



POWER FINANCIAL
CORPORATION

CARBON
DISCLOSURE
PROJECT
2017

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CARBON DISCLOSURE PROJECT 2017

INTRODUCTION

cco.1

Power Financial Corporation (hereinafter “Power Financial” or the “Corporation”) is a diversified international management and holding company with interests in companies in the financial services and other business sectors.

Financial Services (approx. 99% of assets)

Power Financial holds substantial interests in the financial services industry through its controlling interest in each of Great-West Lifeco Inc. and IGM Financial Inc. (our major publicly traded subsidiaries).

Great-West Lifeco is an international financial services holding company with interests in life insurance, health insurance, retirement and investment services, asset management and reinsurance businesses. The company has operations in Canada, the United States, Europe and Asia through The Great-West Life Assurance Company, London Life Insurance Company, The Canada Life Assurance Company, Irish Life Group Limited, Great-West Life & Annuity Insurance Company (Great-West Financial) and Putnam Investments, LLC.

IGM Financial is one of Canada’s premier personal financial services companies, and one of the country’s largest managers and distributors of mutual funds and other managed asset products, serving the financial needs of Canadians through multiple distinct businesses including Investors Group Inc., Mackenzie Financial Corporation and Investment Planning Counsel Inc.

Together, Power Financial’s investments in the financial services sector represent approx. 99% of its consolidated assets.

Other Business Sectors (approx. 1% of assets)

Power Financial and the Frère Group of Belgium each hold a 50% interest in Parjointco N.V., which holds their interest in Pargesa Holding SA, a publicly traded Swiss company with indirect interests in companies based in Europe held through its publicly traded affiliated company, Groupe Bruxelles Lambert (GBL). Power Financial’s effective interest in these companies is as follows: Imerys – mineral-based specialties for industry (7.48%); LafargeHolcim – cement, aggregates and concrete (1.31%); SGS SA – testing, inspection and certification services (2.25%); adidas – design and distribution of sportswear (1.04%); Pernod Ricard – wines and spirits (1.04%); Umicore, NV/SA – materials technology and recycling (2.36%); and Total SA – oil, gas and alternative energies (0.10%).

Power Financial has a deeply rooted tradition of acting in a responsible and ethical manner. We remain committed to continuing to reduce our impact on the environment, while working with our group companies as a supportive shareholder in connection with the energy and carbon management strategies they establish and implement.

Power Financial reports its carbon inventory using a financial control consolidation approach. Where financial control exists (as defined in Power Financial’s financial statements), the Scope 1, 2 and 3 emissions reported by Great-West Lifeco and IGM Financial have been rolled up. Throughout our response to the CDP, we make reference to the activities of our group companies. Many of these companies have filed their own response to the CDP questionnaire, including our major publicly traded subsidiaries, Great-West Lifeco and IGM Financial. Where applicable, please refer to these companies’ CDP responses for more detailed information.

REPORTING YEAR

CC0.2

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

01/01/2016 - 12/31/2016

CURRENCY SELECTION

CC0.4

Please select the currency in which you would like to submit your response. All financial information contained in the response (questions CC3.3b and CC12.2) should be in this currency.

Currency

CAD (\$)

CC0.5

Please select if you wish to complete a shorter information request.

No

MANAGEMENT



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Group and Individual Responsibility

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.

Responsibility for climate change has been assigned at the Board level to the Governance and Nominating Committee of the Board of Directors. The Committee is responsible for reviewing the Corporation's progress on Corporate Social Responsibility (CSR), which includes relevant climate change topics. These reviews are conducted at least annually.

The Corporation's President and Chief Executive Officer (CEO) provides strategic oversight on matters relating to carbon and energy management.

The Vice-President, General Counsel and Secretary is the appointed CSR Lead and has direct responsibility for overseeing efforts being taken to minimize the energy and carbon impacts at the holding company, as well as monitoring the progress being made by our group companies. The CSR Lead reports to the President and CEO on these matters, as well as to the Governance and Nominating Committee of the Board of Directors.

Individual Performance

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
Chief Financial Officer, Great-West Lifeco	Recognition (non-monetary)	Emissions reduction target	Incentives for the management of climate change issues are provided by our subsidiary Great-West Lifeco to its Deputy Chief Financial Officer. He has annual objectives that include oversight on the company's CSR initiatives, including activities being undertaken to achieve their carbon reduction target.
Vice-President, Corporate Properties, Great-West Lifeco	Monetary reward	Emissions reduction target	Monetary incentives for the management of climate change issues are provided by our subsidiary Great-West Lifeco to its Vice-President, Corporate Properties. His variable compensation bonus structure includes executing on initiatives to achieve their carbon reduction target.
Corporate Executive Team, Great-West Lifeco	Monetary reward	Other: Climate change-related risks in the reinsurance business	Monetary incentives are provided by our subsidiary Great-West Lifeco to its leadership property catastrophe team for identifying optimal property catastrophe cover retrocession reinsurance opportunities within defined criteria and considering exposure to property risks, including physical climate parameters.
CSR Committee members, Great-West Lifeco	Recognition (non-monetary)	Emissions reduction target	Incentives for the management of climate change issues are provided by our subsidiary Great-West Lifeco to its CSR Committee members. They have annual objectives related to executing on the company's CSR initiatives, including activities being undertaken to achieve their carbon reduction target.

CC1.2a Please provide further details on the incentives provided for the management of climate change issues. (continued)

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Facility Managers, GWL Realty Advisors	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Environmental criteria included in purchases	Monetary incentives for the management of climate change issues are provided by our subsidiary Great-West Lifeco to the corporate property managers at its subsidiary GWL Realty Advisors Inc. on achieving Building Owners and Managers Association's (BOMA) BEST® certifications, which align with Great-West Lifeco's energy and carbon reduction objectives, and include sustainable procurement considerations. Various property managers of Great-West Lifeco are also incentivized through their annual bonus structures for progress being made towards energy reduction targets at its buildings.
Corporate Executive, IGM Financial	Monetary reward	Emissions reduction project Emissions reduction target Behaviour change related indicator	Incentives for the management of climate change issues are provided by our subsidiary IGM Financial to the Senior Vice-President and Treasurer. His annual objectives include integrating climate-related considerations into the company's Corporate Responsibility (CR) strategy and initiatives as well as efforts to disclose and report carbon and energy management performance.
Property Managers, IGM Financial	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	Incentives for the management of climate change issues are provided by our subsidiary IGM Financial to the Property Managers and their leaders at its operating companies. The Property Managers are incentivized for progress on achieving BOMA BEST® and Leadership in Energy and Environmental Design (LEED®) certifications at their corporate properties. Their objectives also include addressing climate-related issues in building operations. These incentives align with IGM Financial's carbon reduction targets of 40% by 2020 and 50% by 2036 for Scope1 and 2 emissions (based on 2013).
Environment/Sustainability managers, IGM Financial	Monetary reward	Emissions reduction project Emissions reduction target Behaviour change related indicator	Incentives for the management of climate change issues are provided by our subsidiary IGM Financial to the Vice-President, Finance & Corporate Responsibility and the Manager, Corporate Responsibility. Their annual objectives include: integrating climate-related considerations into the company's CR initiatives to reduce emissions, efforts to disclose and report carbon and energy management performance, and plans to engage its people in behaviour changes supporting the company's energy and climate management plans.

Risk Management Approach

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	Given the global context of our business, we consider risks from a broad geographical perspective, covering North America, Europe, and Asia-Pacific.	> 6 years	Climate change risks and opportunities are integrated into the Corporation's company-wide risk management processes. Through our prudent risk management culture, we identify, assess, respond to, and monitor risks and opportunities related to a wide range of business issues and trends, including climate change, where relevant. As part of this process, we also consider the risks and opportunities identified by our group companies. Climate change risks and opportunities, like other risks and opportunities, are monitored on an ongoing basis, as required. When relevant, these issues may be reviewed during internal senior management meetings as well as through our representation on the respective Boards of our group companies. Strategic climate risks and opportunities would be communicated to the President and Chief Executive Officer and/or the Board of Directors, depending on the circumstances.

CC2.1b

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

Assessment of risks and opportunities from a company level perspective

We track macroeconomic trends generally that could impact our company, which include climate-related impacts. We also take into consideration the climate risks and opportunities identified by our group companies. Once a trend is identified as representing a potential risk or opportunity, a more formal assessment is made by internal and/or external resources to evaluate the probability and materiality of the potential impact on the business. The results of our assessment are then presented to the executive team to determine the appropriate action plan.

Assessment of risks and opportunities from an asset level perspective

As a diversified management and holding company with interests, directly or indirectly, in companies in the financial services and other business sectors, we recognize that sustainability trends such as climate change could potentially impact the companies in which we have made investments. We consider climate change risks and opportunities, where relevant, as part of our investment analysis process.

Through this analysis, we typically focus on company-specific risks and opportunities, which can include at our subsidiaries' level: climate-related regulations; government incentives that support renewable energy markets; exposure to weather events that could impact our investments, corporate properties, information technology systems, and business continuity plans at office locations; and consumer needs for new products and services. These types of analyses can be further strengthened by our interactions with the senior management of our subsidiaries and portfolio companies.

CC2.1c

How do you prioritize the risks and opportunities identified?

The materiality of potential climate change risks and opportunities is based on an understanding of the likelihood and impact on our business, which we then use to determine the relative importance of the issues being addressed. Materiality for the purpose of our continuous disclosure documents is assessed based on the applicable legal and regulatory requirements.

Business Strategy

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

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

The process by which the strategy is influenced

Climate change considerations that could impact our overall strategy are identified through risk assessments and investment decision-making meetings, including at the Board meetings of our investments, at internal senior executive management meetings and at CSR committee meetings with our major subsidiaries. Where relevant, outcomes related to climate change from these meetings are integrated into the business strategy.

Climate change aspects that influenced the strategy

Climate change aspects that influenced our strategy as a group include: renewable energy investment opportunities; the impact of extreme weather events on our reinsurance and insurance business; increases in building energy costs; business continuity and climate adaptation strategies at our properties; changing customer needs for energy-efficient products and services; government incentives in cleaner renewable energy influencing the growth of Great-West Lifeco's green bond investment portfolio; and stakeholder interest for carbon disclosure and transparency.

Most important components of the short-term strategy

Our short-term strategy has been influenced by the following climate change components:

First, we continued to increase our investments in renewable energy. For example, our subsidiary Great-West Lifeco has strategic investments in solar and hydro projects and last year Great-West Life's Bond Investments Group supported the Ontario Green bond program, purchasing \$10 million of the new issue. Our subsidiary IGM Financial has continued its investments in green natural gas to match the annual conventional natural gas used at its head office locations, enabling the company to remain on track to meet its renewable energy target of 80% by 2020.

Our group also continued to invest in building project upgrades and retrofits that reduce our energy and carbon impacts, including LED lighting retrofits, building equipment retrofits, data centre optimization and green building upgrades and certifications. Together, these projects are enabling Power Financial to progress towards its reduction target of 8% Scope 1 and 2 by 2020, based on 2011; Great-West Lifeco to meet its Scope 1 and 2 GHG reduction targets for Canadian properties of a 27.3% GHG reduction by 2025 and a 50.4% reduction by 2036, based on a 2013 baseline year; and IGM Financial to meet its reduction target of 40% Scope 1 and 2 emissions by 2020.

CC2.2a

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

Finally, we continued to work with our group companies, as a supportive shareholder, to encourage the development of products and services to position the group positively with our clients and stakeholders. Great-West Lifeco subsidiaries, GLC Asset Management Group, Putnam Investments and Irish Life Investment Managers, and IGM Financial subsidiaries, Investors Group and Mackenzie Investments, are signatories to the Principles for Responsible Investment. Furthermore, our group companies continue to contribute to community projects and initiatives that increase awareness and knowledge on climate change impacts and management.

Climate change aspects that have influenced the long-term strategy

Our long-term strategy is being influenced by our continued investments in sustainable and efficient companies supplying products and services that contribute to a low-carbon economy and societal well-being. For example, Great-West Lifeco is paying even greater attention to its experience with the risks associated with climate-related events to ensure effective integration in product pricing and insurance contract liabilities. While not currently an issue, Great-West Lifeco is also monitoring climate-related health impacts on morbidity and mortality rates. IGM Financial has strengthened its governance structure to assess, manage and monitor climate-related issues over the long-term. Further, IGM Financial is also focusing on a long-term strategy to become more efficient in the use of space and equipment to enable it to meet its long-term reduction target of 50% of Scope 1 and 2 emissions by 2036, based on 2013.

How this approach is gaining a strategic advantage over competitors

Relative to our competitors, we are well positioned to: proactively address potential reputational risks; potentially grow our revenues in the clean energy sector; identify opportunities to invest in innovative

products and services that help to respond to climate change issues; reduce energy costs at our buildings and managed properties; minimize our carbon risk exposure; increase awareness on climate change through the community programs we support; improve client loyalty and trust; attract, retain and engage employees; and gain advisor confidence.

Most substantial business decisions made during the reporting year influenced by climate change

- Great-West Lifeco's Private Debt Investments Group in Canada invested over \$375 million in 2016 in renewable energy projects, including solar, wind, and hydro energy projects. The Private Debt Investments Group also placed nearly \$400 million in transit-oriented and LEED® certified P3 (public-private-partnership) projects.
- Implementing building efficiency projects at our properties. In 2016, our parent company, Power Corporation, through its wholly owned subsidiary Square Victoria Real Estate, maintained the BOMA BEST® certification for its corporate buildings where Power Financial leases office space. These buildings are also registered under the LEED® green building program. Great-West Lifeco continues to invest in energy efficiency projects with a view to obtaining green building designations. To date, 23 buildings, totalling 11 million square feet, under GWL Realty Advisors' management have attained LEED® certification, and more than 96% of the eligible commercial portfolio is certified to the BOMA BEST® standard. IGM Financial has continued to execute its space optimization strategy at its corporate and regional office properties.

CC2.2c Does your company use an internal price of carbon?

Yes

CC2.2d Please provide details and examples of how your company uses an internal price on carbon.

Power Financial's subsidiary, Great-West Lifeco, through its subsidiary GWL Realty Advisors, uses an internal price of carbon. Within the GHG Inventory Report developed for GWL Realty Advisors' managed portfolio, which includes all head office and investment properties within the Great-West Lifeco reporting boundary, a price on carbon is integrated to understand how much GHG emissions reductions would potentially represent in monetary value. A carbon price of \$30 per tonne is used as a proxy, which corresponds to the carbon tax price per tonne of CO₂e in British Columbia (British Columbia's Carbon Tax Act [SBC 2008] Chapter 40, B.C. Reg. 125/2008 O.C. 386/2008). They also

use a proxy carbon price of \$50 per tonne, as per Canada's national approach to pricing carbon pollution, the "Pan-Canadian Framework".

GWL Realty Advisors uses this carbon price for informational purposes to determine the level of opportunity they may have to monetize carbon through potential cap and trade systems (e.g. GHG offset origination for commercial energy efficiency projects). Over time, GWL Realty Advisors will be exploring how to integrate carbon costs into the investment decision-making process for its retrofit (and other) projects.

CC2.3 Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following?

Direct engagement with policy makers

Trade associations

Funding research organizations

Other

CC2.3a On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Clean growth	Support	Through Power Financial's Executive Co-Chairman's role on the board of directors of the Business Council of Canada, we are supporting innovation in green and clean technology; advocating on the responsible transfer and development of natural resources; and working alongside government and industry on developing policies to combat climate change.	Support clean growth strategy for Canada and combatting climate change.
Clean energy generation	Support	The CEO of IGM Financial and Investors Group is a member of the Business Council of Manitoba. Through this group of executive business leaders, the company supports discussions towards a clean energy strategy for Canada.	Support clean energy strategy for Canada.
Carbon Tax	Neutral	The Vice-President, Finance and Corporate Responsibility of IGM Financial, engaged with the Manitoba Environment Minister and the CEO of Bullfrog Power to discuss the implications of carbon pricing in Manitoba in connection with IGM's voluntary purchase of carbon-free renewable natural gas from Bullfrog Power.	Carbon pricing exemption for companies making additional investments into carbon-free sources.

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?
International Economic Forum of the Americas (IEF) (Canada)	Consistent	The IEF is committed to heightening knowledge and awareness of the major issues concerning economic globalization, with a particular emphasis on the relations between the Americas and other continents. They include issues related to climate change.	Power Financial's Executive Co-Chairman, Paul Desmarais Jr., is the Chair of the Board of Governors of the IEF. Through our involvement in the IEF, we support efforts being taken to increase awareness and collaboration between international governments on a wide range of issues, including climate change.
Brookings International Advisory Council	Consistent	Brookings established the International Advisory Council, a group of distinguished international business and community leaders, to extend its outreach and relevance to other countries and increase its ability to inform the American public and policymakers about global developments, including energy and environmental issues.	Power Financial's Executive Co-Chairman, Paul Desmarais Jr., is Co-Chairman of the Brookings International Advisory Council. Through our involvement, we support efforts being made to develop effective, pragmatic policies for addressing national and global issues including energy and environmental issues.

CC2.3c

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

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
Canadian Institute of Actuaries (CIA)	Consistent	The CIA supports the advancement of knowledge into better understanding the impact of climate change and has developed a Climate Change and Sustainability Committee. Part of the Institute's role is to raise awareness of climate change and environmental sustainability with both members and the public.	Through the membership of Great-West Lifeco's employees on the CIA, Great-West Lifeco is engaging within the industry to better understand how climate change could impact insurance pricing and valuation models.
American Academy of Actuaries	Consistent	The American Academy of Actuaries supports knowledge and raises awareness among policymakers and the public at large of the increasing risks from extreme weather events. It aims to evaluate and help manage exposure to these risks from an insurance perspective, by combining current climate science knowledge with actuarial experience.	As members of the American Academy of Actuaries, Great-West Lifeco supports and is increasing its own knowledge of climate risks.
Chartered Financial Analyst (CFA) Institute	Consistent	The mission of the CFA Institute is served by generating value for core investment management professionals and engaging with the core investment management industry to advance ethics, market integrity, and professional standards of practice, which collectively contributes value to society. The CFA Institute provides knowledge on climate change risks, pricing and management.	As members of the CFA Institute, Great-West Lifeco is supporting and increasing its knowledge of climate risks.
REALpac (Real Property Association of Canada)	Consistent	REALpac recognizes the significant economic, environmental, social, governance (EESG) impact of Canada's commercial real estate sector, and the need for an industry-driven approach toward supporting national and provincial strategies on greenhouse gas reduction (climate change action), the importance of reasoned discourse with political and policy officials, and the value of persuasive arguments for sustainable economic growth. The Association also recognizes the need for industry-wide "green" benchmarking data and shared best practices, and is working with its constituents and its national and international counterparts to help to responsibly ensure the sector is well positioned for a sustainable future.	As members of REALpac, as well as REALpac's Environment, Social and Governance Committee, Great-West Lifeco supports initiatives to increase awareness on energy improvements and increase government incentives towards energy efficient existing and new commercial real estate.
Building Owners and Managers Association (BOMA) and its regional chapters	Consistent	BOMA is the voice of the Canadian commercial real estate industry, addressing issues of national concern, and promotes excellence in the industry through information, education, advocacy and recognition, including on issues of carbon and energy efficiency. BOMA Canada implements timely, responsible and consistent policy positions on issues of critical importance to the Canadian commercial real estate industry (including climate change-related legislation).	Through Great-West Lifeco's Board membership with BOMA, the company supports initiatives to increase awareness of energy and climate change issues, and incentives to increase building energy and carbon efficiency investments.

CC2.3c Please enter the details of those trade associations that are likely to take a position on climate change legislation. (continued)

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?
Canada Green Building Council (CaGBC)	Consistent	The CaGBC's mission is to "Lead and accelerate the transformation to high-performing, healthy green buildings, homes and communities throughout Canada." This includes the adoption of green building practices that ultimately lead to reduced greenhouse gas emissions. The CaGBC is working with federal, provincial and municipal leaders and government officials to support the development and implementation of green building policies and sustainability practices across Canada and is working with CaGBC members and stakeholders to set and report against ambitious targets and action plans that will contribute to COP21 goals.	Through Great-West Lifeco's membership with the CaGBC, the company supports initiatives to increase the adoption of green building practices, participation in green building certification systems, and incentives to increase energy and carbon efficiency investments.
NAIOP (Commercial Real Estate Development Association)	Consistent	NAIOP is an organization for developers, owners, and investors of office, industrial, retail and mixed-use real estate. They provide strong advocacy, education and business opportunities on a range of issues. The organization is committed to providing its members with education and resources that encourage environmentally-responsible choices, as well as issuing policy statements that promote the utilization of sustainable building practices. Energy efficiency is a legislative priority for NAIOP and the "NAIOP supports the advancement of higher levels of energy efficiency for commercial buildings through solutions that incorporate federal incentives, and realistic time frames for the financial recoupment of efficiency investments through utility savings."	Through Great-West Lifeco's membership on the NAIOP, the company supports initiatives to increase awareness of energy and climate change issues as part of a broader mandate for real estate operations.

CC2.3d Do you publically disclose a list of all the research organizations that you fund?

No

CC2.3e

Please provide details of the other engagement activities that you undertake.

As a subsidiary of Power Corporation, corporate donations are conducted through Power Corporation's Donations Committee on behalf of both Power Corporation and Power Financial.

The following provides examples of the research organizations we support:

- David Suzuki Foundation – Power Corporation provided funding to the Foundation covering a nine-year period from 2007 to 2015, and has renewed its commitment for 2019–2020. The David Suzuki Foundation works with government, business and individuals to conserve the environment by providing science-based education, advocacy and policy work, and acting as a catalyst for social change.
- One Drop Foundation – The Corporation provided funding to the Foundation covering an eight-year period, beginning in 2011. Its projects in developing countries attempt to provide access to water, ensure food security, and use arts and culture to educate local communities on issues concerning water and climate change.

The support that Power Corporation provides to these foundations is in line with its strategy to contribute to community projects and initiatives that increase awareness and knowledge on climate change impacts and management.

We also invest in companies that share our philosophy and values, supporting a wide array of causes, including organizations promoting environmental stewardship and climate change. Our major publicly traded subsidiaries support organizations that

produce public work on climate change and encourage their staff to get involved with environmental causes the companies support. Great-West Lifeco examples include the International Institute for Sustainable Development, Pollution Probe's Healthy Communities Campaign, and the Canadian Institute for Energy Training (CIET). IGM Financial examples include the EcoPass/Allego/VIP Public Transit Incentive Program, the Nature Conservancy of Canada Forces of Nature Campaign, the Commuter Challenge and Earth Day Canada.

The following provides examples of these engagements:

International Institute for Sustainable Development (IISD) – Great-West Lifeco

Method of Engagement – Great-West Lifeco engages with the IISD to promote research and knowledge of the risks associated with climate change.

Topic of Engagement – The topic of engagement is focused on understanding the risk of climate change and how we can anticipate the risk in order to increase community resilience.

Nature of Engagement – Great-West Lifeco is the catalyst funder for Prairie Climate Centre – a joint venture between the IISD and the University of Winnipeg. The Centre provides research, advice and policy development on climate change.

CC2.3e

Please provide details of the other engagement activities that you undertake. (continued)

Actions Advocated as part of the Engagement – Through its engagement with the IISD, Great-West Lifeco is supporting coordinated research, advice and policy development on climate change. The IISD and the University of Winnipeg established the Prairie Climate Centre to provide leadership on climate adaptation issues through climate and data research, communication and outreach, and planning and development. In 2016, its continued support of the IISD helped to launch the Prairie Climate Atlas.

EcoPass/Allego/VIP Public Transit Incentive Program – IGM Financial

Method of Engagement – IGM Financial engages through partnership agreements with various city transit organizations to incentivize the use of public transport amongst its employees to enable carbon emissions to be reduced during their travel to and from work. Specifically, they have partnership agreements between Investors Group and the Winnipeg Transit Agency and the Montreal Metropolitan Transit Agency. Furthermore, IGM Financial's subsidiaries Mackenzie Investments and Investment Planning Council also have partnerships with the Toronto Transit Commission's Volume Incentive Program (VIP).

Topic of Engagement – IGM Financial is engaging with the above agencies so that their employees have access to cleaner transportation modes with a lower carbon impact.

Nature of Engagement – The engagements relate specifically to the agency incentive programs aimed at promoting public transit.

Actions Advocated as part of the Engagement – Through IGM Financial's engagement with these organizations, they actively advocate for continuation of these programs and possible enhancements to subsidize the cost for employees that use public transit. Through these subsidies, they expect to reduce the use of employee personal vehicles, which ultimately reduces their carbon emissions. In 2016, the company estimated that the use of public transit by their employees saved approximately 705 tonnes of CO₂ emissions compared to employees taking their own personal vehicles to work every day.

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.

The CSR Lead provides oversight on matters related to the Corporation's corporate social responsibility initiatives. Through this role, the CSR Lead ensures that direct and indirect activities that influence public policy are consistent with the Corporation's overall responsible management strategy, including topics that relate to climate change.

3 › TARGETS AND INITIATIVES

CC3.1

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

Absolute target

Renewable energy consumption and/or production target

CC3.1a

Please provide details of your absolute target.

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO ₂ e)	Target year	Is this a science-based target?	Comment
PFC Abs1	Scope 1+2 (location-based)	0.05%	8%	2011	62	2020	No, but we anticipate setting one in the next 2 years	This target is based on the consumption of natural gas and electricity at Power Financial. Once the Science Based Organization methodology for financial service companies is established, we will be exploring the application on our business.
Lifeco Abs2	Scope 1+2 (location-based)	33.2%	27.3%	2013	21,322	2025	No, but we anticipate setting one in the next 2 years	This target (2013-2025) applies to Scope 1 and 2 emissions for Great-West Lifeco's owner-occupied and investment properties in Canada. The target excludes Scope 1 and 2 GHG emissions associated with corporate jet fuel use, backup generator diesel fuel use, and refrigerants. The target includes emissions associated with its property-level electricity, natural gas, and steam consumption at its corporate head office and investment properties.
Lifeco Abs3	Scope 1+2 (location-based)	33.2%	50.4%	2013	21,322	2036	No, but we anticipate setting one in the next 2 years	This target (2013-2036) applies to Scope 1 and 2 emissions for Great-West Lifeco's owner-occupied and investment properties in Canada. The target excludes Scope 1 and 2 GHG emissions associated with corporate jet fuel use, backup generator diesel fuel use, and refrigerants. The target includes emissions associated with its property-level electricity, natural gas, and steam consumption at its corporate head office and investment properties.
IGM Abs4	Scope 1+2 (location-based)	100%	40%	2013	2,332	2020	No, but we anticipate setting one in the next 2 years	This target (2013-2020) applies to Scope 1 and 2 emissions for IGM Financial's owner-occupied property in Canada, which includes property-level electricity, natural gas, and refrigerants consumption at its corporate head office. Once the Science Based Organization methodology for financial services companies is established, IGM Financial will be exploring the application on its business.

3 › TARGETS AND INITIATIVES

CC3.1a Please provide details of your absolute target. (continued)

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO ₂ e)	Target year	Is this a science-based target?	Comment
IGM Abs5	Scope 1+2 (location-based)	100%	50%	2013	2,332	2036	No, but we anticipate setting one in the next 2 years	This target (2013–2036) applies to Scope 1 and 2 emissions for IGM Financial's owner-occupied property in Canada, which includes property-level electricity, natural gas, and refrigerants consumption at its corporate head office. Once the Science Based Organization methodology for financial services companies is established, IGM Financial will be exploring the application on its business.

CC3.1d Please provide details of your renewable energy consumption and/or production target.

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
IGM RE1	Natural gas	2013	5,861	0%	2020	80%	This target relates to IGM Financial's consumption of natural gas. This target is for at least 80% of the natural gas utilized at the company's owned property to be renewable.

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
PFC Abs1	56%	0%	While electricity has shown a decrease of 25% since 2011, natural gas has increased by 9%, thereby increasing overall emissions by 8% since 2011. In context, this only corresponds to a total increase in emissions of 4 tCO ₂ e since 2011.
Lifeco Abs2	25%	72%	Great-West Lifeco achieved 2013 to 2016 Scope 1 and 2 GHG emission reductions of 19.6% for its corporate head office and investment properties in scope for this target. These reductions are in part due to emissions reduction activities (e.g. energy efficiency focused retrofits and behavioral changes) at its corporate head office and investment properties in scope for this target.
Lifeco Abs3	13%	39%	Great-West Lifeco achieved 2013 to 2016 Scope 1 and 2 GHG emission reductions of 19.6% for its corporate head office and investment properties in scope for this target. These reductions are in part due to emissions reduction activities (e.g. energy efficiency focused retrofits and behavioral changes) at its corporate head office and investment properties in scope for this target.
IGM Abs4	43%	100%	IGM Financial's Scope 1 emission reductions were a result of projects to increase energy efficiency and the purchase of renewable natural gas. IGM Financial is on track to achieve its 2020 target.
IGM Abs5	13%	100%	IGM Financial's Scope 1 emission reductions were a result of projects to increase energy efficiency and the purchase of renewable natural gas. IGM Financial is on track to achieve its 2036 target.
IGM RE1	43%	100%	IGM Financial exceeded its renewable energy target in 2016, and remains on target to achieve an 80% reduction by 2020.

3 › TARGETS AND INITIATIVES

MANAGEMENT

CC3.2

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

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions?

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of Products	Great-West Lifeco's property management services through its wholly owned subsidiary GWL Realty Advisors	Low-carbon products	Other: N/A	1%	Less than or equal to 10%	Through GWL Realty Advisors, Great-West Lifeco is working with building owners and tenants in its office and multi-residential portfolio to minimize the carbon footprint of its assets by prudently managing their overall environmental impact.

CC3.3

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

Yes

CC3.3a

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

Stage of development	Number of projects	Total estimated annual CO ₂ e savings in metric tonnes CO ₂ e (only for rows marked *)
Under investigation	7	
To be implemented*	21	1,703.2
Implementation commenced*	8	314.3
Implemented*	20	343.6
Not to be implemented	1	

3 › TARGETS AND INITIATIVES

CC3.3b

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

Activity type	Description of activity	Estimated annual CO ₂ e savings (metric tonnes CO ₂ e)	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 (years)	Comment
Energy efficiency: Building services	Great-West Lifeco invested in lighting-focused retrofits (multiple locations) including at Oxbridge Place, London Life RAM Centre, London Life Head Office, Mackenzie Financial, Canada Life Place, and the Yonge Richmond Centre. In addition, they also made BAS/controls upgrades at the Canada Life Place Head Office, as well as other energy efficiency-focused projects at Canadian owner-occupied and investment properties.	253	Scope 2 (location-based)	Voluntary	170,173	377,534	1-3 years	6-10 years	Investment required does not include all energy efficiency projects that resulted in annual monetary savings. Annual monetary savings are estimated and pertain to Canadian owner-occupied and investment properties only.
Energy efficiency: Building fabric	IGM Financial increased insulation in head office roof from R15 to R28.5.	90	Scope 1	Voluntary	11,500	21,110	1-3 years	21-30 years	This initiative at IGM Financial decreases energy consumption for heating thus reducing Scope 1 emissions.

CC3.3c What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	As part of our commitment to continuously reduce our limited carbon and energy impacts, our parent company Power Corporation has in place a dedicated budget for carbon reduction projects. A majority of this budget has been dedicated to maintaining the BOMA BEST® certification and initiatives undertaken to achieve LEED EB 2009 certification at the Corporation's head office building, which include retrofits and building upgrades.
Dedicated budget for energy efficiency	Great-West Lifeco has a dedicated budget for energy efficiency projects. Each year, an investigation is made into possible energy efficiency projects. The dedicated budget varies based on the type of projects, return on investment, and overall positive sustainability impact (e.g. GHG emissions reduction potential). In 2016, Great-West Lifeco dedicated approximately CAD \$1.8 million to undertake energy efficiency projects at its owner-occupied properties in Canada.
Financial optimization calculations	At Great-West Lifeco, financial optimization calculations are conducted on a project-by-project basis by asset management and property management teams for major capital expenditures at its corporately-owned properties.
Employee engagement	Employee engagement is a core component of Great-West Lifeco's sustainability strategy. In 2016, the company continued working on GHG reduction initiatives through its Corporate Properties Sustainability Working Group (CPSWG). The Working Group, consisting of experienced property management and building operations employees, helps to direct sustainability initiatives with a particular focus on GHG emission reductions at its corporate properties. So far, they have concentrated on retrofits focusing on energy, water and waste reduction, and the sharing of best practices and strategies among their facilities. The Working Group also helps coordinate environment-themed employee engagement activities, including its participation in the longstanding Earth Day and Earth Hour events. Additionally, sustainability initiatives that can lead to emission reductions at the corporate level are run throughout the year as well, including energy awareness programs, waste reduction initiatives (e.g. paper use reduction), and the promotion of sustainable commuting strategies.
Other	IGM Financial has in place a year-over-year dedicated budget for its facilities relating to building improvements. This budget includes energy efficiency projects, such as equipment replacements for boilers, lighting, air handling and HVAC systems.

COMMUNICATIONS



POWER FINANCIAL
CORPORATION

CARBON
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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	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	20-21	Power Financial 2016 Annual Report
In voluntary communications	Complete	All	Power Financial CSR website - Energy and Carbon Efficiency
In voluntary communications	Complete	All	Power Financial CSR website - Our performance
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	12-13	Great-West Lifeco 2016 Annual Report
In voluntary communications	Complete	16-20	Great-West Life 2016 Public Accountability Statement
In voluntary communications	Complete	All	Great-West Lifeco CSR website
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	65-66	IGM 2016 Annual Report
In voluntary communications	Complete	All	IGM CSR website - CSR approach
In voluntary communications	Complete	All	IGM CSR website - Library
In voluntary communications	Complete	All	Pargesa CSR website
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	27-29	Groupe Bruxelles Lambert 2016 Annual Report
In voluntary communications	Complete	All	Groupe Bruxelles Lambert CSR website
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	42-43	Imerys 2016 Annual Report
In voluntary communications	Complete	21-25	Imerys 2016 Sustainable Development Report
In voluntary communications	Complete	All	Imerys website - Sustainable Development section of website
In voluntary communications	Complete	All	GWL Realty Advisors 2016 Annual Review

RISKS AND OPPORTUNITIES



POWER FINANCIAL
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CC5.1d

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

Statement of no substantive risk

Climate change regulatory risks are not expected to generate a substantive change in our business operations, revenues or expenditures.

Impact evaluation process

We assess the impact of regulatory climate-related risks through: annual engagement with CSR representatives at our subsidiaries, regular interaction with senior management of our subsidiaries and portfolio companies; and the investment analysis process, where relevant. In 2016, the regulatory climate risk impact assessment of our subsidiaries considered GHG regulations, carbon market and pricing, building energy requirements, and carbon taxes.

Why not relevant

As a holding company, with no production, manufacturing or service operations, most of our corporate offices' carbon footprint is tied to business travel and electricity use—mostly sourced from hydro-electric power. Given our small footprint, we have not identified climate regulatory risks that could substantively impact our business.

From an investment perspective, a majority of our interests (approx. 99% of our assets) are held within the financial services industry through our controlling interests in Great-West Lifeco and IGM Financial. In 2016, and as disclosed in their respective CDP submissions, these companies do not consider climate-related regulations to have the potential to generate a substantive change in their business. Both have limited direct GHG impacts and the diversification of their investments and insurance businesses further limits their exposure to industry sectors, markets and countries subject to climate-related regulations. For example, the total percentage of assets invested by Great-West Lifeco in sectors that could be exposed to regulatory pressures related to carbon taxes and/or cap and trade schemes, such as the energy sector, amounted to approximately 5% of invested assets in 2016.

With respect to our interests in other business sectors, there is a potentially higher indirect exposure. As an example, Imerys indicated in its 2016 CDP submission some exposure to cap and trade schemes in Europe, California and China. With approx. 1% of our total assets invested in these other business sectors, we do not expect these potential regulatory risks to result in a substantive impact on Power Financial.

CC5.1e

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

Statement of no substantive risk

Risks driven by changes in physical climate parameters are not expected to generate a substantive change in our business operations, revenues or expenditures.

Impact evaluation process

We assess the impacts of physical climate risks through: annual engagement with CSR representatives at our subsidiaries, regular interaction with senior management of our subsidiaries and portfolio companies; and the investment analysis process, where relevant. In 2016, the physical climate risk impact assessment of our subsidiaries considered the impact of temperature extremes, precipitation patterns and other climate-related natural disasters on their business.

Why not relevant

A majority of our interests (99% of our assets) are held within the financial services industry through Great-West Lifeco and IGM Financial. Given the geographic diversification of property locations, as disclosed in their respective CDP submissions, both companies do not consider physical climate parameters to have a substantive impact. Some of our European investments have a presence in parts of the world that are prone to these risks. For example, Imerys indicated in its 2016 CDP submission that some locations could be affected by climate-related natural disasters impacting operational costs. However, with 1% of our assets invested in these other business sectors, we do not expect a substantive impact on Power Financial.

With respect to products and services, both Great-West Lifeco and IGM Financial do not consider physical risks to substantively impact their investments, property insurance, life and health insurance, loans and mortgages. Both companies carry a wide range of diversified funds limiting exposure to any one particular sector or market. For example, based on the nature and location of IGM's property and mortgage investments, impacts from extreme weather events would not be substantive on its business.

Great-West Lifeco's exposure to weather-related property insurance claims in its reinsurance business represents a relatively small part of the business. In terms of the life and health insurance businesses, Great-West Lifeco also diversifies its morbidity and mortality risks limiting concentrations in any one specific region or geography and has not experienced notable changes in insurance claims as a result of climate-related health impacts.

CC5.1f

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

Statement of no substantive risk

Risks driven by changes in other climate-related developments are not expected to generate a substantive change in our business operations, revenues or expenditures.

Impact evaluation process

We assess the impacts of other climate-related risks through: annual engagement with CSR representatives at our subsidiaries, regular interaction with senior management of our subsidiaries and portfolio companies; and the investment analysis process, where relevant. In 2016, the other climate risk impact assessment of our subsidiaries considered fluctuating socio-economic conditions, reputational and markets risks, and increasing requests for greater disclosure from the public and investors.

Why not relevant

With increasing public and investor concerns over climate change, we recognize that a lack of disclosure on climate risk management could potentially expose us to reputational risks. When considered in the context of other types of reputational risks, however, we do not expect a substantive impact on our business.

From an investment perspective, the majority of our interests (99% of our assets) are within the financial services industry through our controlling interests in Great-West Lifeco and IGM Financial. In 2016, and as disclosed in their respective CDP submissions, both companies did not consider other climate-related developments to have a substantive impact, given the diversification of their respective businesses. For example, lapse rates from extreme weather events, such as Hurricane Katrina, are not considered to be severe and have had limited impact on Great-West Lifeco's insurance affordability and customer retention rates. For IGM Financial, reputational risks from increasing stakeholder requests on climate disclosure are not substantive when compared to other reputational risks, such as client privacy and product/service compliance. With respect to our other interests, particularly those within the industrial sectors, there is a potentially higher exposure to fluctuating socio-economic conditions. For example, Imerys indicated in its 2016 CDP submission that fluctuating socio-economic conditions from climate change could result in reduced demand for goods and services. However, with 1% of our assets invested in these other sectors, we do not expect these risks would result in a substantive impact on Power Financial.

CC6.1d

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

Statement of no substantive opportunity

Opportunities driven by changes in climate change regulations (current or future) are not expected to generate a substantive change in our business operations, revenues or expenditures.

Impact evaluation process

We consider regulatory climate risk opportunities through: annual engagement with CSR representatives at our subsidiaries, regular interaction with senior management of our subsidiaries and portfolio companies; and the investment analysis process, where relevant. In 2016, the regulatory climate risk impact assessment of our subsidiaries considered opportunities related to carbon markets and renewable energy market subsidies.

Why not relevant

A majority of our interests (99% of our assets) are within the financial services industry through controlling interests in Great-West Lifeco and IGM Financial. In 2016, Great-West Lifeco's Private Debt Investments Group invested \$375 million in renewable energy projects, nearly \$400 million in transit-oriented and LEED® certified public-private partnerships, and \$10 million in a new green bond issued by Ontario. Despite these investments, Great-West Lifeco's CDP submission indicates these opportunities are not substantive to its business. IGM Financial opportunities to improve energy efficiency of properties driven by green building and energy product standards are not substantive given energy costs represent less than 1% of IGM's operating costs.

With respect to our interests in other business sectors, potential regulatory climate opportunities were identified by our European indirect investments. For example, Imerys indicates in its 2016 CDP submission that fuel and energy taxes as well as renewable energy regulation are enabling the company to generate additional sales by providing new products to customers, including carbonate fillers, high purity quartz for photovoltaic markets, and talc for car plastics. Though these opportunities may be important to the companies, our investments in these businesses represent approx. 1% of our assets and are not substantive for Power Financial.

CC6.1e

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

Statement of no substantive opportunity

Opportunities driven by changes in physical climate parameters are not expected to generate a substantive change in our business operations, revenues or expenditures.

Impact evaluation process

We consider physical climate opportunities through: annual engagement with CSR representatives at our subsidiaries, regular interaction with senior management of our subsidiaries and portfolio companies; and the investment analysis process, where relevant. In 2016, the physical climate risk impact assessment of our subsidiaries considered general warming temperatures and the associated energy reduction costs during the winter season.

Why not relevant

A majority of our interests (99% of our assets) are held within the financial services industry through our controlling interests in Great-West Lifeco and IGM Financial. In 2016, and as disclosed in their respective CDP submissions, both companies do not consider warming temperatures to have the potential to generate a substantive change in their business from a decrease in energy use and associated cost savings. For example, at Great-West Lifeco, since overall spend on utilities for owner-occupied properties represents less than 1% of overall expenditures, any cost saving opportunities would be offset by the normal seasonal variations that occur in Canada between winter and summer periods. For IGM Financial, energy rebates from utilities to promote smart energy demand during extreme weather events are not substantive to the business, given that energy represents less than 1% of IGM Financial's operating costs.

With respect to our interests in other businesses, there are potential opportunities in terms of new products and services. For example, Imerys considers changes in natural resources will grow the renewable energy sector and demand for its high purity quartz for photovoltaic cells. Though these opportunities may be important to the respective companies, as our investments in other businesses in total represent approx. 1% of our assets, they are therefore not expected to result in a substantive impact on Power Financial.

CC6.1f

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

Statement of no substantive opportunity

Opportunities driven by other climate-related developments are not expected to generate a substantive change in our business operations, revenues or expenditures.

Impact evaluation process

We consider other climate-related opportunities through: annual engagement with CSR representatives at our subsidiaries, regular interaction with senior management of our subsidiaries and portfolio companies; and the investment analysis process, where relevant. In 2016, the other climate risk impact assessment of our subsidiaries considered: reputation, increasing public and investor requests for greater climate change disclosure, demand for low carbon products and services, employee engagement and operational cost reductions.

Why not relevant

We considered possible reputational opportunities associated with increasing public and investor requests for greater climate change disclosure. However, we do not expect the reputational benefits to have a substantive impact on our overall business, when compared to other reputational opportunities.

From an investment perspective, a majority of our interests (99% of our assets) are held within the financial services industry through our controlling interests in Great-West Lifeco and IGM Financial. In 2016, and as disclosed in their respective CDP submissions, both companies do not consider other climate-related developments to have the potential to have a substantive business impact. For example, Great-West Lifeco's energy reduction initiatives from the property management services at GWL Realty Advisors, which could positively impact its reputation with clients, would not be substantive to the business, given that the fee income from its real estate management is less than 1% of overall net income.

With respect to our interests in other businesses, many of our companies are taking advantage of climate-related opportunities. Imerys continues to develop carbon efficient products and is increasing research and innovation spend into new cleaner products. Though these opportunities may be important to the companies, as our investments in other businesses in total represent approx. 1% of our assets, they are not expected to result in a substantive impact on Power Financial.

EMISSIONS



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CC7.1

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

Scope	Base year	Base year emissions (metric tonnes CO ₂ e)
Scope 1	2013	22,938
Scope 2 (location-based)	2013	46,006
Scope 2 (market-based)	2013	46,006

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.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

CC7.3

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

Gas	Reference
CO ₂	IPCC Fourth Assessment Report (AR4-100 year)
CH ₄	IPCC Fourth Assessment Report (AR4-100 year)
N ₂ O	IPCC Fourth Assessment Report (AR4-100 year)

CC7.4 Please give the emission factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of the page.

Emission factors available on the CDP Database

8 › EMISSIONS DATA

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.

Year	Scope 1	Comment
2016	17,920	

CC8.3 Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2 location-based figure	We are reporting a Scope 2 market-based figure	Location-based and market-based emissions are the same since no Renewable energy credits (RECs) have been purchased.

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
40,196	40,196	While steam is purchased for the Lifeco properties, no REC contracts have been purchased and the numbers for location and market-based are therefore the same.

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?

No

CC8.5 Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations.

Source	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Data Gaps, Assumptions, Extrapolation	Data was sourced from supplier invoices and spreadsheet files provided by property managers. The spreadsheet files had to be taken as is and assumed to be correct. Where supplier data was missing, spreadsheet data was used to fill in the gaps and where none of these data sources were available, manual estimations were made.
Scope 2 (location-based)	More than 2% but less than or equal to 5%	Data Gaps, Assumptions, Extrapolation	Data was sourced from smart meter data, supplier invoices and spreadsheet files provided by property managers. The spreadsheet files had to be taken as is and assumed to be correct. Where smart meter data was not available, supplier invoices were used, and in their absence, spreadsheet data was used to fill in the gaps. Where none of these data sources were available, manual estimations were made.
Scope 2 (market based)	More than 2% but less than or equal to 5%	Data Gaps, Assumptions, Extrapolation	Data was sourced from smart meter data, supplier invoices and spreadsheet files provided by property managers. The spreadsheet files had to be taken as is and assumed to be correct. Where smart meter data was not available, supplier invoices were used, and in their absence, spreadsheet data was used to fill in the gaps. Where none of these data sources were available, manual estimations were made.

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 document	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual Process	Complete	Limited Assurance	Available on the CDP Database	2-4	International Standards on Assurance Engagements 3410 (ISAE 3410)	100%

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

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 document	Page/section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited Assurance	Available on the CDP Database	2-4	International Standards on Assurance Engagements 3410 (ISAE 3410)	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
Year on year change in emissions (Scope 1)
Year on year change in emissions (Scope 2)
Year on year change in emissions (Scope 1 and 2)
Year on year change in emissions (Scope 3)

CC8.9 Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?
No

9 › SCOPE 1 EMISSIONS BREAKDOWN

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 CO ₂ e
Canada	12,984
United States	1,055
United Kingdom	546
Ireland	3,335

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide.

By facility

By GHG type

By activity

9 › SCOPE 1 EMISSIONS BREAKDOWN

EMISSIONS

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO ₂ e)
Oliver Village	955
Oxbridge Place	430
670 Sovereign Road	338
255 Dufferin Avenue	832
City Centre Plaza	59
Canada Life Place	296
180 Queen St	341
190 Simcoe St	17
330 University	3
180 Simcoe St	165
College Park	1,471
Yonge Richmond Centre	473
433 Main	697
560 Broadway	14
Winnipeg Data Center	90
GWL Centre	1,808
Block 1, Irish Life Centre	280
Block 2, Irish Life Centre	255
Block 3A-3B, Lower Abbey Street	1,043
Block 4, Irish Life Centre	54
Block 5/6, Irish Life Centre	145

Facility	Scope 1 emissions (metric tonnes CO ₂ e)
Block 7, Irish Life Centre	98
Block A/B, Abbey Court	81
Block C, Abbey Court	264
Block D/E/F, Abbey Court	497
Beresford Court, Beresford Place	257
Irish Life Centre (Public Car Park)	331
Block 1 Christchurch Square	13
Block 2 Christchurch Square	16
Great-West Financial Centre - Tower I	60
Great-West Financial Centre - Tower II	252
Great-West Financial Centre - Tower III	252
Great-West Financial Centre - North Building	478
Great-West Financial Centre - Parking Garage No. 1	8
Great-West Financial Centre - Parking Garage No. 2	4
Canada Life Place UK	248
Maple House	77
Lombard Street	207
Canada Life Residential Flats	14
One Canada Centre	6
Other	4,988

9 › SCOPE 1 EMISSIONS BREAKDOWN

CC9.2c Please break down your total gross global Scope 1 emissions by GHG type.

GHG type	Scope 1 emissions (metric tonnes CO ₂ e)
CO ₂	17,668
CH ₄	22
N ₂ O	102.8
R22	100.9
R-410A	26

CC9.2d Please break down your total gross global Scope 1 emissions by activity.

Activity	Scope 1 emissions (metric tonnes CO ₂ e)
Natural Gas	10,881
Diesel (Backup Generation)	166
Refrigerants	127
Other	4,988
Vehicle Fuel	1,758

10 › SCOPE 2 EMISSIONS BREAKDOWN

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 emissions (metric tonnes CO ₂ e)	Scope 2, market-based emissions (metric tonnes CO ₂ e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Canada	9,363	9,363	122,155	116,610
United States	22,081	22,081	27,826	0
United Kingdom	2,549	2,549	6,185	0
Ireland	6,204	6,204	13,200	0

CC10.2 Please indicate which other Scope 2 emissions breakdowns you are able to provide.

By facility

By activity

10 › SCOPE 2 EMISSIONS BREAKDOWN

EMISSIONS

CC10.2b

Please break down your total gross global Scope 2 emissions and energy consumption by facility.

Facility	Scope 2, location-based emissions (metric tonnes CO ₂ e)	Scope 2, market-based emissions (metric tonnes CO ₂ e)
Oliver Village	829	829
Oxbridge Place	1,999	1,999
670 Sovereign Road	66	66
255 Dufferin Avenue	421	421
City Centre Plaza	168	168
Canada Life Place	1,884	1,884
180 Queen St	176	176
190 Simcoe St	1,075	1,075
330 University	408	408
180 Simcoe St	189	189
College Park	1,739	1,739
Yonge Richmond Centre	329	329
433 Main	10	10
560 Broadway	1	1
Winnipeg Data Center	28	28
GWL Centre	34	34
Block 1, Irish Life Centre	774	774
Block 2, Irish Life Centre	450	450
Block 3A-3B, Lower Abbey Street	1,428	1,428
Block 4, Irish Life Centre	154	154
Block 5/6, Irish Life Centre	393	393
Block 7, Irish Life Centre	259	259

Facility	Scope 2, location-based emissions (metric tonnes CO ₂ e)	Scope 2, market-based emissions (metric tonnes CO ₂ e)
Block A/B, Abbey Court	112	112
Block C, Abbey Court	360	360
Block D/E/F, Abbey Court	683	683
Beresford Court, Beresford Place	401	401
Irish Life Centre (Public Car Park)	960	960
Block 1 Christchurch Square	121	121
Block 2 Christchurch Square	107	107
Great-West Financial Centre - Tower I	5,988	5,988
Great-West Financial Centre - Tower II	5,988	5,988
Great-West Financial Centre - Tower III	3,498	3,498
Great-West Financial Centre - North Building	5,730	5,730
Great-West Financial Centre - Parking Garage No. 1	439	439
Great-West Financial Centre - Parking Garage No. 2	438	438
Canada Life Place UK	1,532	1,532
Maple House	376	376
Lombard Street	637	637
Canada Life Residential Flats	4	4
One Canada Centre	7	7

10 › SCOPE 2 EMISSIONS BREAKDOWN

CC10.2c Please break down your total gross global Scope 2 emissions by activity.

Activity	Scope 2, location-based emissions (metric tonnes CO ₂ e)	Scope 2, market-based emissions (metric tonnes CO ₂ e)
Electricity	39,002	39,002
Steam	1,194	1,194

11 › ENERGY

CC11.1 What percentage of your total operational spend in the reporting year was on energy?

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

CC11.2 Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year.

Energy type	MWh
Heat	0
Steam	6,541
Cooling	0

CC11.3 Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year.

88,472

CC11.3a Please complete the table by breaking down the total “Fuel” figure entered above by fuel type.

Fuels	MWh
Natural gas	63,891
Other: Transportation fuels	23,804
Diesel	777

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 you provided in CC8.3a.

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO ₂ e per MWh)	Comments
Contract with suppliers or utilities, with a supplier-specific emission rate, not backed by electricity attribute certificates	6,541	0.1830	Our subsidiary Great-West Lifeco purchases district steam for their Toronto owner-occupied office locations. This source produces lower emissions per MWh compared to traditional fossil fuel-based heating sources.
Contract with suppliers or utilities, with a supplier-specific emission rate, not backed by electricity attribute certificates	21,298	0.0034	Great-West Lifeco purchased electricity from Manitoba Hydro for their owner-occupied and investment properties in Manitoba coming predominantly (99.6% of grid mix) from low carbon energy sources, such as utility-scale hydro and other renewables.
Contract with suppliers or utilities, with a supplier-specific emission rate, not backed by electricity attribute certificates	82,831	0.0410	Great-West Lifeco purchased electricity in Ontario for their owner-occupied and investment properties coming predominantly (85% of grid mix) from low carbon energy sources including utility-scale hydro, nuclear, wind, solar, and other renewables.
Contract with suppliers or utilities, with a supplier-specific emission rate, not backed by electricity attribute certificates	5,940	0.0011	100% of our subsidiary IGM Financial's Scope 2 emissions from owned property is purchased from Manitoba, which had an emission factor for electricity production of 1.1 g/kWh as reported directly from Manitoba Hydro.

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
162,826	162,826	0	0	0	Power Financial does not produce its own electricity.

12 › EMISSIONS PERFORMANCE

EMISSIONS

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	0.50%	Decrease	In 2016, we decreased our Scope 1 and 2 GHG emissions by 0.50% based on the reduction activities of Great-West Lifeco and IGM Financial. Great-West Lifeco achieved emission reductions of 253 tCO ₂ e from various efficiency retrofits, operational changes and behavioural programs at its Canadian owner-occupied and investment property portfolio. IGM Financial achieved emission reductions of 39.5 tCO ₂ e through continuing a contract with Bullfrog Energy to purchase zero carbon neutral gas, as well as through improvements to the rooftop units at its headquarters. As a result of these emission reduction activities, our total Scope 1 and 2 emissions were reduced by 292.5 tCO ₂ e in 2016. We divided this number by 58,239 (the total Scope 1 and 2 emissions in 2015) to achieve an overall 0.50% decrease from emission reduction activities. The calculation is as follows: $(292.5/58,239)*100 = 0.50\%$.
Divestment	0		
Acquisitions	0		
Mergers	0		
Change in output	0.72%	Increase	In 2016, we increased our Scope 1 and 2 GHG emissions by 0.72% (74 tCO ₂ e from an increase in business travel and 345 tCO ₂ e mainly from an increase in occupancy throughout Great-West Lifeco's global company portfolio, for a total increase of 419 tCO ₂ e). To calculate the increase, we divided 419 tCO ₂ e by 58,239 tCO ₂ e (the total Scope 1 and 2 emissions in 2015) to achieve an overall 0.72% increase. The calculation is as follows: $(419/58,239)*100 = 0.72\%$
Change in methodology	0.02%	Decrease	In 2016, we decreased our Scope 1 and 2 GHG emissions by 0.02% (10.9 tCO ₂ e) resulting from a change in the electricity emission factor provided by Manitoba Hydro. To calculate the decrease, we divided 10.9 tCO ₂ e by 58,239 tCO ₂ e (the total Scope 1 and 2 emissions in 2015) to achieve an overall 0.02% decrease. The calculation is as follows: $(10.9/58,239)*100 = 0.02\%$
Change in boundary	0		
Change in physical operating conditions	0.31%	Decrease	In 2016, we decreased our Scope 1 and 2 GHG emissions by 0.31% (182.5 tCO ₂ e), resulting from weather and occupancy changes in Canada for the Lifeco corporate buildings as well as the IGM Financial corporate buildings. To calculate the decrease, we divided 182.5 tCO ₂ e by 58,239 tCO ₂ e (the total Scope 1 and 2 emissions in 2015) to achieve an overall 0.31% decrease. The calculation is as follows: $(182.5/58,239)*100 = 0.31\%$

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. (continued)

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Other	0.12%	Decrease	In 2016, we decreased our Scope 1 and 2 GHG emissions by 0.12% (67 tCO ₂ e), resulting from a decrease in the use of refrigerants and diesel for back up purposes at Great-West Lifeco, partially offset by an increase in the use of refrigerants at IGM Financial. To calculate the decrease, we divided 67 tCO ₂ e by 58,239 tCO ₂ e (the total Scope 1 and 2 emissions in 2015) to achieve an overall 0.09% decrease. The calculation is as follows: (67/58,239)*100 = 0.12%

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?

Market-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
0.0000012	58,116 metric tonnes CO ₂ e	49,122,000,000	Location-based	25.8%	Decrease	Power Financial revenue increased by 34.5% while emissions stayed relatively constant.

12 › EMISSIONS PERFORMANCE

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
2.19	58,116 metric tonnes CO ₂ e	Full time equivalent (FTE) employee	26,539	Location-based	7.51%	Decrease	Employee count at the Power Financial group increased by 7.9% while emissions decreased by 0.21%.
6.96	58,116 metric tonnes CO ₂ e	Thousand of square foot	8,355	Location-based	0.21%	Decrease	Emissions decreased by 0.21% while area stayed the same.

13 › EMISSIONS TRADING

CC13.1

Do you participate in any emissions trading schemes?

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

CC13.2

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

Yes

CC13.2a

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

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO ₂ e)	Number of credits (metric tonnes CO ₂ e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
Credit purchase	Biomass energy	Purchased by IGM Financial Canada's Renewable Fuels Regulations (SOR 2010-189) under the Canadian Environmental Protection Act 1999. Various Used Cooking Oil and/or Crude Fish Oil By-product from Omega 3 production facilities	Other: Government of Ontario Greener Diesel-Renewable Fuel Content Requirements for Petroleum Diesel Fuel	52.09	52.09		Voluntary Offsetting
Credit purchase	Landfill gas	Purchased by IGM Financial Landfill Capture and Flare. Fredericton Region Solid Waste Commission, BlueRegistry Project 49-1	VER+ (TÜV SÜD standard)	833.33	833.33		Voluntary Offsetting

14 › SCOPE 3 EMISSIONS

EMISSIONS

CC14.1

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

Sources of Scope 3 emissions	Evaluation status	Metric tonnes CO ₂ e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain suppliers	Explanation
Purchased goods and services	Not relevant, calculated	2,308	Weight of paper purchased was multiplied by appropriate emission factors based on% post-consumer content	100%	These emissions relate to paper purchases for Great-West Lifeco corporate properties.
Capital goods	Not relevant, explanation provided				Given the nature of our business, we do not consider capital goods to contribute significantly to our total anticipated Scope 3 emissions.
Fuel- and energy-related activities (not included in Scope 1 or 2)	Not relevant, explanation provided				Scope 3 fuel- and energy- related emissions are from Great-West Lifeco's and IGM Financial's leased or investment properties only and are reported below under downstream leased assets and investments.
Upstream transportation and distribution	Not relevant, calculated	218	Indirect measurement using provincial emission factors and electricity consumption required for water distribution. Source 1: Maas, Carol. Greenhouse Gas and Energy Co-Benefits of Water Conservation. POLIS Project on Ecological Governance, University of Victoria. November 2008. Source 2: Environment Canada. Greenhouse Gas Division, National Inventory Report 1990-2014: Greenhouse Gas Sources and Sinks in Canada Part 1. (Ottawa: Environment Canada, 2016.), p30	100%	These emissions relate to the transport and distribution of products that Great-West Lifeco purchases for its offices relating to the distribution of water for consumption in its buildings.
Waste generated in operations	Not relevant, calculated	3,686	Indirect measurement using provincial emission factors. Source: Environment Canada. Greenhouse Gas Division, National Inventory Report 1990-2014: Greenhouse Gas Sources and Sinks in Canada Part 1. (Ottawa: Environment Canada, 2016.), p175 and p176. Based on 500 year emissions with following equation: Emission Factor = (CH ₄ GWP)*Lo*(1-EXP(-500*k))/1000	100%	These emissions relate to landfill waste generated by the corporate properties of Great-West Lifeco and IGM Financial.

14 › SCOPE 3 EMISSIONS

CC14.1

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

Sources of Scope 3 emissions	Evaluation status	Metric tonnes CO ₂ e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain suppliers	Explanation
Business travel	Relevant, calculated	17,571	Miles travelled multiplied by appropriate emission factors from the following: Source 1 - (Reimbursed Mileage): Federal Highway Administration Highway Statistics 2013 (Table VM-1). Source 2 - (Air Travel): Defra/DECC's GHG Conversion Factors for Company Reporting, Version 1.0 July 2015. Source 3 - (Rail Travel) Environment Canada, Greenhouse Gas Division, National Inventory Report 1990-2014: Greenhouse Gas Sources and Sinks in Canada Part 2. (Ottawa: Environment Canada, 2016.), 198.	100%	Business travel includes corporate road, car and rail travel for Power Financial, Great-West Lifeco and IGM Financial.
Employee commuting	Not relevant, explanation provided				Data is not currently available.
Upstream leased assets	Not relevant, explanation provided				We do not lease upstream assets in our business.
Downstream transportation and distribution	Not relevant, explanation provided				Given the nature of our business, we do not consider downstream transportation and distribution to contribute significantly to our total anticipated Scope 3 emissions.
Processing of sold products	Not relevant, explanation provided				We do not sell products in our business that result in the processing of sold products.
Use of sold products	Not relevant, explanation provided				We do not sell products in our business where the use of sold products would be relevant.
End of life treatment of sold products	Not relevant, explanation provided				We do not sell products where end of life treatment would be relevant.
Downstream leased assets	Not relevant, calculated	14,245	Energy, water and waste data collected from leased properties was multiplied by appropriate emission factors found in Environment Canada, Greenhouse Gas Division, National Inventory Report 1990-2014: Greenhouse Gas Sources and Sinks in Canada (Ottawa: Environment Canada, 2016.)	100%	These emissions include the downstream leased assets of Great-West Lifeco and IGM Financial and relate to the energy, water and waste from Canadian leased properties.

14 › SCOPE 3 EMISSIONS

CC14.1 Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions. (continued)

Sources of Scope 3 emissions	Evaluation status	Metric tonnes CO ₂ e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain suppliers	Explanation
Franchises	Not relevant, explanation provided				We do not own any franchises.
Investments	Relevant, calculated	90,202	Energy, water and waste data collected from Seg Fund properties was multiplied by appropriate emission factors found in Environment Canada. Greenhouse Gas Division, National Inventory Report 1990-2014: Greenhouse Gas Sources and Sinks in Canada (Ottawa: Environment Canada, 2016.)	100%	These emissions cover energy, water and waste for Great-West Lifeco's Seg fund properties in Canada.
Other (upstream)			N/A	N/A	
Other (downstream)			N/A	N/A	

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	Complete	Limited Assurance	Available on the CDP Database	2-4	International Standards on Assurance Engagements 3410 (ISAE 3410)	76%

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

14 › SCOPE 3 EMISSIONS

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 (%)	Direction of change	Comment
Purchased goods and services	Change in methodology	16.3%	Increase	The change relates to an increase in emissions from a change in methodology in calculating the total paper volumes at Great-West Lifeco.
Upstream transportation and distribution	Emissions reduction activities	3.2%	Decrease	The change is partially attributable to water use reduction activities (e.g., installation of high efficiency fixtures) at the corporate properties of Great-West Lifeco.
Waste generated in operations	Change in physical operating conditions	3.2%	Increase	The change relates to an increase in waste generated by Canadian, US and Irish properties of Great-West Lifeco.
Business travel	Change in physical operating conditions	6.9%	Increase	The change relates to an increase in business-related travel at Great-West Lifeco.
Downstream leased assets	Emissions reduction activities	2.0%	Decrease	The change relates to efficiencies in consolidating third-party leased office space used by Great-West Lifeco.
Investments	Emissions reduction activities	1.7%	Decrease	The change relates to efficiency conservation measures taken by Great-West Lifeco at various locations within their investment portfolio (e.g., lighting retrofits, BAS upgrades, etc.) resulting in energy reductions in both electricity and natural gas.
Business travel	Change in output	0.8%	Increase	The change relates to a growth in business requirements and increased employee/Consultant head count, which in turn increased business travel for meetings and training at IGM Financial.
Downstream leased assets	Acquisitions	1.7%	Increase	The change relates to our subsidiary IGM Financial who expanded 2 locations last year, and opened 9 new ones, resulting in increased square footage under administration.
Downstream leased assets	Change in methodology	0.04%	Decrease	The change relates to adjustments to emission factors for IGM Financial Manitoba locations covering electricity usage.
Downstream leased assets	Change in output	0.86%	Decrease	The change relates to a reduction in utilities consumption due to climatic conditions at IGM Financial.
Downstream leased assets	Change in output	0.12%	Increase	The change relates to the change in allocation of excess green gas available for Scope 3 leased properties by IGM Financial, which decreased in 2016 compared to 2015.
Business travel	Change in output	0.08%	Decrease	The change relates to a decrease in business-related travel at Power Financial.
Downstream leased assets	Change in physical operating conditions	0.02%	Increase	The change relates to an increase of utilities consumption due to climatic conditions for the property leased by Power Financial.
Waste generated in operations	Change in output	0.25%	Decrease	The change relates to a decrease of waste generated by property leased by Power Financial.

CC14.4 Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies?

Yes, our suppliers

Yes, other partners in the value chain

CC14.4a Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success.

Method of engagement - We engage with our major subsidiaries through a group-wide CSR committee on a range of corporate social responsibility initiatives, including GHG emission and climate change strategies. As part of Power Financial's Responsible Procurement Policy and Third Party Code of Conduct, we also engage with our suppliers and contractors to influence the provision of environmentally-friendly products and services for our business.

Strategy for prioritizing engagements - We prioritize our engagements with subsidiaries where we have financial control and significant influence. For example, over the past year we prioritized our engagement with our major publicly traded subsidiaries, Great-West Lifeco and IGM Financial.

Measures of success - We measure our success based on the progress being achieved. For example, over the past year we held two awareness sessions with our major subsidiaries to understand

their carbon and energy management strategies. Considerable efforts have been made by our major subsidiaries to strengthen their commitments on reducing GHG emissions and disclosing their climate change strategies, resulting in external recognition.

In 2016, for example, Power Financial and IGM Financial gained listing status on the FTSE4Good Global Index - one of the most important indices that measure the performance of companies demonstrating strong ESG practices. Great-West Lifeco's Canadian investment management subsidiary became a signatory to the PRI and its real estate subsidiary GWL Realty Advisors Inc. maintained its Green Star ranking status on the Global Real Estate Sustainability Benchmark (GRESB). IGM Financial also maintained its listing status on the Sustainalytics' Jantzi Social Index and was named one of the 2016 Best 50 Corporate Citizens in Canada by Corporate Knights, achieving 8th place in the 2017 ranking.

CC14.4b To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent.

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Collaboration/ innovation	20	3%	Through our major subsidiary, Great-West Lifeco, we work collaboratively with our suppliers to encourage innovative products and services that can reduce our environmental impact, including GHG emissions. For example, we source recycled and sustainable FSC certified paper, LED lighting efficient data centres and equipment for building upgrades. Our supplier requests for services now have green specifications.

SIGN OFF



POWER FINANCIAL
CORPORATION

CARBON
DISCLOSURE
PROJECT
2017

15 › SIGN OFF

CC15.1

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

Name	Job title	Corresponding job category
R. Jeffrey Orr	President and Chief Executive Officer	Chief Executive Officer (CEO)