2010 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 77,000 full and part-time employees who serve more than 18 million personal, business, public sector and institutional clients through offices in Canada, the U.S. and 53 other countries. RBC holds strong market positions in its five business segments: Canadian Banking; Wealth Management; International Banking; Capital Markets; and Insurance.

0.2 Reporting Year

Please state the start and end date of the year for which you are reporting data.

Enter Periods that will be disclosed
Sat 01 Nov 2008 - Sat 31 Oct 2009
Thu 01 Nov 2007 - Fri 31 Oct 2008
Wed 01 Nov 2006 - Wed 31 Oct 2007

0.3

Are you participating in the Walmart Sustainability Assessment?

No

0.5 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

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Further Information

Further information regarding RBC's environmental priorities, objectives and programs can be reviewed at our website (http://www.rbc.com/environment/index.html). For convenience, we have attached 5 documents that we consider to be our keystone environmental reports. These reports are also available on RBC's website (www.rbc.com/environment). They include:

- RBC Environmental Blueprint (includes our Environmental Policy, priority environmental issues & objectives and 44 environmental commitments)
- 2009 Environmental Blueprint Report Card (tracks progress against the 44 commitments made in the RBC Environmental Blueprint)
- 2009 Annual Report to Shareholders (environmental risk disclosure on pages 55-56)
- 2009 Corporate Responsibility Report (environment section on pages 45-54)
- 2009 SOFT Footprint Report (Sourcing, Operations, Facilities and Travel) that tracks over 40 environmental performance indicators.

Module: : Governance

Governance

1.1

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

Other, lower level departments

1.1a

Please specify who is responsible.

Director, Corporate Environmental Affairs.

1.1b

Select the lower level department responsible.

Officer/manager not reporting directly to board committee/board member

1.2

What is the mechanism by which the board committee or other executive body reviews the company's progress and status regarding climate change?

1.3a

Please explain how overall responsibility for climate change is managed within your company.

ENVIRONMENTAL MANAGEMENT
Since our first environmental policy was drafted in 1991, we have been committed to environmental management and continuous improvement. To support this commitment, we published the RBC Environmental Blueprint in 2007 (see attachment), a clear articulation of our corporate environmental policy, priorities and objectives. It sets out how we will approach environmental matters pertaining to operations, business activities, products and services, employees, compliance, reporting transparency and partnerships. The RBC Environmental Blueprint also presents 44 medium- and long-term environmental commitments with a pledge to report progress on these commitments on an annual basis in the Corporate Responsibility Report and RBC Blueprint Report Card (see attachments)

STRUCTURE, OVERSIGHT AND RESPONSIBILITY
Our Corporate Environmental Affairs (CEA) group is responsible for implementing the RBC Environmental Blueprint and for setting enterprise-wide policy for the identification, assessment, control, monitoring and reporting of environmental matters. Executive oversight is provided by our Group Executive and by the Corporate Governance and Public Policy Committee of the Board of Directors. In addition, CEA works with our businesses to:

- Develop, maintain and communicate environmental policies, procedures, and guidelines related to managing environmental risk and reducing our environmental footprint;
- Monitor relevant environmental laws and regulations, as well as other requirements to which we adhere;

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- Monitor key activities and track performance, including the cost-effectiveness of initiatives;
- Engage with internal and external stakeholders to advance our understanding of important environmental issues affecting our clients, our businesses and the communities in which we operate;
- Assess the need for and champion new initiatives to meet our environmental objectives;
- Provide approval authority and advisory services on the management of specific environmental risks in business transactions.

PRIORITY ENVIRONMENTAL ISSUES

As outlined in the RBC Environmental Blueprint, we have identified three priority environmental issues:

1) ***Climate change*** presents environmental, social and financial challenges to the global economy, human health and our own businesses. We believe it is vitally important that we contribute to efforts to reduce greenhouse gas (GHG) emissions and effectively adapt to the impacts of climate change.

2) ***Biodiversity***, or "biological diversity," refers to the variety of different species, the genetic variability of each species and the variety of different ecosystems that these species form. Environmental degradation resulting from human activity and the forces of climate change is disrupting the natural biodiversity of habitats and ecosystems. We recognize that critical natural systems and the abundant biodiversity they support must be preserved in order to maintain healthy communities and cultural values. Further, we recognize that the identity, cultural beliefs and economies of some indigenous peoples are intrinsically tied to their region's history, biodiversity and natural landscapes.

3) ***Water*** is the most important natural resource on earth, and without it, all life would cease. Access to clean fresh water, the preservation and management of watersheds and water conservation are becoming increasingly urgent environmental concerns, both globally and in many of the regions in which we operate. Climate change, pollution and inefficient water usage are factors contributing to a growing water crisis

PRIORITY ENVIRONMENTAL OBJECTIVES

As outlined in the RBC Environmental Blueprint, we have identified three priority environmental objectives:

1) Reduce the intensity of our environmental footprint: Primarily, RBC's environmental footprint comprises energy use, paper consumption, employee travel, water use, and procurement activities. We are committed to continuing to reduce our environmental footprint.

2) Promote environmentally responsible business activities: RBC provides a variety of financial products and services to personal, business and corporate clients globally. We have comprehensive environmental risk management policies and procedures to facilitate the environmental review of transactions. We proactively review and update these policies and processes to address regulatory changes, emerging and evolving issues and international best-practices. RBC employs a dedicated team of environmental professionals who are available to provide expertise across the enterprise, when required.

3) RBC seeks 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.

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1.4

Do you provide incentives for the management of climate change issues, including the attainment of greenhouse gas (GHG) targets?

Yes

1.5

Please complete the table

Who is entitled to benefit from those incentives?	The type of incentives
Environment/sustainability managers	Monetary reward
Business unit managers	Monetary reward

Further Information

Management of environmental related issues, including climate change and energy, is a component of the performance goals of Corporate Environmental Affairs, Environmental Risk Management, Corporate Real Estate and the Capital Markets carbon trading desk. RBC's performance based compensation program links employee performance to annual incentives.

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Governance/RBC Environmental Blueprint.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Governance/2009 RBC Blueprint Report Card.pdf

Module: Risks and Opportunities

Risks & Opportunities Identification Process

2.1

Describe your company's process for identifying significant risks and/or opportunities from climate change and assessing the degree to which they could affect your business, including the financial implications.

RBC's management of risk is supported by sound risk management practices and effective enterprise risk management frameworks. The cornerstone of these frameworks is a strong risk management culture, supported by an enterprise-wide set of policies and procedures which involve our risk management professionals, business segments and other functional teams. This partnership is designed to ensure the ongoing alignment of business strategies and activities within our risk appetite. Below we have presented how we identify risk related to the risk categories CDP has assigned: regulatory, physical and other.

I. REGULATORY RISK IDENTIFICATION

RBC defines REGULATORY RISK as the risk of negative impact to business activities, earnings or capital, regulatory relationships or reputation as a result of a failure to comply with or a failure to adapt to current and changing regulation, law, industry codes or rules, regulatory expectations or ethical standards. RBC's strategy for identifying and managing the regulatory risks associated with climate change is to evaluate the impact of climate change regulations on the elements of our risk pyramid. The pyramid illustrates that climate change regulation gives rise to three risks: credit, market and operational risk.

RBC defines CREDIT RISK as the risk of loss associated with a counterparty's inability or unwillingness to fulfill its payment obligations. Credit risk may be direct (e.g. issuer, debtor, borrower or policyholder), or indirect to a secondary obligor (e.g. guarantor, reinsurance) and contingent on the default of the primary party.

To assess credit risk we contracted a third party consultant in 2008 to analyze the exposure of borrowers in our loan and investment portfolio to climate change risks and regulations. The analysis was conducted on approximately 100 of RBC's largest single name clients and included the review of borrowers in 12 industrial sectors. The analysis included the review of historic carbon emissions by company and sector, production growth projections by sector, current and projected compliance costs, availability and price of carbon offsets, regulatory frameworks and other parameters. The report identified risks and opportunities for each sector under three future carbon pricing scenarios and over two separate time periods. Results showed that 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).

RBC defines OPERATIONAL RISK as the risk of loss or harm resulting from inadequate or failed internal processes, people and systems or from external events. Impending carbon regulations may create operational risks in the form of higher energy costs. RBC Corporate Real Estate (CRE) and our property management services company have well established systems in place to track utility bills for electricity and fuels used across our property portfolio of branches and major premises. Utility spends are analysed for trends and outliers on an annual basis. We also use utility bills and direct energy metering to track and report key environmental metrics (energy consumption, GHG emissions, etc) and present this information publicly in the RBC Sourcing, Operations, Facilities and Travel (SOFT) Footprint. Please see 2009 SOFT Footprint Report attached to this question.

RBC defines MARKET RISK as the risk of loss resulting from changes in market factors such as interest rates, foreign exchange rates, equity or commodity prices, or in the volatility of these factors. Market risk can be exacerbated by thinly-traded or illiquid markets. Identification of market and commodity trading risks is the responsibility of Group Risk Management (GRM) – Market and Trading Credit Risk, which includes major units in Toronto, London, New York and Sydney. Carbon is now traded on many exchanges across the globe as a commodity. Commodity trading risk is the potential for adverse impact on our earnings and economic value due to commodities price movements and volatilities. The RBC Capital Markets Carbon Trading desk also helps identify market risk through their understanding of carbon credits, exchanges and carbon forecasting on numerous carbon exchanges. See bullet list at end of our response for other ways we identify regulatory risk.

Module: Risks and Opportunities

II. PHYSICAL RISK IDENTIFICATION

Using our risk management framework, we assessed that physical impacts of climate change may increase credit and operational risk. Credit risk in the form of our client's inability to fulfill payment of debt obligations due to climate related impacts on their operations and facilities. Operational risk in the form of impacts to RBC's global network of facilities that may be affected by meteorological events (i.e. impacts to our branch and major property network in regions like the Caribbean and south-eastern United States where climate modeling suggests increasing frequency and severity of tropical storms / hurricanes and some minor to moderate levels of sea level rise.)

RBC completed a study examining the physical risks of climate change to sectors and regions in which we do business. Results of the study were disseminated internally to affected industry and company analysts. Physical risks associated with climate change are primarily a function of the geographic location and the regional availability of resources such as water. Our understating of physical risks of climate change and timescales is primarily informed by the latest scientific information published by the Intergovernmental Panel on Climate Change (IPCC) and other scientific bodies. These reports unanimously state that weather related natural disasters such as floods, droughts and hurricanes will increase in frequency and intensity in almost all regions of the world over the next three to five decades. See bullet list at end of our response for other ways we identify physical risk.

III. OTHER RISK IDENTIFICATION

Our risk management framework also identified the potential for climate change to increase in reputational and competitive risk.

RBC defines REPUTATIONAL RISK as the risk that an activity of RBC or its representatives will impair RBC's image in the community or public confidence, and that this will result in the loss of business and/or legal action or additional regulatory oversight.

RBC defines COMPETIVE RISK as the inability to build or maintain sustainable competitive advantage in a given market or markets. Competitive risk can arise within or outside the financial sector, from traditional or non-traditional competitors, domestically or globally. Reputational risk, competitive risk and aspects of regulatory and physical risks are identified through the following means:

- Market research studies prepared by in-house researchers and third party consultants help us better understand reputational and competitive risks associated with environmental issues in general, including climate change.
- Benchmarking not only tells us how well we are doing over time, but also provides perspective against our industry peers and is a quick and continuous way to research improvement. RBC conducts strategic benchmarking that measures critical success factors such as customer satisfaction, reputation and product and service market share.
- RBC is active in stakeholder engagement with NGOs and clients to stay attuned to the latest environmental and climate change related issues. Staying up-to-date in the latest NGO research and campaigns, and engaging NGOs in meaningful dialogue, assists in RBC's assessment of reputational risks. Focus groups and opinion surveys are also useful feedback mechanisms to gauge reputational matters with our customers.
- RBC maintains membership in multiple professional associations to stay informed of the latest environmental and climate change knowledge. We participate in financial institution associations and cross-sector associations that provide a rich variety of opinions and viewpoints on corporate responsibility and sustainability matters. Maintaining involvement in professional associations helps inform our risk assessment of reputational and competitive risks.

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/RisksOpportunities-IdentificationProcess/2009 SOFT Footprint Report.pdf

Module: Risks and Opportunities

Regulatory Risks

3.1

Do current and/or anticipated regulatory requirements related to climate change present significant risks to your company?

No

3.7

Please explain why you do not consider your company to be exposed to significant regulatory risks - current and/or anticipated.

The majority of RBC's business activities are focused in North American. Current climate change regulations in North America do not pose a significant risk to RBC. We also believe that anticipated regulations in Canada and the United States will pose some risk to RBC, but not a significant risk as the question suggests. Please see our attachment "CDP Question 3 – Geographic areas and regulations" for our current assessment of climate change regulations in Canada, the United States, British Isles and Caribbean.

Below we have outlined how climate change regulations will affect RBC based on credit, market and operational risk as presented in our response to Question 2. We have also presented actions we have taken to mitigate these risks helping to support our opinion that current and anticipated regulatory risks do not pose a significant risk.

I. THE EFFECT OF CLIMATE CHANGE REGULATIONS ON OUR BUSINESS

a) CREDIT RISK
Many of our commercial and corporate clients will be regulated under impending GHG mitigation rules in Canada, the US, 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 70% 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 30% of our outstanding loans are associated with large and corporate clients (wholesale). Our lending to carbon intensive sectors (energy, utilities, metals & mining, transportation, industrial products and forest products) represents approximately 12% of our outstanding loans. Many, but not all, of these clients will be directly subjected to climate change regulation. The analysis conducted in 2009 on climate change related risks to our loan and investment portfolio (see Question 2.1 for details) showed that many 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).

b) MARKET RISK
This is the risk of loss resulting from changes in market factors such as equity or commodity prices, or in the volatility of these factors. 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.

c) 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 also immaterial when compared to the total operating costs of RBC globally.

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II. ACTIONS TO ADDRESS CREDIT RISK

a) ENVIRONMENTAL POLICIES

The foundation of RBC's approach to responsible lending is our environmental credit risk policy suite, which covers a range of environmental risks and business activities. The purpose of this suite of policies is to help us identify and manage environmental risks in our lending activities, and to protect the interests of our clients and stakeholders. These policies are regularly reviewed to ensure compliance with legal and operational requirements, and to take into account evolving business activities. Policies require that certain transactions are reviewed by internal or third-party and independent environmental specialists.

b) ENVIRONMENTAL RISK RATINGS

Industry sectors are categorised 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). The enhanced due diligence includes an evaluation of climate change issues.

c) CREDIT RISK MANAGEMENT

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 2009 Annual Report (page 86) that is attached to this question.

d) CARBON RISK ASSESSMENT OF PORTFOLIO

Please see response to Question 2.1 for details.

III. ACTIONS TO ADDRESS 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. This group also provides independent oversight on trading activities, including the establishment and administration of trading operational limits, market risk and counterparty credit limit compliance, risk analytics, and the review and oversight of non-traditional or complex transactions.

IV. ACTIONS TO ADDRESS OPERATIONAL RISK

a) SOFT FOOTPRINT

In 2006, we developed the Sourcing, Operations, Facilities and Travel (SOFT) Footprint to help us track our progress in reducing our demand on natural systems while managing our costs more efficiently. The SOFT footprint data is publicly available and we have attached a copy to this question.

b) ENERGY EFFICIENCY

We use energy to heat and cool buildings and to run our technology infrastructure and lighting systems. This is an area where we have focused a considerable amount of effort to reduce our impacts as it represents a significant proportion of our environmental footprint and significant opportunities for reducing costs. To mitigate the effects of higher energy costs, RBC is undertaking programs to reduce energy use intensity within our properties and within RBC's information technology systems and operations. We report annually on our progress against energy related commitments in the RBC Environmental Blueprint Report Card, which we have attached to this question.

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Recent energy related initiatives include:

- The RBC Energy Management Plan - through lighting retrofits, HVAC systems maintenance and facility manager / staff awareness programs we estimate a reduction in energy use across our North American retail branch network of >10%. The current plan is partially funded, with full funding anticipated in 2011.
- Launched the RBC Employee Environmental Stewardship Guidelines to all staff globally, which includes guidelines on conserving energy in the workplace and on low carbon / alternatives to travel.
- Continued a multi-year server virtualization program that has resulted in the removal and purchase avoidance of over 3,400 new physical servers from our data centres since project inception.
- Primary tenant in the new RBC Centre in Toronto, a new 40-storey office tower in Toronto that is certified as LEED Gold. In addition, two new Canadian branch locations have obtained LEED certification.
- Implemented new electrical, mechanical and architectural standards for our Canadian branch network through five pilot projects.

To read more about out energy efficiency initiatives please see: http://www.rbc.com/environment/initiatives.html

V. OTHER ACTIONS TO ADDRESS RISKS ARISING FROM CARBON REGULATION

a) REGULATION CONSULTATIONS

To ensure we are prepared for regulatory developments, RBC Capital Markets and Corporate Environmental Affairs (CEA) have been actively involved in discussions with public servants and elected officials on climate change related matters. Examples of these discussions include:

- Consultation meeting with the federal government on Canada's Position and Go Forward Plan regarding Climate Change that preceded the international climate change negotiations at COP15 in Copenhagen.
- Multi-stakeholder consultation on the design of a federal carbon cap and trade system at the request of the Prime Minster of Canada.
- Consultation meetings with the Ontario Minister of the Environment on the design of future carbon cap and trade legislation for the Province of Ontario.
- RBC is a co-chair of the UN Environment Programme Finance Initiative (UNEP FI) - North American Task Force. UNEP FI comments regularly on international policy matters and hosted a consultation session between climate change negotiators / policy makers and the finance sector in the build-up to COP15 in Copenhagen.

b) STAKEHOLDER ENGAGEMENT AND PROFESSIONAL ASSOCIATIONS

RBC is active in stakeholder engagement and liaised with a number of stakeholder groups in 2009 to discuss environmental issues related to policy development, transaction review, portfolio management, operational impacts and business development opportunities. In 2009 and 2010, RBC:

- Collaborated and held discussions with non-governmental organizations including the Canadian Boreal Initiative, Forest Ethics, Pollution Probe, Toronto Atmospheric Fund, Greening Greater Toronto Task Force, WWF Canada, Nature Conservancy of Canada and Rainforest Action Network
- Participated in industry associations including: Conference Board of Canada's Business Council for Sustainability, UN Environment Programme Finance Initiative — North American Task Force (co-chair), the US Environmental Bankers Association and the EXCEL Partnership

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c) RESOURCE ALLOCATION

Adequate resources are a signpost of a good environmental management system. RBC maintains four full time professional staff in its Corporate Environmental Affairs unit, with a mandate to lead the identification and management of environmental risks and opportunities in the organisation. Furthermore, we have two additional full time staff devoted to environmentally-related operational issues in North America and the UK.

VI. ACTIONS TO ADDRESS REPUTATIONAL AND COMPETITIVE RISKS

Please see our response to CDP Question 5.

Further Information

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/RisksOpportunities-RegulatoryRisks/2009 SOFT Footprint Report.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/RisksOpportunities-RegulatoryRisks/CDP Question 3 - Geographic areas and regulations.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/RisksOpportunities-RegulatoryRisks/2009 RBC Annual Report.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/RisksOpportunities-RegulatoryRisks/2009 RBC Blueprint Report Card.pdf

Module: Risks and Opportunities

Physical Risks

4.1

Do current and/or anticipated physical impacts of climate change present significant risks to your company?

No

4.7

Please explain why you do not consider your company to be exposed to significant physical risks - current and/or anticipated.

The majority of RBC's business activities are focused in North American. Current climate change related physical impacts in North America do not pose a significant risk to RBC. We also believe that anticipated physical risks in Canada and the United States will pose some risk to RBC, but not a significant risk as the question suggests.

Below we have outlined how climate change physical impacts will affect RBC based on credit and operational risks as presented in our response to Question 2. We have also presented actions we have taken to mitigate these risks helping to support our opinion that current and anticipated physical risks do not pose a significant risk.

I. THE AFFECT OF PHYSICAL IMPACTS ON OUR BUSINESS

Our research indicates that the physical effects of climate change may manifest through a general rise in temperature, an increase in volatile weather events, flooding and seasonal cycle changes, pests, water quality issues and effects on human health. Our assessment showed the following physical impacts of climate change in certain geographies:

Permafrost: Physical deterioration of infrastructure may be accelerated by climate change, particularly in Canada's north as the permafrost melts, which has already had an impact on northern mining operations and transportation systems.

Weather: Climate change is increasing the frequency and severity of hurricanes, tropical storms and North Atlantic gales, which can impact RBC operations and our client's operations in the Caribbean, Channel Islands (British Isles), coastal British Columbia, coastal south-eastern United States, Maritime provinces, and along the St. Lawrence River.

Water: Climate change is anticipated to further stress water resources in already water constrained areas of central Canada, the US Midwest, Southern states and the Caribbean. The physical impacts of climate change give rise to operational and credit risk for RBC, which we discuss below.

a) CREDIT RISK

Many of our commercial and corporate clients will have to manage the physical impacts of climate change at their facilities and properties. This may create credit risks for RBC as the physical impacts may affect our client's ability to fulfill their payment obligations. Many of our clients may face similar operational risks as RBC as summarized in the next section.

b) OPERATIONAL RISK

RBC occupies more than 2.2 million square meters of office space in Canada, the United States, British Isles, the Caribbean and small amounts in other international locations. Depending on the region in which the RBC office is located, we anticipate the physical effects of climate change may result in the following operational risks to RBC:

Business Interruption: We anticipate that our branches and offices located in costal regions such as the south-eastern United States; coastal British Columbia, the Atlantic region and along the St. Lawrence River in Canada; the Caribbean, coastal south-eastern United States and British Isles may be more prone to storm damage.

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Changes to Heating and Cooling Costs: In many of the regions where we operate, we anticipate that heat waves may result in a more significant demand for air conditioning, while warmer winters will mean lower heating costs.

Higher Insurance Costs for our Properties: Severe weather events, exacerbated by insufficient infrastructure and land use planning, may result in higher insurance premiums and difficulty in obtaining insurance coverage for certain perils based on climate change considerations.

Insurance Claims Risk: With the unpredictability of weather patterns associated with climate change, there is a risk of loss when assumptions made in insurance product design and pricing activities differ from actual experience. However, at RBC, the risk associated with property and catastrophe reinsurance has been largely mitigated by our strategic exit from the property reinsurance business in 2006.

Disruption to our Supply Chain: RBC requires products and services to conduct our business effectively, including items such as paper, electronics and energy. Physical impacts may disrupt our supply chain and impact our ability to operate our business.

It is difficult to accurately quantify the costs associated with the above operational risks as forecasting these costs is reliant on climate change modeling and predicting future weather related events. Climate change modeling has provided strong evidence of shifting climate and meteorological trends over medium to long-periods of time, but does not have a strong ability to predict variations year-over-year that can be applied in a meaningful way to RBC's property portfolio, supply chain and our operating costs. However, with some confidence we have estimated the financial implications over the next 3-5 years will be immaterial when compared to RBC's total operating costs.

II. ACTIONS TO ADDRESS CREDIT RISK TO OUR CLIENTS OPERATIONAL RISK REVIEWED IN CREDIT ASSESSMENT

Risk associated with the operational impacts and business continuity are assessed as part of the credit assessment process. It is examined as part of the market and competitive analysis, company strategy review and assessment of general industry risk where appropriate. The credit assessment process evaluates insurance and business continuity plans to ensure they adequately address all types of operational risk, including physical impacts associated with climate change such as extreme weather related events.

CLIMATE CHANGE RISK REVIEW IN PROJECT FINANCE

RBC was the first Canadian bank to sign the Equator Principles in 2003, and we recommitted to the revised Principles in 2006. The Equator Principles requires enhanced environmental and social due diligence in project finance including the review of climate change related risks and operation impacts. Since our original adoption of the Equator Principles, RBC has reviewed over 30 projects under our related Policy on Social and Environmental Review in Project Finance.

III. ACTIONS TO ADDRESS OPERATIONAL RISK TO RBC CONTIGENCY PLANS FOR CLIMATE CHANGE RELATED PHYSICAL RISKS

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.

The RBC Enterprise Crisis Management team, consisting of senior executives from across the organization, is responsible for ensuring continued service to our clients. It is supported by a global network of regional, business-line and local incident management teams. These teams are on call around the clock to address any situation that may pose material risk to staff, corporate reputation or our ability to deliver service to clients. Regular crisis simulations are conducted to test the readiness for, and timeliness of responses to emergency situations. The RBC Business Emergency Information Line is our link to employees, providing current updates in the event of a crisis or external situation affecting their ability to access RBC offices or serve our clients.

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Other risks

5.1

Does climate change present other significant risks - current and/or anticipated - for your company?

No

5.7

Explain why you do not consider your company to be exposed to other significant risks - current and/or anticipated.

Below we have outlined how other climate change risks will affect RBC based on reputational and competitive risk as presented in our response to Question 2. We have also presented actions we have taken to mitigate these risks helping to support our opinion that other climate change risks do not pose a significant risk.

I. THE AFFECT OF OTHER CLIMATE CHANGE RISKS ON OUR BUSINESS

a) REPUTATION 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. General awareness and understanding of banking and climate change issues are considered more mature in European markets; however, climate change has certainly emerged as a mainstream topic in North America as well.

b) COMPETITIVE RISK

This is the risk that a bank might be unable to build or maintain 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 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 our banks to offer clients green products and services. The Canadian market currently has a wider variety of green financial products than US markets.

II. ACTIONS TO ADDRESS REPUTATIONAL RISK

RBC Corporate Environmental Affairs is tasked with building external expertise in environmental issues, including climate change, and for buildings culture of employee awareness. Prioritizing climate change internally and publically maintains top-of-mind awareness for RBC employees and stakeholders. This is facilitated through:

a) TRAINING

The RBC Corporate Environmental Affairs Group (CEA) leads training and learning sessions, which are targeted to banking professionals involved in risk management, lending for small business and corporate clients, and internal staff involved in real estate matters, procurement and employee travel. Training and learning sessions are typically presentation based with the content focusing on aspects of corporate environmental matters. Climate change is embedded throughout the training and learning sessions as climate change is seen as a keystone environmental topic as outlined in the RBC Environmental Blueprint.

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b) INTRANET- BASED DISSEMINATION OF INFORMATION
Our intranet site has a climate change section where employees can access information that includes the following discussion topics:

- Background on climate change
- What is the proof that climate change is actually occurring?
- How do we know that climate change is linked to industrialization?
- What might the general effects of climate change be?
- What industries will be most affected and how?
- What regions will be most affected and how?
- How might the financial services industry be affected by climate change?
- Links to external websites that are considered authorities of climate change subject matter such as the Stern Review of the Economics of Climate Change and the Intergovernmental Panel on Climate Change.

April 2010 was Environment Month at RBC and we developed a series of articles to provide employees with green tools, tips and information regarding what RBC is doing to be a more environmentally responsible organization. To engage employees across the entire organization, the articles were made available on the main page of RBC.net and from regional and business unit intranet sites. All articles directly referred to climate change:

- Four ways to increase your Green IQ
- Emissions trading 101
- Top 12 Tips for Earth Day
- Greening the Vancouver 2010 Olympic Torch Relay (carbon neutral)
- Seven Questions - Bringing the environment into bank lending

c) EQUITY RESEARCH
RBC Capital Markets Equity Research in the United States produces weekly research reports on renewable energy and climate change policy matters that is available to clients and analysts. The reports typically contain information on the following subject areas:

- Renewable energy and cleantech.
- Proposed carbon cap and trade legislation in the United States
- Specific detail on agendas in the US House of Representatives Energy and Commerce Committee and the US Senate Energy and Natural Resources Committee.
- Reports on impacts of proposed legislation in US industry sectors.
- Proposed timelines for implementation of policies. RBC Corporate Environmental Affairs also issues a weekly Climate Change Policy Update that provides an overview on climate change policy developments in North America, the EU, and international agreements such as the UN Kyoto Protocol. The update also includes information on carbon markets, developments in industry related to energy and climate change, information on renewable energy and cleantech, and summaries of the latest research and reports.

Module: Risks and Opportunities

d) CENTRES OF EXPERRISE AND ADVISORY DESKS
RBC has number of climate change related centres of expertise including:

- The Corporate Environmental Affairs (CEA) team provides business and risk management units with research materials and information on climate change related risks and opportunities.
- The RBC Capital Markets emissions trading desk provides expertise of carbon credits, exchanges and carbon forecasting. As of October 31st, 2009 (fiscal year-end) the desk has traded over 121 million tonnes of carbon credits.
- RBC Capital Markets in London (UK) has an Energy & Utilities team that provides services to the renewable energy sector. The team offers investment banking, financing and advisory services for businesses and renewable power projects in Europe, and provides support to our international activities within the renewables sector for projects such as wind farm, small hydro and biomass projects.

e) SPONSORSHIP AND PUBLIC SPEAKING ENEGAGEMENTS
RBC was a proud Diamond level sponsor of the Globe 2010 Conference held in Vancouver from March 23-26, 2010. This biennial business and environment conference is the world's biggest, welcoming over 10,000 delegates and trade show attendees over 3 days.

The RBC VP of Corporate Citizenship moderated the RBC sponsored panel on "Water Efficiency: Managing a Valuable Resource". RBC Director of Corporate Environmental Affairs was a panel member for the session on "Brave New World: Finance and Investment in a Low Carbon Economy". RBC Director of Emissions Markets was on the panel entitled "Reducing Carbon Emissions: High-Quality Standards for Success".

The RBC Director of Corporate Environmental Affairs spoke at a Conference Board of Canada event on the topic of "How to Achieve a Low Carbon Economy".

The Vice President of Corporate Citizenship and Corporate Environmental Affairs (CEA) personnel give numerous presentations on finance and sustainability at conferences and to university classes. A key part of all CEA presentations is discussing RBC's priority environmental issues, climate change being one of them, and our commitments to reduce our environmental footprint. Examples of public speaking engagements at universities in 2009 and 2010 include:

- University of Waterloo
- Queens University
- Sheridan College
- University of Toronto - Rotman School of Business
- York University – Schulich School of Business
- University of Guelph

f) MEMBERSHIPS
RBC is active in stakeholder engagement and liaised with a number of stakeholder groups in 2009 to discuss environmental issues related to policy development, transaction review, portfolio management, operational impacts and business development opportunities. In 2009 and 2010, RBC:

- Collaborated and held discussions with non-governmental organizations including the Canadian Boreal Initiative, Forest Ethics, Pollution Probe, Toronto Atmospheric Fund, Greening Greater Toronto Task Force, WWF Canada, Nature Conservancy of Canada and Rainforest Action Network
- Participated in industry associations including: Conference Board of Canada's Business Council for Sustainability, UN Environment Programme Finance Initiative – North American Task Force (co-chair), the US Environmental Bankers Association and the EXCEL Partnership

Module: Risks and Opportunities

III. ACTIONS TO ADDRESS COMPETIVE RISKS

OFFER OUR CLIENTS ENVIRONMENTAL PRODUCTS AND SERVICES

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. RBC is committed to:

- participating, as appropriate, in market-based initiatives that focus on reducing greenhouse gas emissions,
- adapting to climate change, safeguarding biodiversity and protecting water resources;
- continuing to develop retail banking products and services that satisfy the demands of our clients for environmentally-sustainable choices;
- offering responsible investment options to clients who choose to invest in companies based on social, environmental and governance considerations in addition to financial performance; and
- reviewing the potential impacts of environmental issues, such as climate change, on RBC's insurance businesses. Please see our responses to CDP Questions 6.2, 7.2 and 8.2 for a detailed summary of our environmental products and services we offer our clients.

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/RisksOpportunities-Otherrisks/Environment intranet - RBC Celebrates Environment Month.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/RisksOpportunities-Otherrisks/Environment intranet - homepage.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/RisksOpportunities-Otherrisks/Environment intranet - resources.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/RisksOpportunities-Otherrisks/Environment intranet - green@rbc newsletter.pdf

Module: Risks and Opportunities

Regulatory Opportunities

6.1

Do current and/or anticipated regulatory requirements related to climate change present significant opportunities for your company?

Yes

6.2B

What are the current and/or anticipated significant regulatory opportunities and their associated countries/regions and timescales?

RBC has identified the following opportunities associated with the regulatory impacts of climate change:

CARBON TRADING
The RBC Capital Markets emissions trading desk provides expertise of carbon credits, exchanges and carbon forecasting. As of October 31st, 2009 (fiscal year-end) the desk has traded over 121 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, but we have also seen a growth in trading on the North America Regional Greenhouse Gas Initiatives (RGGI), Chicago Climate Exchange (CCX) and other voluntary markets.

CLEAN ENERGY FINANCING
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. This is a growing part of our business. Loans and trading lines outstanding as of October 31, 2009 included:

- Hydroelectric: $840 million to Canadian public and private companies whose primary power generation capacity is derived from water. We also have $25 million in outstanding loans to hydro projects that are under construction.
- Wind: $110 million to electricity producers whose primary method of power generation is wind. Over the past several years, we have provided financing and advisory services to companies with over 2,750 megawatts of wind power capacity, and project financing of almost 375 megawatts of new wind power capacity.
- Biomass: $100 million to several biomass projects in North America, including the production of ethanol and the generation of electricity through the combustion of biowaste and landfill gas.
- Solar: $36 million to global manufacturers of thin film photovoltaic solar modules.
- Advanced energy metering: $93 million to several global manufacturers of advanced metering systems whose products enhance energy conservation efforts.

CARBON MARKET ADVISORY SERVICES
Emerging regulations requiring large emitters to reduce greenhouse gas emissions, and the developing market in GHG emissions trading, will impact some of RBC's biggest clients. RBC can assist clients in managing these risks, as well in taking advantage of associated opportunities, by offering GHG emissions related advisory services. RBC has one-stop-shop capabilities for clients' GHG emissions management needs. Helping clients manage their own risks will also have the secondary, indirect, effect of reducing RBC's counterparty risks (assuming these clients present credit risks within RBC's portfolio). There may be particular opportunities to offer advice to clients that are developing renewable energy projects as these clients will require assistance in navigating complex domestic and international rules.

RENEWABLE ENERGY FINANCING ADVISORY SERVICES
RBC Capital Markets in Calgary and London (UK) have Energy & Utility teams that provide advisory services to the renewable energy sector. Each team offers investment banking, financing and advisory services for businesses and renewable power projects in North America and Europe, and provides support for our activities within the renewables sector for projects such

Module: Introduction

as wind farm, small hydro and biomass projects. There are also daily updates on renewable energy and clean technology available to RBC staff working in these areas.

EQUITY RESEARCH
RBC Capital Markets Equity Research in the United States produces weekly research reports on renewable energy, clean technology and climate change policy matters that is available to analysts. The reports typically contain information on the following subject areas:

- Renewable energy and cleantech.
- Proposed carbon cap and trade legislation in the United States.
- Specific detail on agendas in the US House of Representatives Energy and Commerce Committee and the US Senate Energy and Natural Resources Committee.
- Impacts of proposed legislation in US industry sectors.
- Proposed timelines for implementation of policies.

6.3

Describe the ways in which the identified opportunities affect or could affect your business and your value chain.

The identified opportunities have a positive affect on our business and value chain, including the following benefits:

- Maintain and enhance RBC's reputation as a leader in environmental sustainability
- Demonstrate action on publicly made commitments to offer our clients products and services that have environmental benefits
- Demonstrate to our clients and staff that we are committed to environmental solutions through the provision of green advice
- Support projects that have universal environmental benefits including the reduction of the carbon intensity of the electricity grid (CO2e emitted per unit of electricity generated) and support for carbon markets that financially assist GHG reduction initiatives globally.
- Access to revenues and service fees associated with the identified opportunities

Module: Risks and Opportunities

6.4

Are there financial implications associated with the identified opportunities?

Yes

6.5

Please describe them.

Please see response to Question 6.2

6.6

Describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.

Please see response to Question 6.2

Module: Risks and Opportunities

Physical Opportunities

7.1

Do current and/or anticipated physical impacts of climate change present significant opportunities for your company?

Yes

7.2B

What are the current and/or anticipated significant physical opportunities and their associated countries/regions and timescales?

Physical impacts resulting from climate change present opportunities for RBC in the following ways:

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

LOWER OPERATIONAL 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 ISSUES
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 increased our donations to environmental causes from $3.13 million in 2008 to $5.25 million in 2009 to charities in Canada, the United States and the Caribbean. 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 (i.e. water barrels to collect rainwater), especially in regions where climatologists predict communities must adapt to more frequent water shortages due to shifting meteorological patterns.

Module: Risks and Opportunities

7.3

Describe the ways in which the identified opportunities affect or could affect your business and your value chain.

The identified opportunities have a positive affect on our business and value chain, including the following benefits:

- Maintain and enhance RBC's reputation as a leader in environmental sustainability
- Demonstrate action on publicly made commitments to offer our clients products and services that have environmental benefits
- Support projects that have universal environmental benefits including the reduction of the carbon intensity of the electricity grid (CO2e emitted per unit of electricity generated) and support for carbon markets that financially assist GHG reduction initiatives globally.
- Access to revenues and service fees associated with the identified opportunities

7.4

Are there financial implications associated with the identified opportunities?

Yes

7.5

Please describe them.

Please see response to Question 7.2

7.6

Describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.

Please see response to Question 7.2

Module: Risks and Opportunities

Other Opportunities

8.1

Does climate change present other significant opportunities - current and/or anticipated - for your company?

Yes

8.2B

What are the current and/or anticipated other significant opportunities and their associated countries/regions and timescales?

We offer banking products and services to help clients mitigate their impacts on climate change and the environment.

ENERGY SAVER MORTGAGE
In September 2008, we launched the RBC Energy Saver Mortgage in Canada which offers a $300 rebate on a home energy audit. A home energy audit is a report generated by a licensed professional who is specially trained to examine electrical, mechanical and architectural aspects of residential homes. The audit provides recommendations to help improve a home's energy efficiency and lower its energy costs.

ENERGY SAVER LOAN
We offer clients in Canada the RBC Energy Saver Loan which helps clients create a more energy efficient home while saving on borrowing costs. By making a qualified environmentally-friendly purchase, clients can receive a 1% discount or a $100 home energy audit rebate on a fixed rate installment loan over $5,000.

ADVICE ON GREENING YOUR HOME
RBC Home Equity partnering Canada Mortgage and Housing Corporation (CMHC) launched a Grow an Energy Efficiency Home advice centre, which shows homeowners what they can do to reduce home's energy use, from something as simple as switching to compact fluorescent light bulbs to upgrading your home's insulation, to installing a high-efficiency furnace.

ADVICE ON GREENING YOUR BUSINESS
RBC Business Financial Services launched a Greening Your Business advice centre for small business and commercial clients. The website presents numerous articles and videos on a variety of topics related to greening your business including: Managing Carbon, Conserving Water, Greening your Supply Chain, Increasing Energy Efficiency, Brownfield Development and Waste Management.

LEED CERTIFIED AFFORDABLE HOUSING FINANCING
In 2009, the RBC Tax Credit Equity Group invested US$73.7 million in the development of 10 affordable housing projects in the United States. RBC takes a 99% equity ownership position in the affordable housing projects developed under this program. The Low Income Housing Tax Credit created under the US Tax Code, allows state housing finance agencies to allocate tax credits which developers in partnerships with banks and other not-for-profit agencies bid on. The equity raised from the sale of the tax credits reduces the debt of the housing project and in exchange, the partnership restricts the rental rates and ensures the units are rented to lower income residents.

CARBON MARKET ADVISORY SERVICES
Members of the RBC Corporate Environmental Affairs (CEA) team and the RBC Capital Markets Emissions Trading group have been actively involved in discussions with elected public servants, client companies and other interested stakeholders on climate change related matters. Examples of these discussions include:

- Discussions with the Alberta government, NGOs, academics, Aboriginal leaders, industry associations and corporate clients regarding the environmental and social impacts of the development of the Alberta oil sands.

Module: Risks and Opportunities

- Consultation meetings with the Ontario Minister of the Environment and Climate Change Secretariat on the design of future carbon cap and trade legislation and integrating climate change policy and considerations across all government sectors and programs in Ontario.
- Discussions with Environment Canada regarding the design of a Canadian federal carbon cap and trade system.

SOCIALLY RESPONSIBLE INVESTMENT PRODUCTS
Since 2007, RBC has been helping investors reach their financial goals while incorporating broader concerns for social responsibility, environmental sustainability and corporate governance into our investment products. Using numerous indicators for environmental, social and governance performance, socially responsible investment (SRI) funds provide clients with the assurance that responsible screening has been applied to the investment decision-making process. The screening process also includes the review of climate change related performance for carbon intensive sectors. We offer our clients seven SRI products through RBC Global Asset Management, with combined assets under management in excess of $800 million as of October 31st, 2009.

SOCIALLY RESPONSIBLE INVESTMENT ADVISORY SERVICES
All RBC investment advisors in Canada can counsel clients on the RBC Jantzi Funds. In addition, RBC investment advisors have the ability to access information on dozens of other SRI products in the Canadian market and can also facilitate investments in these products. To support the growth in socially responsible investing among high net worth individuals, foundations, unions, and pension funds, RBC's SRI Wealth Management Group provides SRI expertise to clients across the United States. The specialized team of financial advisors, based in San Francisco, manages almost US$1 billion in responsibly invested assets.

8.3

Describe the ways in which the identified opportunities affect or could affect your business and your value chain.

The identified opportunities have a positive affect on our business and value chain, including the following benefits:

- Maintain and enhance RBC's reputation as a leader in environmental sustainability
- Demonstrate action on publicly made commitments to offer our clients products and services that have environmental benefits and to provide "green" advice
- Support projects that have universal environmental benefits including promoting energy efficiency and the reduction of GHG emissions
- Generate revenues and service fees associated with the identified opportunities

8.4

Are there financial implications associated with the identified opportunities?

Yes

8.5

Please describe them.

Please see response to Question 8.2

8.6

Module: Risks and Opportunities

Describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.

Please see response to Question 8.2

Further Information

Please see RBC website: http://www.rbc.com/environment/what-you-can-do.html for more information on environmental products and services we offer our clients.

Module: Strategy

Strategy

9.1

Please describe how your overall group business strategy links with actions taken on risks and opportunities (identified in questions 3 to 8), including any emissions reduction targets or achievements, public policy engagement and external communications.

ENTERPRISE-WIDE COORDINATED ACTION PLANS FOR BUSINESS OPERATION RELATED TO CLIMATE CHANGE
As outlined in the RBC Environmental Blueprint (see attached), we have identified three priority environmental issues for our organization: climate change, biodiversity and water. Climate change presents environmental, social and financial challenges to the global economy, human health and our own businesses. We believe it is vitally important that we contribute to efforts to reduce greenhouse gas (GHG) emissions and effectively adapt to the impacts of climate change. While financial services companies are not considered high-impact, RBC is one of the largest companies in Canada and as a result we do use a great deal of resources, which represent a significant environmental footprint.

The RBC Environmental Blueprint outlines enterprise-wide commitments for mitigation of climate change impacts from our operations. Our primary 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. Governance and coordination of climate change mitigation strategies for our business operations is led by the RBC Corporate Environmental Affairs (CEA) team, working in collaboration with Corporate Real Estate, Procurement and Technology & Operations (Green IT Committee) and other operational units.

COORDINATED ACTION PLANS FOR FINANCING / INVESTING ACTIVITIES RELATED TO CLIMATE CHANGE
The RBC Environment Blueprint outlines group-wide objectives to support the coordination of action plans for financing and investing activities led by RBC's business units, based on market opportunities and with support from RBC Corporate Environmental Affairs (CEA) and other experts as needed. CEA oversees environmental risk policy development and implementation in financing activities. This includes:

- Capital Markets financing of clean energy projects
- Canadian Banking Green Strategy that identifies three areas of opportunity for financing: green buildings, small and medium renewable energy projects (i.e. rooftop solar) and cleantech in knowledge based industries.

SUPPORT OF COMMUNITY AFFAIRS PROJECTS AIMED AT CLIMATE CHANGE MITIGATION AND ADAPTION
RBC is committed to making a lasting social impact through responsible giving and by building strong partnerships with the charitable sector. We have increased our donations to environmental causes from $3.13 million in 2008 to $5.25 million in 2009 to charities in Canada, the United States and the Caribbean. Our signature environmental cause is the RBC Blue Water Project, our global commitment to help protect the world's fresh water resources which involves a 10 year, $50 million grant commitment to protecting watersheds around the world. 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 (i.e. water barrels to collect rainwater), especially in regions where climatologists predict communities must adapt to more frequent water shortages due to shifting meteorological patterns.

Module: Strategy

PRIVATE-PUBLIC PARTNERSHIP TO ENCOURAGE THE DEVELOPMENT OF LOW CARBON TECHNOLOGIES
Sponsor: Sustainable Development Technologies Canada (SDTC) Summit:

http://www.sdtc.ca/cleantechsummit2009/en.htm
SDTC is Canada's largest early-stage funder of clean technologies, playing a leading role in building the capacity of Canadian clean-technology entrepreneurs, helping them form strategic relationships, and in building a critical mass of sustainable development capability in Canada.

Sponsor: 2010 SDTC Cleantech Growth & Go-to-Market Report: http://www.cleantechnologyreport2010.ca/en/
This report compares the commercialization profiles of 436 Canadian clean tech companies to commercialization investment benchmarks, as well as best practices of Canadian and global clean tech companies.

Sponsor: CleanTech North Cluster http://www.cleantechnorth.com/
In December 2009, RBC and other industry experts launched CleanTech North, an organisation that helps early-stage cleantech companies reach their potential. Headquartered in Toronto, CleanTech North will help accelerate the trajectory of promising cleantech companies to global markets.

Sponsor: CleanTech Group LLC Membership http://cleantech.com/index.cfm
Since 2002, the Cleantech Group has been providing investors, entrepreneurs, and Fortune 1000 global corporations with the latest industry market intelligence through subscription-based research, global industry networking events, and world-class consulting services.

CONTRIBUTING TO THE INTENRNATIONAL AND NATIONAL DEBATE ON CLIMATE CHANGE

Please see response to Question 9.11

LOBBYING FOR PUBLIC POLICY FRAMEWORKS ON CLIMATE CHANGE
In November 2009, RBC signed the Copenhagen Communiqué, which calls on politicians to agree on an ambitious, robust and equitable global deal on climate change that responds credibly to the scale and urgency of the crisis facing the world today. The communiqué cautioned that business will suffer if a credible deal on climate change was not reached at the United Nations Climate Change Conference that took place in Copenhagen in December 2009.

MARKETING CAMPAIGNS RELATED TO RBC'S EFFORTS
Green Power
We announced the opening of our100th green powered branch in November 2009. RBC was the first financial institution to partner with Bullfrog Power to source low-impact, renewable power in 2005. The 100 Canadian branches powered by Bullfrog use 9,800 MWh of certified emission-free power. As a result of RBC's commitment to Bullfrog power, we reduced our carbon footprint by approximately 3,300 tonnes in 2009, and our emissions of sulphur dioxide and nitrogen oxides by approximately 9,000 kg and 4,850 kg, respectively. See announcement here: http://www.rbc.com/newsroom/2009/1123-bullfrog.html

Greening Your Business Advice Centre
RBC Business Financial Services launched a Greening Your Business advice centre for small business and commercial clients. The website presents numerous articles and videos on a variety of topics related to greening your business including: Managing Carbon, Conserving Water, Greening your Supply Chain, Increasing Energy Efficiency, Brownfield Development and Waste Management. See website here:
http://www.rbcroyalbank.com/commercial/advice/greening-your-business/index.html

Greening the Vancouver 2010 Olympic Torch Relay
RBC developed a behind-the-scenes look of how RBC helped to make the longest Olympic Torch Relay in history carbon neutral in video called "Greening the Vancouver 2010 Olympic Torch Relay". See video here:
http://forms.rbc.com/ExpertAdvice/video/2010-Olympic-Torch-Relay.html

Module: Strategy

Globe Conference

RBC was a proud Diamond level sponsor of the Globe 2010 Conference held in Vancouver from March 23-26, 2010. This biennial business and environment conference is the world's biggest, welcoming over 10,000 delegates and trade show attendees over 3 days. The RBC VP of Corporate Citizenship moderated the RBC sponsored panel on "Water Efficiency: Managing a Valuable Resource". RBC Director of Corporate Environmental Affairs was a panel member for the session on "Brave New World: Finance and Investment in a Low Carbon Economy". RBC Director of Emissions Markets was on the panel entitled "Reducing Carbon Emissions: High-Quality Standards for Success".

SPEAKING ENGAGEMENTS

The RBC Director of Corporate Environmental Affairs spoke at a Conference Board of Canada event on the topic of "How to Achieve a Low Carbon Economy". The Vice President of Corporate Citizenship and Corporate Environmental Affairs (CEA) personnel give numerous presentations on finance and sustainability at conferences and to university classes. A key part of all CEA presentations is discussing RBC's priority environmental issues, climate change being one of them, and our commitments to reduce our environmental footprint. Examples of public speaking engagements at universities in 2009 and 2010 include:

- University of Waterloo
- Queens University
- Sheridan College
- University of Toronto - Rotman School of Business
- York University – Schulich School of Business
- University of Guelph

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Strategy-Strategy/RBC Greening Your Business Guide_2010.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Strategy-Strategy/RBC Environmental Blueprint.pdf

Module: Strategy

Strategy – Targets

9.2

Do you have a current emissions reduction target?

No, but we are developing one

9.4

Please give details of the target(s) you are developing and when you expect to announce it/them. ***(If you are in the process of developing a target)***

We plan to announce an energy and GHG reduction target for our North American retail branch and / or major property network in 2011. The reduction targets will likely be based on a baseline year of 2009. We also plan to meet our GHG reduction target without the purchase of carbon offsets. The targeted energy reductions and likely 50% of the targeted greenhouse gas reductions will be achieved through a combination of efficiency initiatives within RBC's branch and major leased properties. The remaining greenhouse gas reductions will come from the purchase of certified green power.

Strategy – Emission Reduction Activities

Is question 9.7 relevant for your company?

Yes

9.7

Please use the table below to describe your company's actions to reduce its GHG emissions.

1. Actions – please describe	2. Annual energy saving	3. Annual energy savings – number	4. Annual energy saving – units	5. Annual emission reduction in metric tonnes CO2-e	6. Reduction – achieved or anticipated	7. Investment – number	8. Investment – currency	9. Monetary savings – number	10. Monetary savings – currency	11. Monetary savings	12. Timescale of actions & associated investments (if relevant)
PURCHASING CERTIFIED GREEN POWER	Not relevant			2749	Achieved	226000	CAD ($)	0	CAD ($)	Not relevant	All figures reported are based on our 2009 fiscal year. The program is approved to continue in 2010 and we anticipate a greater volume of green power will be purchased this year than compared in 2009.
RBC ENERGY MANAGEMENT PLAN Comprehensive lighting retrofit program in our retail branch network Scope includes converting a variety of lighting and ballasts, sensors and optimizing light levels. Also includes premium HVAC maintenance which fine tunes HVAC energy efficiency, also includes adding demand control ventilation where possible.	Anticipated				Anticipated	1260000	CAD ($)		CAD ($)	Anticipated	RBC has committed $1.26 million in 2010 to the RBC Energy Management Plan which is a planned 3-year, $15 million project. The project is anticipated to reduce energy use across our North American retail branch network by >10%. Project payback is anticipated with 3-4 years once fully funded.

Module: Strategy

1. Actions – please describe	2. Annual energy saving	3. Annual energy savings – number	4. Annual energy saving – units	5. Annual emission reduction in metric tonnes CO2-e	6. Reduction – achieved or anticipated	7. Investment – number	8. Investment – currency	9. Monetary savings – number	10. Monetary savings – currency	11. Monetary savings	12. Timescale of actions & associated investments (if relevant)
CARBON OFFSETTING OF RBC SPONSORSHIPS, EVENTS AND PRODUCTION OF MAJOR REPORTS • Offset the carbon emissions associated with our participation in the 2010 Olympic Torch Relay, Vancouver 2010 Olympic and Paralympic Winter Games. • Offset the carbon emissions associated with the production of the RBC 2009 Annual Report, Proxy Circular and Corporate Responsibility Report. • Offset carbon emissions associated with the 2010 Annual General Meeting	Not relevant			1100	Achieved	28000	CAD ($)	0	CAD ($)		

9.8

Please explain why not.

9.9

Please provide any other information you consider necessary to describe your emission reduction activities.

Other recent energy and greenhouse gas related initiatives:

- Completed 10 branch energy audits that have informed the development of RBC Energy Plan with planned implementation in 2010.
- Launched the RBC Employee Environmental Stewardship Guidelines to all staff globally, which includes guidelines on conserving energy in the workplace and on low carbon / alternatives to travel.
- Continued a multi-year server virtualization program that has resulted in the removal and purchase avoidance of over 3,400 new physical servers from our data centres since project inception.
- Offset the carbon emissions associated with our participation in the 2010 Olympic Torch Relay, Vancouver 2010 Olympic and Paralympic Winter Games.
- Offset the carbon emissions associated with the production of the RBC 2009 Annual Report, Proxy Circular and Corporate Responsibility Report.
- Primary tenant in the new RBC Centre in Toronto, a new 40-storey office tower in Toronto that is certified as LEED Gold. In addition, two new Canadian branch locations have obtained LEED certification.
- Implemented new electrical, mechanical and architectural standards for our Canadian branch network through five pilot projects.
- Continued Energy Smart - an internal program developed to promote energy conservation in our branch and office building premises.

Module: Strategy

- Strong staff and building participation in Earth Hour 2009 including a total of 73 North America major office buildings reporting participation. We also had over 7,500 staff, representing over 29 countries, commit to participating in Earth Hour.
- Piloted Project Reflection, a new office design that supports environmental responsibility, which resulted in estimated annual electricity savings of 200,000 kWh at the pilot location, the equivalent of 18 Canadian homes.

9.10

Do you engage with policy makers on possible responses to climate change including taxation, regulation and carbon trading?

Yes

9.11

Please describe.

RBC Capital Markets and Corporate Environmental Affairs (CEA) have been actively involved in discussions with public servants and elected officials on climate change related matters. Examples of these discussions include:

- Consultation meeting with the federal government on Canada's Position and Go Forward Plan regarding Climate Change that preceded the international climate change negotiations at COP15 in Copenhagen.
- Multi-stakeholder consultation on the design of a federal carbon cap and trade system at the request of the Prime Minster of Canada.
- Consultation meetings with the Ontario Minister of the Environment on the design of future carbon cap and trade legislation for the Province of Ontario.
- Discussions with the Ontario Climate Change Secretariat, who is responsible for integrating climate change policy and considerations across all government sectors and programs in Ontario.
- RBC is a co-chair of the UN Environment Programme Finance Initiative (UNEP FI) - North American Task Force. UNEP FI comments regularly on international policy matters and hosted a consultation session between climate change negotiators / policy makers and the finance sector in the build-up to COP15 in Copenhagen.

Further Information

For a list of all of our environmental programs please see: http://www.rbc.com/environment/initiatives.html

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Boundary (1 Nov 2006 - 31 Oct 2007)

10.1

Please indicate the category that describes the company, entities, or group for which Scope 1 and Scope 2 GHG emissions are reported.

Companies over which financial control is exercised per consolidated audited financial statements

10.2

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

Yes

10.3

Please complete the following table.

Source	Scope	Explain why the source is excluded
All non-Canadian properties	Scope 1 and 2	In 2007, we reported scope 1 and 2 emissions for our Canadian retail branch network only, which represented approximately 35% of our global floor area. At the time, utility data for our United States, British Isles, Caribbean and other non-Canadian locations was not available in a format that could support credible public reporting.
All Canadian major leased properties	Scope 1 and 2	In 2007, we reported scope 1 and 2 emissions for our Canadian retail branch network only, which represented approximately 35% of our global floor area. At the time, utility data for our Canadian major leased properties was not available in a format that could support credible public reporting.

Further Information

Please see our 2007 RBC Corporate Responsibility Report attached - emissions data is presented in page 27. Please see attachment “RBC Comments for CDP Question 10 - Energy Data” for more information

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Boundary(1Nov2006-31Oct2007)/2007 RBC Corporate Responsibility Report.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Boundary(1Nov2006-31Oct2007)/RBC Comments for CDP Question 10 - Energy Data.doc

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Boundary (1 Nov 2007 - 31 Oct 2008)

10.1

Please indicate the category that describes the company, entities, or group for which Scope 1 and Scope 2 GHG emissions are reported.

Companies over which financial control is exercised per consolidated audited financial statements

10.2

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

Yes

10.3

Please complete the following table.

Source	Scope	Explain why the source is excluded
Some United States based properties	Scope 1 and 2	In 2008, we enhanced utility data collection across RBC, which resulted in a significant increase in sources covered. 2008 was the first year RBC was able to track and report scope 1 and 2 emissions for our major leased premises in Canada, the United States and the British Isles. We were also able to track and report emissions from energy consumption for our key data and processing centres: facilities that use large quantities of purchased electricity. Gaps in utility data were associated with properties in some parts of the United States, the Caribbean and other international locations.
All Caribbean and other international locations	Scope 1 and 2	See response above

Further Information

Please see our 2008 RBC Corporate Responsibility Report attached - emissions data is presented in page 43-44. Please see attachment “RBC Comments for CDP Question 10 - Energy Data” for more information

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Boundary(1Nov2007-31Oct2008)/RBC Comments for CDP Question 10 - Energy Data.doc

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Boundary(1Nov2007-31Oct2008)/2008 RBC Corporate Responsibility Report.pdf

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Boundary (1 Nov 2008 - 31 Oct 2009)

10.1

Please indicate the category that describes the company, entities, or group for which Scope 1 and Scope 2 GHG emissions are reported.

Companies over which financial control is exercised per consolidated audited financial statements

10.2

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

Yes

10.3

Please complete the following table.

Source	Scope	Explain why the source is excluded
Caribbean and other international properties	Scope 1 and 2	In 2009, we expanded our energy data coverage to 94% of our global floor area, compared to 65% in 2008. We measured and reported 100% of our scope 1 and 2 emissions for all properties located in Canada and the United States. Gaps in utility data were associated with properties in the Caribbean and other international locations. In 2009 we developed a new property classification called “data centres and processing centres” to better understand the unique energy footprint associated with these properties.

Further Information

Please see our 2009 RBC Corporate Responsibility Report attached - emissions data and discussion is presented in page 51-53. Please see attachment “RBC Comments for CDP Question 10 - Energy Data” for more information

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Boundary(1Nov2008-31Oct2009)/RBC Comments for CDP Question 10 - Energy Data.doc

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Boundary(1Nov2008-31Oct2009)/2009 RBC Corporate Responsibility Report.pdf

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Methodology (1 Nov 2006 - 31 Oct 2007)

11.1a

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 and/or describe the procedure you have used (in the text box in 11.1b below).

Please select the published methodologies that you use.
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
ISO 14064-1

11.1b

Please describe the procedure that you use.

RBC's greenhouse gas (GHG) emissions are calculated based on the methodologies provided by the Greenhouse Gas Protocol of the World Business Council on Sustainable Development. Details on calculation methodologies are presented below.

DIRECT ENERGY (Scope 1)
Direct energy consumption refers to RBC's use of fossil fuels (i.e. natural gas, heating oil and propane) for heating purposes across the RBC property portfolio of major leased premises and branches. Fuel consumption data is based on data collection and record keeping practices employed by our property management firm CB Richard Ellis with oversight by RBC Corporate Real Estate and Corporate Environmental Affairs. GHG Protocol emission factors are applied to fuel consumption data to calculate the CO2e emissions.

INDIRECT ENERGY (Scope 2)
Indirect energy consumption refers to RBC's use of purchased electricity at major leased premises and branches. Electricity consumption data is based on data collection and record keeping practices employed by our property management firm CB Richard Ellis with oversight by RBC Corporate Real Estate and Corporate Environmental Affairs. In Canada, emission factors are obtained from Environment Canada's National Inventory Report (NIR) which provides emission factors for each province and territory based on the mix of power generation in that province or territory. In the United States, emission factors are obtained from US EPA eGrid, which presents emission factors for three species of GHGs: carbon dioxide, methane and nitrous oxide which informed the development of an overall carbon emission factor for each state based on GHG warming potentials of each GHG. In the British Isles emission factors are obtained from publicly available information made available by local power authorities.

We reduced GHG emissions by purchasing certified green electricity from Bullfrog Power. At the end of October 2007 (fiscal year), we had 23 Canadian branches powered by certified "green" emission-free power, representing a GHG emissions reduction of approximately 1,680 tonnes annually.

11.2

Please also provide the names of and links to any calculation tools used.

Please select the calculation tools used.
GHG Protocol - CO2 emissions from business travel 1.2 August 2005
GHG Protocol - GHG emissions from stationary combustion 3.1 March 2008
Other: GHG Protocol - Indirect CO2 emissions from purchased electricity (Version 2.0)

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

11.3

Please give the global warming potentials you have applied and their origin.

Gas	Reference	GWP
Carbon dioxide	IPCC Second Assessment Report (SAR - 100 year)	1
Methane	IPCC Second Assessment Report (SAR - 100 year)	21
Nitrous oxide	IPCC Second Assessment Report (SAR - 100 year)	310

11.4

Please give the emission factors you have applied and their origin.

Fuel/Material	Emission Factor	Unit	Reference
Natural gas	1.93	Other: kg CO2-e per m3	WRI. GHG protocol tool for stationary combustion.
Propane	1.52	kg CO2-e per litre	WRI. GHG protocol tool for stationary combustion.
Other: Heating oil	2.68	kg CO2-e per litre	WRI. GHG protocol tool for stationary combustion.

Further Information

Please see attachment “RBC Comments for CDP Question 11- Detailed Methodology” for more information

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Methodology(1Nov2006-31Oct2007)/RBC Comments for CDP Question 11 - Detailed Methodology.doc

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Methodology (1 Nov 2007 - 31 Oct 2008)

11.1a

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 and/or describe the procedure you have used (in the text box in 11.1b below).

Please select the published methodologies that you use.
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
ISO 14064-1

11.1b

Please describe the procedure that you use.

RBC's greenhouse gas (GHG) emissions are calculated based on the methodologies provided by the Greenhouse Gas Protocol of the World Business Council on Sustainable Development. Details on calculation methodologies are presented below.

DIRECT ENERGY (Scope 1)
Direct energy consumption refers to RBC's use of fossil fuels (i.e. natural gas, heating oil and propane) for heating purposes across the RBC property portfolio of major leased premises and branches. Fuel consumption data is based on data collection and record keeping practices employed by our property management firm CB Richard Ellis with oversight by RBC Corporate Real Estate and Corporate Environmental Affairs. GHG Protocol emission factors are applied to fuel consumption data to calculate the CO2e emissions.

INDIRECT ENERGY (Scope 2)
Indirect energy consumption refers to RBC's use of purchased electricity at major leased premises and branches. Electricity consumption data is based on data collection and record keeping practices employed by our property management firm CB Richard Ellis with oversight by RBC Corporate Real Estate and Corporate Environmental Affairs. In Canada, emission factors are obtained from Environment Canada's National Inventory Report (NIR) which provides emission factors for each province and territory based on the mix of power generation in that province or territory. In the United States, emission factors are obtained from US EPA eGrid, which presents emission factors for three species of GHGs: carbon dioxide, methane and nitrous oxide which informed the development of an overall carbon emission factor for each state based on GHG warming potentials of each GHG. In the British Isles emission factors are obtained from publicly available information made available by local power authorities.

We reduced GHG emissions by purchasing certified green electricity from Bullfrog Power. At the end of October 2008 (fiscal year), we had 76 Canadian branches powered by over 5,000 MWh of certified "green" emission-free power, which represents a GHG emissions reduction of approximately 2,095 tonnes annually.

11.2

Please also provide the names of and links to any calculation tools used.

Please select the calculation tools used.
GHG Protocol - CO2 emissions from business travel 1.2 August 2005
GHG Protocol - GHG emissions from stationary combustion 3.1 March 2008
Other: GHG Protocol - Indirect CO2 emissions from purchased electricity (Version 2.0)

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

11.3

Please give the global warming potentials you have applied and their origin.

Gas	Reference	GWP
Carbon dioxide	IPCC Second Assessment Report (SAR - 100 year)	1
Methane	IPCC Second Assessment Report (SAR - 100 year)	21
Nitrous oxide	IPCC Second Assessment Report (SAR - 100 year)	310

11.4

Please give the emission factors you have applied and their origin.

Fuel/Material	Emission Factor	Unit	Reference
Natural gas	1.93	Other: kg CO2-e per m3	WRI. GHG protocol tool for stationary combustion.
Propane	1.52	kg CO2-e per litre	WRI. GHG protocol tool for stationary combustion.
Other: Heating oil	2.68	kg CO2-e per litre	WRI. GHG protocol tool for stationary combustion.

Further Information

Please see attachment “RBC Comments for CDP Question 11- Detailed Methodology” for more information

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Methodology(1Nov2007-31Oct2008)/RBC Comments for CDP Question 11 - Detailed Methodology.doc

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Methodology (1 Nov 2008 - 31 Oct 2009)

11.1a

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 and/or describe the procedure you have used (in the text box in 11.1b below).

Please select the published methodologies that you use.
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
ISO 14064-1

11.1b

Please describe the procedure that you use.

RBC's greenhouse gas (GHG) emissions are calculated based on the methodologies provided by the Greenhouse Gas Protocol of the World Business Council on Sustainable Development. Details on calculation methodologies are presented below.

DIRECT ENERGY (Scope 1)
Direct energy consumption refers to RBC's use of fossil fuels (i.e. natural gas, heating oil and propane) for heating purposes across the RBC property portfolio of major leased premises and branches. Fuel consumption data is based on data collection and record keeping practices employed by our property management firm CB Richard Ellis with oversight by RBC Corporate Real Estate and Corporate Environmental Affairs. GHG Protocol emission factors are applied to fuel consumption data to calculate the CO2e emissions.

INDIRECT ENERGY (Scope 2)
Indirect energy consumption refers to RBC's use of purchased electricity at major leased premises and branches. Electricity consumption data is based on data collection and record keeping practices employed by our property management firm CB Richard Ellis with oversight by RBC Corporate Real Estate and Corporate Environmental Affairs. In Canada, emission factors are obtained from Environment Canada's National Inventory Report (NIR) which provides emission factors for each province and territory based on the mix of power generation in that province or territory. In the United States, emission factors are obtained from US EPA eGrid, which presents emission factors for three species of GHGs: carbon dioxide, methane and nitrous oxide which informed the development of an overall carbon emission factor for each state based on GHG warming potentials of each GHG. In the British Isles emission factors are obtained from publicly available information made available by local power authorities.

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.

11.2

Please also provide the names of and links to any calculation tools used.

Please select the calculation tools used.
GHG Protocol - CO2 emissions from business travel 1.2 August 2005
GHG Protocol - GHG emissions from stationary combustion 4.0 February 2009
GHG Protocol - Indirect CO2 emissions from purchased electricity 3.0 March 2008

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

11.3

Please give the global warming potentials you have applied and their origin.

Gas	Reference	GWP
Carbon dioxide	IPCC Second Assessment Report (SAR - 100 year)	1
Methane	IPCC Second Assessment Report (SAR - 100 year)	21
Nitrous oxide	IPCC Second Assessment Report (SAR - 100 year)	310

11.4

Please give the emission factors you have applied and their origin.

Fuel/Material	Emission Factor	Unit	Reference
Natural gas	1.89	Other: kg CO2-e per m3	WRI (2008). GHG protocol tool for stationary combustion.
Propane	1.62	kg CO2-e per litre	WRI (2008). GHG protocol tool for stationary combustion.
Other: Heating oil	2.69	kg CO2 per litre	WRI (2008). GHG protocol tool for stationary combustion.

Further Information

Please see attachment “RBC Comments for CDP Question 11- Detailed Methodology” for more information

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Methodology(1Nov2008-31Oct2009)/RBC Comments for CDP Question 11 - Detailed Methodology.doc

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Scope 1 (1 Nov 2006 - 31 Oct 2007)

12.1

Please give your total gross global Scope 1 GHG emissions in metric tonnes of CO2-e.

11336

Is question 12.2 relevant to your company?

Yes

12.2

Please break down your total gross global Scope 1 emissions in metric tonnes CO2-e by country/region.

Country	Scope 1 Metric tonnes CO2-e
Canada	11336

12.4

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by business division. (Only data for the current reporting year requested.)

Business Division	Scope 1 Metric tonnes CO2-e
Canada - Branches	11336

12.5

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by facility. (Only data for the current reporting year requested.)

Facilities	Scope 1 Metric tonnes CO2-e
Branches	11336

Is question 12.6 relevant to your company?

No

12.7

Please explain why not.

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emission factors for the combustion of fossil fuels at our properties are presented in CO2 equivalent, so there is no need or real value in speciating GHG by type. Reduction initiatives do not focus on reducing emissions by type, instead they focus on reducing fuel consumption through efficiency measures or switching to less carbon intensive fuels.

Is question 12.8 relevant to your company?

Yes

12.8

Please give the total amount of fuel in MWh that your organization has consumed during the reporting year.

58085

Is question 12.10 relevant to your company?

Yes

12.10

Please complete the table by breaking down the total figure by fuel type.

Fuels	MWh
Natural gas	55158
Propane	277
Other: Heating oil	2650

12.12

Please estimate the level of uncertainty of the total gross global Scope 1 figure that you have supplied in answer to question 12.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Uncertainty Range	Main sources of uncertainty	Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Metering/ Measurement Constraints Data Management	In 2007, energy consumption is based on actual consumption taken from utility bills and direct meters. We did not extrapolate data. As mentioned in Question 10.3, we reported scope 1 emissions for our Canadian retail branch network only, which represented approximately 35% of our global floor area. At the time, utility data for our United States, British Isles, Caribbean and other international locations was not available in a format that could support credible public reporting.

Further Information

Please see our 2007 RBC Corporate Responsibility Report attached - emissions data is presented in page 27.

Attachments

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Scope1(1Nov2006-31Oct2007)/2007 RBC Corporate Responsibility Report.pdf

Emissions Scope 1 (1 Nov 2007 - 31 Oct 2008)

12.1

Please give your total gross global Scope 1 GHG emissions in metric tonnes of CO2-e.

27619

Is question 12.2 relevant to your company?

Yes

12.2

Please break down your total gross global Scope 1 emissions in metric tonnes CO2-e by country/region.

Country	Scope 1 Metric tonnes CO2-e
Canada	23464
United States of America	4007
United Kingdom	78
Jersey	1
Guernsey	69

12.4

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by business division. (Only data for the current reporting year requested.)

Business Division	Scope 1 Metric tonnes CO2-e
Canada - Branches	11274
Canada - Major leased properties	12190
US - Branches	1173
US - Major leased properties	2834
British Isles - Major leased properties	148

12.5

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by facility. (Only data for the current reporting year requested.)

Facilities	Scope 1 Metric tonnes CO2-e
Branches	12447
Major leased properties	15172

12.6

Please break down your total gross global Scope 1 emissions by GHG type. (Only data for the current reporting year requested.)

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

12.7

Please explain why not.

Emission factors for the combustion of fossil fuels at our properties are presented in CO2 equivalent, so there is no need or real value in speciating GHG by type. Reduction initiatives do not focus on reducing emissions by type, instead they focus on reducing fuel consumption through efficiency measures or switching to less carbon intensive fuels.

Is question 12.8 relevant to your company?

Yes

12.8

Please give the total amount of fuel in MWh that your organization has consumed during the reporting year.

14737

Is question 12.10 relevant to your company?

Yes

12.10

Please complete the table by breaking down the total figure by fuel type.

Fuels	MWh
Natural gas	146386
Propane	325
Other: Heating oil	661

12.11

Please explain why not.

12.12

Please estimate the level of uncertainty of the total gross global Scope 1 figure that you have supplied in answer to question 12.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Uncertainty Range	Main sources of uncertainty	Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Metering/ Measurement Constraints Data Management	In 2008, energy consumption is based on actual consumption taken from utility bills and direct meters. We did not extrapolate data. As mentioned in Question 10.3, we had enhanced utility across RBC in 2008, which resulted in a significant increase in data coverage (65% of total global floor area). 2008 was the first year RBC was able to track and report scope 1 emissions for our major leased premises in Canada, the United States and the British Isles. We were also able to track and report emissions from energy consumption for our key data and processing centres: facilities that use large quantities of purchased electricity. Gaps in utility data were associated with properties in some parts of the United States, the Caribbean and other international locations where there was a lack of reporting or data was not available in a format that could support credible public reporting.

Further Information

Please see our 2008 RBC Corporate Responsibility Report attached - emissions data is presented in page 43-44.

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Scope1(1Nov2007-31Oct2008)/2008 RBC Corporate Responsibility Report.pdf

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Scope 1 (1 Nov 2008 - 31 Oct 2009)

12.1

Please give your total gross global Scope 1 GHG emissions in metric tonnes of CO2-e.

33482

Is question 12.2 relevant to your company?

Yes

12.2

Please break down your total gross global Scope 1 emissions in metric tonnes CO2-e by country/region.

Country	Scope 1 Metric tonnes CO2-e
Canada	29273
United States of America	3812
United Kingdom	209
Jersey	1
Guernsey	187

12.4

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by business division. (Only data for the current reporting year requested.)

Business Division	Scope 1 Metric tonnes CO2-e

12.5

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by facility. (Only data for the current reporting year requested.)

Facilities	Scope 1 Metric tonnes CO2-e
Branches	16317
Major leased properties	16474
Data centres and processing centres	650

Is question 12.6 relevant to your company?

No

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

12.6

Please break down your total gross global Scope 1 emissions by GHG type. (Only data for the current reporting year requested.)

GHG Type	Scope 1 Emissions (Metric tonnes)	Scope 1 Emissions (Metric tonnes CO2-e)

12.7

Please explain why not.

Emission factors for the combustion of fossil fuels at our properties are presented CO2 equivalent. No need or value in speciating GHG by type. Reduction initiatives do not focus on reducing emissions by type, instead they focus on reducing fuel consumption or switching to less carbon intensive fuels.

Is question 12.8 relevant to your company?

Yes

12.8

Please give the total amount of fuel in MWh that your organization has consumed during the reporting year.

180736

12.9

Please explain why not.

Is question 12.10 relevant to your company?

Yes

12.10

Please complete the table by breaking down the total figure by fuel type.

Fuels	MWh
Natural gas	174481
Propane	5989
Other: Heating oil	266

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

12.11

Please explain why not.

12.12

Please estimate the level of uncertainty of the total gross global Scope 1 figure that you have supplied in answer to question 12.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Uncertainty Range	Main sources of uncertainty	Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	ExtrapolationMetering/ Measurement ConstraintsData Management	In 2009, we expanded our energy data coverage to 94% of our global floor area, compared to 65% in 2008. We measured and reported 100% of our scope 1 emissions for all properties located in Canada and the United States. Gaps in utility data were associated with properties in the Caribbean and other international locations where there was a lack of reporting or data was not available in a format that could support credible public reporting. In 2009 we developed a new property classification called “data centres and processing centres” to better understand the unique energy footprint associated with these properties.

Further Information

Please see our 2009 RBC Corporate Responsibility Report attached - emissions data and discussion is presented in page 51-53.
Please see attachment “RBC Comments for CDP Question 10 - Energy Data” for more information

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Scope1(1Nov2008-31Oct2009)/2009 RBC Corporate Responsibility Report.pdf
https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Scope1(1Nov2008-31Oct2009)/RBC Comments for CDP Question 10 - Energy Data.doc

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Scope 2 (1 Nov 2006 - 31 Oct 2007)

13.1

Please give your total gross global Scope 2 GHG emissions in metric tonnes of CO2-e.

25088

Is question 13.2 relevant to your company?

Yes

13.2

Please break down your total gross global Scope 2 emissions in metric tonnes of CO2-e by country/region.

Country	Metric tonnes CO2-e
Canada	25088

13.3

Please explain why not.

13.4

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by business division. (Only data for the current reporting year requested.)

Business division name	Metric tonnes CO2-e

13.5

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by facility. (Only data for the current reporting year requested.)

Facility name	Metric tonnes CO2-e
Branches	25088

Is question 13.6 relevant to your company?

Yes

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

13.6

How much electricity, heat, steam, and cooling in MWh has your organization purchased for its own consumption during the reporting year?

Please supply data for these energy types.	MWh
Electricity	137369

13.7

Please explain why not.

13.8

Please estimate the level of uncertainty of the total gross global Scope 2 figure that you have supplied in answer to question 13.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Uncertainty range	Main sources of uncertainty in your data	Please expand on the uncertainty in your data.
More than 2% but less than or equal to 5%	Metering/ Measurement Constraints Data Management	In 2007, energy consumption is based on actual consumption taken from utility bills and direct meters. We did not extrapolate data. As mentioned in Question 10.3, we reported scope 2 emissions for our Canadian retail branch network only, which represented approximately 35% of our global floor area. At the time, utility data for our United States, British Isles, Caribbean and other international locations was not available in a format that could support credible public reporting.

Further Information

Note: In 2007, we reduced GHG emissions by purchasing certified green electricity from Bullfrog Power. At the end of October 2007 (fiscal year), we had 23 Canadian branches powered by 2,831 MWh of certified “green” emission-free power, representing a GHG emissions reduction of approximately 1,680 tonnes annually. This carbon reduction has NOT been applied to the figures presented above. Please see our 2007 RBC Corporate Responsibility Report attached — emissions data is presented in page 27.

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Scope2(1Nov2006-31Oct2007)/2007 RBC Corporate Responsibility Report.pdf

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Scope 2 (1 Nov 2007 - 31 Oct 2008)

13.1

Please give your total gross global Scope 2 GHG emissions in metric tonnes of CO2-e.

109771

Is question 13.2 relevant to your company?

Yes

13.2

Please break down your total gross global Scope 2 emissions in metric tonnes of CO2-e by country/region.

Country	Metric tonnes CO2-e
Canada	66780
United States of America	42036
United Kingdom	375
Jersey	280
Guernsey	300

13.3

Please explain why not.

13.4

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by business division. (Only data for the current reporting year requested.)

Business division name	Metric tonnes CO2-e

13.5

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by facility. (Only data for the current reporting year requested.)

Facility name	Metric tonnes CO2-e
Branches	49949
Major leased properties	59822

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Is question 13.6 relevant to your company?

Yes

13.6

How much electricity, heat, steam, and cooling in MWh has your organization purchased for its own consumption during the reporting year?

Please supply data for these energy types.	MWh
Electricity	448307

13.7

Please explain why not.

13.8

Please estimate the level of uncertainty of the total gross global Scope 2 figure that you have supplied in answer to question 13.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Uncertainty range	Main sources of uncertainty in your data	Please expand on the uncertainty in your data.
More than 2% but less than or equal to 5%	Metering/ Measurement Constraints Data Management	In 2008, energy consumption is based on actual consumption taken from utility bills and direct meters. We did not extrapolate data. As mentioned in Question 10.3, we had enhanced utility across RBC in 2008, which resulted in a significant increase in data coverage (65% of total global floor area). 2008 was the first year RBC was able to track and report scope 2 emissions for our major leased premises in Canada, the United States and the British Isles. We were also able to track and report emissions from energy consumption for our key data and processing centres: facilities that use large quantities of purchased electricity. Gaps in utility data were associated with properties in some parts of the United States, the Caribbean and other international locations where there was a lack of reporting or data was not available in a format that could support credible public reporting.

Further Information

Note: In 2008, we reduced GHG emissions by purchasing certified green electricity from Bullfrog Power. At the end of October 2008 (fiscal year), we had 76 Canadian branches powered by over 5,000 MWh of certified “green” emission-free power, which represents a GHG emissions reduction of approximately 2,095 tonnes annually. This carbon reduction has NOT been applied to the figures presented above. Please see our 2008 RBC Corporate Responsibility Report attached - emissions data is presented in page 43-44.

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Scope2(1Nov2007-31Oct2008)/2008 RBC Corporate Responsibility Report.pdf

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Scope 2 (1 Nov 2008 - 31 Oct 2009)

13.1

Please give your total gross global Scope 2 GHG emissions in metric tonnes of CO2-e.

178080

Is question 13.2 relevant to your company?

Yes

13.2

Please break down your total gross global Scope 2 emissions in metric tonnes of CO2-e by country/region.

Country	Metric tonnes CO2-e
Canada	97029
United States of America	79523
United Kingdom	987
Jersey	269
Guernsey	272

13.3

Please explain why not.

13.4

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by business division. (Only data for the current reporting year requested.)

Business division name	Metric tonnes CO2-e

13.5

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by facility. (Only data for the current reporting year requested.)

Facility name	Metric tonnes CO2-e
Branches	96395
Major leased properties	57440
Data centre and processing centres	24245

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Is question 13.6 relevant to your company?

Yes

13.6

How much electricity, heat, steam, and cooling in MWh has your organization purchased for its own consumption during the reporting year?

Please supply data for these energy types.	MWh
Electricity	576095

13.7

Please explain why not.

13.8

Please estimate the level of uncertainty of the total gross global Scope 2 figure that you have supplied in answer to question 13.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Uncertainty range	Main sources of uncertainty in your data	Please expand on the uncertainty in your data.
More than 2% but less than or equal to 5%	ExtrapolationMetering/ Measurement ConstraintsData Management	In 2009, we expanded our energy data coverage to 94% of our global floor area, compared to 65% in 2008. We measured and reported 100% of our scope 2 emissions for all properties located in Canada and the United States. Gaps in utility data were associated with properties in the Caribbean and other international locations where there was a lack of reporting or data was not available in a format that could support credible public reporting. In 2009 we developed a new property classification called “data centres and processing centres” to better understand the unique energy footprint associated with these properties. The classification represents a total of 11 properties.

Further Information

Note: 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 above. Please see our 2009 RBC Corporate Responsibility Report attached - emissions data and discussion is presented in page 51-53. Please see attachment “RBC Comments for CDP Question 10 - Energy Data” for more information

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Scope2(1Nov2008-31Oct2009)/RBC Comments for CDP Question 10 - Energy Data.doc

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Scope2(1Nov2008-31Oct2009)/2009 RBC Corporate Responsibility Report.pdf

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Scope Contractual

14.1

Do you consider that the grid average factors used to report Scope 2 emissions in question 13 reflect the contractual arrangements you have with electricity suppliers?

Yes

14.2

You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tonnes CO2-e.

14.3

Explain the origin of the alternative figure including information about the emission factors used and the tariffs.

14.4

Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

Yes

14.5

Please provide details including the number and type of certificates.

Type of certificate	Number of certificates	Comments
Other: Green Electricity Certificates (Canada)	2749	Since 2005, RBC has partnered with Bullfrog Power to source certified "green" emission-free power as part of our goal to reduce carbon emissions associated with our electricity consumption across our Canadian operations. Bullfrog Power purchases Green Electricity Certificates in Canada and retires them on their customer's behalf. 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.

Further Information

Please see our November 2009 announcement regarding the opening of our 100th green powered branch: http://www.rbc.com/newsroom/2009/1123-bullfrog.html

Attachments

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Scope 3

Is question 15.1 relevant to your company?

Yes

15.1

Please provide data on sources of Scope 3 emissions that are relevant to your organization.

Sources of Scope 3 emissions	Metric tonnes of CO2-e	Methodology	If you cannot provide a figure for a relevant source of Scope 3 emissions, please describe the emissions.
Business travel	21261	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. We track four categories of business travel: air travel, rail travel, business travel in rental vehicles and business travel in personal vehicles. Emission factors are applied to travel data to calculate the emissions. Emission factors are referenced to the CO2 Emissions from Business Travel (Developed by World Resources Institute (WRI)	
Purchased goods & services - direct supplier emissions		See next column	We are undertaking a significant project to calculate the carbon footprint of our Canadian branch logistics infrastructure that mainly consist or delivery and courier services. The objective is to find ways to reduce the number and frequency of deliveries at branch locations in an effort to reduce costs and vehicle related environmental impacts.

15.2

Please explain why not.

Further Information

Please see attached for additional information on business travel Overall business travel was down 18% in 2009. Employee air, rail and automobile rental travel decreased on a per employee basis, while business travel in personal vehicles increased by 24% in 2009. The shift away from air and rail travel to more economic modes of transportation (automobile) can be attributed to the downturn in the economy and internal cost management efforts. Data coverage for air travel in 2009 does not include our RBTT operations in the Caribbean.

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Emissions-Scope3/RBC Comments for CDP - Business Travel.doc

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Avoided

16.1

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

Yes

16.2

Please provide details including the anticipated timescale over which the emissions are avoided, in which sector of the economy they might help to avoid emissions and their potential to avoid emissions.

ENERGY SAVER MORTGAGE
In September 2008, we launched the RBC Energy Saver Mortgage in Canada which offers a $300 rebate on a home energy audit. A home energy audit is a report generated by a licensed professional who is specially trained to examine electrical, mechanical and architectural aspects of residential homes. The audit provides recommendations to help improve a home's energy efficiency and lower its energy costs.

ENERGY SAVER LOAN
We offer clients in Canada the RBC Energy Saver Loan which helps clients create a more energy efficient home while saving on borrowing costs. By making a qualified environmentally-friendly purchase, clients can receive a 1% discount or a $100 home energy audit rebate on a fixed rate instalment loan over $5,000.

ADVICE ON GREENING YOUR HOME
RBC Home Equity partnering Canada Mortgage and Housing Corporation (CMHC) launched a Grow an Energy Efficiency Home advice centre, which shows homeowners what they can do to reduce home's energy use, from something as simple as switching to compact fluorescent light bulbs to upgrading your home's insulation, to installing a high-efficiency furnace.

ADVICE ON GREENING YOUR BUSINESS
RBC Business Financial Services launched a Greening Your Business advice centre for small business and commercial clients. The website presents numerous articles and videos on a variety of topics related to greening your business including: Managing Carbon, Conserving Water, Greening your Supply Chain, Increasing Energy Efficiency, Brownfield Development and Waste Management.

ELECTRONIC STATEMENTS
In Canada, RBC offers electronic statements for VISA, Home Equity, Royal Credit Line, Business Deposit Accounts, Day to Day Savings, Day to Day Banking, eSavings accounts, and accounts from Direct Investing and Dominion Securities. Since January 2006, over 4.7 million RBC accounts have been switched from paper statements to electronic statements. The resulting paper savings amount to approximately 980 metric tonnes of paper. Using the Environmental Defense Fund Paper Calculator, these paper savings are equivalent to nearly 28,000 trees

CARBON TRADING
In July 2008, RBC Capital Markets announced global capabilities for carbon emission trading with the establishment of a carbon trading desk. The majority of the trading volume centres around the European Union Emissions Trading Scheme (EU ETS), the largest compliance market in the world, but we have also seen a growth in trading on the North America Regional Greenhouse Gas Initiatives (RGGI), Chicago Climate Exchange (CCX) and other voluntary markets. Since the inception of the trading desk, we transacted approximately 121 million tonnes of carbon credits/allowances.

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

CLEAN ENERGY FINANCING
RBC recognizes that the clean energy sector is an emerging industry, and we see both opportunities and environmental benefits in providing credit and advisory services to this sector. This is a growing part of our business. Loans and trading lines outstanding as of October 31, 2009 included:

- Hydroelectric: $840 million to Canadian public and private companies whose primary power generation capacity is derived from water.
- Wind: $110 million to electricity producers whose primary method of power generation is wind.
- Biomass: $100 million to several biomass projects in North America, including the production of ethanol and the generation of electricity through the combustion of biowaste and landfill gas.
- Solar: $36 million to global manufacturers of thin film photovoltaic solar modules.
- Advanced energy metering: $93 million

LEED CERTIFIED AFFORDABLE HOUSING
In 2009, the RBC Tax Credit Equity Group invested US$73.7 million in the development of 10 affordable housing projects in the United States. RBC takes a 99% equity ownership position in the affordable housing projects developed under this program. The Low Income Housing Tax Credit created under the US Tax Code, allows state housing finance agencies to allocate tax credits which developers in partnerships with banks and other not-for-profit agencies bid on. The equity raised from the sale of the tax credits reduces the debt of the housing project and in exchange, the partnership restricts the rental rates and ensures the units are rented to lower income residents.

SOCIALLY RESPONSIBILE INVESTMENT PRODUCTS
Using numerous indicators for environmental, social and governance performance, socially responsible investment (SRI) funds provide clients with the assurance that responsible screening has been applied to the investment decision-making process. The screening process also includes the review of climate change related performance for carbon intensive sectors. Total assets under management for the combined SRI products were estimated to be in excess of $800 million as of October 31st, 2009.

Is question 17.1 relevant to your company?

No

17.1

Please provide your total carbon dioxide emissions in metric tonnes CO2 from the combustion of biologically sequestered carbon i.e. carbon dioxide emissions from burning biomass/biofuels.

Not applicable

17.2

Please explain why not.

Does not apply to the financial sector

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Further Information

For more information on RBC's environmental products and services please see: http://www.rbc.com/environment/what-you-can-do.html

Attachments

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Intensity

18.1a

Please describe a financial intensity measurement for the reporting year for your gross combined Scope 1 and Scope 2 emissions.

If you do not consider a financial intensity measurement to be relevant to your company, select "Not relevant" in column 5 and explain why in column 6.

Figure for Scope 1 and Scope 2 emissions	GHG units	Multiple of currency unit	Currency unit	Financial intensity metrics	Please explain if not relevant. Alternatively provide any contextual details that you consider relevant to understand the units or figures you have provided.
7.27	Metric tonnes CO2-e	Million	CAD ($)	Revenue	Revenue is a key metirc presented in the RBC Annual Report, reported at $29,106 million dollars in 2009. Our combined Scope 1 and Scope 2 emissions for 2009 are 211,562 tonnes.

18.1b

Please describe an activity-related intensity measurement for the reporting year for your gross combined Scope 1 and Scope 2 emissions.

Oil and gas sector companies are also asked to report activity-related intensity metrics in answer to table O&G1.3.

If you do not consider an activity-related intensity measurement to be relevant to your company, select "Not relevant" in column 3 and explain why in column 4.

Figure for Scope 1 and Scope 2 emissions	GHG units	Activity-related metrics	Please explain if not relevant. Alternatively provide any contextual details that you consider relevant to understand the units or figures you have provided.
2.97	Metric tonnes CO2-e	per full-time equivalent employee	2009 global full-time equivalent (FTE) employee count is 71,186
0.09	Metric tonnes CO2-e	Other: per m3 of global floor area	2009 global floor area is 2,174,131 meters squared

19.1

Do the absolute emissions (Scope 1 and Scope 2 combined) for the reporting year vary significantly compared to the previous year?

Yes

19.2

Please explain why they have varied and why the variation is significant.

Our absolute GHG emissions are higher in 2009 due to greater energy data coverage in our property portfolio. In 2009, we expanded our energy data coverage to 94% of our global floor area, compared to 65% in 2008. Our GHG emissions intensity (GHG emissions per m2) increased slightly in 2009. This increase is a result of improved data coverage for our United States locations, where the electricity supply is typically more carbon intensive (i.e. coal-fired power plants) than Canadian electricity generation.

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

20.1A

Please complete the following table indicating the percentage of reported emissions that have been verified/assured and attach the relevant statement.

Scope 1 (Q12.1)	Scope 2 (Q13.1)	Scope 3 (Q15.1)
Not verified	Not verified	Not verified

20.1B

I have attached an external verification statement that covers the following scopes:

Further Information

Attachments

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Emissions Trading

21.1

Do you participate in any emission trading schemes?

Yes

21.2

Please complete the following table for each of the emission trading schemes in which you participate.

Scheme name	Period for which data is supplied.	Allowances allocated	Allowances purchased	Verified emissions - number	Verified emissions - units	Details of ownership
	Mon 01 Jan 0001 - Mon 01 Jan 0001					

21.3

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

RBC participates in these schemes by providing risk management services to our clients. The RBC Capital Markets Emissions Trading group is participating as an advisor and trader in numerous carbon markets. Since the inception of the trading desk, RBC has transacted approximately 121 million tonnes of carbon credits/allowances. The majority of the trading volume centres around the European Union Emissions Trading Scheme (EU ETS), the largest compliance market in the world, but we have also seen a growth in trading on the North America Regional Greenhouse Gas Initiatives (RGGI), Chicago Climate Exchange (CCX) and other voluntary markets. We anticipate involvement in both the Canadian and US federal programs when they develop as well as other programs such as the Western Climate Initiative and the Ontario cap and trade program.

21.4

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

No

21.5

Please complete the following table.

Credit origination or credit purchase?	Project identification	URL link to project documentation	Verified to which standard?	Number of credits (metric tonnes of CO2-e)	Credits retired?	Purpose e.g. compliance

Further Information

RBC Capital Markets Emissions Trading Group website: https://www.rbccm.com/commodities/cid-214797.html

Attachments

Module: Climate Change Communications

Communications

22.1

Have you published information about your company's response to climate change/GHG emissions in other places than in your CDP response?

Yes

22.2

In your Annual Reports or other mainstream filing? (If so, please attach your latest publication(s).)

Yes

22.3

Through voluntary communications such as CSR reports? *(If so, please attach your latest publication(s).)*

Yes

Further Information

Please see 2009 Annual Report for discussion on environmental risks, including climate change on page 55. Please see 2009 Corporate Responsibility Report, environment section is presented on pages 45 - 54. Please see RBC Environmental Blueprint, climate change related commitments on page 5. Please see 2009 Blueprint Report Card for an update on the commitments we made in the Environmental Blueprint. Please see 2009 SOFT Footprint table for data on GHG emissions as well as other environmental metrics.

Attachments

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Communications/RBC Environmental Blueprint.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Communications/2009 RBC Annual Report.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Communications/2009 SOFT Footprint Report.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Communications/2009 RBC Corporate Responsibility Report.pdf

https://www.cdproject.net/Sites/2010/80/15980/Investor CDP 2010/Shared Documents/Attachments/InvestorCDP2010/Communications/2009 RBC Blueprint Report Card.pdf


RBC