



*Solar panels on our Woodstock Ontario Branch

2016 Carbon Disclosure Project

RBC Response



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Module: Introduction

Introduction

CC0.1 Introduction

Please give a general description and introduction to your organization.

We are one of Canada's largest banks and one of the largest banks in the world, based on market capitalization.

We are one of North America's leading diversified financial services companies, and provide personal and commercial banking, wealth management, insurance, investor services and capital markets products and services on a global basis.

We have over 80,000 full- and part-time employees who serve more than 16 million personal, business, public sector and institutional clients through offices in Canada, the U.S. and 37 other countries.

CC0.2 Reporting Year

Please state the start and end date of the year for which you are reporting data. The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first. We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Sat 01 Nov 2014 - Sat 31 Oct 2015
Fri 01 Nov 2013 - Fri 31 Oct 2014
Thu 01 Nov 2012 - Thu 31 Oct 2013

CC0.3 Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
Canada
United States of America
United Kingdom
Jersey
Guernsey

Module: Introduction

CC0.4 Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

CAD (\$)

Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Further Information

For convenience, we have included references to five publicly available sources of information that we consider to be our keystone environmental reports and communication mechanisms. Three of these documents are available in pdf format and have been attached.

- RBC and the Environment website: <http://www.rbc.com/environment/index.html>
- green@rbc, our environmental newsletter: <http://www.rbc.com/environment/green-rbc-newsltr.html>
- RBC Environmental Blueprint (includes our Environmental Policy, priority environmental issues & objectives and 42 environmental commitments): http://www.rbc.com/community-sustainability/_assets-custom/pdf/RBC-Environmental-Blueprint.pdf 2015 Corporate Responsibility Report
- 2015 Annual Report to Shareholders (environmental risk disclosure on page 91):

Module: Management [Investor]

Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

Our Governance Committee of the Board of Directors provides executive oversight to our Citizenship strategy, which includes environmental programs and performance, including climate change. The Risk Committee of the Board of Directors provides oversight to ensure that management has established policies, processes and procedures to manage environmental risks, including compliance with applicable laws and regulations.

Once a year, an update on the implementation of the RBC Environmental Blueprint is presented to the RBC

Group Operating Committee (GOC). The content presented includes a progress update on our Blueprint commitments including quantitative targets, budget and plans for the upcoming year. The GOC is responsible to Group Executive to ensure that the day to day business operations of the organization fit within the strategic direction and priorities, and enterprise risk and compliance framework established, at a point in time and over a 3 – 5 year time horizon.

Our Corporate Environmental Affairs Group (CEA) is responsible for implementing the RBC Environmental Blueprint. The group develops enterprise-wide policy for the identification, assessment, control, monitoring and reporting of environmental matters, including climate change.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivised performance indicator	Comment
Environment/ Sustainability managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behaviour change related indicator	Management of environment-related issues, including climate change and energy, is a component of the performance goals of staff in RBC Corporate Environmental Affairs, RBC Corporate Real Estate and RBC Technology and Operations. RBC's performance-based compensation program links employee performance to annual incentives.

Module: Management [Investor]

Who is entitled to benefit from these incentives?	The type of incentives	Incentivised performance indicator	Comment
Business unit managers	Monetary reward	Other: Climate change risk management in investments and insurance	Management of environment-related issues, including climate change and severe weather, is a component of the performance goals for senior management in RBC Insurance, Global Asset Management Socially Responsible Investment Manager and staff working at the Capital Markets carbon trading desk. RBC's performance-based compensation program links employee performance to annual incentives.
All employees	Monetary reward	Behaviour change related indicator Other: Employee engagement	Through employee environmental engagement campaigns, employees have the opportunity to win monetary prizes for undertaking environmentally responsible actions in the workplace or in their personal lives.
Energy managers	Monetary reward	Energy reduction project Energy reduction target Efficiency project Efficiency target Behaviour change related indicator	Management of energy is a component of the performance goals of staff in Corporate Real Estate. RBC's performance-based compensation program links employee performance to annual incentives.
Chief executive officer (CEO)	Monetary reward	Other: Sustainability reporting target	RBC's CEO has included in part of his mandate to continue to be named by top sustainability indices annually.
Executive officer	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behaviour change related indicator	A number of RBC Senior Executives have commitments and targets from the RBC Environmental Blueprint assigned to their mandates. Each year, the individual's performance is reviewed in comparison to their goals and mandate. A monetary reward is determined based on the successful completion of their goals.

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Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Board or individual/ sub-set of the Board or committee appointed by the Board	Global	3 to 6 years	<p>The Corporate Environmental Affairs Group (CEA) is responsible for the RBC Environmental Blueprint. They report annually to RBC's Group Operating Committee Executive, chaired by our CFO, to provide an update on the implementation of the Environmental Blueprint. CEA also works with the RBC Enterprise Risk Policy Team in Group Risk Management and with our businesses to:</p> <ul style="list-style-type: none"> ▪ Develop, maintain & communicate environmental policies, procedures & guidelines related to managing environmental risk & to reducing our environmental footprint ▪ Monitor relevant environmental laws, regulations and other requirements that affect our business and our clients' activities ▪ Track the performance, environmental benefits and cost effectiveness of key environmental programs ▪ Engage with internal and external stakeholders on environmental issues that affect our clients, our businesses and the communities in which we operate ▪ Assess the need for and champion new initiatives to meet our environmental objectives ▪ Advise on the management of specific environmental risks in business transactions

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CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

In the RBC Environmental Blueprint we identified climate change as one of three priority environmental issues for RBC. In addition, 9 of the 42 commitments in the Blueprint address climate change. We also have an Enterprise-wide Policy on Environmental and Social Risk Management that requires all units within RBC to consider and manage environmental and social risks in all organizational decisions.

FINANCING

RBC has a number of environmental and social policies that include climate change considerations:

- Policy on Environmental and Social Risk Management for Capital Markets includes an assessment of corporate clients on 10 environmental and social criteria, one being an assessment of the impacts of future environmental and climate change regulations.
- Our Policy on Social and Environmental Review in Project Finance aligns with RBC's decade-long commitment to the Equator Principles. The newest iteration of the EP (EP III) includes requirements to monitor and report on project financing that will emit over 100,000 tonnes/year of CO₂.

OPERATIONS

The RBC Environmental Blueprint outlines enterprise-wide commitments for mitigation and adaptation of climate change impacts from our operations. RBC has committed to a 20% reduction in GHG emission intensity in our properties by 2018. RBC also has an enterprise – wide group focusing on management of business disruption risks, including disruptions from weather-related incidents. Risk assessments of all areas are conducted annually and further supported with contingency plans and periodic testing.

PROCUREMENT

Our Supplier Code of Conduct requires all procurement engagements to include screening for environmental and social considerations, which includes a review of our suppliers' environmental action plans to address GHG emissions and climate risk, where appropriate.

BUSINESS OPPORTUNITIES

Please see our response to 2.2a for business opportunities for financing/investing in activities related to climate change.

CC2.1c

How do you prioritize the risks and opportunities identified?

In 2013, RBC conducted a materiality analysis to identify the social, environmental and governance issues that were most important to our operations and stakeholders (for details see CR Reporting at RBC attached). For climate change, we identified the following:

MITIGATION

Our primary mitigation commitment is to reduce the intensity of our direct and indirect energy use in order to

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reduce our Scope 1 and Scope 2 greenhouse gas emissions. RBC has committed to a 20% reduction in GHG emission intensity in our properties by 2018 below our 2012 baseline. (Other initiatives are presented in the 2015 Corporate Responsibility Report, attached)

ADAPTATION

The most significant risk driven by the physical impacts of climate change is increased insurance risk, the risk of potential financial loss that may arise where the amount, timing or frequency of benefit payments under insurance contracts exceeds that expected. Risk management methods: Mitigating risks through both an increase in premiums, and changes in our pricing, product/policy and underwriting structure. Depending on the region in which the RBC office is located, we anticipate the physical effects of climate change may result in the following operational risks to RBC:

- Business interruptions in coastal regions where we operate (Caribbean, eastern Canada and the Channel Islands)
- Changes to heating and cooling costs
- Higher insurance costs for our properties
- Disruption to our supply chain that may impact our ability to operate our business from time to time

RBC has an enterprise-wide group focusing on management of business disruption risks, including disruptions from weather related incidents.

Please see our response to 2.2a for business opportunities for financing/investing in activities related to climate change.

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

The RBC Environmental Blueprint is approved by the CEO and all senior executives of RBC business and functional units. Under the Blueprint, one of our priority environmental objectives is to offer environmental products and services to our clients. RBC has identified a number of business opportunities for financing/investing in opportunities related to the transition to a low carbon economy, including:

ENERGY SAVER LOAN AND MORTGAGE PRODUCTS

RBC offers the RBC Energy Saver Loan and RBC Energy Saver Mortgage products in Canada, which help clients qualify for rebates on home energy audits and/or create a more energy-efficient home while saving on borrowing costs. For more details, visit <http://www.rbcroyalbank.com/mortgages/energy-saver-mortgage.html>.

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SOLAR PANEL FINANCING

RBC Royal Bank in Canada offers homeowners and businesses advice on and solutions for solar panel financing, including vendor financing. For more details, visit <http://www.rbcroyalbank.com/business/financing/solar-panel-financing.html>.

CLIMATE CHANGE BUSINESS ADVICE

Our Canadian Banking Green Strategy for commercial and small business clients identifies three areas of opportunity for financing: green buildings, small and medium renewable energy projects, and cleantech in knowledge-based industries. The Greening Your Business section of our Commercial Advice Centre offers valuable tools and resources to support businesses looking to shift to more sustainable business models. The Advice Centre has a number of articles and videos related to renewable energy, green buildings and managing carbon and energy. For more details, visit <http://www.rbcroyalbank.com/commercial/advice/greening-your-business>.

RESPONSIBLE INVESTING

RBC has seven socially responsible investing (SRI) mutual fund products through RBC Global Asset Management using SRI research and ESG screens developed by Sustainalytics. Climate change is a common screen used to evaluate companies and sectors included in the funds. Total assets under management for the combined SRI products are now almost \$4 billion. RBC also offers high-net-worth and other clients personalized screens through its Wealth Management Groups in several markets. We also offer SRI fixed income products to clients through BlueBay Asset Management. Clients can choose investment options that focus specifically on carbon- and climate change-related opportunities or factors, including those related to adaptation. RBC offers a fossil fuel free global equity fund for institutional investors in the US. A similar product is under consideration in Canada. We are also exploring various options for clients who are interested in measuring the carbon intensity of their investments. For more details, visit <http://funds.rbcgam.com/investment-solutions/socially-responsible-investments>.

CARBON TRADING

In 2015, we traded 165 million tonnes of carbon credits through the RBC Capital Markets Carbon Emissions Trading Group. Since the inception of the trading group in 2008, RBC has traded almost 1 billion tonnes of carbon credits. The majority of the trading volume centres around the European Union Emissions Trading Scheme (EU ETS), the largest compliance market in the world. We also trade in the California Cap-and-Trade Program, Regional Greenhouse Gas Initiatives (RGGI), Climate Action Reserve, and other offset and voluntary markets. For more details, visit <https://www.rbccm.com/carbontrading>.

CLEAN ENERGY ADVICE AND FINANCING

RBC Capital Markets has a long history of providing credit, debt and equity underwriting services and advisory services to both the renewable power generation and clean technology sectors. As of October 31, 2015, RBC had nearly \$3.4 billion in loan and trading line exposures to companies whose predominant business is renewable energy. For more details, visit <https://www.rbccm.com/energy>.

INVESTMENTS IN GREEN AFFORDABLE HOUSING

Green buildings and communities help protect the environment. The RBC Tax Credit Equity Group regularly invests in LEED certified and other green affordable housing projects in the U.S. In 2015, RBC invested over US\$628 million in affordable housing projects in the U.S. States. For more details, visit <https://www.rbccm.com/tceg>.

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CC2.2c

Does your company use an internal price of carbon?

No, and we currently don't anticipate doing so in the next 2 years.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

- Direct engagement with policy makers
- Trade associations
- Funding research organizations
- Other

CC2.3a

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	Participated and sponsored green building association events and meetings including the Canadian Green Building Council and Greening Greater Toronto.	Lobbying for superior building standards across Canada, including improved standards for building energy efficiency.
Clean energy generation	Support	Provided comments to the Government of Ontario on the Ontario Climate Action Plan, specifically on the establishment of cap and trade program and associated carbon market.	The Ontario Climate Action Plan to fight climate change, reduce greenhouse gas pollution and transition to a low-carbon economy.
Other: Sustainable communities	Support	RBC has worked with the Pembina Institute on a number of initiatives under the "Location Matters" series that researches factors that influence home purchasing decisions and encouraging the shift to sustainable communities. Our 2015 report "Factoring Location Costs into Home Buying Decisions" shows that less expensive homes located further from the workplace can actually cost more when transportation and commuting expenses are considered. The Chief Planner of the City of Toronto has been directly involved in profiling the results of this work and initiating related conversations on social media. The results of the study were developed into an interactive website on the RBC Home Equity Advice centre: https://www.rbcadvicecentre.com/pembina-location-matters/	Advocating for more sustainable communities with access to public transportation
Energy efficiency	Support	Partnered again with B+H Architects and announced the winners of the fourth annual Evolve Sustainable Design Competition, in challenging post-secondary students to design a net-zero energy and water-wise mixed-use wood mid-rise construction. The judging panel included members of municipal government.	Advocating for more efficient building design standards

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Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Other: Clean Technology	Support	<p>Consultation with the federal government on clean tech - through the First Minister's meeting, Vancouver declaration. Four consultation streams were announced, and RBC is participating in the Working Group on Clean Technology, Innovation and Jobs. (mitigation, adaptation, cleantech, price of carbon).</p>	<p>The Working Group on Clean Technology, Innovation and Jobs will provide a report with options on how to stimulate economic growth, create jobs, and drive innovation across all sectors to transition to a low-carbon economy, leveraging regional strengths. This working group will consider a range of policy tools to bring new and emerging technology and innovations to market, sustain a competitive economy, reduce GHG emissions, encourage growth and investment, and increase exports of clean technologies, services and expertise. Their work will be overseen by Ministers of Innovation and Economic Development, who will receive their report.</p>
Carbon tax	Support	<p>RBC has supported a price on carbon for the past decade. Below please find a quote from RBC's CEO. "Climate change is one of the most pressing issues of our time, and one that has galvanized humans to act. While we've seen important political progress, if we have any hopes of lasting change to the way we produce and consume energy, business has to be at the forefront. At RBC, we've publicly supported the principle of carbon pricing for more than a decade. We're pushing every part of our business to do more. We've expanded our financing of clean tech, energy efficiency and renewable energy businesses, and are excited to be part of the developing green bond and carbon trading markets. Last year we established a greenhouse gas reduction target for our global operations and we're now one of the largest purchasers of renewable energy, and one of the largest leasers of certified green office space in Canada. What does a bank see in a lower-carbon future? We see an essential path to prosperity for our clients and their communities, knowing that a sustainable planet goes hand in hand with a more efficient, productive and ultimately profitable economy for everyone." David McKay, President and Chief Executive Officer, Royal Bank of Canada</p>	<p>Supporting a price on carbon to help reduce GHG emissions. The Office of the CEO has publicly supported a price on carbon: http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/royal-bank-of-canada-backs-adoption-of-carbon-price/article30564155/ "In our view at RBC, carbon should be priced at a level to create long-term behavioural change and to ensure polluters pay, as we all move toward low-carbon targets," John Stackhouse, a senior vice-president at RBC.</p>

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CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
<p>The United Nations Environment Programme Finance Initiative (UNEP FI)</p>	<p>Consistent</p>	<p>Position that banks, investors and insurers can and should play a pivotal role in supporting societies to gradually move to low-carbon and the need for climate-change-resilient economies.</p>	<p>RBC has been a proud member of UNEP FI since 1992. We have been co-chairs of the North American Task Force. In this role we helped determine what type of research was conducted. There are 3 advisory groups within UNEP FI. All of which focus on carbon within their subject area (insurance, investing and traditional banking). UNEP FI has a strong position statement on carbon and the roles of banks in achieving the low carbon economy. "Financial Services Sector recognize that economic development needs to be compatible with human welfare and a healthy environment. To ignore this is to risk increasing social, environmental and financial costs. We further recognize that sustainable development is the collective responsibility of governments, businesses and individuals. We are committed to working collectively toward common sustainability goals."</p>

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Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
Conference Board of Canada	Consistent	Numerous position statements and reports on a wide range of sustainability -related issues including Canada's need for better preparedness to address the physical impacts of climate change, Canada's transition to clean energy and the need for improved federal regulations to mitigate GHG emissions in Canada.	RBC is a long-standing member of the Conference Board of Canada Business Council for Sustainability. By partnering with other companies, we are able to have a larger influence that working independently. We recently joined their research initiative (we are on the advisory council). The research initiative aims to better understand the link between the economy and the potential impact of carbon on our economy. The group acts as a collaborative force to create strong partnerships and programs to support organizations' roles in transitioning to a low carbon economy.
Chartered Professional Accountants (CPA) Canada	Consistent	RBC and RBC GAM participate in a working group to assess current state of climate risk disclosure in Canada with CPA Canada.	RBC and RBC GAM participate in a larger working group with CPA Canada. Together, the working group gains a better understanding of risk disclosure, providing clear criteria for evaluation to enhance the applicability and usefulness of the analysis. Accordingly, we have influenced the position by providing advice on the measurement criteria for evaluation to ensure a useful analysis is performed that can help further enhance climate change risk disclosures in Canada.

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

No

CC2.3e

Please provide details of the other engagement activities that you undertake

Hosted a Renewable Energy Day, powering our entire Canadian operations with renewable energy for an entire day. RBC also donated \$10,000 to the TREC Renewable Energy Co-operative.

Co-hosted a day of learning for 80 participants about unburnable carbon and stranded carbon assets to explore the economics of the energy sector and better understand the full range of other environmental, social and economic factors that could result in stranded assets.

In 2015, RBC donated 5.9 million to environmental charities globally. This includes \$3 million in RBC Blue Water Project grants for fresh water protection and preservation programs. We try to use our influence and resources to promote environmental sustainability within our organization and the communities where we operate.

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We released the RBC-Pembina report entitled “Factoring location costs into homebuying decisions” and launched a tool that explores the full cost of home ownership for Toronto area homebuyers. Part of a series encouraging the shift to livable, vibrant and more sustainable communities.

RBC announced the winners of the fourth annual Evolve Sustainable Design Competition, which challenged post-secondary students to design a net-zero energy and water-wise mixed-use mid-rise building out of wood.

RBC launched an internal employee engagement campaign, RBC’s One Million Acts of Good, where over 10,000 employees from 29 countries completed over 1 million acts of wellness, environmental protection and kindness, including numerous acts related to energy conservation / efficiency and reducing your carbon footprint.

In April 2016, RBC Capital Markets hosted its 3rd annual Green Bond Conference in Toronto to explore the growth of the Green Bond market globally and its future development in Canada. <https://www.rbccm.com/about/file-862926.pdf>

CC2.3f

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?

Established processes to ensure alignment with overall climate change strategies including:

- Established governance structure (see response in question 1.1a);
- Internal subject matter expertise (see details of the roles and responsibilities of the RBC Corporate Environmental Affairs Group in question 1.1a);
- Established environmental policies that provide guidance (see responses in question 2.1);
- Direct engagement: RBC directly participates in activities that influence climate change policy including meeting with federal, state, provincial and municipal government officials and agencies

CC2.3g

Please provide details of the other engagement activities that you undertake

We released the RBC-Pembina Home Location Preference Survey, the third instalment in a series from RBC and the Pembina Institute that presents research on the factors that influence home purchasing decisions and encourage the shift to liveable, vibrant and more sustainable communities.

RBC announced the winners of the third annual Evolve Sustainable Design Competition, challenging post-secondary students to design a net-zero energy and water-wise community library.

RBC launched an internal employee engagement campaign, RBC’s One Million Acts of Good, where over 10,000 employees from 29 countries completed over one million acts of wellness, environmental protection and kindness, including numerous acts related to energy conservation/efficiency and reducing your carbon footprint.

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CC2.3h

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?

Established processes to ensure alignment with overall climate change strategies include:

- Established governance structure (see response to question 1.1a)
 - Internal subject matter expertise (see details of the roles and responsibilities of the RBC Corporate Sustainability Group in question 1.1a)
 - Established environmental policies that provide guidance (see response to question 2.1)
 - Direct engagement: RBC directly participates in activities that influence climate change policy including meeting with federal, state, provincial and municipal government officials and agencies
-

Module: Management [Investor]

Targets and Initiatives

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Absolute target

Intensity target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO ₂ e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 3: Upstream transportation & distribution	60%	20%	2012	365	2018	No, but we anticipate setting one in the next 2 years	Our target as presented in the RBC Environmental Blueprint is to reduce GHG emissions by 20% from our Canadian logistics and delivery network by 2018. Data presented represents approximately 60% of our Canadian deliveries. We have successfully achieved our 20% reduction target and far exceeded it by reducing our GHG emissions by 53% from our baseline year of 2012. We will be reassessing targets in our next iteration of the Environmental Blueprint. Calculations: 2012 baseline emissions: 365 tonnes CO ₂ e, FY 2015 emissions: 170 tonnes CO ₂ e. Difference between baseline and 2015: 53%

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CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Is this a science-based target?	Comment
Int1	Scope 1+2 (location-based)	90%	20%	Metric tonnes CO2e per square meter*	2012	0.083	2018	No, but we anticipate setting one in the next 2 years	Our target as presented in the RBC Environmental Blueprint is to reduce GHG emission intensity by 20% in our properties by 2018. Data presented represents 90% of our global operations based on floor area. Since 2009, we have been able to measure and report our energy consumption for 100% of our properties located in Canada, the U.S. and the British Isles. We have achieved this target and reduced our emissions by 27.9% from the baseline year of 2012. We will be reassessing our target in our next iteration of the Environmental Blueprint.

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	25	No change		<p>We have observed a decrease in our absolute Scope 1 and 2 emissions from our properties in 2013 and 2014 (baseline year is 2012). Data is below:</p> <p>GHG emissions from energy use in our properties:</p> <p>2015: 109,925 tonnes CO2e 2014: 119,386 tonnes CO2e 2013: 126,531 tonnes CO2e 2012: 159,491 tonnes CO2e</p> <p>Based on the data above we are assuming at minimum a 31% change in absolute Scope 1 and 2 emissions at target completion. We have already far exceeded our target of a 20% reduction by 2018.</p>

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CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
Abs1	50%	100%	RBC set this target using 2012 as the baseline year and 2018 as a target year (6 year period). RBC is currently 3 years into the 6 year commitment period (50% complete) and has exceeded the target, as such, it is 100% complete. We are currently reviewing the potential of announcing a new GHG reduction target since our original target has been met.
Int1	50%	100%	RBC set this target using 2012 as the baseline year and 2018 as a target year (6 year period). RBC is currently 3 years into the 6 year commitment period (50% complete) and has exceeded the target, as such, it is 100% complete. We are currently reviewing the potential of announcing a new GHG reduction target since our original target has been met.

CC3.2

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

CC3.2a

Please 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	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of products	Energy Saver Loan and Mortgage Products RBC offers the RBC Energy Saver Loan and RBC Energy Saver Mortgage products in Canada, which help clients qualify for rebates on home energy audits and/or create a more energy efficient home while saving on borrowing costs.	Low carbon product	Other: None	0.1%	Less than or equal to 10%	RBC Energy Saver Loan: http://www.rbcroyalbank.com/personal-loans/energy-saver-loan.html?topnavclick=true RBC Energy Saver Mortgage: http://www.rbcroyalbank.com/mortgages/energy-saver-mortgage.html

Module: Management [Investor]

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Product	Solar Panel Financing RBC Royal Bank in Canada offers advice and solutions for solar panel financing for homeowners and businesses, including vendor financing, for more details visit: RBC Solar Panel Financing	Avoided emissions	Other: None	0.1%	Less than or equal to 10%	RBC Solar Panel Financing: http://www.rbcroyalbank.com/business/financing/solar-panel-financing.html
Product	Energy Efficiency Lending Program With energy and fuel costs rising and unpredictably, energy retrofits are becoming a proven way to save energy and reduce costs and environmental impacts. The RBC Energy Efficiency lending program helps businesses assess energy-saving opportunities, and lends them the funds to help realize those savings. Loans are structured to minimize the impact on existing cash flow by including the expected energy cost savings in the loan amortization schedule. In short, businesses get all the benefits of a greater energy-efficiency with minimal impact on cash flow.	Avoided emissions	Other: None	0.1%	Less than or equal to 10%	

Module: Management [Investor]

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Company-wide	<p>Climate Change Business Advice Canadian Banking Green Strategy for commercial and small business clients that identifies three areas of opportunity for financing: green buildings, small and medium renewable energy projects and cleantech in knowledge based industries. The Greening Your Business section of our Commercial Advice Centre offers valuable tools and resources to support businesses looking to shift to more sustainable business models.</p>	Avoided emissions	Other: None	0.1%	Less than or equal to 10%	
Company-wide	<p>Climate Change Business Advice Canadian Banking Green Strategy for commercial and small business clients that identifies three areas of opportunity for financing: green buildings, small and medium renewable energy projects and cleantech in knowledge based industries. The Greening Your Business section of our Commercial Advice Centre offers valuable tools and resources to support businesses looking to shift to more sustainable business models.</p>	Avoided emissions	Other: None	0.1%	Less than or equal to 10%	<p>Greening Your Business: http://www.rbcroyalbank.com/commercial/advice/greening-your-business/</p>

Module: Management [Investor]

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of products	<p>Protecting Homeowners Against the Physical Impacts of Climate Change: Many regions across North America are experiencing more violent and frequent storms, one of the many emerging realities of climate change. The Insurance Bureau of Canada reports that property damage caused by severe weather is now the leading cause of property insurance claims. Payouts from extreme weather have more than doubled every five to 10 years since the 1980s. For each of the past six years, losses hit \$1.2 billion. In 2013, losses were a historic \$3.4 billion, due to floods in Alberta and Toronto. To help protect homeowners from expensive repairs, RBC Insurance has identified some key areas where water damage can occur in the home and advice to prevent such damage: Ten Ways to Prevent Water Damage to Your Home advice webpage and our Water Damage Checklist. In 2015, RBC insurance created a video addressing the potential impact from climate change on homes.</p>	Avoided emissions	Other: None	0.1%	Less than or equal to 10%	Protecting Homeowners Against the Physical Impacts of Climate Change: http://www.rbcinsurance.com/homeinsurance/climate-change.html
Group of products	<p>Responsible Investing: RBC has seven socially responsible investing (SRI) mutual fund products through RBC Global Asset Management using SRI research and ESG screens developed by Jantzi-Sustainalytics. Climate change is a common screen used to evaluate companies and sectors included in the funds. Total assets under management for the combined SRI products are \$4.3 billion (Oct 31, 2015). RBC also offers high net worth clients and other clients personalized screens through its SRI Wealth Management Group. Clients can choose investment options that focus specifically on carbon and climate change related opportunities or factors, including those related to adaptation. Fossil Fuel Free Global Equity Fund: RBC offers a fossil fuel free global equity fund for institutional investors in the U.S. – a similar product is under consideration in Canada. We are exploring various options for clients who are interested in measuring the carbon intensity of their investments.</p>	Avoided emissions	Other: None	0.1%	Less than or equal to 10%	Responsible Investing: https://www.phn.com/Default.aspx?tabid=94

Module: Management [Investor]

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of products	Carbon Emission Trading In 2015, we traded 165 million tonnes of carbon credits through the RBC Capital Markets Carbon Emissions Trading Group. Since the inception of the trading group in 2008, RBC has traded nearly 1 billion tonnes of carbon credits. The majority of the trading volume centres around the European Union Emissions Trading Scheme (EU ETS), the largest compliance market in the world. We also trade in the California Cap-and-Trade Program, Regional Greenhouse Gas Initiatives (RGGI), Climate Action Reserve, and other offset and voluntary markets.	Avoided emissions	Other: None	0.1%	Less than or equal to 10%	RBC Carbon Emission Trading: https://www.rbccm.com/carbontrading/cid-247100.html
Group of products	Clean Energy Advice and Financing RBC Capital Markets has a long history of providing credit, debt and equity underwriting services, and advisory services to both the renewable power generation and clean technology sectors. As of October 31, 2015, RBC had \$3.4 billion in loan and trading line exposures to companies whose predominant business is renewable energy.	Avoided emissions	Other: None	0.1%	Less than or equal to 10%	
Company-wide	Investments in Green Affordable Housing Green buildings and communities help protect the environment. The RBC Tax Credit Equity Group regularly invests in LEED certified and other green affordable housing projects in the U.S. In 2015, invested US\$628 million in affordable housing projects in the U.S. States through the RBC Capital Markets Tax Credit Equity Group.	Avoided emissions	Other: None	0.1%	Less than or equal to 10%	RBC Tax Equity Group: https://www.rbccm.com/tceg/

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CC3.3

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

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO₂e savings

Stage of development	Number of projects	Total estimated annual CO ₂ e savings in metric tonnes CO ₂ e (only for rows marked *)
Under investigation	2	
To be implemented*		
Implementation commenced*		
Implemented*	16	13,455
Not to be implemented		

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CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency – as specified in CC0.4)	Investment required (unit currency – as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	<p>Completed a five-year lighting retrofit program in 2014 at over 1,000 Canadian branches, resulting in an average 9% reduction in branch electrical demand and total energy savings of approximately 10,000 MWh of electricity. Continued our office space optimization strategy, which has reduced our office space requirements by over 77,900 m2 since 2009, resulting in annual energy savings of almost 7,000 MWh. Installed rooftop solar panels on two branches in Ontario as part of our commitment to support the growth of renewable energy. Increased the amount of LEED certified office space we occupy by 145% from our 2012 baseline. Occupied an additional 20,161 m2 of office space certified under the BOMA BEST and BREEAM green building standards. Continued to implement our green-leasing standard that includes performance standards for environmental criteria such as energy, water, waste and indoor air quality. Implemented an HVAC Controller program where 639 Retail stores had HVAC Controllers installed to regulate the operation of the HVAC system. HVAC controllers are sensory devices that compare the actual state with a target state in an efficient manner.</p>	6,331	<p>Scope 1</p> <p>Scope 2 (location-based)</p>	Voluntary	1,586,781	1,930,000	1-3 years	Ongoing	<p>2015 was a relatively low spend year for environmental footprint programs mainly because of the transition to new property management service providers and focus on essential projects during the transition year. Most of the 2016 spend will be focused of energy efficiency initiatives in the retail branch network.</p>

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Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency – as specified in CC0.4)	Investment required (unit currency – as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Low carbon energy purchase	In 2015, we purchased 20,000 MWh of EcoLogo-certified green electricity to power our entire ATM and retail branch digital display networks, as well as a number of external meetings and major sponsored events such as the 2015 RBC Canadian Open golf tournament.	3,229	Scope 2 (market-based)	Voluntary	0	370,000		Ongoing	There is no payback associated with purchasing renewable power; this investment is simply to demonstrate our support for the growth of renewable energy.

Further Information

See the RBC 2015 Corporate Responsibility Report attached for more details on footprint reduction programs on pages 41-47. In reference to table 3.2a: It is becoming increasingly difficult to track “carbon” costs and revenue because environmental and energy criteria is being embedded into transformational enterprise initiatives as well as business-as-usual project spending. This is a good thing. We are seeing less direct project spend on environment and more integration of environmental principles into larger projects.

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Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency – as specified in CC0.4)	Investment required (unit currency – as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	GREEN IT: Achieved annual power usage effectiveness (PUE) values of 1.64 and 1.53 at two of our enterprise data centres. A third enterprise data centre was offline this year and we anticipate a PUE value for this facility will be reported in 2016. Virtualized nearly 27,500 servers representing over 68% of our total global server fleet. For every server virtualized, we estimate avoiding the need for 1,400 kWh of electricity.	3,700		Voluntary	3,332,000	1,700,000	4-10 years	Ongoing	Server virtualization saves an estimated \$3.3 million in energy costs per year against a \$17 million investment.
Transportation: Use	Green Logistics: In 2012, we launched Project One-Stop, aimed at reducing the number of deliveries to our Canadian properties by consolidating shipments and adjusting delivery frequencies. Since the project's launch in 2012, we have seen a 53.5% reduction in GHG emissions associated with the transportation of goods, and a 16% increase in the number of packages consolidated per delivery.	195		Voluntary	75000	1,197,034	4-10 years	Ongoing	Consolidating shipments and adjusting delivery frequencies saves an estimated \$300,000 in delivery costs per year against a \$1.2 million investment.

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Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency – as specified in CC0.4)	Investment required (unit currency – as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Behavioral change	<p>Environmental campaigns throughout the year: One Million Acts of Good: Conducted an internal employee engagement campaign where over 10,000 employees from 29 countries completed over 1.2 million acts of wellness, environmental protection and kindness. Hosted a Renewable Energy Day: powered our entire Canadian operations (branches, major offices and data centres) with renewable energy for the entire day. Connect site: Built and launched an interactive site (jive software) for colleagues across the globe to join and interact with all environmental initiatives. Through this platform, colleagues are educated and also can actively participate in campaigns and develop a strong environmental culture and network. Earth Day: Launched the RBC Green Champion program. An internal program aimed to develop an environmental culture at the local level. The program is voluntary and colleagues act as environmental ambassadors for corporate environmental initiatives. They also act as local centres of expertise to provide Corporate Environmental Affairs with important local knowledge related to environmental initiatives. Various campaigns throughout the year aim to ultimately support RBC's Environmental Blueprint targets. For example, energy reduction, waste reduction/diversion and water reduction. Various environmental engagement campaigns: Conducted an Earth Hour photo competition to showcase RBCers' unique methods of demonstrating the importance of climate change. In order to recognize the importance of green buildings, RBCers participated in an engagement campaign to pledge how they are "going green". green@rbc: we publish an external environmental e-newsletter called green@rbc every two months, which has over 20,000 subscribers and includes themed issues including climate, water etc.</p>			Voluntary				Ongoing	It is difficult to quantify the savings for RBC portfolio-wide resulting from awareness and behavioural change initiatives.

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CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	We have had a dedicated budget for energy efficiency projects in our properties since 2009. Business case established on a number of premises including cost savings, consistency with environmental strategy and publicly made commitments to reducing energy and GHG emissions, alignment with RBC business units that are promoting environmental benefits and positive reputational benefits.
Dedicated budget for other emissions reduction activities	We have had a dedicated budget for purchasing green power since 2005. Since then, we have purchased over 114,000 MWh of certified green power, equivalent to powering more than 9,500 Canadian homes. Business case established on a number of premises including consistency with environmental strategy and publicly made commitments to reduce GHG emissions associated with energy use in our properties, support for the renewable energy sector and the greening of Canada's electricity grid, good marketing opportunities, and positive environmental and reputational benefits.
Employee engagement	Business case established on a number of premises including positive employee experience that helps to retain and attract top talent, cost savings, and positive environmental and reputational benefits.
Internal incentives/recognition programs	See response to question 1.2a for more details on incentive and recognition programs.
Other	Annual presentations of progress on the RBC Environmental Blueprint to senior executives in the RBC Group Operating Committee chaired by the CFO. These presentations include updates on budget and resources related to environmental programs, including programs related to energy efficiency and greenhouse gas reductions.

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Communication

4.1

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)

Method	Status	Page/Section reference	Attach the document	Comment
In voluntary communications	Complete	Pages 41-47: Environment Chapter	https://www.cdp.net/sites/2016/80/15980/Climate Change 2016/Shared Documents/Attachments/CC4.1/RBC-CRR-Report-2015-e.pdf	The RBC Corporate Responsibility is the primary location for our organization's environmental performance
In voluntary communications	Complete	pages 3-5	https://www.cdp.net/sites/2016/80/15980/Climate Change 2016/Shared Documents/Attachments/CC4.1/RBC-Environmental-Blueprint-20150511-134648.pdf	The RBC Environmental Blueprint from page3-5 present information on RBC's response to climate change.
In voluntary communications	Complete	Footprint Section		http://www.rbc.com/community-sustainability/environment/environmental-footprint-reduction.html Also, please see the RBC Environment webpage for additional information on climate change and GHG emissions: http://www.rbc.com/community-sustainability/environment/
In voluntary communications	Complete	green@rbc: January issue, March issue		http://www.rbc.com/community-sustainability/environment/green-rbc-newsletter.html RBC Corporate Environmental Affairs' bi-monthly e-newsletter with over 25,000 subscribers. The January issue discussed our progress on green buildings. The March issue announced the launch of the 2015 Corporate Responsibility Report and showcased highlights of our progress against targets
In voluntary communications	Complete	Greening the Open		In partnership with our green power service provider, Bullfrog Power, we have published information about our GHG emissions performance for 2015: http://www.rbc.com/newsroom/news/2015/20150722-cdn-open_news.html
In voluntary communications	Complete	RBC Environmental Blueprint Progress Report Card		Each year, we create an Environmental Progress report card and post it on our public website: http://www.rbc.com/community-sustainability/environment/ 2014 Report Card: http://www.rbc.com/community-sustainability/_assets-custom/pdf/2014-RBC-Environmental-Blueprint-Report-Card.pdf
In voluntary communications	Complete	Page 91: Regulatory reporting on Environmental Risk in our Annual Report	https://www.cdp.net/sites/2016/80/15980/Climate Change 2016/Shared Documents/Attachments/CC4.1/RBC Annual Report_2015_e.pdf	Please see page 91 for regulatory reporting on Environmental Risk in our Annual Report.
In voluntary communications	Complete	page 3-6: Community Development	https://www.cdp.net/sites/2016/80/15980/Climate Change 2016/Shared Documents/Attachments/CC4.1/RBC-PAS-e-2015.pdf	Regulatory reporting in our Public Accountability Statement regarding charitable donations we have made to environmental organizations specifically aimed at reducing climate change related risks/impacts on pages 3-6. http://www.rbc.com/community-sustainability/_assets-custom/pdf/RBC-PAS-e-2015.pdf

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Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in physical climate parameters

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

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Risk Driver	Change in precipitation extremes and droughts
Description	The most significant risk driven by the physical impacts of climate change is increased insurance risk, the risk of potential financial loss that may arise where the amount, timing or frequency of benefit payments under (re)insurance contracts exceeds that expected. Risk management methods: Mitigating risks through both an increase in premiums, and changes in our pricing, product/policy and underwriting structure. RBC Insurance continues to work with industry associations like the Insurance Bureau of Canada and the Institute for Catastrophic Loss Reduction to find ways to work with government bodies and the communities to build more awareness around climate change and the impacts to homeowners; while developing recommended solutions to combat the impacts related to catastrophic weather losses.
Potential impact	Other: Insurance claims
Timeframe	Up to 1 year
Direct/Indirect	Indirect (Client)
Likelihood	More likely than not
Magnitude of impact	Low to medium
Estimated financial implications	Catastrophic weather events in Canada are intensifying and increasing in frequency. From 1983 to 2008, the Property & Casualty insurance sector experienced claims typically in the \$200 – 500 million range. However, from 2009 onward, claims have consistently exceeded \$1 billion. The Insurance Bureau of Canada classified 2013 as a record year for catastrophic events, including flooding events in Alberta and Ontario, and ice storms in eastern Canada, resulting of insured losses over \$3.5 billion. Actual losses annually as a result of climate change are difficult to quantify, but trending catastrophic events have contributed to profitability challenges across the industry.
Management method	<p>ADJUSTMENTS TO PREMIUMS AND PRICING Insurance is mitigating risks through both an increase in premiums and changes in our pricing, product/policy, and underwriting structure.</p> <p>RESEARCH AND COLLABORATION As weather events become less predictable, the insurance sector is adapting its risk management models to account for more frequent and severe events that result in insurance claims. In 2012, we researched the physical impacts of climate change on our insurance business, which included drafting a white paper on the topic, developing an action plan to address the observed increases in water-related insurance claims and participating in numerous climate change severe weather and adaptation working groups including the Insurance Bureau of Canada and the Institute for Catastrophic Loss Reduction. Our membership with the UNEP FI enables access studies conducted by the UN on climate change impacts and risks to banks, insurers and asset managers. Please see “further information” for information on water damage client education programs.</p> <p>WATER DAMAGE CLIENT EDUCATION Insurance published water damage educational materials including videos in the Insurance Advice Centre. The Advice Centre includes homeowner water damage prevention tips and examples of some causes of water damage that are covered under most standard home insurance plans. For more details, visit http://www.rbcinsurance.com/insuranceneeds/water-damage-insurance.html. Since this time, further client communications have been developed, which include a video explaining the evolution of home insurance as a result of climate change: http://www.rbcinsurance.com/insuranceneeds/changing-landscape-of-home-insurance.html. RBC has also generated media articles and press releases about the impacts of weather on homeowners and emergency preparedness, and has issued more online information on how to prevent and deal with damages related to weather. There has also been some investment made in clearly outlining policyholder deductibles, limits and coverage within client renewal packages related to severe weather to ensure clients are clear about coverage to assess potential gaps. Additionally, prior to renewal, attempts were made to contact clients by telephone to discuss policy coverage.</p>
Cost of management	Costs associated with managing this risk consist primarily of human resources (salaries) and investments in information technology. There are dedicated employees for property insurance who are focused on reviewing rates province by province each year and reviewing property rating models. Additional resources are required for the implementation of the rate action that takes place six times a year requiring the effort of multiple employees and the need for IT systems. We also revise policy wording, product coverage and limits and underwriting rules to ensure we can continue to ensure the product is available and affordable. This type of work happens two to three times per year with a number of employees at varying degrees focusing on these efforts. The estimated annual cost of all of the activities mentioned above is approximately \$500,000 to \$1.5 million. Please see “further information” for more details.

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

The majority of RBC’s business activities are focused in North America. Current climate change regulations in states and provinces within North America do not pose a significant risk to RBC. Our studies show that anticipated carbon regulations in Canada and the United States will not apply directly to banks. Regulations may have a small, indirect impact on RBC, but will

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not generate a substantive change in our business operations, revenue or expenditure. Below we have outlined how climate change regulations will affect RBC based on credit, market and operational risk.

CREDIT RISK

Some of our commercial and corporate clients are or at some point in the future may be regulated under GHG mitigation rules at the provincial/state level. This may give rise to credit risk for RBC as clients face new regulatory, reputational, competitive, operational and market risks. Clients that do not identify and manage these risks appropriately may experience diminished financial performance and a possible deterioration in credit quality. However, RBC has a diversified portfolio and the majority of our clients will not be impacted by future climate change regulations. Approximately 71% of our outstanding loans are associated with personal banking, small business and commercial clients that will likely not be directly subjected to anticipated climate change regulations in Canada and the United States. The remaining 29% of our outstanding loans are associated with large and corporate clients. Our lending to carbon-intensive sectors (including automotive, energy, forest, mining, industrial products, and transportation) represents approximately 6.7% of our outstanding loans. Many, but not all, of these clients will be directly subjected to climate change regulation.

We analyzed the exposure of borrowers in our loan and investment portfolio to unburnable carbon or stranded assets. We analyzed approximately 100 of RBC's largest single-name clients in the energy and utilities sectors globally. We started from an overly conservative assumption that, in a carbon-constrained world, these clients would be unable to repay their loans to RBC. Results showed the impact to RBC would be manageable, with losses amounting to less than 1% of our total lending portfolio.

MANAGING CREDIT RISK

Environmental Policies: See details in response to question 2.1a. Environmental Risk Ratings: Industry sectors are categorized by RBC according to the level of inherent environmental risk. Sectors classified as Environmental Risk Category 0 are low risk and consist mainly of professional services firms, while Environmental Risk Category III sectors include high impact sectors like mining, energy, pulp and paper, etc. We require enhanced environmental and social due diligence for clients operating in Environmental Risk Category II and III sectors (considered to be medium and high environmental risk sectors respectively), which includes an evaluation of climate change issues. Our enterprise credit risk management framework ensures that sectors, borrowers and transactions are carefully evaluated and credit risk assessed. This process is extensively described in our 2015 Annual Report (p. 56), which is attached to this question.

MARKET RISK

RBC is actively involved in carbon trading markets and, as in any commodity trading market, we will face market risk that can be exacerbated by thinly traded or illiquid markets (which will be a characteristic of carbon markets, especially in the early years). Market risk is also amplified by the risk that regulators will make unforeseen changes to the regulatory framework, causing large shifts in the market.

MANAGING MARKET RISK

Climate change may give rise to market risk in the form of commodity trading risk. The independent oversight of trading market risk management activities is the responsibility of Group Risk Management – Market and Trading Credit Risk, which includes major units in Toronto, London, New York and Sydney. The Market and Trading Credit Risk group establishes market risk policies and limits, develops quantitative techniques and analytical tools, vets trading models and systems, maintains the Value-at-Risk (VaR) and stress risk measurement systems, and provides enterprise risk reporting on trading activities.

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OPERATIONAL RISK

The price of energy may rise if power producers are able to pass on costs associated with their obligation to meet carbon emission regulations in Canada, the United States and elsewhere. We anticipate that an increase in RBC's operating costs due to higher energy prices will be offset to some extent by savings that arise from our energy efficiency initiatives. Energy costs are also immaterial when compared to the total operating costs of RBC globally.

MANAGING OPERATIONAL RISK

Environmental Reporting: Since 2006, we have been reporting metrics associated with our environmental footprint. Our Corporate Responsibility Report (attached) helps us track our progress in reducing our demand on natural systems while managing our costs.

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Other climate change risks that affect corporations are reputational and competitive. We have taken action to mitigate these risks, and our analysis indicates that these risks are negligible. More details are presented below.

REPUTATIONAL RISK

Financial institutions that do not adequately identify, manage and mitigate, where appropriate, their contribution to climate change face increasing censure from their stakeholders including investors, clients, employees and the general public. This may damage the firm's image in the community or public confidence, resulting in the loss of business. Also, when evaluating risk from a marketing and reporting perspective, there is a growing consumer suspicion of exaggerated or false claims regarding a company's environmental performance, known as "greenwash." Reputational risks apply to all regions where RBC operates.

ADDRESSING REPUTATIONAL RISK

Our robust environmental policy frameworks shield RBC from reputational issues related to climate change. The RBC Environmental Blueprint identifies climate change as one of our priority environmental issues and contains a number of publicly made commitments related to combating climate change. RBC also has both an enterprise-wide level Corporate Environmental Policy, first launched in 1991, and an internal suite of supporting policies directed at both our operational impacts and environmental credit risk management for lending and investment (see question 2.1a). These policies include climate change considerations. As our understanding of environmental issues and climate change has expanded over the years, and through stakeholder engagement, research and collaboration, we have revised our Corporate Environmental Policy periodically so that it continues to guide RBC's business and operational activities in a manner consistent with the evolving principles of sustainable development. We have also mitigated reputational risks through

- Awareness and training of our staff on environmental policies and climate change-related information
- Maintaining committees and centres of environmental and climate change expertise
- Research and thought leadership on environmental and climate change-related topics

For more details, please see the RBC Corporate Responsibility report attached.

COMPETITIVE RISK

This is the risk that a bank might be unable to build or maintain a sustainable competitive advantage over its peers in a new market where green products and services are important, where climate change physical impacts must be considered, and where carbon-market capabilities are required. Financial institutions are also increasingly expected to develop and adhere to lending and procurement policies that promote sustainable development, and are also expected to provide services that allow clients to reduce their impact on the environment and adapt to unavoidable environmental impacts, such as climate change.

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Competitive risks are greatest in North American markets where RBC has the vast majority of operations and competes with a variety of banks to offer clients green products and services.

ADDRESSING COMPETITIVE RISK

As outlined in the RBC Environmental Blueprint, we seek to offer an expanding array of products and services that provide long-term environmental benefits, are clearly distinguishable from comparable non-environmentally focused products, and empower clients with options to reduce their environmental footprint at little or no additional cost to the client. Please see our responses to CDP question 3.2a for a detailed summary of our environmental products and services.

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Climate Change Opportunities

CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

In 2015, RBC reported revenue of \$35.3 billion. Changes in climate regulation will not make a substantive change in our business operations, revenue or expenditure (see response to question 5.1g for more details).

The current direct opportunities we see include:

CARBON TRADING

In 2015, we traded nearly 165 million tonnes of carbon credits through the RBC Capital Markets Carbon emissions Trading Group. Since the inception of the trading group in 2008, RBC has traded nearly 1 billion tonnes of carbon credits. The majority of the trading volume centres around the European Union Emissions Trading Scheme (EU ETS), the largest compliance market in the world. We also trade in the California Cap-and-Trade Program, Regional Greenhouse Gas Initiatives (RGGI), Climate Action Reserve and other offset and voluntary markets. For details, visit <http://www.rbccm.com/carbontrading/>.

CLEAN ENERGY FINANCING AND ADVISORY SERVICES

RBC recognizes opportunities associated with the growth in clean energy, including renewable, alternative and clean technologies, as government agencies set policies and targets on the expansion of clean and renewable power generation. RBC Capital Markets has a long history of providing credit, debt and equity underwriting services and advisory services to both the renewable power generation and clean technology sectors. As of October 31 2015, RBC had nearly \$3.4 billion in loan and trading line exposures to companies whose predominant business is renewable energy. For more details, visit <https://www.rbccm.com/energy/>.

CLEANTECH

The global clean tech market is expected to exceed \$2 trillion by 2020, bigger than Canada's GDP. Over the next 15 years, \$90 trillion in new infrastructure investments will be required around the world to achieve a global low-carbon transition. Canada's clean tech industry is already worth almost \$12 billion, and is increasingly important to our place in the Canadian economy. The Canadian government has pledged significant financial support for the cleantech sector as a means of transitioning to low carbon (full details will be announced in fall 2016)

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

We see opportunities driven by physical climate parameters; however, these opportunities do not currently or in the near future have the potential to generate a substantive change in our business operations, revenue or expenditure.

Current opportunities we see include:

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

INFRASTRUCTURE FINANCING

Physical deterioration of infrastructure may be accelerated by climate change, particularly in Canada's north as the permafrost melts. This may result in large public-sector financing needs for upgraded roads, buildings and municipal infrastructure. Adaptation to climate change may also require significant capital expenditure for roads, docks, water treatment systems, sewers and other systems.

LOWER OPERATING COSTS

With a large proportion of our global operations situated in Canada, RBC may benefit from lower heating costs in colder parts of the country as Canadian winters become warmer in the changed climate. (This may however be offset by hotter summers and increased cooling costs.)

SUPPORTING WATER-RELATED CAUSES

Climate change is exacerbating water quality and availability issues all over the world. This unfortunate reality gives rise to community investment opportunities for large corporations to help address the problems. RBC is committed to making a lasting social impact through responsible giving and by building strong partnerships with the charitable sector. We donated \$5.9 million in 2015 to environmental charities globally; most of this was to water-related causes. Our signature environmental cause is the RBC Blue Water Project, our global commitment to help protect the world's fresh water resources.

Some of the environmental projects we support include features that have an effect on climate change mitigation and adaptation, including projects that:

- Protect or restore forested areas that act as carbon sinks
- Protect or restore coastal wetlands that regulate sea water intrusion into inland areas that could impact groundwater used for drinking
- Improve management of urban storm and rainwater
- Educate homeowners and businesses about the need to conserve water, especially in regions where climatologists predict communities must adapt to more frequent water shortages due to shifting meteorological patterns

For more, visit <http://www.rbc.com/community-sustainability/environment/rbc-blue-water/about/index.html>.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

We see opportunities driven by other climate-related developments; however, these opportunities do not currently or in the near future have the potential to generate a substantive change in our business operations, revenue or expenditure (see response to question 5.1i for more details).

The current opportunities we see include:

ENERGY SAVER LOAN AND MORTGAGE PRODUCTS

RBC offers the RBC Energy Saver Loan and RBC Energy Saver Mortgage products in Canada, which help clients qualify for rebates on home energy audits and create a more energy efficient home while saving on borrowing costs. For more details, visit <http://www.rbcroyalbank.com/mortgages/energy-saver-mortgage.html>.

SOLAR PANEL FINANCING

RBC Royal Bank in Canada offers advice on and solutions for solar panel financing for homeowners and businesses, including vendor financing. For more details, visit <http://www.rbcroyalbank.com/business/financing/solar-panel-financing.html>.

CLIMATE CHANGE BUSINESS ADVICE

The Canadian Banking Green Strategy for commercial and small business clients identifies three areas of opportunity for financing: green buildings, small and medium renewable energy projects, and cleantech in knowledge-based industries. The Greening Your Business section of our Commercial Advice Centre offers valuable tools and resources to support businesses looking to shift to more sustainable business models. The Advice Centre has a number of articles and videos related to renewable energy, green buildings and managing carbon and energy. For more details, visit <http://www.rbcroyalbank.com/commercial/advice/greening-your-business/>.

RESPONSIBLE INVESTING

RBC has seven socially responsible investing (SRI) mutual fund products through RBC Global Asset Management using SRI research and ESG screens developed by Sustainalytics. Climate change is a common screen used to evaluate companies and sectors included in the funds. Total assets under management for the combined SRI products are now \$4.3 billion. RBC also offers high-net-worth clients and other clients personalized screens through its SRI Wealth Management Group. Clients can choose investment options that focus specifically on carbon- and climate change-related opportunities or factors, including those related to adaptation. For more details, visit <http://funds.rbcgam.com/investment-solutions/sociallyresponsible-investments/>.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO ₂ e)
Scope 1	Tue 01 Nov 2011 - Wed 31 Oct 2012	32,046
Scope 2 (location-based)	Tue 01 Nov 2011 - Wed 31 Oct 2012	127,445
Scope 2 (market-based)	Tue 01 Nov 2011 - Wed 31 Oct 2012	124,167

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organisations

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO ₂	IPCC Second Assessment Report (SAR – 100 year)
CH ₄	IPCC Second Assessment Report (SAR – 100 year)
N ₂ O	IPCC Second Assessment Report (SAR – 100 year)

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	1.89	Other: kg CO ₂ e per m ³	WRI. GHG Protocol tool for stationary combustion
Propane	1.62	kg CO ₂ e per liter	WRI. GHG Protocol tool for stationary combustion
Other: Heating oil	2.69	kg CO ₂ e per liter	WRI. GHG Protocol tool for stationary combustion
Electricity		Other: Metric tonnes of CO ₂ e per kWh	See spreadsheet attached for breakdown by country, province and state.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Emissions Data – (1 Nov 2012 – 31 Oct 2013)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Financial control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO₂e

35,905

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

Yes

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO₂e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
90,626	86,816	Methodology for market-based per the GHG Protocol Scope 2 Guidance: an amendment to the Corporate Standard. RBC purchased 3,810 tonnes CO ₂ e of renewable energy in FY 2013. One of our major electricity suppliers that we have entered into a contract for multiple years was unable to provide RBC with supplier specific emissions factors due to legal reasons within their organization.

CC8.4

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

Yes

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
International properties	Emissions are relevant but have not yet been calculated	Emissions are relevant but have not yet been calculated	Emissions are relevant but not yet calculated	Since 2009, we have been able to measure and report on Scope 1 and 2 emissions for 100% of our properties located in Canada, the U.S. and the British Isles, which represented reporting from 88% of our global operations during this reporting year (measured by global floor area). Current gaps in Scope 1 and 2 data include energy reporting in the Caribbean and other international locations where there was a lack of reporting or where data was not available in a format that could support credible public reporting.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Source	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Extrapolation Data Management	<p>Our energy footprint is based on three categories of data:</p> <ol style="list-style-type: none"> 1) Metered: Properties where metered energy consumption is billed directly from a utility or landlord. 2) Prorated estimated: Major properties that do not have metered data, but where the landlord has provided consumption data for the entire building that is prorated to the area we occupy. 3) Proxy estimated: Energy consumption is calculated using averaged metered data for comparable buildings and applied based on the area RBC occupies. Inherently, there is less uncertainty in data that is metered versus the other two categories. In this particular reporting year, 44% of energy data was metered, 37% was prorated and 19% was proxy estimated.
Scope 2 (location-based)	More than 2% but less than or equal to 5%	Extrapolation Data Management	<p>Our energy footprint is based on three categories of data:</p> <ol style="list-style-type: none"> 1) Metered: Properties where metered energy consumption is billed directly from a utility or landlord. 2) Prorated estimated: Major properties that do not have metered data, but where the landlord has provided consumption data for the entire building that is prorated to the area we occupy. 3) Proxy estimated: Energy consumption is calculated using averaged metered data for comparable buildings and applied based on the area RBC occupies. Inherently, there is less uncertainty in data that is metered versus the other two categories. In this particular reporting year, 44% of energy data was metered, 37% was prorated and 19% was proxy estimated.
Scope 2 (market-based)	More than 2% but less than or equal to 5%	Extrapolation Data Management Other: No supplier specific emission factor available	<p>RBC Purchased 3,810 tonnes CO₂e of renewable energy in FY 2013. One of our major electricity suppliers that we have entered into a contract for multiple years was unable to provide RBC with supplier specific emissions factors due to legal reasons within their organization. However, the contract that we hold is in the province of Ontario where we have over 40% of our operations and both enterprise data centres. The Ontario grid has a low carbon intensity. Our supplier is primarily nuclear power, as such, it is likely less carbon intensive than the Ontario grid average. Therefore, our reporting is conservative (over stated). Similar to the above: Our energy footprint is based on three categories of data:</p> <ol style="list-style-type: none"> 1) Metered: Properties where metered energy consumption is billed directly from a utility or landlord. 2) Prorated estimated: Major properties that do not have metered data, but where the landlord has provided consumption data for the entire building that is prorated to the area we occupy. 3) Proxy estimated: Energy consumption is calculated using averaged metered data for comparable buildings and applied based on the area RBC occupies. Inherently, there is less uncertainty in data that is metered versus the other two categories. In this particular reporting year, 44% of energy data was metered, 37% was prorated and 19% was proxy estimated.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

No third-party verification or assurance

CC8.7

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

No third-party verification or assurance

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	We are fully committed to providing complete and accurate data on our key performance indicators. Internally, we have incorporated many steps into our environmental data review. Our environmental data are subjected to “four lines of quality control” before being reported. The first line is CB Richard Ellis, our property management service provider, who produces an annual Building Energy Performance Indicator (BEP) report that tracks our energy use for all properties in Canada and the U.S. (over 1,900 properties). RBC Corporate Real Estate then reviews the data by using a variance threshold and comparing data year over year. The RBC Corporate Sustainability Group then calculates the GHG emissions associated with our property energy consumption. RBC Internal Audit forms the final line of quality control by periodically conducting audits of procedures and reports that may involve selective testing of data for accuracy. An audit was conducted by RBC Internal Audit in 2013. Senior executives also are required to sign off on data being reported. This data collection and calculation process involves subject matter experts with backgrounds in engineering, environmental sciences and/or energy management. We continue to evaluate the usefulness of having an external expert verify parts or all of our CR disclosure, and assess whether there is sufficient benefit to our stakeholders to justify the cost and resources required for this exercise.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Emissions Data – (1 Nov 2013 – 31 Oct 2014)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Financial control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

35,127

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

Yes

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
84,259	81,146	Methodology for market-based per the GHG Protocol Scope 2 Guidance: an amendment to the Corporate Standard. RBC purchased 3,113 tonnes CO2e of renewable energy in FY 2014. One of our major electricity suppliers that we have entered into a contract for multiple years was unable to provide RBC with supplier specific emissions factors due to legal reasons within their organization.

CC8.4

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

Yes

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
International properties	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated	Since 2009, we have been able to measure and report on Scope 1 and 2 emissions for 100% of our properties located in Canada, the U.S. and the British Isles, which represented reporting from 88% of our global operations during this reporting year (measured by global floor area). Current gaps in Scope 1 and 2 data include energy reporting in the Caribbean and other international locations where there was a lack of reporting or where data was not available in a format that could support credible public reporting.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Extrapolation Data Management	<p>Our energy footprint is based on three categories of data:</p> <ol style="list-style-type: none"> 1) Metered: Properties where metered energy consumption is billed directly from a utility or landlord. 2) Prorated estimated: Major properties that do not have metered data, but where the landlord has provided consumption data for the entire building that is prorated to the area we occupy. 3) Proxy estimated: Energy consumption is calculated using averaged metered data for comparable buildings and applied based on the area RBC occupies. Inherently, there is less uncertainty in data that is metered versus the other two categories. In this particular reporting year, 41% of energy data was metered, 39% was prorated and 20% was proxy estimated.
Scope 2 (location-based)	More than 2% but less than or equal to 5%	Extrapolation Data Management	<p>Our energy footprint is based on three categories of data:</p> <ol style="list-style-type: none"> 1) Metered: Properties where metered energy consumption is billed directly from a utility or landlord. 2) Prorated estimated: Major properties that do not have metered data, but where the landlord has provided consumption data for the entire building that is prorated to the area we occupy. 3) Proxy estimated: Energy consumption is calculated using averaged metered data for comparable buildings and applied based on the area RBC occupies. Inherently, there is less uncertainty in data that is metered versus the other two categories. In this particular reporting year, 41% of energy data was metered, 39% was prorated and 20% was proxy estimated.
Scope 2 (market-based)	More than 2% but less than or equal to 5%	<p>Extrapolation Data Management</p> <p>Other: no supplier specific emission factor available</p>	<p>RBC Purchased 3,113 tonnes CO₂e of renewable energy in FY 2014. One of our major electricity suppliers that we have entered into a contract for multiple years was unable to provide RBC with supplier specific emissions factors due to legal reasons within their organization. However, the contract that we hold is in the province of Ontario where we have over 40% of our operations and both enterprise data centres. The Ontario grid has a low carbon intensity. Our supplier is primarily nuclear power, as such, it is likely less carbon intensive than the Ontario grid average. Therefore, our reporting is conservative (over stated). Our energy footprint is based on three categories of data:</p> <ol style="list-style-type: none"> 1) Metered: Properties where metered energy consumption is billed directly from a utility or landlord. 2) Prorated estimated: Major properties that do not have metered data, but where the landlord has provided consumption data for the entire building that is prorated to the area we occupy. 3) Proxy estimated: Energy consumption is calculated using averaged metered data for comparable buildings and applied based on the area RBC occupies. Inherently, there is less uncertainty in data that is metered versus the other two categories. In this particular reporting year, 41% of energy data was metered, 39% was prorated and 20% was proxy estimated.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

No third-party verification or assurance

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

No third party verification or assurance

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	We are fully committed to providing complete and accurate data on our key performance indicators. Internally, we have incorporated many steps into our environmental data review. Our environmental data are subjected to “four lines of quality control” before being reported. The first line is CB Richard Ellis, our property management service provider, who produces an annual Building Energy Performance Indicator (BEPI) report that tracks our energy use for all properties in Canada and the U.S. (over 1,900 properties). RBC Corporate Real Estate then reviews the data by using a variance threshold and comparing data year over year. The RBC Corporate Sustainability Group then calculates the GHG emissions associated with our property energy consumption. RBC Internal Audit forms the final line of quality control by periodically conducting audits of procedures and reports that may involve selective testing of data for accuracy. Senior executives also are required to sign off on data being reported. This data collection and calculation process involves subject matter experts with backgrounds in engineering, environmental sciences and/or energy management. We continue to evaluate the usefulness of having an external expert verify parts or all of our CR disclosure, and assess whether there is sufficient benefit to our stakeholders to justify the cost and resources required for this exercise.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Emissions Data – (1 Nov 2014 – 31 Oct 2015)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Financial control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO₂e

25,640

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

Yes

C8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO₂e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
84,285	81,449	Methodology for market-based per the GHG Protocol Scope 2 Guidance: an amendment to the Corporate Standard. RBC purchased 2,836 tonnes CO ₂ e of renewable energy in FY 2015. One of our major electricity suppliers that we have entered into a contract for multiple years was unable to provide RBC with supplier specific emissions factors due to legal reasons within their organization.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC8.4

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

Yes

C8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
International properties	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated	Since 2009, we have been able to measure and report on Scope 1 and 2 emissions for 100% of our properties located in Canada, the U.S. and the British Isles, which represented reporting from 90% of our global operations during this reporting year (measured by global floor area). Current gaps in Scope 1 and 2 data include energy reporting in the Caribbean and other international locations where there was a lack of reporting or where data was not available in a format that could support credible public reporting.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Extrapolation Data Management	<p>Our energy footprint is based on three categories of data:</p> <ol style="list-style-type: none"> 1) Metered: Properties where metered energy consumption is billed directly from a utility or landlord. 2) Prorated estimated: Major properties that do not have metered data, but where the landlord has provided consumption data for the entire building that is prorated to the area we occupy. 3) Proxy estimated: Energy consumption is calculated using averaged metered data for comparable buildings and applied based on the area RBC occupies. Inherently, there is less uncertainty in data that is metered versus the other two categories. In this particular reporting year, 45% of energy data was metered, 33% was prorated and 22% was proxy estimated.
Scope 2 (location-based)	More than 2% but less than or equal to 5%	Extrapolation Data Management	<p>Our energy footprint is based on three categories of data:</p> <ol style="list-style-type: none"> 1) Metered: Properties where metered energy consumption is billed directly from a utility or landlord. 2) Prorated estimated: Major properties that do not have metered data, but where the landlord has provided consumption data for the entire building that is prorated to the area we occupy. 3) Proxy estimated: Energy consumption is calculated using averaged metered data for comparable buildings and applied based on the area RBC occupies. Inherently, there is less uncertainty in data that is metered versus the other two categories. In this particular reporting year, 33% of energy data was metered, 22% was prorated and 45% was proxy estimated.
Scope 2 (market-based)	More than 2% but less than or equal to 5%	<p>Extrapolation Data Management</p> <p>Other: no supplier specific emission factor available</p>	<p>RBC Purchased 2,836 tonnes CO₂e of renewable energy in FY 2015. One of our major electricity suppliers that we have entered into a contract for multiple years was unable to provide RBC with supplier specific emissions factors due to legal reasons within their organization. However, the contract that we hold is in the province of Ontario where we have over 40% of our operations and both enterprise data centres. The Ontario grid has a low carbon intensity. Our supplier is primarily nuclear power, as such, it is likely less carbon intensive than the Ontario grid average. Therefore, our reporting is conservative (over stated). Our energy footprint is based on three categories of data:</p> <ol style="list-style-type: none"> 1) Metered: Properties where metered energy consumption is billed directly from a utility or landlord. 2) Prorated estimated: Major properties that do not have metered data, but where the landlord has provided consumption data for the entire building that is prorated to the area we occupy. 3) Proxy estimated: Energy consumption is calculated using averaged metered data for comparable buildings and applied based on the area RBC occupies. Inherently, there is less uncertainty in data that is metered versus the other two categories. In this particular reporting year, 45% of energy data was metered, 33% was prorated and 22% was proxy estimated.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Type of verification or assurance	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2016/80/15980/Climate Change 2016/Shared Documents/Attachments/CC8.6a/RBC-CRR-Report-2015-e.pdf	Please see page 8 and 9 of the Corporate Responsibility report for Deloitte's Independent Limited Assurance Report	ISAE3000	100

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

C8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Type of verification or assurance	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2016/80/15980/Climate Change 2016/Shared Documents/Attachments/CC8.7a/RBC-CRR-Report-2015-e.pdf	Please see page 8 and 9 of the Corporate Responsibility report for Deloitte's Independent Limited Assurance Report	ISAE3000	ISAE3000

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

C8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	We are fully committed to providing complete and accurate data on our key performance indicators. Internally, we have incorporated many steps into our environmental data review. Our environmental data are subjected to “four lines of quality control” before being reported. The first line is Jones Lang Laselle, our property management service provider, who produces an annual Building Energy Performance Indicator (BEPI) report that tracks our energy use for all properties in Canada and the U.S. (over 1,900 properties). RBC Corporate Real Estate then reviews the data by using a variance threshold and comparing data year over year. The RBC Corporate Environmental Affairs Group then calculates the GHG emissions associated with our property energy consumption. RBC Internal Audit forms the final line of quality control by periodically conducting audits of procedures and reports that may involve selective testing of data for accuracy. Senior executives also are required to sign off on data being reported. This data collection and calculation process involves subject matter experts with backgrounds in engineering, environmental sciences and/or energy management. We continue to evaluate the usefulness of having an external expert verify parts or all of our CR disclosure, and assess whether there is sufficient benefit to our stakeholders to justify the cost and resources required for this exercise.

C8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

Further Information

Please note that in the past, RBC has included steam as a direct emission. However, in 2015 we are now reporting district steam as an indirect emission as suggested by Deloitte LLP who conducted the assurance of our energy and emissions data. In 2015, 48,751 MWh (8,909 tonnes of CO₂e) of steam was moved from direct to indirect energy consumption. CC8.6a and CC8.7a: another relevant standard is ISAE3410 in addition to ISAE 3000

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Scope 1 Emissions Breakdown – (1 Nov 2012 – 31 Oct 2013)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Canada	32,207
United States of America	2,999
United Kingdom	547
Jersey	73
Guernsey	78

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By facility

By activity

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Branches	16,400		
Major properties	18,935		
Data centres and processing centres	570		

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Property heating	35,905

Further Information

Major properties are categorized as facilities with an area greater than 25,000 ft² (greater than 2,320 m²), and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft² (less than 2,320 m²). In 2013, data

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

centres and processing centres consisted of 13 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands. Please see our 2013 RBC Environmental Report attached with GHG and energy reporting on pages 4, 5 and 15.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Scope 1 Emissions Breakdown – (1 Nov 2013 – 31 Oct 2014)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Canada	32,913
United States of America	2,142
United Kingdom	48
Jersey	14
Guernsey	10

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By facility

By activity

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Branches	17,154		
Major properties	17,640		
Data centres and processing centres	333		

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Property heating	35,127

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Further Information

Major properties are categorized as facilities with an area greater than 25,000 ft² (greater than 2,320 m²), and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft² (less than 2,320 m²). In 2014, data centres and processing centres consisted of 13 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands. Please see our 2014 Corporate Responsibility Report attached with GHG and energy reporting on page 34.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Scope 1 Emissions Breakdown – (1 Nov 2014 – 31 Oct 2015)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please complete the table below

Country/Region	Scope 1 metric tonnes CO2e
Canada	24606
United States of America	959
United Kingdom	87
Jersey	0
Guernsey	5

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By facility

By activity

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Branches	18,545		
Major properties	6,813		
Data centres and processing centres	283		

CC9.2d

Do you have Scope 2 emissions sources in more than one country?

Activity	Scope 1 emissions (metric tonnes CO2e)
Property heating	25,640

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Further Information

Major properties are categorized as facilities with an area greater than 25,000 ft² (greater than 2,320 m²), and branches are categorized as RBC-owned or-leased properties with an area of less than 25,000 ft² (less than 2,320 m²). In 2015, data centres and processing centres consisted of 12 properties across Canada, the US and the British Isles containing operational processes and equipment that have high electricity demands. Please see our 2015 Corporate Responsibility Report attached with energy and GHG reporting on Page 43.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Scope 2 Emissions Breakdown – (1 Nov 2012 – 31 Oct 2013)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Canada	69,399	65,589	389,285	18,673
United States of America	19,282	19,282	42,565	0
United Kingdom	1,524	1,524	12,976	0
Jersey	204	204	2,550	0
Guernsey	217	217	944	0

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

By activity

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions (metric tonnes CO2e)	
Branches	51,915	48,105
Major properties	29,091	29,091
Data Centres and Processing Centres	9,619	9,619

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions, location based (metric tonnes CO ₂ e)	Scope 2 emissions, market-based (metric tonnes CO ₂ e)
Purchased electricity use	90,626	86,816

Further Information

Major properties are categorized as facilities with an area greater than 25,000 ft² (larger than 2,320 m²), and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft² (less than 2,320 m²). In 2013, data centres and processing centres consisted of 13 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands. Please see our 2013 RBC Environmental Report attached with GHG and energy reporting on pages 4, 5 and 15.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Scope 2 Emissions Breakdown – (1 Nov 2013 – 31 Oct 2014)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Canada	62,786	59,673	377,770	18,044
United States of America	18,810	18,810	37,968	0
United Kingdom	1,764	1,764	14,725	0
Jersey	523	523	2,324	0
Guernsey	377	377	934	0

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

By activity

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Branches	50,252	47,139
Major properties	25,130	25,130
Data centres and processing centres	8,877	8,877

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions, location based (metric tonnes CO ₂ e)	Scope 2 emissions, market-based (metric tonnes CO ₂ e)
Purchased electricity use	80,259	77,146

Further Information

Major properties are categorized as facilities with an area greater than 25,000 ft² (larger than 2,320 m²), and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft² (less than 2,320 m²). In 2014, data centres and processing centres consisted of 13 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands. Please see our 2014 Corporate Responsibility Report attached with GHG and energy reporting on page 34.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Scope 2 Emissions Breakdown – (1 Nov 2014 – 31 Oct 2015)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Canada	60,909	58,073	409,449	20,000
United States of America	20,250	20,250	52,855	0
United Kingdom	2,266	2,266	13,730	0
Jersey	512	512	2,277	0
Guernsey	348	348	861	0

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

By activity

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Branches	50,616	47,780
Major Properties	21,456	21,456
Data Centres and Processing Centres	12,213	12,213

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Purchased electricity and district steam use	84,285	81,449

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Further Information

Please note that in the past, RBC has included steam as a direct emission. However, in 2015 we are now reporting district steam as an indirect emission as suggested by Deloitte LLP who conducted the assurance of our energy and emissions data. In 2015, 48,751 MWh (8,909 tonnes of CO₂e) of steam was moved from direct to indirect energy consumption. Major properties are categorized as facilities with an area greater than 25,000 ft² (larger than 2,320 m²), and branches are categorized as RBC-owned or-leased properties with an area of less than 25,000 ft² (less than 2,320 m²). In 2015, data centres and processing centres consisted of 12 properties across Canada, the US and the British Isles containing operational processes and equipment that have high electricity demands. Please see our 2015 Corporate Responsibility Report attached with GHG and energy reporting on page 43.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

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

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	Energy purchased and consumed (MWh)
Heat	138,047
Steam	48,751
Cooling	86,084

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

138,047

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	131,753
Propane	386
Other: Heating oil	5,908

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	Basis for applying a low carbon emission factor	Comments
Contract with suppliers or utilities, supported by energy attribute certificates	20,000	In 2015, RBC purchased 20,000 MWh of EcoLogo-certified green electricity that powered our entire ATM and retail branch digital display networks plus a number of external meetings and major sponsored events such as the 2015 RBC Canadian Open.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comments
430,421	430,421	0	0	0	Total electricity consumed: 430,421MWh Total district steam consumed: 48,751MWh Total renewable electricity consumed by RBC: 17,541MWh

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Emissions Performance

CC12.1

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

Decreased

CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	5.8	Decrease	Please refer to question 3.3b for the complete summary of our emissions reduction activities from 2015.
Divestment		No change	
Acquisitions		No change	
Mergers		No change	
Change in output		No change	
Change in methodology	13	Decrease	Greening the electricity grid has helped many companies reduce their GHG emissions from electricity use. We analyzed the impact that greening the grid had on RBC's North American portfolio by applying 2014 emission factors to 2015 electricity consumption data to determine the percentage difference. By simply applying the old emission factors, we were able to demonstrate an estimated 13% GHG reduction in our North American property portfolio.
Change in boundary		No change	
Change in physical operating conditions	10.8	Increase	According to Environment Canada, February 2015 brought record-breaking cold conditions to various parts of Canada and some parts of the USA. In fact, February 2015 was the all-time coldest month on record for the northern USA where some areas (including New York experienced their coldest temperature ever on record in February 2015. In Ontario, February 2015 was the first month in which temperatures remained below the freezing mark for the whole month (since records began in 1840). Due to the extremely cold winter as well as fluctuating temperatures across North America, the demand for energy increased.
Unidentified		No change	
Other		No change	

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO₂e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0000031	metric tonnes CO ₂ e	35,321,000,000	Location-based	12.9	Decrease	Our Scope 1 and 2 emissions decreased by 7.9% in 2015 when compared to 2014 for reasons noted in table 12.1a, while total revenue increased by 3.5%.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.06	metric tonnes CO ₂ e	square meter	1825430	Location-based	9	Decrease	Our Scope 1 and 2 emissions decreased by 7.9% in 2015 compared to 2014 for reasons noted in table 12.1a. Our total floor area increased by 1.2%. Our total coverage for floor area increased from 88% to 90% when comparing 2014 to 2015. As such, the denominator used for this calculation is floor areas that has credible energy reporting (which is 90% of our global operations).
1.69	metric tonnes CO ₂ e	full time equivalent (FTE) employee	64911	Location-based	8.6	Decrease	Energy consumption per FTE was 1.85 in 2014 (119,386/64,684). Our scope 1 and 2 emissions decreased by 7.9% in 2015 compared to 2014 for reasons noted in table 12.1a. Our total FTE count increased very slightly by less than 1%.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

CC13.2

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

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO ₂ e)	Number of credits (metric tonnes CO ₂ e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit purchase	Other:	We purchase CERs through the RBC Emissions Trading Desk. RBC completes an OTC sale of spot CERs and sends an International Emissions Trading Association (IETA) "Single Trade Agreement" contract for the trade. The CERs are sourced from a mix of projects that are subjected to a rigorous validation, certification, registration and insurance process designed to ensure real, measurable and verifiable emission reductions that are recognized by the United Nations.	Other: Certified emission reduction (CER) units	550		Yes	Voluntary offsetting

Further Information

RBC is not regulated under any emissions trading schemes but actively participates in carbon markets as a trader and adviser. In 2015, we traded approximately 165 million tonnes of carbon credits through our Capital Markets Carbon Emissions Trading Group. Since the inception of the trading group in 2008, RBC has traded nearly 1 billion tonnes. The majority of the trading volume centres around the European Union Emissions Trading Scheme (EU ETS), the largest compliance market in the world. We also trade in the California Cap-and-Trade Program, Regional Greenhouse Gas Initiatives, Climate Action Reserve and other offset and voluntary markets. For more information, please see the RBC Capital Markets Emissions Trading website: <https://www.rbccm.com/carbontrading/>. In 2015, we purchased offsets for a variety of reports and events including: the production, and distribution of our major reports, emissions from our major events (e.g. RBC Canadian Open and Run for the Kids).

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO ₂ e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, not yet calculated				In 2015, RBC purchased \$7.6 billion of goods and services from approximately 32,000 international, national, regional and local suppliers. We practice responsible and sustainable sourcing and effective supply chain management. We have a principles-based Supplier Code of Conduct (http://www.rbc.com/sourcing/Supplier_Code_of_Conduct_table.pdf) to ensure the behaviour of our suppliers aligns with RBC standards, with an externally verified process to monitor supplier acknowledgement of the Code. There are no current plans to track and report on the carbon footprint of our supply chain, except for a few suppliers we work closely with on GHG reduction initiatives (e.g. Project One Stop in question 3.3b)
Capital goods	Not relevant, explanation provided				Not applicable to our operations - we do not manufacture goods.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not relevant, explanation provided				Not applicable to our operations
Upstream transportation and distribution	Not relevant, calculated	170	Emissions associated with deliveries to our property network in Canada are calculated by a third-party logistics service provider using direct measurements of package weights and delivery distances. Calculations following best practice guidance from both the ISO 14064 series for GHG Accounting and the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.	60.00%	In 2012, we launched Project One-Stop, aimed at reducing the number of deliveries to our Canadian properties by consolidating shipments and adjusting delivery frequencies. Since its project launch in 2012, we have seen a 17% increase in the number of packages consolidated per delivery and a 53.5% reduction in GHG emissions associated with the transportation of goods.

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Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Waste generated in operations	Not relevant, explanation provided ■				<p>There are no current plans to track and report on the carbon footprint associated with waste generated. We have purposely focused on waste reduction efforts as outlined in the RBC Environmental Blueprint:</p> <ul style="list-style-type: none"> ■ Send zero electronic waste to landfill globally by 2018 ■ Ensure all major offices have waste diversion programs ■ Ensure all major construction and renovation projects have waste diversion plans for carpet, furniture and demolition waste <p>We report annually on our progress in achieving these commitments.</p>
Business travel	Relevant, calculated	29,336	We track four categories of business travel: air, rail, rental vehicles and personal vehicles. Data coverage for air travel includes all staff in Canada, the US and the British Isles, which represents about 89% of all RBC staff globally.	89.00%	<p>Travel data is based on data collection and record-keeping practices employed by our third-party travel service providers, RBC travel desks and expense-claim systems. Employees have a number of travel alternatives including audio, web and video conferencing and we have an intranet webpage dedicated to assisting employees in using these tools. An example is the annual two-day Canadian Banking sales leadership conference which is now held using WebEx technology to deliver live two-way video streaming. We reduced the need for employee travel by using remote collaboration tools for more than 1.3 million hours of meetings in 2015. The RBC Employee Environmental Stewardship Guidelines include guidance on low carbon travel, videoconferencing and teleconferencing for employees worldwide.</p>
Employee commuting	Relevant, not yet calculated				<p>RBC employs approximately 78,000 full and part-time employees through offices in Canada, the US and 37 other countries. We occasionally survey our employees on commuting habits but do not calculate the carbon footprint of employee commuting. We have provided online carpooling totals to employees in some of our larger commuting centres. For example, we have an employee carpool program called “Smar Commute” available to over 6,000 employees at our Meadowvale office in Mississauga, Ontario. In 2015, the program had more than 270 employees registered, 71 logged trips, almost 3,000km logged for carpools utilizing the designated carpool parking spots.</p>

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO ₂ e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Upstream leased assets	Relevant, calculated		Included in Scope 1 and 2 emission calculations. See answers to questions 9 and 10 for further details		We include leased properties in our calculation of Scope 1 and 2 emissions as we have the ability to put into action carbon reductions in these properties through green-leasing strategies, electrical and mechanical design standards and landlord-tenant engagement campaigns.
Downstream transportation and distribution	Relevant, not yet calculated				Deliveries of client statements and marketing materials are our largest source of downstream transportation emissions. In the RBC Environmental Blueprint, we have committed to reducing the amount of paper we use by expanding our electronic services and paperless banking options for clients and employees, thus reducing the need to transport these materials. Since 2006, we have converted more than 13 million accounts in Canada to electronic statements. The continued success of the e-Courier program allows branches in Canada to electronically submit documents to central processing offices. It also reduces the need for paper and the associated environmental impacts of transportation. In 2015, employees submitted an estimated 87 million pages of documents through e-Courier, avoiding the need for 395 tonnes of copy paper and the associated environmental impacts of transportation.
Processing of sold products	Not relevant, explanation provided				Banking is a service-oriented industry with little to no exchange of physical goods.
Use of sold products	Not relevant, explanation provided				Banking is a service-oriented industry with little to no exchange of physical goods.
End-of-life treatment of sold products	Not relevant, explanation provided				Banking is a service-oriented industry with little to no exchange of physical goods.
Downstream leased assets	Not relevant, explanation provided				Not applicable to our operations.
Franchises	Not relevant, explanation provided				Not applicable to our operations.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Investments	Not evaluated				RBC's investment and lending policies include requirements to review environmental and social issues, including climate change; however, we do not calculate the carbon emissions associated with our investments. For more on RBC's lending and investment policies, please see: http://www.rbc.com/community-sustainability/environment/responsible-financing.html
Other (upstream)					
Other (downstream)					

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

No third-party verification or assurance

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Other: operational expansion	5	Increase	Total emissions related to business travel increased by 4.9%. Our overall business travel is increasing due to RBC's operational expansion internationally (including acquisitions in UK, Luxembourg and the US), we are required to travel to the new international locations that did not previously exist as part of our business.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagement and measures of success

RBC's supplier management policy includes requirements in the procurement process to review environmental and social issues that can impact our business, our suppliers' businesses and communities. The review process ensures that we gather the appropriate environmental and social information regarding suppliers' operations and the products and services they offer to make informed procurement decisions. This includes reviewing product lifecycle analysis and third-party certification standards related to energy efficiency (i.e. EPEAT and Energy Star) and GHG emissions. Energy and carbon considerations are embedded in the majority of leasing and procurement activities that focus on real estate and IT. We also have a principles-based Supplier Code of Conduct (http://www.rbc.com/sourcing/Supplier_Code_of_Conduct_table.pdf) to ensure the behaviour of our suppliers aligns with RBC standards, with an externally verified process to monitor supplier acknowledgement of the Code.

For engagement with customers, see response to question CC 2.2a.

For engagement with other partners, see response to question CC 2.3.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend	Comments
97	5%	In 2015, 5% of RBC's total spend from purchases were screened against environmental and social criteria. In the same year, RBC purchased \$7.6 billion of goods and services globally. Note that many of our contracts with suppliers are multi-year, so 5 percent does not accurately reflect the percentage of suppliers we engage and or the percentage subjected to environmental and social due diligence. It reflects the number of suppliers subjected to due diligence in 2015 only.

Module: GHG Emissions Accounting, Energy and Fuel Use and Trading [Investor]

CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Identifying GHG sources to prioritize for reduction actions	RBC's supplier management policy includes requirements in the procurement process to review environmental and social issues that can impact our business, our suppliers' business and communities. For certain material procurement engagements, we require category-specific environmental screening in an effort to identify and reward environmental leaders. This may include a review of environmental benefits and lifecycle impacts of a product by evaluating the product's environmental impacts associated with the extraction of raw materials, manufacturing process, packaging, transportation, product longevity and end-of-life disposal.
Stimulating innovation of new products	Our procurement process for real estate includes strategies to lease or build office space certified to green building standards, including the predominate North American green building standard LEED. 73% of our major properties are LEED Certified (427,937 m2) with an additional 11% that are BOMA or BREEAM certified. We have increased our amount of LEED certified office space by 145% since 2012 and we are still committed to increasing that number. The RBC Centre was certified as one of the largest LEED Gold for New Construction and LEED Gold for Commercial Interiors in Canada at the time. RBC's headquarters in Toronto, Royal Bank Plaza, was the first bank tower complex to achieve LEED Gold for Existing Building certification in Canada. Riverbank House, RBC's office on the Thames in London, UK has achieved an "Excellent" rating under the BREEAM green building rating system. For more details on our green buildings, please visit http://www.rbc.com/community-sustainability/environment/environmental-footprint-reduction.html Our procurement process for IT includes reviewing product lifecycle analysis and third-party certification standards related to energy efficiency (i.e. EPEAT and Energy Star), helping to some degree to drive energy efficiency innovation through our purchasing decisions.

Further Information

Attached please find our Corporate Responsibility Report with detailed reporting on our 2015 GHG emissions and energy footprint on page 43.

Module: Sign Off

Sign Off

CC15.1 Sign Off

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Andrew Craig	Director, Corporate Environmental Affairs	Environment/Sustainability manager

