2013 Carbon Disclosure Project

RBC Response

Contents

Module: Introduction

Introduction

0.1 Introduction

Please give a general description and introduction to your organization.

RBC provides personal and commercial banking, wealth management services, insurance, corporate and investment banking, and transaction processing services on a global basis. RBC employs approximately 80,000 full- and part-time employees, who serve more than 15 million personal, business, public sector and institutional clients through offices in Canada, the U.S. and 49 other countries. We are one of Canada's largest banks as measured by assets and market capitalization, and are among the largest banks in the world based on market capitalization.

0.2 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 have 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
01/11/2011 – 01/11/2012
01/11/2010 – 01/11/2011
01/11/2009 – 01/11/2010
01/11/2008 – 01/11/2009

0.3 Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response.

Select country
Canada
United States of America
United Kingdom
Jersey
Guernsey

0.4 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 ($)

Module: Introduction

0.6 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 sectors, companies in the oil and gas industry and companies in the information technology and telecommunications sectors should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (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@cdproject.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.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx.

Further Information

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

- RBC and the Environment website: http://www.rbc.com/environment/index.html
- RBC Environmental Blueprint (includes our Environmental Policy, priority environmental issues & objectives and 44 environmental commitments): http://www.rbc.com/environment/pdf/RBC-Environmental-Blueprint.pdf
- 2012 Environmental Blueprint Report Card (tracks progress against the 44 commitments made in the RBC Environmental Blueprint): http://www.rbc.com/community-sustainability/_assets-custom/pdf/RBC-Blueprint-Report-Card.pdf
- 2012 Corporate Responsibility Report and Public Accountability Statement (environment section on pages 80-93): http://www.rbc.com/community-sustainability/_assets-custom/pdf/RBC-CRR-Report-e.pdf
- 2012 Environmental Footprint Report, which tracks over 40 environmental performance indicators: http://www.rbc.com/community-sustainability/_assets-custom/pdf/RBC-Footprint-e.pdf
- 2012 Annual Report to Shareholders (environmental risk disclosure on page 68): http://www.rbc.com/investorrelations/pdf/ar_2012_e.pdf
- green@rbc, our environmental newsletter: http://www.rbc.com/environment/green-rbc-newsltr.html

Module: Management [Investor]

Governance

1.1

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

Senior Manager/Officer

1.1a

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

Our Group Executive and the Corporate Governance and Public Policy Committee (CGPPC) of the Board of Directors provide executive oversight of our environmental, including climate change, programs and performance. The Risk Committee of the Board of Directors also provides oversight to ensure that management has established policies, processes and procedures to manage environmental risks, including compliance with applicable laws and regulations.

Our Corporate Sustainability Group (CSG) is responsible for implementing the RBC Environmental Blueprint. The group develops enterprise-wide policies for the identification, assessment, control, monitoring and reporting of environmental matters, including climate change. In addition, CSG works with our businesses and functional areas to:

- Develop, maintain and communicate environmental policies, procedures and guidelines related to managing environmental risk and reducing our environmental footprint;
- Monitor relevant environmental laws, regulations and other requirements that affect both our business and our clients' activities;
- Advise on the management of environmental risks in specific business transactions;
- 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;
- Develop new products and services to help clients shift to more environmentally sustainable personal and business models; and
- Assess the need for and champion new initiatives to meet our environmental objectives.

We published the RBC Environmental Blueprint ("the Blueprint") in 2007, which articulates our corporate environmental policy, priorities and objectives, and contains 44 medium- and long-term commitments relative to our operations, business activities, products and services, employees, compliance, reporting transparency and partnerships. In the Blueprint, climate change is identified as one of three priority environmental issues for RBC. In addition, 9 of the 44 commitments in the Blueprint are specific to addressing climate change.

The primary RBC position that has responsibility for managing climate change is the RBC Director of Corporate Sustainability.

1.2

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

Yes

Module: Management [Investor]

1.2a

Please complete the table

Who is entitled to benefit from these incentives?	The type of incentives	Incentivised performance indicator
Environment/Sustainability managers	Monetary reward	Management of environment-related issues, including climate change and energy, is a component of the performance goals of staff in Corporate Sustainability, Corporate Real Estate and of Wealth Management's Environmental Officer. RBC's performance-based compensation program links employee performance to annual incentives.
Business unit managers	Monetary reward	Management of environment-related issues, including climate change, is a component of the performance goals of the Global Asset Management ESG 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	Through employee environmental engagement campaigns, employees have the opportunity to win monetary prizes for undertaking environmentally responsible behaviours in the workplace or for submitting ideas on how RBC can be a more environmentally responsible company.
Energy managers	Monetary reward	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.

Module: Management [Investor]

Strategy

2.1

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

2.1a

Please provide further details

RBC ENVIRONMENTAL BLUEPRINT

We published the RBC Environmental Blueprint ("the Blueprint") in 2007, which articulates our corporate environmental policy, priorities and objectives, and contains 44 medium- and long-term commitments relative to our operations, business activities, products and services, employees, compliance, reporting transparency and partnerships. In the Blueprint, climate change is identified as one of three priority environmental issues for RBC. In addition, 9 of the 44 commitments in the Blueprint are specific to addressing climate change. We believe that it is of vital importance that we reduce greenhouse gas emissions and effectively adapt to the unavoidable impacts of climate change.

In addition to the Blueprint, we have the Enterprise-wide Policy on Environmental and Social Risk Management, which requires all units within RBC to consider and manage environmental and social risks in all organizational decisions. It requires evaluations of environmental risk issues, including putting climate change, land and biodiversity, and water into relevant policies and decision-making processes.

GOVERNANCE

The RBC Corporate Sustainability Group (CSG) is responsible for implementing the RBC Environmental Blueprint. The group sets enterprise-wide policies for the identification, assessment, control, monitoring and reporting of environmental matters. Our Group Executive and the Corporate Governance and Public Policy Committee of the Board of Directors provide executive oversight. In addition, CSG works with our businesses to:

- Develop, maintain and communicate environmental policies, procedures and guidelines related to managing environmental risk and 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; and
- Advise on the management of specific environmental risks in business transactions.

MITIGATION

Our primary mitigation commitment is to reduce the intensity of our direct and indirect energy use and employee travel activities – our two major sources of greenhouse gas emissions. We believe that improving our operational efficiency and reducing the greenhouse gas emissions associated with our activities will lead to positive environmental and economic results. Recent mitigation strategies include energy efficiency projects, adhering to green building standards such as LEED in renovation and construction projects, greening our information technology and logistics infrastructures, and purchasing renewable power. (Other initiatives aimed at responding to climate change are presented in the RBC Environmental Blueprint Report Card, which is attached to this question, and on our internet website at http://www.rbc.com/community-sustainability/_assets-custom/pdf/RBC-Blueprint-Report-Card.pdf.)

Module: Management [Investor]

ADAPTATION

Depending on the region in which the RBC office is located, we anticipate that the physical effects of climate change may manifest a general rise in temperature, an increase in volatile weather events, flooding and seasonal cycle changes, permafrost deterioration, pests, water quality issues and effects on human health. 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. RBC uses a best-in-class Business Continuity Management program to ensure that our businesses are adequately prepared to deal with any disruption of service to clients. 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, where appropriate.

FINANCING

RBC's Corporate Sustainability Group oversees environmental risk policy development and implementation in financing and investing activities. 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.

For more details, visit RBC Responsible Financing: http://www.rbc.com/community-sustainability/environment/responsible-financing.html.

BUSINESS OPPORTUNITIES

RBC has identified a number of business opportunities for financing/investing in activities related to climate change – please see our response to 2.2a on the next page for more details.

2.2

Is climate change integrated into your business strategy?

Yes

Module: Management [Investor]

2.2a

Please describe the process and outcomes

Under the RBC Environmental Blueprint (see attachment), 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 climate change, 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.

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 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 now almost $3 billion. RBC also offers high-net-worth 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/socially-responsible-investments.

CARBON TRADING

In 2012, we traded 125 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 over 470 million 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, 2012, RBC had nearly $2.1 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 2012, RBC invested over US$542 million in 78 affordable housing projects in 25 U.S. States. For more details, visit https://www.rbccm.com/tceg.

Module: Management [Investor]

2.3

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

Direct engagement

Trade associations

Funding research organizations

Other

2.3a

On what issues have you been engaging directly?

Focus of legislation	Corporate Position	Details of engagement	Proposed solution
Other: Price on carbon	Support	RBC is a member of the Canadian Council of Chief Executives, who lobby on a wide range of issues including environmentally responsible business practices: http://www.ceocouncil.ca.	Assign a price on carbon in Canada through legislation
Adaptation resiliency	Support	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 adaptation working groups including the University of Waterloo Climate Change Adaptation Project, the Toronto Region Action Group for Extreme Weather Resilience (Weather Wise) and the National Round Table on the Environment and the Economy (NRTEE) Climate Prosperity project.	Better understanding of the physical impacts of climate change and measures needed to mitigate these risks
Mandatory carbon reporting	Support with major exceptions	Participation in working groups to develop the revised GHG Protocol Financial Sector Guidance with the WRI and the WBCSD.	Proposing requirements and methodologies for tracking and reporting "financed emissions," which are emissions associated with the lending activities of financial institutions
Energy efficiency	Support	Participation in green building associations 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 revised regulations related to the Ontario Green Energy Act. Participated in conferences to promote renewable energy projects and the involvement of Aboriginal communities in these projects.	Advocating more renewable power projects

Module: Management [Investor]

2.3b

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

Yes

2.3c

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?
Canadian Council of Chief Executives	Consistent	Assign a price on carbon in Canada	The RBC CEO, Gordon Nixon, is a member of the Canadian Council of Chief Executives
Toronto Board of Trade	Consistent	Dedicated public transit funding in the Greater Toronto Area to improve productivity and to reduce emissions of air pollutants and GHGs caused by transportation	RBC is a proud sponsor and member of the Toronto Board of Trade
The United Nations Environment Programme Finance Initiative (UNEP FI)	Consistent	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.	RBC has been a proud member of UNEP FI since 1992
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

2.3d

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

Yes

2.3e

Do you fund any research organizations to produce public work on climate change?

Yes

Module: Management [Investor]

2.3f

Please describe the work and how it aligns with your own strategy on climate change

In 2012, RBC donated $7.4 million to environmental charities worldwide. Many of the organizations we support have projects to help address climate change. A few examples of charities we fund:

- Pembina Institute, http://www.pembina.org/
- Pollution Probe, http://www.pollutionprobe.org/
- Tides Canada, http://tidescanada.org/
- WWF Canada, http://www.wwf.ca/
- United Nations Environment Programme Finance Initiative, http://www.unepfi.org/

In 2012, RBC made over 9,000 donations, totalling more than $61 million, to 6,000 charities worldwide. Our Vibrant Communities Report lists the organizations we supported in 2012: http://www.rbc.com/community-sustainability/_assets-custom/pdf/Vibrant-Communities-Report.pdf.

2.3g

Please provide details of the other engagement activities that you undertake

In 2012, we:

- Sponsored events that promoted thought leadership on climate change, cleantech and renewable energy, including the 2012 Globe Conference, Ontario Centre for Environmental Technology Advancement, SDTC Cleantech Focus, CleanTech North, Curacao Energie, Aboriginal Energy Conference and the Green Living Show;
- Launched Evolve, a competition aimed at challenging Canadian architecture and engineering students to design a net-zero energy and water-wise bank branch;
- Released the RBC-Pembina Home Location Study, which found that Greater Toronto Area homebuyers would prefer more compact and family-friendly homes that are closer to rapid transit and other amenities.

2.3h

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 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 Sustainability Group in question 1.1a);
- Established environmental policies that provide guidance (see response in question 2.1a);
- 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

3.1

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

No

3.1e

Please explain (i) why not; and (ii) forecast how your emissions will change over the next five years

(i) EMISSION REDUCTIONS AND TARGETS

As outlined in the RBC Environmental Blueprint (see attachment), we are committed to continuously reducing our energy and GHG emission intensity. We do not currently have an emissions reduction target; however, RBC Corporate Sustainability is developing a GHG emission reduction target with a number of internal stakeholder groups including Corporate Real Estate, Technology & Operations, Physical Network Distribution with input from RBC business units that use environmental sustainability as a platform to sell banking products and services. We plan to announce a formal GHG reduction target in the fall of 2013 that will continue to drive GHG and energy reductions across our operations.

Even without a reduction target, we have focused a considerable amount of effort on reducing energy and GHG emissions as they represent a significant proportion of our environmental footprint and reducing GHG emissions provides an opportunity for reducing costs. Since 2009, our GHG emissions from energy use and employee travel have decreased by 21%, and the energy intensity of our North American and British Isles property portfolio has decreased by 8%. This has been achieved through a combination of energy management programs, portfolio renewal strategies, renewable electricity purchases and other contributing factors.

(ii) FORECAST

We are currently forecasting that our emissions will decrease slightly to moderately over the next five years. Our emission forecast is primarily a reflection of the size of our property portfolio, the energy efficiency of our property portfolio and the need for employee business travel. See further discussion on these forecasting influencers below.

Size of property portfolio
In March 2012, we completed the sale of our U.S. retail banking operations to PNC Financial Services Group. Over 220,000 m2 of retail banking office space was transferred in the sale, resulting in a 10% decrease in our total global property portfolio. This reduction reduced absolute GHG emissions from energy but also improved our GHG intensity figures (GHG emissions per m2 of office space) as U.S. electricity supply is typically more carbon intensive (i.e. coal-fired power plants) than Canadian electricity generation.

Anticipated areas of business growth for RBC in the next five years focus on the international expansion of RBC's Capital Markets and Wealth Management services; however, these types of operations only require small amounts of office space when compared to our retail operations in Canada, the United States and the Caribbean, so the anticipated increase in emissions is considered negligible.

Energy efficiency of property portfolio
A positive trend we are observing is the general decrease in the energy intensity of our property portfolio (see 2012 Environmental Footprint Report attached). This trend is a reflection of the initiatives underway to improve energy efficiency in our properties such as lighting retrofits, HVAC efficiency assessments, after-hours lighting shutdown programs and new office design and configurations. Another real estate strategy that is making a difference is choosing to lease or build green office space, specifically office space built and certified to LEED standards. LEED stands for Leadership in Energy and Environmental Design and is the predominant standard for green buildings in North America. These buildings have been designed with numerous features that reduce energy use. We currently lease over 300,000 m2 of green certified office space, representing over 41% of our global office tower space.

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Employee business travel

Total business travel decreased by 7% in 2012, with reductions in all modes of transportation (see 2012 Environmental Footprint Report attached). We saw an 18% decrease in rental vehicle travel, a reflection of the sale of our U.S. regional retail banking operations, where vehicle rental was a common means of business travel. Air travel decreased by 6% compared to 2011 figures; however, the average flight distance increased, a reflection of the continued expansion of our businesses into European and Asian markets.

3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

3.2a

Please provide details (see guidance)

CARBON TRADING

In 2012, we traded 125 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 over 470 million 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.

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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.

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.

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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.

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 water damage is now the leading cause of property damage in Canada, costing insurers approximately $1.7 billion per year. To help protect homeowners from expensive repairs, RBC Insurance has identified some key areas where water damage can occur in the home and provided advice to prevent such damage: Ten Ways to Prevent Water Damage to Your Home advice webpage and our Water Damage Checklist.

3.3

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

Yes

3.3a

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 CO2e savings in metric tonnes CO2e (only for rows marked*)
Under investigation		
To be implemented*		
Implementation commenced*	6	10,000
Implemented*	6	7,700
Not to be implemented		

Module: Management [Investor]

3.3b

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)	Annual monetary savings (unit currency – as specified in Q0.4)	Investment required (unit currency – as specified in Q0.4)	Payback period
Energy efficiency: Building services	**Building Energy Efficiency Projects** ■ Completed lighting retrofits at over 400 Canadian retail branches, a record number of upgrades in a one-year period. On average, participating branches have benefited from a 33% reduction in lighting electrical demand, which translates into a 9% reduction in overall branch electrical demand and approximately 4,850 MWh of electricity saved annually. ■ Targeted a 35% energy efficiency improvement over typical design in newly constructed retail branches through a combination of improved electrical, mechanical and building insulation standards. ■ Achieved a 5% energy efficiency improvement in major properties that participated in the Race to Reduce Program, which involved after-hour lighting minimization, installation of occupancy sensors and tenant education campaigns. ■ Expanded Project Reflection, a new office design that reflects a more mobile and customized way of working. Since inception in 2009, Project Reflection has reduced our office space requirements by nearly 20,000 m2, resulting in annual energy savings of over 7,900 MWh, about the equivalent energy use of 650 Canadian homes. ■ Since 2009, the energy intensity of our North American and British Isles property portfolio has decreased by 8%.	4,100	1,275,000	4,300,000	1 – 3 years
Low carbon energy purchase	**Green Power Purchases** In 2012, we powered our entire Canadian ATM and retail branch digital display networks with renewable energy by purchasing 13,941 MWh of EcoLogo-certified green power for approximately 4,600 ATMs and 3,500 digital displays, for an equivalent carbon dioxide reduction of nearly 3,300 tonnes. Since 2007, we have purchased over 54,000 MWh of certified green power, enough electricity to power over 4,500 Canadian homes. Purchasing green power reduces our carbon footprint, but does not result in annual savings or payback.	3,300	0	350,000	

Module: Management [Investor]

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency – as specified in Q0.4)	Investment required (unit currency – as specified in Q0.4)	Payback period
Energy efficiency: Processes	**Green IT** ■ Opened a new state-of-the-art back office processing facility designed to maximize energy efficiency and achieve aggressive advancements with a power usage effectiveness (PUE) value of 1.4. In addition to energy considerations, the facility was designed and constructed with a number of environmental features including advanced monitoring systems to ensure water and energy consumption are reduced; innovative strategies that ensure existing undeveloped areas around the facility remain a natural habitat; and the use of construction materials containing recycled content. The facility just recently received the Leadership in Energy and Environmental Design (LEED) Gold certification, which is a third-party certification program and an internationally accepted benchmark for the design, construction and operation of high performance green buildings. ■ Increased the number of virtual servers to nearly 9,700, representing 54% of our total global servers. By pooling more applications on fewer servers, our energy usage can be reduced. For every server virtualized, we estimate avoiding the need for 1,500 kWh of electricity annually. ■ Refreshed approximately 12,000 printers – 40% of our Canadian fleet – across our Canadian head office and branch locations. The new printers are more energy efficient than previous models and have established power management settings.				
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 launch in June 2012, we have seen a 46% increase in the number of packages consolidated per delivery and a 20% reduction in GHG emissions associated with the transportation of goods within the project's scope.	275	250,000	1,450,000	4 – 10 years

Module: Management [Investor]

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency – as specified in Q0.4)	Investment required (unit currency – as specified in Q0.4)	Payback period
Behavioural change	**Employee Engagement Activities** ■ Over 6,700 staff participated in our enterprise-wide RBC Environment Challenge to celebrate Earth Day 2012. This four-week employee engagement program gave staff the opportunity to earn "green points" by undertaking activities at work that have an environmental benefit or by committing to learn more about our array of green initiatives. ■ Launched an employee environmental e-learning course on Earth Day 2012, where employees could learn more about global environmental issues, the business case for environmental sustainability, the RBC Environmental Blueprint and how they can support our environmental objectives, including reducing energy and GHG emissions. Over 2,200 employees have successfully completed the e-learning course and quiz. ■ Published an external environmental e-newsletter called green@rbc every two months, which has over 12,500 subscriptions. Includes articles on climate change.				

Module: Management [Investor]

3.3c

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 sustainability as a strong business platform to clients, positive 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 54,000 MWh of certified green power, enough electricity to power over 4,500 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.

Module: Management [Investor]

Communication

4.1

Have you published information about your company'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)

Please see the RBC Environment webpage for additional information on climate change and GHG emissions:
http://www.rbc.com/community-sustainability/environment/index.html

Module: Risks and Opportunities [Investor]

Climate Change Risks

5.1

Have you identified any climate change risks (current or future) 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

5.1c

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
	Change in precipitation extremes and droughts	We determined a potential risk driven by the physical impacts of climate change is an increased insurance risk, or the risk of potential financial loss that may arise where the amount, timing and/or frequency of benefit payments under (re)insurance contracts exceeds that expected. Increasingly extreme weather conditions, aging infrastructure plus the growing and diverse/complex needs of society are resulting in increases in water damage losses. This is not only RBC Insurance's experience – the Canadian insurance industry spends nearly $1 billion a year for insured losses from natural catastrophes.	Other: Insurance claims	Current	Indirect (client)	More likely than not	Low – medium

5.1d

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

We determined a potential risk driven by the physical impacts of climate change would be increased insurance risk, or the risk of potential financial loss that may arise where the amount, timing and/or frequency of benefit payments under (re)insurance contracts exceeds that expected.

(I) FINANCIAL IMPLICATION OF THE RISK BEFORE TAKING ACTION

Catastrophic weather events in Canada are intensifying and increasing in frequency. There have been two 1-in-100 year events and six 1-in-50 year events in terms of rain intensity during the past 15 years. In 2008, we experienced two significant flooding events, four in 2009, eight in 2011 and thirteen in 2012. 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.

(II) METHODS TO MANAGE THIS RISK

Adjustments to premiums and pricing

RBC Insurance is mitigating risks through both an increase in premiums and changes in our pricing structure.

Module: Risks and Opportunities [Investor]

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 adaptation working groups including the University of Waterloo Climate Change Adaptation Project, the Toronto Region Action Group for Extreme Weather Resilience (Weather Wise) and the National Round Table on the Environment and the Economy (NRTEE) Climate Prosperity project.

Our membership with the United Nations Environment Programme Finance Initiative enables us to access studies conducted by the UN on climate change impacts and risks to banks, insurers and asset managers.

Water damage client education programs
In 2011, RBC 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.

(III) COSTS ASSOCIATED WITH THESE ACTIONS
Costs associated with managing this risk consist primarily of human resources (salaries) and, to a lesser extent, 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 (home) 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 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 these activities is approximately $500,000.

5.1g

Please explain why you do not consider your company to be exposed to 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 may have a small indirect impact on RBC, but will 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 may, at some point, be regulated under GHG mitigation rules in Canada, the U.S. and internationally. This may give rise to credit risk for RBC as clients face new regulatory, reputational, competitive, operational and market risk. 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 77% of our outstanding loans are associated with personal banking clients, small business and commercial clients that will not be directly subjected to anticipated climate change regulations in Canada and the United States. The remaining 23% of our outstanding loans are associated with large and corporate clients (wholesale). Our lending to carbon-intensive sectors (energy, mining & metals, transportation, industrial products and forest products) represents approximately 5% of our outstanding loans. Many, but not all, of these clients will be directly subjected to climate change regulation.

The analysis conducted on climate change-related risks to our loan and investment portfolio showed that all of our largest clients would continue to be profitable even when carbon is priced at $100/tonne, and the impact on most companies will represent less than 5% loss of net income (profit).

Module: Risks and Opportunities [Investor]

ADDRESSING 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 2012 Annual Report (pages 51 – 53), 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.

Addressing 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 (GRM) – 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.

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.

Addressing operational risk
Environmental Reporting: Since 2006, we have been reporting metrics associated with our environmental footprint. The RBC Environmental Footprint Report (see attachment) helps us track our progress in reducing our demand on natural systems while managing our costs.

Energy Efficiency: See RBC Environmental Blueprint Report Card attached.

5.1i

Please explain why you do not consider your company to be exposed to 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 also 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.

Module: Risks and Opportunities [Investor]

Addressing reputational risk
Our robust environmental policy frameworks shield RBC from reputational issues related to climate change. The RBC Environmental Blueprint (see attachment) 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. 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

- Training our staff on environmental policies and climate change-related information
- Staff communication and engagement
- 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 Environmental Blueprint Report Card attached or online at http://www.rbc.com/community-sustainability/_assets-custom/pdf/RBC-Blueprint-Report-Card.pdf.

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.

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 risks
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.

Module: Risks and Opportunities [Investor]

Climate Change Opportunities

6.1

Have you identified any climate change opportunities (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation
Opportunities driven by changes in physical climate parameters
Opportunities driven by changes in other climate-related developments

6.1g

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

We see opportunities driven by changes in regulation; 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 5.1g for more detail).

The current opportunities we see include:

CARBON TRADING
In 2012, we traded 125 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 over 470 million 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 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, 2012, RBC had nearly $2.1 billion in loan and trading line exposures to companies whose predominant business is renewable energy. For more details, visit https://www.rbccm.com/energy/.

6.1h

Please explain why you do not consider your company to be exposed to 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.

The current opportunities we see include:

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.

Module: Risks and Opportunities [Investor]

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.) In fact, the winters of 2006, 2007 and 2010 in Canada were three of the warmest on record according to Environment Canada.

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 have donated $7.4 million in 2012 to environmental charities globally, most of this 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 affect on climate change mitigation and adaptation, including projects that:

- Protect or restore forested areas that act as carbon sinks;
- Protect or restore costal wetlands that regulate sea water intrusion into inland areas that could impact groundwater used for drinking;
- Educate homeowners and businesses about the need to conserve water (e.g. water barrels to collect rainwater), especially in regions where climatologists predict communities must adapt to more frequent water shortages due to shifting meteorological patterns; and
- Improve management of urban storm and rain water, such as building awareness about low-impact design or the use of natural systems to control storm or rain water.

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

6.1i

Please explain why you do not consider your company to be exposed to 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 detail).

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.

Module: Risks and Opportunities [Investor]

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 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 now almost $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/socially-responsible-investments/.

Module: Risks and Opportunities [Investor]

Emissions Methodology

7.1

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

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Fri 31 Oct 2008 – Sun 01 Nov 2009	33,482	178,080

7.2

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 GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organisations
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

7.3

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

Gas	Reference
CO2	IPCC Second Assessment Report (SAR – 100 year)
CH4	IPCC Second Assessment Report (SAR – 100 year)
N2O	IPCC Second Assessment Report (SAR – 100 year)

7.4

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

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	1.89	Other: kg CO2e per m3	WRI. GHG Protocol tool for stationary combustion
Propane	1.62	kg CO2e per litre	WRI. GHG Protocol tool for stationary combustion
Other: Heating oil	2.69	kg CO2e per litre	WRI. GHG Protocol tool for stationary combustion
Electricity		Other: metric tonnes of CO2e 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 2008 – 1 Nov 2009)

8.1

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

Financial control

8.2

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

33,482

8.3

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

178,080

8.4

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

Yes

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
International properties	Scopes 1 and 2	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 94% 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]

8.5

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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Extrapolation Data Management	Our energy footprint is based on three categories of data: 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, 46% of energy data was metered, 29% was prorated and 25% was proxy estimated.	More than 2% but less than or equal to 5%	Extrapolation Data Management	Our energy footprint is based on three categories of data: 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, 46% of energy data was metered, 29% was prorated and 25% was proxy estimated.

8.6

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

No third-party verification or assurance

8.7

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

No third-party verification or assurance

8.8

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

No

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

Further Information

We reduced GHG emissions by purchasing certified green electricity from Bullfrog Power. At the end of October 2009 (fiscal year), we had 96 Canadian branches powered by over 8,000 MWh of certified "green" emission-free power, which represents a GHG emissions reduction of approximately 2,749 tonnes annually. This carbon reduction has NOT been applied to the figures presented on the previous page. Please see our 2009 RBC Corporate Responsibility Report attached – emissions data and discussion is presented on pages 51 – 53.

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

Emissions Data – (1 Nov 2009 – 1 Nov 2010)

8.1

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

Financial control

8.2

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

33,136

8.3

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

169,340

8.4

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

Yes

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
International properties	Scopes 1 and 2	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 94% 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]

8.5

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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Extrapolation Data Management	Our energy footprint is based on three categories of data: 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, 46% of energy data was metered, 29% was prorated and 25% was proxy estimated.	More than 2% but less than or equal to 5%	Extrapolation Data Management	Our energy footprint is based on three categories of data: 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, 46% of energy data was metered, 29% was prorated and 25% was proxy estimated.

8.6

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

No third-party verification or assurance

8.7

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

No third-party verification or assurance

8.8

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

No

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

Further Information

We reduced GHG emissions by purchasing certified green electricity from Bullfrog Power. At the end of October 2010 (fiscal year), we had 124 Canadian branches powered by over 11,200 MWh of certified "green" emission-free power, which represents a GHG emissions reduction of over 3,300 tonnes annually. This carbon reduction has NOT been applied to the figures presented on the previous page. Please see our 2010 RBC Corporate Responsibility Report attached – emissions data and discussion is presented on pages 70 – 73.

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

Emissions Data – (1 Nov 2010 – 1 Nov 2011)

8.1

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

Financial control

8.2

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

35,546

8.3

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

145,222

8.4

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

Yes

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
International properties	Scopes 1 and 2	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 92% 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]

8.5

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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Extrapolation Data Management	Our energy footprint is based on three categories of data: 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, 50% of energy data was metered, 27% was prorated and 23% was proxy estimated.	More than 2% but less than or equal to 5%	Extrapolation Data Management	Our energy footprint is based on three categories of data: 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, 50% of energy data was metered, 27% was prorated and 23% was proxy estimated.

8.6

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

No third-party verification or assurance

8.7

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

No third-party verification or assurance

8.8

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

No

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

Further Information

We reduced GHG emissions by purchasing certified green electricity from Bullfrog Power. At the end of October 2011 (fiscal year), we had 134 Canadian branches powered by over 13,600 MWh of certified "green" emission-free power, which represents a GHG emissions reduction of over 3,600 tonnes annually. This carbon reduction has NOT been applied to the figures presented on the previous page. Please see our 2011 RBC Corporate Responsibility Report attached – emissions data and discussion is presented on pages 79 – 84.

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

Emissions Data – (1 Nov 2011 – 1 Nov 2012)

8.1

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

Financial control

8.2a

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

32,046

8.3

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

127,445

8.4

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

Yes

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
International properties	Scopes 1 and 2	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 89% 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]

8.5

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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Extrapolation Data Management	Our energy footprint is based on three categories of data: 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, 48% of energy data was metered, 30% was prorated and 22% was proxy estimated.	More than 2% but less than or equal to 5%	Extrapolation Data Management	Our energy footprint is based on three categories of data: 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, 48% of energy data was metered, 30% was prorated and 22% was proxy estimated.

8.6

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

No third-party verification or assurance

8.7

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

No third-party verification or assurance

8.8

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

No

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

Further Information

We reduced GHG emissions by purchasing certified green electricity from Bullfrog Power. At the end of October 2012 (fiscal year), we had purchased over 13,900 MWh of certified "green" emission-free power, which represents a GHG emissions reduction of over 3,200 tonnes annually. This carbon reduction has NOT been applied to the figures presented on the previous page. Please see our 2012 RBC Corporate Responsibility Report attached – emissions data and discussion is presented on pages 84 – 85.

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

Scope 1 Emissions Breakdown – (1 Nov 2008 – 1 Nov 2009)

9.1

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

Yes

9.1a

Please complete the table below

Country	Scope 1 metric tonnes CO2e
Canada	29,273
United States of America	3,812
United Kingdom	209
Jersey	1
Guernsey	187

9.2

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

By facility

By activity

9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Branches	16,338		
Major properties	16,494		
Data centres and processing centres	650		

9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Property heating	33,482

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 (>2,320 m2) and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft2 (<2,320 m2).

In 2009 we developed a new property classification called “data centres and processing centres” to better understand the unique energy and GHG footprint associated with these properties. In 2009, data centres and processing centres consisted of 11 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands.

Please see our 2009 RBC Corporate Responsibility Report attached – emissions data is presented on pages 51 – 54.

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

Scope 1 Emissions Breakdown – (1 Nov 2009 – 1 Nov 2010)

9.1

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

Yes

9.1a

Please complete the table below

Country	Scope 1 metric tonnes CO2e
Canada	26,521
United States of America	6,144
United Kingdom	248
Jersey	1
Guernsey	222

9.2

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

By facility

By activity

9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Major properties	18,326		
Data centres and processing centres	1,187		

9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Property heating	33,136

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 (>2,320 m2) and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft2 (<2,320 m2).

In 2010, data centres and processing centres consisted of 12 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands.

Please see our 2010 RBC Corporate Responsibility Report attached – emissions data is presented on pages 70 – 73.

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

Scope 1 Emissions Breakdown – (1 Nov 2010 – 1 Nov 2011)

9.1

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

Yes

9.1a

Please complete the table below

Country	Scope 1 metric tonnes CO2e
Canada	30,155
United States of America	5,061
United Kingdom	238
Jersey	38
Guernsey	54

9.2

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

By facility

By activity

9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Branches	17,296		
Major properties	16,428		
Data centres and processing centres	1,823		

9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Property heating	35,546

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 (>2,320 m2) and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft2 (<2,320 m2).

In 2011, 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 2011 RBC Corporate Responsibility Report attached – emissions data is presented on pages 79 – 84.

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

Scope 1 Emissions Breakdown – (1 Nov 2011 – 1 Nov 2012)

9.1

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

Yes

9.1a

Please complete the table below

Country/Region	Scope 1 metric tonnes CO2e
Canada	27,030
United States of America	4,520
United Kingdom	351
Jersey	69
Guernsey	76

9.2

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

By facility

By activity

9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Branches	14,537		
Major properties	16,460		
Data centres and processing centres	1,049		

9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Property heating	32,046

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 (>2,320 m2) and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft2 (<2,320 m2).

In 2012, data centres and processing centres consisted of 12 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands.

Please see our 2012 RBC Corporate Responsibility Report attached – emissions data is presented on pages 84 – 85.

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

Scope 2 Emissions Breakdown – (1 Nov 2008 – 1 Nov 2009)

10.1

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

Yes

10.1a

Please complete the table below

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Canada	97,029	411,773	8,068
United States of America	79,523	146,637	0
United Kingdom	987	13,147	0
Jersey	269	3,357	0
Guernsey	272	1,180	0

10.2

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

By facility

By activity

10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
Branches	96,395
Major properties	57,440
Data centres and processing centres	24,245

10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
Purchased electricity use	178,080

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 (>2,320 m2) and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft2 (<2,320 m2).

In 2009 we developed a new property classification called “data centres and processing centres” to better understand the unique energy and GHG footprint associated with these properties. In 2009, data centres and processing centres consisted of 11 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands.

Please see our 2009 RBC Corporate Responsibility Report attached – emissions data is presented on pages 51 – 54.

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

Scope 2 Emissions Breakdown – (1 Nov 2009 – 1 Nov 2010)

10.1

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

Yes

10.1a

Please complete the table below

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Canada	81,240	382,642	11,242
United States of America	86,529	150,278	0
United Kingdom	1,063	15,491	0
Jersey	236	2,952	0
Guernsey	272	1,184	0

10.2

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

By facility

By activity

10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
Branches	90,632
Major properties	60,433
Data centres and processing centres	18,275

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

10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
Purchased electricity use	169,340

Further Information

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

In 2010, data centres and processing centres consisted of 12 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands.

Please see our 2010 RBC Corporate Responsibility Report attached – emissions data is presented on pages 70 – 73.

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

Scope 2 Emissions Breakdown – (1 Nov 2010 – 1 Nov 2011)

10.1

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

Yes

10.1a

Please complete the table below

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Canada	68,596	386,874	13,663
United States of America	75,249	136,738	0
United Kingdom	991	14,384	0
Jersey	160	1,995	0
Guernsey	226	984	0

10.2

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

By facility

By activity

10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
Branches	84,663
Major properties	41,215
Data centres and processing centres	19,344

10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
Purchased electricity use	145,222

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 (>2,320 m2) and branches are categorized as RBC-owned or -leased properties with an area of less than 25,000 ft2 (<2,320 m2).

In 2011, 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 2011 RBC Corporate Responsibility Report attached – emissions data is presented on pages 79 – 84.

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

Scope 2 Emissions Breakdown – (1 Nov 2011 – 1 Nov 2012)

10.1

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

Yes

10.1a

Please complete the table below

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Canada	79,523	371,681	13,941
United States of America	46,456	93,606	0
United Kingdom	1,036	10,440	0
Jersey	205	2,560	0
Guernsey	225	979	0

10.2

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

By facility

By activity

10.2b

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

Activity	Scope 2 emissions (metric tonnes CO2e)
Purchased electricity use	127,445

Further Information

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

In 2012, data centres and processing centres consisted of 12 properties across Canada, the U.S. and the British Isles containing operational processes and equipment that have high electricity demands.

Please see our 2012 RBC Corporate Responsibility Report attached – emissions data is presented on pages 84 – 85.

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

Energy

11.1

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

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

11.2

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

Energy type	MWh
Fuel	
Electricity	479,266
Heat	174,075
Steam	
Cooling	

11.3

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

Energy type	MWh
Natural gas	167,405
Propane	347
Other: Heating oil	6,323

11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comments
Grid-connected low-carbon electricity generation owned by company; instruments created and retired by company	13,941	In 2012, we powered our entire Canadian ATM and retail branch digital display networks with renewable energy by purchasing 13,941 MWh of EcoLogo-certified green power for approximately 4,600 ATMs and 3,500 digital displays, for an equivalent carbon dioxide reduction of nearly 3,300 tonnes. Since 2007, we have purchased over 54,000 MWh of certified green power, enough electricity to power over 4,500 Canadian homes.

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

Emissions Performance

12.1

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

Decreased

12.2

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	2.3	Decrease	Please see question 3.3b for a summary of our emissions reduction activities in 2012.
Divestment	9.5	Decrease	In March 2012, we completed the sale of our U.S. retail banking operations to PNC Financial Services Group. Over 220,000 m2 of retail banking office space was transferred in the sale, resulting in a 10% decrease in our total global property portfolio. This reduction reduced absolute GHG emissions from energy but also improved our GHG intensity figures (GHG emissions per m2 of office space) as U.S. electricity supply is typically more carbon-intensive (i.e. coal-fired power plants) than Canadian electricity generation.
Acquisitions	1,036	10,440	0
Mergers	205	2,560	0
Change in output	225	979	0
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

12.2

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

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.0000054	Metric tonnes CO2e	Unit total revenue	18.1	Decrease	Our Scope 1 and 2 emissions decreased by 12% in 2012 compared to 2011 for reasons noted in table 12.1a, while total revenue increased by 8%.

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

12.3

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
2.52	Metric tonnes CO2e	FTE employee	8.8	Decrease	Our Scope 1 and 2 emissions decreased by 12% in 2012 compared to 2011 for reasons noted in table 12.1a, while total FTE count increased by almost 2%.

12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.083	Metric tonnes CO2e	Square meter	5.0	Decrease	Our Scope 1 and 2 emissions decreased by 12% in 2012 compared to 2011 for reasons noted in table 12.1a, while total global floor area decreased by only 4%.

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

Emissions Trading

13.1

Do you participate in any emissions trading schemes?

Yes

13.1a

What is your strategy for complying with the schemes in which you participate or anticipate participating?

RBC is not regulated under any emissions trading schemes but actively participates in carbon markets as a trader and adviser. In 2012, we traded approximately 125 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 over 470 million 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 RBC Capital Markets Emissions Trading website: https://www.rbccm.com/carbontrading/.

13.2

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

Yes

13.2a

Please complete the table

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits retired	Purpose, e.g. compliance
Credit purchase	Other: Mix of projects that qualify as CERs	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 under the Kyoto Protocol.	Other: Certified emission reduction (CER) units	404		Yes	Voluntary offsetting

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

Scope 3 Emissions

14.1

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Purchased goods and services	Relevant, not yet calculated				In 2012, we spent $5.9 billion on goods and services from 36,000 international, national, regional and local suppliers of all sizes. We have taken a more holistic approach to addressing sustainability issues in our procurement process rather than simply focusing on climate change. 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.
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	342	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.	100%	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 launch in June 2012, we have seen a 46% increase in the number of packages consolidated per delivery and a 20% reduction in GHG emissions associated with the transportation of goods within the project's scope.

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Waste generated in operations	Not relevant, explanation provided				We have purposely focused on waste reduction efforts for the following commitments as outlined in the RBC Environmental Blueprint: ■ Disposing of electronic equipment and devices in an environmentally responsible manner and considering disposal when we make decisions about the procurement of products and services. ■ Recycling paper, glass, plastic and metal throughout the organization, wherever municipal recycling programs or practical alternatives exist. ■ Promoting the reuse of furniture and other fixtures to reduce the amount of materials going to landfill. We report annually on our progress in achieving these commitments. To view our progress on waste and recycling, see page 4 of the 2012 RBC Environmental Blueprint Report Card (see attachment).
Business travel	Relevant, calculated	24,373	We track four categories of business travel: air travel, rail travel, business travel in rental vehicles and business travel in personal vehicles. Data coverage for air travel includes all staff in Canada, the U.S. and the British Isles, which represent 85% of all RBC staff globally.	100%	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.
Employee commuting	Relevant, not yet calculated				RBC employs approximately 80,000 full- and part-time employees through offices in Canada, the U.S. and 49 other countries. Calculating the carbon footprint of employee commuting would be a significant exercise that may not result in added value or actionable items. However, we have provided online carpooling tools to employees in some of our larger commuting centres. For example, we have an employee carpool program called “Smart Commute” available to over 6,000 employees at our Meadowvale office in Mississauga, Ontario. Since 2010, the program tracked reductions of over 23,000 commuter round trips, 1.75 million km of commuter travel and 384 tonnes of GHG emissions.
Upstream leased assets	Relevant, calculated		Included in Scope 1 and 2 emission calculations. See answers to questions 9 and 10.		We include leased properties in our calculation of Scope 1 and 2 emissions as we have the ability to action carbon reductions in these properties through green leasing strategies, electrical and mechanical design standards and landlord-tenant engagement campaigns.

Module: Sign Off

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Investments	Not evaluated				RBC's investment and lending policies include requirements to review environmental and social issues, including climate change; however, we have not undertaken an exercise to 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.
Downstream transportation and distribution	Relevant, not yet calculated				Deliveries of client statements and marketing materials is 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 12.9 million accounts in Canada to electronic statements, resulting in cumulative paper savings of more than 2,600 metric tonnes. Continued success of e-Courier, a program that allows branches in Canada to electronically submit documents to central processing offices, also reduces the need for paper and the associated environmental impacts of transportation. In 2012, employees submitted an estimated 39.6 million pages of documents through e-Courier, avoiding the need for 180 tonnes of copy paper and the transportation of these materials.
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
Other (upstream)					
Other (downstream)					

14.1b

Module: Sign Off

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

No third-party verification or assurance

14.3

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

Yes

14.3a

Please complete the following table

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Other: Multiple, see comment section	7	Decrease	Total business travel decreased by 7% in 2012, with reductions in all modes of transportation. We saw an 18% decrease in rental vehicle travel, a reflection of the sale of our U.S. regional retail banking operations, where vehicle rental was a common means of business travel. Air travel decreased by 6% compared to 2011 figures; however, the average flight distance increased, a reflection of the continued expansion of our businesses into European and Asian markets.

14.4

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

14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements 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.

Module: Sign Off

14.4b

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	Comment
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' businesses 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. The RBC Centre in Toronto has the unique distinction of being certified as the largest LEED Gold for New Construction and LEED Gold for Commercial Interiors (CI) project in Canada. RBC Plaza was the first bank tower complex to achieve LEED Gold for Existing Building certification in Canada. Both these projects have set high standards for green office buildings in Canada, helping to drive innovation in this field. For more details, visit http://www.rbc.com/community-sustainability/rbc-in-action/LEED-green-real-estate.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

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

In 2012, data centres and processing centres consisted of 12 properties across Canada, the U.S. and the British Isles, containing operational processes and equipment that have high electricity demands.

Please see our 2012 RBC Corporate Responsibility Report attached – emissions data is presented on pages 84 – 85.

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Please enter the name of the individual that has signed off (approved) the response and their job title

Sandra Odendahl

Director, Corporate Sustainability


RBC