure and progress towards TCFD-aligned reporting, while constructively engaging with outliers to implement best practices. JF also leverages CDP Scores for its proprietary portfolio-level Environment, Social and Governance (ESG) heatmap, and flags companies that do not disclose to CDP for potential engagement. MD: MD actively engages with investees, either directly or indirectly, on identified climate change issues and opportunities, including improved climate-related disclosures.

Impact of engagement, including measures of success

Direct data for the results of previous or ongoing engagements for overall AUM is either sensitive or not available.

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Carry out collaborative engagements with other investors or institutions

% of investees by number

% Scope 3 emissions as reported in C-FS14.1a/C-FS14.1b

Portfolio coverage

Minority of the portfolio

Rationale for the coverage of your engagement

Portfolio coverage is based on the combined assets under management of 1832 Asset Management (1832), Jarislowsky Fraser (JF) and MD Financial Management (MD). Each asset manager participates in collaborative engagements to varying degrees. 1832 and JF are both members of the Canadian Coalition for Good Governance, and are represented on their Environmental and Social Committee. The coalition regularly engages corporate boards on ESG-related best practices, including climate-related disclosures. All three asset managers are also signatories to the Principles for Responsible Investment (PRI) and continue to promote more comprehensive climate-related disclosure by signatory members and reporting issuers. 1832, JF, MD, and other internal partners at Scotiabank are also collaborating with related companies to engage the TMX Group and support enhanced ESG disclosures from listed issuers on their exchanges.

Impact of engagement, including measures of success

Direct data for the results of previous or ongoing engagements for overall AUM is either sensitive or not yet available.

C12.1d

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

Investors

Over the course of the year, Scotiabank engages with investors and shareholders, including institutional investors on the issue of climate change and climate risk. 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.

In addition, our asset management businesses also participate in several industry initiatives and collaborative engagements, often in partnership with other investors. For example, 1832 Asset Management (1832), Jarislowsky Fraser (JF), and MD Financial Management (MD), and other internal partners at Scotiabank are collaborating with related companies to engage the TMX Group on enhanced ESG disclosures from listed issuers on their exchanges. 1832 and JF are also both members of the Canadian Coalition for Good Governance, and are represented on their Environmental and Social Committee. The coalition regularly engages corporate boards on ESG-related best practices, including climate-related disclosures. Finally, JF participated as a lead investor on the PRI-Coordinated Engagement on Climate Change Transition for Oil & Gas Companies, as well as the PRI-Coordinated Global Engagement on Methane. Both initiatives aim to help investors and companies (mainly in the Energy sector) improve their understanding and management of specific climate-related risks, namely transition risks in response to future policy and technological shifts, and risks related to methane emissions.

External Partners

In 2019, we supported two different youth challenges with Enactus, an organization that seeks to rally the energy of students to use business to address important social issues across Canada. The Scotiabank Youth Empowerment Challenge and the Scotiabank Environmental Leadership Challenge encourage post-secondary students to develop real-life solutions to challenges facing young people and the environment. In 2019, over 2,800 students volunteered approximately 130,000 hours in their communities through these programs. Link to Enactus Canada: <http://enactus.ca/>

Scotiabank is proud to be the National Youth Programs Sponsor for Relay Education in Canada, whose mission is to educate, inspire and assist people in building a 100% renewable energy future in Canada. Through our work with Relay, we help educate over 18,000 kids and adults every year about renewable energy and energy conservation. We also sponsor Relay's Green Collar Careers program that builds awareness and capacity in Aboriginal youth to pursue careers that positively impact the environment.

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

Business Partners

In 2017, Scotiabank's retail investing division, Scotia iTrade, launched a 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 2019, over 20,000 users interacted with the sustainable investing 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). 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. In support of the CPLC's mandate, Scotiabank established an Internal Carbon Price at \$15/tonne in 2017 and began implementing it internally to fund energy efficiency initiatives in 2018. In 2020, we increased this Internal Carbon Price to \$30/tonne, and we plan for it to rise to \$60/tonne by 2022.	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 was also a Director of the Board of Scotiabank until May 2020, 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 and recommendations to the Government of Canada 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

The Canadian Bankers Association (CBA) recognizes that 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 our Group Head, Canadian Banking sits on CBA's board. We support the CBA's position on environmental sustainability through sustainable operations, sustainable lending, green products and services, and community activities. In 2019, we also participated in the CBA's Climate Change Disclosure Working Group. Through this initiative, we engaged 5 other Canadian banks and led workshop sessions on the development of a sector sensitivity methodology for climate change that identifies key physical and transition risk drivers to determine potential materiality and opportunities. The results were embedded into the risk profiles of the 28 main industry sectors to which the Bank lends.

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. In addition, we are an active member of the IIF's Sustainable Finance Working Group.

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.

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 Corporate Sustainability 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. The Environmental Policy is currently under review and will be updated before the end of the fiscal year.

Where possible, we work with the above organizations and their members 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.

C12.4

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

Publication

In voluntary sustainability report

Status

Complete

Attach the document

Scotiabank_2019_ESG_Report.pdf

Page/Section reference

Environment section: Pages 14-24 TCFD Index: Page 62 GRI disclosures: Pages 70-72

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

BNS_Annual_Report_2019.pdf

Page/Section reference

Page 7 - Letter from the Chair Page 10 - ESG Highlights Page 70 - Board oversight Page 79 - MD&A/Risk types Pages 104-106, P.108 - TCFD

Content elements

Governance
Strategy
Risks & opportunities

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

Scotiabank_Climate_Commitments_EN.pdf

Page/Section reference

Full document

Content elements

Governance
Strategy
Risks & opportunities
Other metrics

Comment

In 2019, we developed an enterprise-wide climate strategy and announced the Bank's five Climate Commitments. The Commitments outline how we will continue to support our customers in the transition to a low-carbon economy and decarbonize our own operations.

(C-FS12.5) Are you a signatory of any climate-related collaborative industry frameworks, initiatives and/or commitments?

	Industry collaboration	Comment
Reporting framework	Equator Principles Task Force on Climate-related Financial Disclosures (TCFD) Other, please specify (Sustainability Accounting Standards Board (SASB))	Equator Principles: The Equator Principles have been integrated into the Scotiabank's internal processes and procedures since 2006. Scotiabank completes EP Reporting annually. TCFD: Scotiabank has been a public supporter of the TCFD since 2018. We integrate the recommendations into our Annual Report and ESG Report. We also participate in various industry groups to develop consistent methodologies and metrics for TCFD reporting. Sustainability Accounting Standards Board (SASB): Jarislowsky Fraser is a SASB Alliance Member.
Industry initiative	Principles for Responsible Investment (PRI) UNEP FI TCFD Pilot Other, please specify (Canadian Coalition for Good Governance (CCGG), PRI-Coordinated Engagement on Climate Change Transition for Oil & Gas Companies, PRI-Coordinated Global Engagement on Methane, Carbon Pricing Leadership Coalition (CPLC))	PRI: 1832 Asset Management, Jarislowsky Fraser, and MD Financial Management are all signatories to the PRI. UNEP FI TCFD Pilot: Scotiabank is a participant in the United Nations Environment Program – Finance Initiative (UNEP FI) TCFD pilot to harmonize industry-wide approaches for climate scenario analysis in bank lending portfolios. CCGG: 1832 Asset Management and Jarislowsky Fraser are also both members of the Canadian Coalition for Good Governance, and are represented on their Environmental and Social Committee. Jarislowsky Fraser's President & CEO is on the CCGG Board of Directors. The coalition regularly engages corporate boards on ESG-related best practices, including climate-related disclosures. PRI-Coordinated Engagement on Climate Change Transition for Oil & Gas Companies: Jarislowsky Fraser was a member of the Working Group and is acting as co-lead investor with a European oil & gas company. PRI-Coordinated Global Engagement on Methane: Jarislowsky Fraser was an Advisory Committee member and lead investor with three North American oil & gas companies. CPLC: Scotiabank has been a private sector partner of the CPLC since 2016. As a way of taking internal action, the Bank set an internal price on carbon of \$15 CDN / tonne of CO2 in 2018. In 2019, the Bank committed to increasing this internal price on carbon to \$30 / tonne in 2020, and \$60 / tonne in 2022.
Commitment	Please select	

C14. Portfolio Impact

C-FS14.1

(C-FS14.1) Do you conduct analysis to understand how your portfolio impacts the climate? (Scope 3 portfolio impact)

	We conduct analysis on our portfolio's impact on the climate	Disclosure metric	Comment
Bank lending (Bank)	No	<Not Applicable>	
Investing (Asset manager)	Yes	Alternative carbon footprinting and/or exposure metrics (as defined by TCFD)	Jarislowsky Fraser has calculated the weighted average carbon intensity of its funds covering their equities and fixed income portfolios. 1832 Asset Management (1832) and MD Financial Management do not currently assess carbon footprinting or TCFD metrics for their portfolios. However, 1832 is actively engaging with MSCI and other data sources to produce portfolio level reporting that would include carbon emissions data. 1832 has produced draft portfolio reports that detail carbon data, and intends to develop an active engagement framework with those reports over the coming 12 months.
Investing (Asset owner)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Insurance underwriting (Insurance company)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other products and services, please specify	Not applicable	<Not Applicable>	

C-FS14.1a

(C-FS14.1a) What are your organization's Scope 3 portfolio emissions? (Category 15 "Investments" total emissions)

Category 15 (Investments)

Evaluation status

Relevant, not yet calculated

Scope 3 portfolio emissions (metric tons CO2e)

<Not Applicable>

Portfolio coverage

<Not Applicable>

Percentage calculated using data obtained from client/investees

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Please explain

Scotiabank's lending business does not currently assess Scope 3 portfolio metrics. However, in terms of the Bank's asset management business, Jarislowsky Fraser calculates Scope 3 portfolio emissions for each fund as a relative figure normalized against either \$M invested or \$M revenue rather than as a total absolute figure for all of its AUM. In addition, 1832 Asset Management (1832) is actively engaging with MSCI and other data sources to produce Scope 3 portfolio-level reporting. 1832 intends to begin producing draft portfolio level reports that detail Scope 3 emissions in coming months. These experiences may be leveraged to help develop Scope 3 portfolio metric for the Bank's lending portfolio in the future.

C-FS14.1b

(C-FS14.1b) What is your organization's Scope 3 portfolio impact? (Category 15 "Investments" alternative carbon footprinting and/or exposure metrics)

Metric type

Weighted average carbon intensity

Metric unit

CO2e/\$M revenue

Scope 3 portfolio metric

149.1

Portfolio coverage

More than 0% but less than or equal to 10%

Percentage calculated using data obtained from clients/investees

0

Calculation methodology

Jarislowsky Fraser (JF) currently uses MSCI ESG Research to calculate the weighted average carbon intensity of all pooled funds. This is calculated as total Scope 1 and 2 emissions normalized against \$M USD sales for each individual holding, and then weighted according to the weight of the holding in the portfolio or index. Carbon emissions are classified per the Greenhouse Gas Protocol (GHG Protocol). MSCI ESG Research collects carbon emissions data once per year from most recent corporate sources, including Annual Reports, Corporate Social Responsibility Reports or websites. In addition, MSCI ESG Research uses the carbon emissions data reported through CDP or government databases when reported data is not available through direct corporate disclosure. When companies do not disclose data, MSCI uses estimation models that use, as applicable, past reported data, the fuel mix for utilities, GICS sub-industry carbon intensity or the Economic Input-Output Life-Cycle Assessment model. JF's total Scope 3 portfolio impact is calculated based on the ex-cash weighting of total AUM in all institutional portfolios by asset class (classified as Canadian Equity, US Equity, International Equity, Emerging Markets Equity and Bonds). This weighting is then used to calculate a weighted average carbon intensity at the total portfolio level based on the weighted average carbon intensity of each of the underlying strategies. Institutional portfolios account for 70% of JF's total AUM, and carbon data coverage is 84.5%. All figures are as at September 30, 2019.

Please explain

The metric and methodology is applied to all portfolios and assets under management at Jarislowsky Fraser except for bonds issued by government entities. The metric was chosen based on client consultation and guidance from standards such as the TCFD Recommendations. The metrics are primarily used as one way to measure exposure to transition risk in individual companies and portfolios. The updated metrics are part of the weekly package used for the discussions by the investment team and make up part of the quarterly reporting to clients.

C-FS14.1c

(C-FS14.1c) Why do you not conduct analysis to understand how your portfolio impacts the climate? (Scope 3 Category 15 "Investments" emissions or alternative carbon footprinting and/or exposure metrics)

Most Scope 3 reporting tools and models are still in early stages and do not yet adequately address our concerns with Scope 3 reporting (ex: providers rarely account for double-counting, disclosures are highly uneven). The Bank will continue to monitor as standards and disclosures improve over time. In addition, experiences from the Bank's asset managers may be leveraged to help develop Scope 3 portfolio metric and reporting for the Bank's lending portfolio in the future.

C-FS14.2

(C-FS14.2) Are you able to provide a breakdown of your organization's Scope 3 portfolio impact?

	Scope 3 breakdown	Comment
Row 1	Yes, by asset class Yes, by industry Yes, by country/region	These breakdowns are available for Jarislowsky Fraser's portfolios.

C-FS14.2a

(C-FS14.2a) Break down your organization's Scope 3 portfolio impact by asset class.

Asset class	Metric type	Metric unit	Scope 3 portfolio emissions or alternative metric	Please explain
Listed equity	Weighted average carbon intensity	CO2e/\$M revenue	158	This is calculated only for Jarislowsky Fraser (JF), based on the ex-cash weighting of total listed equity AUM in all institutional portfolios by strategy (classified as Canadian Equity, US Equity, International Equity, Emerging Markets Equity). This weighting is then used to calculate a weighted average carbon intensity at the portfolio level based on the weighted average carbon intensity of each of the underlying strategies. Institutional portfolios account for 70% of JF's total AUM. All figures are as at September 30, 2019. Data coverage is 99.8%.
Fixed income	Weighted average carbon intensity	CO2e/\$M revenue	100.2	This metric is based on Jarislowsky Fraser's core bond fund. Data coverage is 60% because data for government bonds is not currently available.

C-FS14.2b

(C-FS14.2b) Break down your organization's Scope 3 portfolio impact by industry.

Industry	Metric type	Metric unit	Scope 3 portfolio emissions or alternative metric	Please explain
Energy	Weighted average carbon intensity	CO2e/\$M revenue	567.4	The calculation for each sector is based on Jarislowsky Fraser's Global Balanced Fund as at October 30, 2019. The metric for the energy industry is 15.8% below the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.
Materials	Weighted average carbon intensity	CO2e/\$M revenue	468	Jarislowsky Fraser (JF) calculates the weighted average carbon intensity by industry for each portfolio. The disclosed metric is based on the JF Global Balanced Fund as at September 30, 2019 and is 20.5% below the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.
Utilities	Weighted average carbon intensity	CO2e/\$M revenue	290.5	Jarislowsky Fraser (JF) calculates the weighted average carbon intensity by industry for each portfolio. The disclosed metric is based on the JF Global Balanced Fund as at September 30, 2019 and is 85.2% below the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.
Other, please specify (Industrials)	Weighted average carbon intensity	CO2e/\$M revenue	114.9	Jarislowsky Fraser (JF) calculates the weighted average carbon intensity by industry for each portfolio. The disclosed metric is based on the JF Global Balanced Fund as at September 30, 2019 and is 61.1% below the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.
Other, please specify (Consumer Staples)	Weighted average carbon intensity	CO2e/\$M revenue	55.4	Jarislowsky Fraser (JF) calculates the weighted average carbon intensity by industry for each portfolio. The disclosed metric is based on the JF Global Balanced Fund as at September 30, 2019 and is 11.8% above the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.
Other, please specify (Consumer Discretionary)	Weighted average carbon intensity	CO2e/\$M revenue	42.7	Jarislowsky Fraser (JF) calculates the weighted average carbon intensity by industry for each portfolio. The disclosed metric is based on the JF Global Balanced Fund as at September 30, 2019 and is 2.5% above the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.
Diversified Financials	Weighted average carbon intensity	CO2e/\$M revenue	38	Jarislowsky Fraser (JF) calculates the weighted average carbon intensity by industry for each portfolio. The disclosed metric is based on the JF Global Balanced Fund as at September 30, 2019 and is 54.5% above the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.
Other, please specify (Information technology)	Weighted average carbon intensity	CO2e/\$M revenue	22.8	Jarislowsky Fraser (JF) calculates the weighted average carbon intensity by industry for each portfolio. The disclosed metric is based on the JF Global Balanced Fund as at September 30, 2019 and is 30.7% below the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.
Telecommunication Services	Weighted average carbon intensity	CO2e/\$M revenue	14.4	Jarislowsky Fraser (JF) calculates the weighted average carbon intensity by industry for each portfolio. The disclosed metric is based on the JF Global Balanced Fund as at September 30, 2019 and is 39.4% below the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.
Health Care Equipment & Services	Weighted average carbon intensity	CO2e/\$M revenue	13.9	Jarislowsky Fraser (JF) calculates the weighted average carbon intensity by industry for each portfolio. The disclosed metric is based on the JF Global Balanced Fund as at September 30, 2019 and is 47% below the benchmark. Data availability: All disclosed industries represent 77.7% of the portfolio, and 69.8% of the benchmark.

C-FS14.2c

(C-FS14.2c) Break down your organization's Scope 3 portfolio impact by country/region.

Country/Region	Metric type	Metric unit	Scope 3 portfolio emissions or alternative metric	Please explain
Canada	Weighted average carbon intensity	CO2e/\$M revenue	187.1	Data coverage is 99.9% for Canadian Equity.
United States of America	Weighted average carbon intensity	CO2e/\$M revenue	50.4	Data coverage is 100.0% for US Equity.
Other, please specify (International (EAFE))	Weighted average carbon intensity	CO2e/\$M revenue	81	Data coverage is 98.9% for International Equity (Europe, Australasia and Far East)
Other, please specify (Emerging Markets)	Weighted average carbon intensity	CO2e/\$M revenue	51.7	Data coverage is 98.6% for Emerging Market Equity.

C-FS14.3

(C-FS14.3) Are you taking actions to align your portfolio to a well below 2-degree world?

	We are taking actions to align our portfolio to a well below 2-degree world	Please explain
Bank lending (Bank)	No	Scotiabank developed an enterprise-wide climate strategy in 2019 and announced the Bank's five Climate Commitments. The Commitments outline how we will continue to support our customers in the transition to a low-carbon economy and decarbonize our own operations, including a commitment to mobilize \$100 billion to reduce the impacts of climate change. Scotiabank supports the principles of the Paris Agreement, and we will continue to monitor demand for financing and policy developments that will help achieve meaningful climate targets.
Investing (Asset manager)	No	1832 Asset Management (1832): 1832 is actively exploring the enhancement of portfolio-level reporting on climate-related risk exposure and carbon intensity. The firm is also actively engaging with investee companies on improving their disclosures related to climate risks and carbon emissions. However, 1832 views engagement and improvement in corporate behaviour as a superior approach to driving change than exclusions or selling securities specifically based on climate-related metrics. 1832 does not intend to specifically target portfolio holdings or tailor its investment processes to meet specific climate-related targets at this stage. Jarislowsky Fraser (JF): JF views climate change as a potentially material idiosyncratic risk for some companies and systemic risk for the broader markets. Due to uncertainty associated with the timing and outcomes of climate change mitigation and adaptation, JF believes that its clients are best served by portfolios made up of investments in companies resilient to an uncertain future that take a long-term, sustainable approach to managing their business and creating value. It will continue to evaluate a variety of scenarios including ones that could achieve a below 2-degree world. MD Financial Management (MD): Based on its ESG scorecard approach, MD will engage with both investment advisors and companies that appear to be laggards in climate-related matters. MD actively engages with both and gives each an opportunity to explain their positions for further investment. If there is a real commitment or plan for improvement, investment may continue, however MD does not intend to specifically target portfolio holdings or tailor its investment processes to meet specific climate-related targets at this stage.
Investing (Asset owner)	<Not Applicable>	<Not Applicable>
Insurance underwriting (Insurance company)	<Not Applicable>	<Not Applicable>
Other products and services, please specify	Not applicable	

C15. 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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

Row	Job title	Corresponding job category
Row 1	This submission was signed-off by the Sr. Vice President, Global Communications and Social Impact.	Business unit manager

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms