



Climate Change 2016 Information Request Canadian Pacific Railway

Module: Introduction

Page: Introduction

CC0.1

Introduction

Please give a general description and introduction to your organization.

CP strives to be the North American rail industry leader in environmental protection. Our commitment to conduct environmentally responsible and sustainable business operations is at the core of our franchise and it is the collective responsibility of our employees to ensure that we protect our environment. Our pledge to clean operations benefits our land, our water and our air. Good environmental practices don't just make sense from a corporate responsibility perspective; they are inseparable from sound business practices.

The transportation sector accounts for the second most greenhouse gas emissions in both Canada (28%) and the United States (26%). Railways move approximately 70% of all freight on a tonne-kilometre basis in Canada but only account for 3.9% of the greenhouse gas emissions from the transportation sector. Despite this inherent efficiency, CP recognizes the importance of continuing to strive for improvements in our operations to drive down emissions of greenhouse gases.

CP is driving change as it moves through its transformational journey to become the best railroad in North America, while creating long-term value for shareholders. The company is focused on providing customers with industry leading rail service; driving sustainable, profitable growth; optimizing our assets; and reducing costs, while remaining a leader in rail safety.

CC0.2

Reporting Year

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

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

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

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

Enter Periods that will be disclosed
Thu 01 Jan 2015 - Thu 31 Dec 2015

CC0.3

Country list configuration

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

Select country
Canada
United States of America

CC0.4

Currency selection

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

USD(\$)

CC0.6

Modules

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

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net. If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Further Information

Module: Management

Page: CC1. Governance

CC1.1

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

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

CC1.1a

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

The CP Board of Directors provides oversight on responsibilities with respect to environmental issues including climate change.

The Board is provided with information on regulatory developments and emissions information with respect to climate change by the Environmental Risk group.

CC1.2

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

Yes

CC1.2a

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

| Who is entitled to benefit from these incentives? | The type of incentives | Incentivized performance indicator | Comment |
|---|------------------------|---|---|
| Corporate executive team | Monetary reward | Efficiency target | As one of their performance objectives, members of the corporate executive team are measured against the annual fuel efficiency targets which are set. These targets represent 95% of the company's Scope 1 emissions. |
| Management group | Monetary reward | Efficiency target | As one of their performance objectives, members of the Operations department are measured against the annual fuel efficiency targets which are set. These targets represent 95% of the company's Scope 1 emissions. |
| Other: Operations Employees | Monetary reward | Efficiency target Behaviour change related indicator | As one of their performance objectives, members of the Operations department are measured against the annual fuel efficiency targets which are set. These targets represent 95% of the company's Scope 1 emissions. Employees responsible for running trains are monitored for performance against specific operations practices such as the use of dynamic braking over power braking which improves fuel efficiency in train operations. Monthly notices are issued on performance to ensure continued improvement. |

Further Information

Page: CC2. Strategy

CC2.1

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

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

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

| Frequency of monitoring | To whom are results reported? | Geographical areas considered | How far into the future are risks considered? | Comment |
|-------------------------|--|-------------------------------|---|---------|
| Annually | Board or individual/sub-set of the Board or committee appointed by the Board | Canada and the United States | 3 to 6 years | |

CC2.1b

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

In the normal course of our operations, we are exposed to various climate change risks and opportunities that can have an effect on our financial condition.

As part of the preservation and delivery of value to our shareholders, we have developed an integrated Enterprise Risk Management framework to support consistent achievement of key business objectives through daily pro-active management of risk and recognition of opportunities.

Company Level:

At the company level, potential climate change risks and opportunities are identified through an interdisciplinary approach involving a number of different departments. The Environmental Risk group monitors regulatory and policy developments at the international, national and state/provincial level to identify any changes that may either affect or present opportunity for the company with respect to climate change. Other developments such as carbon taxation systems may also involve Finance, Marketing and Sales and the Enterprise Risk Management group.

Notable developments are reported bi-annually to the Board of Directors as well as other company departments as required by the Environmental Risk group.

Asset Level:

Potential physical risks associated with climate change include damage to railway infrastructure due to extreme weather effects, (e.g. increased flooding, winter storms) are identified and evaluated by Engineering. Improvements to infrastructure design and planning are used to mitigate the potential risks posed by weather events. Canadian Pacific maintains flood plans, winter operating plans, an avalanche risk management program and geotechnical monitoring of slope stability.

CC2.1c

How do you prioritize the risks and opportunities identified?

Each risk or opportunity identified is assessed and prioritized based on the potential impact and likelihood, taking account of financial, environmental, and reputational impacts, and existing management control. Risk mitigation strategies are formulated to accept, treat, transfer, or eliminate the exposure to the identified events or to take advantage of noted opportunities.

Risk assessments are conducted both at the company department level and the strategic corporate level.

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

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

i) How the business strategy has been influenced:

CP's philosophy is that effective governance involves more than policies, procedures and protocols; it must be integrated into the everyday business practices of all those who work for CP. We believe that corporate sustainability creates shareholder value. It is a part of everything we do.

Information on climate change is identified by different groups within the company and then communicated as required. Examples of how the business strategy has been influenced by climate change include: The Environmental Risk group monitors climate change related policy and regulatory developments and communicates these to senior management in potentially affected departments including Operations, Marketing and Sales, Finance and Taxation. Engineering is responsible for evaluating changes to infrastructure and the related environmental factors such as water levels, avalanche risk, storm potentials, etc. This information is then relayed to planning teams that factor in capital upgrade requirements and operating strategies. The company has a multi-year fuel intensity target that reflects 95% of our Scope 1 greenhouse gas emissions. This target is one of our corporate key performance indicators and is based on extensive analysis including the information discussed above.

ii) What aspects of climate change have influenced the strategy:

Regulatory Changes: The most influential changes in regulations related to emissions from our locomotive fleet which represent 95% of our GHG emissions. However others include the introduction of carbon taxation systems and regulatory changes that affect our customers.

Need for Adaptation: The physical risks of climate change such as natural disasters, flooding, and extreme weather events require a continuous evaluation of our 12,500 miles of track and associated infrastructure. They influence our day to day operating plans as well as our capital planning process.

Opportunities for Sustainable Business: Over 25% of national greenhouse gas emissions come from the transportation sector. The movement of freight is critical to the national economy and CP believes that rail provides a sustainable alternative to other forms such as long haul trucking. As part of our strategy we promote the fact that modal shift to rail offers shippers the opportunity to move their goods in a less carbon-intensive manner.

iii. The most important components of the short term strategy that have been influenced by climate change.

Our short term strategy looks at initiatives in the next four years.

Locomotive Fleet Renewal:

Over the past two years we have acquired 42 new EMD SD-30 locomotives and 130 new EMD SD-20 ECO locomotives to help modernize our road locomotive fleet. These locomotives use older locomotive bodies and replace the engine with one that is 15-20% more fuel efficient than their predecessors and improve air pollutant emissions as well.

Operational Strategy:

In 2015, we continued to increase the length of trains in key product groupings which helps to reduce train starts, the number of locomotives required and increases network speed and productivity. All of this results in improvements in fuel efficiency (4% improvement). A number of longer track sidings also came on line in 2015 which reduces the need for idling at train meets in single-track locations.

These initiatives all form part of our 2016 goals for network velocity and fuel efficiency.

iv) The most important components of the long term strategy that have been influenced by climate change.

Looking further ahead we continue to explore alternative fuels for locomotive operations such as liquefied natural gas as well as new locomotive technologies.

v) **Strategic advantage over competitors:** CP's main competition for freight transportation in Canada and the U.S. includes other railways, trucking and barge companies. Our focus on climate change through improvements in locomotive fuel efficiency has allowed us to present a low carbon intensive option to remain competitive with other modes of transportation. In fact, on average rail is 3-4 times more fuel efficient than truck which offers shippers an opportunity to move their products with less greenhouse gas emissions. We continue to emphasize the need to improve our operational efficiency which will allow us to maintain this advantage into the future. This involves a continual review of operational plans, locomotive fleet sizing and renewal and exploration of alternative fuels such as liquefied natural gas.

We report on our progress, challenges and future plans involving climate change through our biennial sustainability report, as well as through our company website, www.cpr.ca. Our website also includes a carbon footprint calculator that allows shippers to understand the difference in greenhouse gas emission between long haul truck and rail movements.

vi) The most substantial business decisions during the year were:

- \$1.5B in capital improvements to infrastructure to ensure an efficient network (adaptation and physical risks)
- Increased length and weight of trains to drive further efficiencies (improved fuel efficiency).

CC2.2c

Does your company use an internal price of carbon?

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

CC2.3

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

Direct engagement with policy makers
Trade associations

CC2.3a

On what issues have you been engaging directly with policy makers?

| Focus of legislation | Corporate Position | Details of engagement | Proposed legislative solution |
|----------------------|--------------------|---|---|
| Energy efficiency | Support | Canadian Pacific is participating with other Class 1 railways in the US-Canada Regulatory Cooperation Council on greenhouse gas emissions in the rail sector. This involves direct engagement with policy makers from the US EPA and Transport Canada. | Exploring voluntary agreements to cover rail sector emissions in Canada and the United States between the Canadian and U.S. governments and the rail sector as represented by the Railway Association of Canada, the Association of American Railroads and individual member companies, including Canadian Pacific. The agreement will include a railway industry target for reduction in greenhouse gas intensity. |
| Energy efficiency | Support | Canadian Pacific is participating in a voluntary memorandum of understanding (2011-2015) on reducing locomotive emissions in Canada. Canadian Pacific is an active member on both the management and technical committees (chair) under the Memorandum of Understanding. This involves direct engagement with policy makers from Transport Canada and Environment Canada. | The agreement includes a target of reducing greenhouse gas emission intensity by 6% from 2010 levels by the end of 2015. Results are expected later in 2016. |

CC2.3b

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

Yes

CC2.3c

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

| Trade association | Is your position on climate change consistent with theirs? | Please explain the trade association's position | How have you, or are you attempting to, influence the position? |
|-----------------------------------|--|--|--|
| Railway Association of Canada | Consistent | From the RAC website: "Environmental policies in Canada, at federal and provincial levels of government, are being developed in response to public demands for improved air quality, reductions in greenhouse gas (GHG) emissions and increased energy efficiency. Overall, Canada is faced with the challenge of reducing emissions growth in a highly competitive global economy. At the same time, Canada's economic strength and community wellbeing must be assured. A key component in an environmental strategy must be the role the rail sector can play in reducing emissions associated with transportation activity. Currently, the transportation sector, the largest single source of GHGs, contributes 27 per cent of GHGs produced in Canada. Rail is well positioned as a solution to reducing GHG emissions associated with transportation activities. Canada's rail business moves 70 per cent of the surface freight on a tonne-kilometer basis but produces only 3 percent of transportation sector GHGs. Canadian rail is in a unique position to meet the challenge facing Canadian communities and industries by offering environmentally sustainable transportation today and into the future. Canada must encourage and enable an effective and sustainable transportation system to serve the nation and its regions. A system that enhances movement of freight and passengers by rail and continually strengthens Canada's and competitiveness is critical to our nation's economic well-being. Canada's Rail business has made a significant contribution to environmental sustainability in the past and it is well positioned to play an important role in the future. In an effort to management locomotive emissions, the RAC and its member railways entered into a Memorandum of Understanding with Transport Canada and Environment Canada. Under this agreement, the rail industry committed to greenhouse gas (GHG) reduction targets, on an intensity basis, for Class 1 freight railways, short line freight railways, intercity passenger rail, and commuter rail as well as efforts to reduce emissions of criteria air containments. The industry is ready to continue to work with governments, communities and other private sector partners to increase the sustainability of the Canadian economy." | Canadian Pacific is actively engaged as members of the following relevant committees of the Board of Directors: Environment Committee and as the current vice-chair of the Safety and Operations Management Committee. Through our participation in these committees we are engaged directly with the association and support the position as described. |
| Association of American Railroads | Consistent | From the AAR website: "Expanded use of freight rail offers a simple, inexpensive, and immediate way to meaningfully reduce greenhouse gas emissions without harming the economy. On average, railroads are four times more fuel efficient than trucks. That means moving freight by rail instead of truck reduces greenhouse gas emissions by 75 percent. According to Environmental Protection Agency (EPA) data, freight railroads account for just 0.6 percent of U.S. greenhouse gas emissions from all sources and just 2.2 percent of emissions from transportation-related sources." | Canadian Pacific is actively engaged as a member of the Environmental Affairs Committee. Through our participation on this committee we are engaged directly with the association and support the position as described. |

CC2.3f

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

Individuals that play a role in the engagement activities mentioned are responsible for communicating all actions and policy developments to senior management within the company. Activities are also reported to the Board of Directors to ensure consistency with the company's climate change strategy.

Further Information

Page: CC3. Targets and Initiatives

CC3.1

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

Intensity target

CC3.1b

Please provide details of your intensity target

| ID | Scope | % of emissions in scope | % reduction from base year | Metric | Base year | Normalized base year emissions covered by target | Target year | Is this a science-based target? | Comment |
|------|---------|-------------------------|----------------------------|--|-----------|--|-------------|---|---------|
| Int1 | Scope 1 | 95% | 3.78% | Other: kilograms CO2e per Thousand Gross-Ton Miles | 2014 | 11.84 | 2015 | No, but we anticipate setting one in the next 2 years | |

CC3.1c

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

| ID | Direction of change anticipated in absolute Scope 1+2 emissions at target completion? | % change anticipated in absolute Scope 1+2 emissions | Direction of change anticipated in absolute Scope 3 emissions at target completion? | % change anticipated in absolute Scope 3 emissions | Comment |
|------|---|--|---|--|---------|
| Int1 | Decrease | 3.95 | No change | | |

CC3.1e

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

| ID | % complete (time) | % complete (emissions or renewable energy) | Comment |
|------|-------------------|--|---------|
| Int1 | 100% | 100% | |

CC3.2

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

No

CC3.3

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

Yes

CC3.3a

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

| Stage of development | Number of projects | Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *) |
|---------------------------|--------------------|--|
| Under investigation | | |
| To be implemented* | 0 | |
| Implementation commenced* | 0 | |
| Implemented* | 1 | 95093 |
| Not to be implemented | | |

CC3.3b

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

| Activity type | Description of activity | Estimated annual CO2e savings (metric tonnes CO2e) | Scope | Voluntary/Mandatory | Annual monetary savings (unit currency - as specified in CC0.4) | Investment required (unit currency - as specified in CC0.4) | Payback period | Estimated lifetime of the initiative | Comment |
|-----------------------|--|--|---------|---------------------|---|---|----------------|--------------------------------------|--|
| Transportation: fleet | CP's Fuel Conservation Program includes a number of initiatives aimed at improving fuel efficiency and as a result reducing greenhouse gas emissions associated with our operations. In 2015 this included 57 older, less fuel efficient locomotives being declared surplus, as well as long term storage of over 600 locomotives. Preference is thereby given to the most fuel efficient locomotives in the fleet performing the majority of the work. Operational improvements included a 3% increase in train weight, 4% increase in train length and a 17% improvement in terminal dwell which increases the fluidity of the network and reduces fuel consumption. | 95093 | Scope 1 | Voluntary | 93000000 | | 1-3 years | Ongoing | Due to the competitive nature of this information, we do not feel comfortable releasing investment aspects of the initiatives. |

CC3.3c

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

| Method | Comment |
|---|---|
| Compliance with regulatory requirements/standards | Standards for locomotive emissions are set by the US EPA in the United States and shortly by Transport Canada in Canada. These standards are the baseline and drive investment in locomotive overhaul emission kits, idle-reduction technology at purchase and other technological initiatives. |
| Dedicated budget for energy efficiency | A continuous goal of improving fuel efficiency is in place at Canadian Pacific. In order to support this goal we allocate funds for obtaining new equipment (e.g. locomotives, railcars, lubrication systems, software systems) and to promote fuel conservation programs in house. |

Further Information

Page: CC4. Communication

CC4.1

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

| Publication | Status | Page/Section reference | Attach the document | Comment |
|---|----------|------------------------|---|--|
| In mainstream reports (including an integrated report) but have not used the CDSB Framework | Complete | Pages 44,45, 57, 58 | https://www.cdp.net/sites/2016/66/2666/Climate Change 2016/Shared Documents/Attachments/CC4.1/CP Annual Report 2015.pdf | CP 2015 Annual Report: Fuel efficiency information in the report is directly applicable to 95% of our Scope 1 emissions. |
| In mainstream reports (including an integrated report) but have not used the CDSB Framework | Complete | Page 16 | https://www.cdp.net/sites/2016/66/2666/Climate Change 2016/Shared Documents/Attachments/CC4.1/cp-form-10k-2015.pdf | CP 2015 10k Filing |

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

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

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

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--------------|---|----------------------------|--------------|------------------|-------------------|---------------------|---|--|---|
| Carbon taxes | Carbon taxation systems are evolving at the provincial level in Canada. At this time, one system is in place in British Columbia and a new system is scheduled to come into place in Alberta on January 1, 2017. Paying these carbon taxes increases CP's operating costs. There is the potential that these taxes could increase in the future and programs be created in other provinces. | Increased operational cost | 1 to 3 years | Direct | Virtually certain | Medium-high | The current carbon tax in British Columbia is 7.67 cents per litre of locomotive diesel fuel consumed. Based on CP's normal annual consumption within the province this translates to an additional cost of \$15-20M per year. Based on the current rates of the Carbon Levy for Alberta's program the estimated cost to CP will be between \$5-10M per year once that program begins in 2017. Any potential increase in these charges would result in an increase in costs for fuel purchased for CP's operations. | Canadian Pacific has created a tariff that addresses the BC Carbon Tax. Through CP tariff 9800, we require that all freight customers, with the exception of CTA regulated grain movements, pay a carbon tax surcharge per mile or container for movements within the province of British Columbia. Carload customers are charged 4.2 cents per mile while Intermodal customers are charged based on each unit that is shipped within the boundaries of BC dependant on the size of the unit and the distance it travels. Long distance (250 miles or more): \$5.48 per twenty foot equivalent unit (TEU) Short haul (<250 miles): \$1.58 per TEU. As the carbon tax has not changed since 2012, these amounts were still valid in 2015. An approach to manage the Carbon Levy in Alberta is still under investigation. In 2015, CP held discussions with officials in Alberta on the setting of the | The cost of management involves the manpower and IT costs to collect the carbon tax surcharge as outlined as well as monitoring regulatory changes. |

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--|--|----------------------------|--------------|------------------|----------------------|---------------------|---|--|---|
| | | | | | | | | carbon levy, in particular the different rate for locomotive diesel versus road and off-road diesel. CP also continues to monitor any regulatory developments with respect to an increase in the carbon tax and potential developments in other provinces. | |
| Uncertainty surrounding new regulation | CP is not currently regulated in Canada or the United States on emissions of greenhouse gases from locomotive operations. A potential regulation could take the form of a cap, mandatory emission intensity levels or other similar requirement. This would have a direct impact the cost of delivering freight service to our customers. It could potentially require Canadian Pacific to implement costly modifications or purchase newly designed locomotives or alternative fuels. | Increased operational cost | 3 to 6 years | Direct | More likely than not | High | The financial implications of such a regulatory instrument are difficult to forecast without specific details. Potential impacts could range from simple modifications to existing approaches which may not increase the cost of business to the requirement for new locomotive designs, fuel types and associated infrastructure which could potentially result in costs in the billions. As an example, in 2015 the cost differential between ultra-low sulphur diesel and B5 was 15-20 cents per US gallon. Based on 2015 fuel consumption this would translate to a \$40-50M increase not including the loss in energy content between the two fuels. | CP Environmental Risk personnel monitor developments in locomotive emission regulations and are in regular contact with regulators in both Canada and the US on this matter. CP is actively participating in the development of a voluntary agreement on greenhouse gas emission from the rail sector with Transport Canada and the US EPA which would include an intensity target to be achieved within five years. By participating in this process we are better able to inform the process to ensure there is a balance between improvements in emissions and the cost of achieving those improvements. CP continued this participation in 2015 as part of the Regulatory Cooperation Council. | The cost of management involves work time and traveling costs to participate in discussions with the regulatory agencies for one FTE in the Environmental Risk group. |
| Cap and trade schemes | Cap and trade schemes have been developed or are in the process of being implemented in two jurisdictions in which CP operates: Ontario and Quebec. These programs are expected to represent an increased operating cost for the company due to the amount of fuel consumed in these locations for locomotive operations. | Increased operational cost | 1 to 3 years | Direct | Likely | Medium | Current estimates of the financial implications of these programs are approximately \$10M per year between the two provinces based on normal fuel consumption. | CP has been working with fuel vendors in Quebec on the possibility of a refund in 2015 due to the fact that a portion of the fuel was consumed outside the province. Management and application of these provincial cap and trade programs is being further investigated and developed within the company. | At this time the costs associated with management are minimal, however as the full scope of these programs develops it is anticipated that costs will increase. |

CC5.1b

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

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|-------------|-------------|------------------|-----------|------------------|------------|---------------------|----------------------------------|-------------------|--------------------|
| | | | | | | | | | |

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|---|---|---|------------------|-------------------------|-------------------|----------------------------|--|--|---|
| Change in precipitation extremes and droughts | This is both a current and anticipated risk for CP which is felt throughout the network but focused in floodplains or in areas that present unique risks such as snow avalanche, landslide or subgrade failure. Experience over the past several years has shown the impact of these natural events and their capacity to affect CP's operations. Flood events such as those seen in Calgary in 2013 can shut down the rail line for extended periods of time, require complete track replacements, and increase the risk of derailments. Significant flooding was experienced in Iowa, Saskatchewan and Ontario in 2014. | Reduction/disruption in production capacity | Up to 1 year | Direct | Very likely | High | In June 2013, both of CP's main routes to the Western Canadian ports were out of service due to flooding. Floods resulted in more than 40 washouts over a four-day period of historic flooding in Calgary and Southern Alberta. Flooding in Saskatchewan in 2014 resulted in line outages and other related delays. Using past floods as a predictor of future potential cost, without adaptive measures to manage this risk, major outages on the main line due to flooding can significantly affect revenues. The 2013 floods resulted in a decline in revenues in the quarter of 2% (\$25M), which serves as an estimate for future floods. | Improvements to infrastructure design and planning are used to mitigate the potential risks posed by weather events. The Company maintains flood plans, winter operating plans, an avalanche risk management program and geotechnical monitoring of slope stability. Post-flood projects were completed in 2013 and 2014 to improve slope stability and armouring on the Bow River in Southern Alberta. In 2015, numerous slope and bridge assessment and improvement projects took place to improve flood resistance and decrease the chance of slope failures or bridge scour. The chance of and location of anticipated flooding is reviewed as the flood season approaches. Notifications are sent to the field to mobilize response resources and to move equipment out of flood-prone areas in advance as part of CP's flood plan. | Upgrading the network rail infrastructure is the most significant cost associated with this particular risk. Spending ranges from \$500-800M per year on this infrastructure. |
| Change in temperature extremes | Extreme temperatures represent risks to railway infrastructure at CP. Track buckling, unacceptable levels of rail movement, increased frequency of broken rails, frozen switches and resulting need to replace track and equipment more frequently are all possible outcomes. Several of these can result in derailments or other incidents requiring | Reduction/disruption in production capacity | Up to 1 year | Direct | Very likely | High | The most likely financial implication due to extreme temperatures is due to the increased risk of derailments which carry the cost of recovery and clean-up as well as disruption of operations and impact on reputation. In 2015, CP experienced instances of extreme temperatures on portions of the network. These temperatures were not known in advance as local weather | Track infrastructure is monitored on a regular basis both visually by our track inspection personnel but also through newer scanning technology that we have been acquiring over the last number of years. Such technology includes track evaluation cars, hi-rail trucks that measure track geometry and rail wear and ultrasonic rail detection. This technology identifies defects prior to in-service failure. Other wayside | Upgrading the network rail infrastructure is the most significant cost associated with this particular risk. Spending ranges from \$500-800M per year on this infrastructure. |

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|-------------|--|------------------|-----------|------------------|------------|---------------------|---|---|--------------------|
| | shutdown of portions of the network exposing the company to financial risks. | | | | | | forecasting capabilities had not predicted the full range of temperature that was eventually experienced. | technology is being acquired and installed to identify issues at the point of the wheel/rail interaction. Hotbox detectors along the rail network also record the ambient temperature at the rail surface. Work is underway to allow this information to be used more centrally in train operations planning. Extreme weather plans (Winter/Summer Plans) are built around the worst case scenarios for each season. They include potential changes to train design and infrastructure inspections. | |

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|---------------|---|-----------------------------------|--------------|-------------------|-------------|---------------------|---|--|---|
| Other drivers | CP is exposed to commodity risk related to purchases of diesel fuel and the potential reduction in net income due to changes in the price of diesel. Fuel expense constitutes a large portion of our operating costs and volatility in diesel fuel prices can have a significant impact on income. Items affecting volatility in diesel prices include, but are not limited to, fluctuations in world markets for crude oil and distillate fuels, which can be affected by supply disruptions, geopolitical events and climate change related developments. | Increased operational cost | Up to 1 year | Direct | Very likely | High | Fluctuations in fuel prices affect the Company's results because fuel expense constitutes a significant portion of CP's operating costs. As fuel prices fluctuate, there will be a timing impact on earnings. In 2015, the impact of lower fuel prices resulted in a decrease in total revenues of \$334 million and a decrease in total operating expenses of \$403 million. | CP employs a fuel cost recovery program designed to automatically respond to fluctuations in fuel prices and help mitigate the financial impact of rising fuel prices. Fuel surcharge revenue is earned on individual shipments; as such, our fuel surcharge revenue is a function of our freight volumes. In addition, we manage fuel expenditures through a continual focus on fuel efficiency programs in our operating plan. In 2015 this involved retiring 57 older less fuel efficient locomotives and placing over 600 locomotives in long-term storage, favouring the newest most fuel-efficient locomotives in the fleet. | The short-term volatility in fuel prices may adversely or positively impact expenses and revenues due to fuel surcharge revenue as described. |
| Other drivers | As a Class 1 rail carrier, CP is required to accept products for shipment that are offered for transportation under common carrier obligations. | Reduced demand for goods/services | Up to 1 year | Indirect (Client) | Likely | High | CP's coal business represented approximately 9.8% (\$639M) of total freight revenues in 2015, while crude oil was approximately | There are inherent limitations to the ability to manage any reputational risks due to the company's common carrier obligations. The risk of future reductions in the | Potential costs of management would include the need to build new track or yard infrastructure to offer services to new customers. |

| Risk driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|-------------|---|------------------|-----------|-----------------|------------|---------------------|--|---|--------------------|
| | Certain products such as crude oil and thermal coal can present both reputation and longer-term economic risks. Environmental policy changes and public interest are expected to increase the pressure to reduce the use of these types of products which can impact these lines of business. | | | | | | 6% (\$393M). Reduction in the demand for these products or policy changes that restrict their use will affect these lines of business for the company. | volumes of these products is managed in part through the diversification of our service offering and offset more recent commitment to increasing revenues through identifying new business lines. | |

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

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

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

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

| Opportunity driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|-----------------------------|---|--------------------------------|--------------|-----------------|-------------|---------------------|--|---|--|
| Renewable energy regulation | The introduction of renewable fuel mandates in Canada and the United States has developed and continues to develop opportunities for the movement of renewable fuels on rail for CP which will increase demand for CP's services or potentially create demand for new business. | New products/business services | 1 to 3 years | Direct | Very likely | Medium | The increased demand for renewable fuels due to regulatory requirements has led to crude by rail services has led to sustained increases in revenues associated with these fuels. In 2015, biofuel revenues for CP were approximately \$110M in the US, an increase of \$3M over 2014. | CP Marketing and Sales proactively works with potential biofuel customers on a regular basis and we have strategically located personnel in key regions. Our rail line is situated in several active regions in the US Midwest. | There are no significant costs to managing this opportunity. |

CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

| Opportunity driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--------------------|---|---|--------------|-----------------|-------------------|---------------------|---|---|--|
| Reputation | We consider our inherent carbon intensity advantage over other surface modes such as long-haul truck to be a significant opportunity to increase revenues in particular portions of the | Increased demand for existing products/services | Up to 1 year | Direct | Virtually certain | Medium-high | Based on 2015 revenues, Each 1% increase in intermodal business could contribute \$13-15M in additional revenues for the company. | This opportunity is managed through a renewed approach to marketing and sales within the company. Efforts have been made to improve efficiency for intermodal routes and to reduce the cycle times as a | Main costs associated with the opportunity include multi-million dollar improvements to intermodal facilities and improvements in IT systems to provide better tools for existing and potential customers. These |

| Opportunity driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--------------------|--|------------------|-----------|------------------|------------|---------------------|----------------------------------|---|--|
| | business, most notably intermodal services. A significant amount of national greenhouse gas emissions come from the transportation sector (roughly 30%), however freight rail only contributes 2-4% of that sector as a whole, despite moving a large amount of surface freight. Customers are continually looking at ways to improve on their carbon footprint in their supply chain which provides an advantage to CP through an increased demand for our freight service. | | | | | | | means of making the service more attractive to potential customers. Commissions for sales staff are being increased in frequency from bi-annual to quarterly to monthly in an attempt to incentivize increasing sales. In 2015, we also reviewed and updated our greenhouse gas calculator as a tool for Marketing and Sales to use in attracting business from long-haul trucking to intermodal by showing the potential for greenhouse gas savings. | improvements were part of \$259M spent on IT and building/facility upgrades in 2015. |

CC6.1e

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

The expected changes in physical climate parameters may indeed present some opportunities on a regional basis due to long term changes in land productivity, notably in the agricultural sector, however these will be offset by similar changes in other regions where productivity will decrease due to increased temperatures and reduced water availability. As a result the company does not expect substantive opportunities due to the changes in physical climate parameters.

Further Information

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

Page: CC7. Emissions Methodology

CC7.1

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

| Scope | Base year | Base year emissions (metric tonnes CO2e) |
|--------------------------|-----------------------------------|--|
| Scope 1 | Sun 01 Jan 2012 - Mon 31 Dec 2012 | 3399665 |
| Scope 2 (location-based) | Sun 01 Jan 2012 - Mon 31 Dec 2012 | 104853 |
| Scope 2 (market-based) | | |

CC7.2

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

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

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Not applicable

CC7.3

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

| Gas | Reference |
|-----|-----------|
| | |

| Gas | Reference |
|---------------------|---|
| CO2 | IPCC Fifth Assessment Report (AR5 - 100 year) |
| CH4 | IPCC Fifth Assessment Report (AR5 - 100 year) |
| N2O | IPCC Fifth Assessment Report (AR5 - 100 year) |
| HFCs | IPCC Fifth Assessment Report (AR5 - 100 year) |
| Other: HCFCs (R-22) | IPCC Fifth Assessment Report (AR5 - 100 year) |

CC7.4

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

| Fuel/Material/Energy | Emission Factor | Unit | Reference |
|----------------------|-----------------|------|-----------|
|----------------------|-----------------|------|-----------|

Further Information

Emission Factors for CC7.4 attached.

Attachments

[https://www.cdp.net/sites/2016/66/2666/Climate Change 2016/Shared Documents/Attachments/ClimateChange2016/CC7.EmissionsMethodology/CP Emission Factors \(2015\).xlsx](https://www.cdp.net/sites/2016/66/2666/Climate%20Change%202016/Shared%20Documents/Attachments/ClimateChange2016/CC7.EmissionsMethodology/CP%20Emission%20Factors%20(2015).xlsx)

Page: CC8. Emissions Data - (1 Jan 2015 - 31 Dec 2015)

CC8.1

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

Financial control

CC8.2

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

3093432

CC8.3

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

Yes

CC8.3a

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

| Scope 2, location-based | Scope 2, market-based (if applicable) | Comment |
|-------------------------|---------------------------------------|---------|
| 52353 | | |

CC8.4

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

Yes

CC8.4a

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

| Source | Relevance of Scope 1 emissions from this source | Relevance of location-based Scope 2 emissions from this source | Relevance of market-based Scope 2 emissions from this source (if applicable) | Explain why the source is excluded |
|---|---|--|--|---|
| Purchased electricity in leased space. | No emissions from this source | Emissions are not relevant | | Data not available. Emissions are anticipated to account for less than 1% of total Scope 2 emissions. |
| Halocarbon emission from US Operations | Emissions are not relevant | No emissions from this source | | Data not currently being collected as part of US operations, emissions are anticipated to account for less than 0.001% of total Scope 1 emissions. |
| Propane consumption from US operations. | Emissions are not relevant | No emissions from this source | | Data was unreliable and therefore excluded. It is anticipated to reflect less than 0.1% of total Scope 1 emissions. |
| Non-contract off-road fuel consumption | Emissions are not relevant | No emissions from this source | | Gasoline and diesel purchased locally by facilities not under corporate contracts are not currently tracked and are therefore not included. Expected volumes would represent less than 0.1% of total Scope 1 emissions. |

CC8.5

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

| Scope | Uncertainty range | Main sources of uncertainty | Please expand on the uncertainty in your data |
|-------|-------------------|-----------------------------|---|
| | | | |

| Scope | Uncertainty range | Main sources of uncertainty | Please expand on the uncertainty in your data |
|--------------------------|---|--|--|
| Scope 1 | More than 2% but less than or equal to 5% | Data Gaps Assumptions | Carbon dioxide emissions for locomotive fuel which comprise 96% of overall scope 1 emissions were calculated assuming no biodiesel content, unless known. In reality the biodiesel content will vary from 0 to 5%, however the specific percentages are not provided by fuel suppliers. The result will be that carbon dioxide emissions for locomotive fuel will be 2-5% higher on average and the corresponding biological carbon dioxide emissions are 2-5% lower as reported. The methane and nitrous oxide emissions would be unaffected by this issue. Small volumes of off-road fuels (gasoline and diesel) are not included in the analysis as purchases are made directly and volumes not recorded. As stated the emissions would represent less than 0.1% of total Scope 1 emissions. Certain sources of off-road diesel are used in mixed service as far as the equipment consuming the fuel. Emissions were assumed to be for off-road mobile equipment in order to perform calculations. However it can be used for smaller equipment as well such as chainsaws, generators, etc. These volumes would be expected to be very small and the different in emission factor minimal thus resulted in a negligible impact on the overall reported total. |
| Scope 2 (location-based) | More than 2% but less than or equal to 5% | Data Gaps Metering/ Measurement Constraints | Scope 2 purchased electricity is based on monthly billing records collected and summarized by a third party vendor. Not all billing is collected in this manner which then represents an under-reporting situation. This billing is anticipated to represent less than 5% of purchased electricity. |
| Scope 2 (market-based) | | | |

CC8.6**Please indicate the verification/assurance status that applies to your reported Scope 1 emissions**

Third party verification or assurance process in place

CC8.6a**Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements**

| Verification or assurance cycle in place | Status in the current reporting year | Type of verification or assurance | Attach the statement | Page/section reference | Relevant standard | Proportion of reported Scope 1 emissions verified (%) |
|--|---|-----------------------------------|---|------------------------|-------------------|---|
| Annual process | Underway but not complete for reporting year – previous statement of process attached | Reasonable assurance | https://www.cdp.net/sites/2016/66/2666/Climate Change 2016/Shared Documents/Attachments/CC8.6a/078384-RPT-6-Verification Report.pdf | PDF Pages 24-27 | ISO14064-3 | 100 |

CC8.7**Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures**

Third party verification or assurance process in place

CC8.7a**Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements**

| Location-based or market-based figure? | Verification or assurance cycle in place | Status in the current reporting year | Type of verification or assurance | Attach the statement | Page/Section reference | Relevant standard | Proportion of reported Scope 2 emissions verified (%) |
|--|--|---|-----------------------------------|---|------------------------|-------------------|---|
| Location-based | Annual process | Underway but not complete for reporting year – previous statement of process attached | Reasonable assurance | https://www.cdp.net/sites/2016/66/2666/Climate Change 2016/Shared Documents/Attachments/CC8.7a/078384-RPT-6-Verification Report.pdf | PDF Pages 24-27 | ISO14064-3 | 100 |

CC8.8**Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2**

| Additional data points verified | Comment |
|---------------------------------|---------|
| No additional data verified | |

CC8.9**Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

Yes

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

708.2

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

CC9.1

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

Yes

CC9.1a

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

| Country/Region | Scope 1 metric tonnes CO2e |
|--------------------------|----------------------------|
| Canada | 2294231.8 |
| United States of America | 799200.7 |

CC9.2

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

By GHG type
By activity

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

| GHG type | Scope 1 emissions (metric tonnes CO2e) |
|--------------|--|
| CO2 | 2818792 |
| CH4 | 4496 |
| N2O | 269980 |
| HFCs | 47.9 |
| Other: HCFCs | 264.1 |

CC9.2d

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

| Activity | Scope 1 emissions (metric tonnes CO2e) |
|-----------------------|--|
| Locomotive Operations | 2952742 |
| On-Road Vehicle Fleet | 52029 |
| Off-Road Equipment | 57742 |
| Heating Oil | 456 |
| Propane (Canada) | 3663 |
| Natural Gas (Heating) | 26537 |
| Halocarbons | 264.1 |

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

CC10.1

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

Yes

CC10.1a

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

| Country/Region | Scope 2, location-based (metric tonnes CO2e) | Scope 2, market-based (metric tonnes CO2e) | Purchased and consumed electricity, heat, steam or cooling (MWh) | Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh) |
|--------------------------|--|--|--|--|
| Canada | 32516.01 | | 200429.42 | 0 |
| United States of America | 19836.93 | | 28523.83 | 0 |

CC10.2

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

Further Information

Page: CC11. Energy

CC11.1

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

More than 15% but less than or equal to 20%

CC11.2

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

| Energy type | Energy purchased and consumed (MWh) |
|-------------|-------------------------------------|
| Heat | 0 |
| Steam | 0 |
| Cooling | 0 |

CC11.3

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

11306720

CC11.3a

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

| Fuels | MWh |
|----------------|-----------|
| Biodiesels | 95.5 |
| Biogasoline | 936.1 |
| Diesel/Gas oil | 11012652 |
| Motor gasoline | 125208.2 |
| Natural gas | 150986.02 |
| Propane | 16842 |

CC11.4

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

| Basis for applying a low carbon emission factor | MWh consumed associated with low carbon electricity, heat, steam or cooling | Comment |
|---|---|---------|
| No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor | | |

CC11.5

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

| Total electricity consumed (MWh) | Consumed electricity that is purchased (MWh) | Total electricity produced (MWh) | Total renewable electricity produced (MWh) | Consumed renewable electricity that is produced by company (MWh) | Comment |
|----------------------------------|--|----------------------------------|--|--|---------|
| 228953.25 | 228953.25 | 0 | 0 | 0 | |

Further Information

Page: CC12. Emissions Performance

CC12.1

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

Decreased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

| Reason | Emissions value (percentage) | Direction of change | Please explain and include calculation |
|---|------------------------------|---------------------|--|
| Emissions reduction activities | 3 | Decrease | Total Scope 1/2 emissions in 2014: 3,145,785.42 metric tonnes Total Scope 1/2 emissions in 2015: 3,280,987 metric tonnes Difference (Change in Emissions): 135,201 metric tonnes 95% (Attributable to locomotive operations) = 128,441 metric tonnes Represents 3% decrease in locomotive fuel and greenhouse gas emissions. Full amount attributable to locomotive fuel conservation program at CP. |
| Divestment | | | |
| Acquisitions | | | |
| Mergers | | | |
| Change in output | | | |
| Change in methodology | | | |
| Change in boundary | | | |
| Change in physical operating conditions | | | |

| Reason | Emissions value (percentage) | Direction of change | Please explain and include calculation |
|--------------|------------------------------|---------------------|--|
| Unidentified | | | |
| Other | | | |

CC12.1b

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

Location-based

CC12.2

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

| Intensity figure = | Metric numerator (Gross global combined Scope 1 and 2 emissions) | Metric denominator: Unit total revenue | Scope 2 figure used | % change from previous year | Direction of change from previous year | Reason for change |
|--------------------|--|--|---------------------|-----------------------------|--|---|
| 0.00047 | metric tonnes CO2e | 6712000000 | Location-based | 5.43 | Decrease | Revenues increased by 1.4% and the corporate fuel efficiency improvements due to emission reduction activities were approximately 3% resulting in less GHG emissions. |

CC12.3

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

| Intensity figure = | Metric numerator (Gross global combined Scope 1 and 2 emissions) | Metric denominator | Metric denominator: Unit total | Scope 2 figure used | % change from previous year | Direction of change from previous year | Reason for change |
|--------------------|--|----------------------------------|--------------------------------|---------------------|-----------------------------|--|--|
| 21.5 | metric tonnes CO2e | Other: Million revenue ton-miles | 146232 | Location-based | 1.77 | Decrease | 3% improvement in fuel efficiency of rail operations due to emission reduction activities. |

Further Information

Page: [CC13. Emissions Trading](#)

CC13.1

Do you participate in any emissions trading schemes?

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

CC13.2

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

No

Further Information

Page: [CC14. Scope 3 Emissions](#)

CC14.1

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

| Sources of Scope 3 emissions | Evaluation status | metric tonnes CO2e | Emissions calculation methodology | Percentage of emissions calculated using data obtained from suppliers or value chain partners | Explanation |
|------------------------------|------------------------------|--------------------|-----------------------------------|---|---|
| Purchased goods and services | Relevant, not yet calculated | | | | Information is not collected in a form that allows for calculation of emissions at this time. |
| Capital goods | Relevant, not yet calculated | | | | Information is not collected in a form that allows for calculation of emissions at this time. |

| Sources of Scope 3 emissions | Evaluation status | metric tonnes CO2e | Emissions calculation methodology | Percentage of emissions calculated using data obtained from suppliers or value chain partners | Explanation |
|---|------------------------------------|--------------------|--|---|---|
| Fuel-and-energy-related activities (not included in Scope 1 or 2) | Relevant, not yet calculated | | | | Information is not collected in a form that allows for calculation of emissions at this time. |
| Upstream transportation and distribution | Relevant, not yet calculated | | | | Information is not collected in a form that allows for calculation of emissions at this time. |
| Waste generated in operations | Relevant, not yet calculated | | | | Information is not collected in a form that allows for calculation of emissions at this time. |
| Business travel | Relevant, calculated | 19517 | Air Travel: Data on flight lengths are obtained from the corporate travel agent. This information is then classified into domestic, short and long haul and corresponding emission factors from the UK Department for Environment, Food and Rural Affairs (2015) are used to calculate the total GHG emissions. Air Travel (2015): 4,745 metric tonnes of CO2e. Car Rentals: The total mileage of each class of rental vehicle is provided by our third party travel management company. Then using the average km/L for that class, the litres of fuel consumed is derived and multiplied by the corresponding country emission factor for road gasoline. Car Rentals (2015): 1113.3 metric tonnes of CO2e. Hotel Accommodations: Total hotel nights are obtained from our third party travel management company and then multiplied by an average emission factor for all hotel types obtained from "Hotel Energy and Carbon Efficiency Report, Brighter Planet (2012). Hotel Accommodations (2014): 13,659 metric tonnes of CO2e. | | |
| Employee commuting | Not relevant, explanation provided | | | | The contribution of this item is expected to be insignificant in comparison to other Scope 3 emissions such as business travel. |
| Upstream leased assets | Not relevant, explanation provided | | | | CP does not have any relevant upstream leased assets. |
| Downstream transportation and distribution | Relevant, not yet calculated | | | | Information is tracked but associated emissions have not been calculated. |
| Processing of sold products | Not relevant, explanation provided | | | | CP is a railway freight service provider and does not sell any products. |
| Use of sold products | Not relevant, explanation provided | | | | CP is a railway freight service provider and does not sell any products. |
| End of life treatment of sold products | Not relevant, explanation provided | | | | CP is a railway freight service provider and does not sell any products. |
| Downstream leased assets | Not relevant, explanation provided | | | | CP does not have any relevant downstream leased assets. |
| Franchises | Not relevant, explanation provided | | | | CP does not have any franchises. |
| Investments | Not relevant, explanation provided | | | | Not anticipated to be material. |
| Other (upstream) | Not relevant, explanation provided | | | | No material items in this category. |
| Other (downstream) | Not relevant, explanation provided | | | | No material items in this category. |

CC14.2

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

Third party verification or assurance process in place

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

| Verification or assurance cycle in place | Status in the current reporting year | Type of verification or assurance | Attach the statement | Page/Section reference | Relevant standard | Proportion of reported Scope 3 emissions verified (%) |
|--|---|-----------------------------------|---|------------------------|-------------------|---|
| Annual process | Underway but not complete for reporting year – previous statement of process attached | Reasonable assurance | https://www.cdp.net/sites/2016/66/2666/Climate Change 2016/Shared Documents/Attachments/CC14.2a/078384-RPT-6-Verification Report.pdf | Page 24-27 | ISO14064-3 | 100 |

CC14.3

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

Yes

CC14.3a

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

| Sources of Scope 3 emissions | Reason for change | Emissions value (percentage) | Direction of change | Comment |
|------------------------------|-------------------------------|------------------------------|---------------------|---------|
| Business travel | Other: Reduction in employees | 2.34 | Decrease | |

CC14.4

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

Yes, our customers

CC14.4a

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

Method of Engagement: Customers approach our customer account managers who in turn work with the Environmental Risk group to provide information on our climate change program and initiatives. Either a member of the Environmental Risk group or the customer account manager will also present the information directly to the customer at their offices.

Strategy for Prioritization: Prioritization is based on demand from customers

Measures of Success: Measured based on timely response and any feedback received from the customer.

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

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

| Name | Job title | Corresponding job category |
|-------------|-----------------------------------|------------------------------------|
| Ken Roberge | Manager, Environment & Regulatory | Environment/Sustainability manager |

Further Information

CDP: [D][-,][D2]