FOCUS AREAS

CLIMATE CHANGE

CPPIB AND SUSTAINABLE INVESTING
Our mandate and the consideration of Environmental, Social and Governance factors

The Chief Actuary of Canada projected in 1995 that the CPP would be exhausted in 2015 without major changes. In response, Canada’s provincial and federal governments decided in 1997 that the CPP’s assets should be professionally and independently managed. They legislated a single objective for CPPIB: to seek a maximum rate of return without undue risk of loss. In doing so, we are explicitly required to act in the best interests of contributors and beneficiaries and to take into account the factors that affect the financial obligations of the CPP. These parameters provide a clear framework for every decision we make.

This mandate is undertaken without regard to political, regional, social or economic development considerations, or any other non-investment objectives. The clarity of our mandate supports the important investment challenge we face to achieve sufficient growth to help sustain the CPP Fund. We believe that organizations that manage environmental, social and governance (ESG) factors effectively are more likely to endure and create sustainable value over the long term.

As a long-term investor, ESG factors are of great importance to us. While the specific factors vary by company, industry and geography, we consider relevant ESG matters when evaluating opportunities, making investment decisions, managing our investments and engaging with companies to seek improvements in business practices and disclosure.

Climate Change

Why We Engage:
Climate change can present material financial risks and opportunities for companies and impact long-term investment values. Uncertainty regarding transition risks (e.g., regulatory, market, consumer and technology), physical risks and the resulting company-specific impacts from these risks make climate change a complex yet vital area for investors to consider over the long term.

What We Seek:

- Enhanced practices related to governance, strategy, risk management, performance metrics and targets and opportunities.
- Improved disclosure on the potential exposure to near-term and long-term climate change-related risks, and subsequent impact on company strategy and profitability.

Why does CPPIB not divest?

CPPIB believes that we can more effectively press for positive change by being an active, engaged investor than we can by sitting on the sidelines. Our responsibility is to maximize investment returns without undue risk of loss; eliminating entire categories of potential investments would not be consistent with that mandate. Instead, CPPIB treats ESG factors as an integral part of our investment activity. The aim is win-win: more responsible corporate behaviour from investees and higher investment returns for 20 million contributors and beneficiaries.
Climate change is one of the most significant physical, social, technological and economic challenges of our time. Its impacts are expected to be pervasive and dynamic. Scientists believe that it is critical to limit global warming to less than two degrees Celsius (2°C) above pre-industrial levels to prevent irreversible damage. The changing planet creates physical and transition risks, such as water scarcity, threats to biodiversity, extreme weather and policy and market risks, as well as investment opportunities in areas such as technological innovation and renewable energy that may manifest in the near, medium or long term.

The past years have been a watershed period for investors and climate change. Climate change has moved from being viewed as a niche ESG matter to one that is increasingly considered in the mainstream because the financial materiality of climate change is becoming increasingly recognized by investors. Not only does climate change present a complex array of immediate and emerging investment risks, it also presents attractive investment opportunities. The projected scale of the investment needed to shift to a lower-carbon economy means many ventures will require the backing of strong, knowledgeable and long-term partners.

At CPPIB, we believe that it is our responsibility to dedicate resources toward understanding climate change-related risks and opportunities across our portfolio. We take a comprehensive approach that integrates climate change considerations into our risk framework and across relevant investment activities to build long-term investment value.

CPPIB’s commitment to stewardship means that we have a responsibility to press for improvement at companies that we invest in, including how they are addressing climate change. We believe that doing so will ultimately add value to our investments.

Climate change has been one of our focus areas for over a decade now, such that we are well positioned to respond to the pace of change in the regulatory and technological spheres. A thorough understanding of the climate change-related risks and opportunities in our portfolio is largely developed from an understanding of our portfolio companies. This aligns well with the work that we are doing through our involvement on the Task Force on Climate-related Financial Disclosures.

For more than a decade, we have been engaging with companies that emit high levels of greenhouse gas emissions to seek better disclosure and improve their practices related to climate change. We believe that engaging with companies on this topic and pressing for improvement, often in collaboration with other investors, will help build long-term value. As an investor with a long-term horizon, we can be a patient provider of capital and engage with the companies that we invest in to bring about positive change. Instead of simply selling our investments that are exposed to climate change risks, we are an active asset owner that seeks better disclosure and practices.

**Direct engagements**

We believe expectations around disclosure of climate change-related risks and opportunities will continue to evolve at a rapid pace in light of global developments. This year, we led and participated in collaborative engagements alongside other Canadian and global investors through which we pressed large greenhouse gas emitters in oil & gas, utilities and other sectors for improved disclosure related to greenhouse gas emissions strategies and performance. We are encouraged that a number of companies have provided enhanced disclosure regarding climate change-related matters and potential impacts to their businesses over the longer term. We will continue to press for additional enhanced disclosure which will better enable investors to reflect the risks and opportunities of climate change in our assessments of investment value.
Hermes EOS engagements

In addition to the engagement work done by CPPIB’s Sustainable Investing group directly, CPPIB also works with Hermes EOS, our global collaborative engagement platform. Hermes EOS’ work focuses on sectors most exposed to climate change, including oil & gas, mining, metals, materials, utilities, automotives and financial services as well as supply chain considerations in the retail and consumer goods sectors. During this reporting period, Hermes EOS engaged with 53 companies globally on climate change on behalf of CPPIB and others. In addition to engagements with companies, Hermes EOS contributes to the work of other global organizations on climate change, including the Institutional Investors Group on Climate Change (IIGCC) and the Task Force on Climate-related Financial Disclosures.

CDP CLIMATE CHANGE PROGRAM

Since 2006, we have supported the CDP – formerly known as the Carbon Disclosure Project – which seeks increased disclosure and management of climate change risks from approximately 6,000 companies globally. More than 825 investors have now signed on to the initiative, representing US$100 trillion in assets under management.

Engaging with companies to reduce methane emissions

In 2017, we joined the Advisory Committee of the United Nations-supported Principles for Responsible Investment’s (PRI’s) collaborative engagement on methane risks in the oil & gas and utilities sectors. The focus of the engagement is to encourage companies to reduce methane emissions, improve management of methane emissions and enhance disclosure.

The engagement was launched to PRI signatories in early 2017 and will continue through 2018. We will continue to take an active role in this collaborative engagement and have chosen to lead a number of the 25+ engagements alongside 35 global investors.
What types of climate change-related risks and opportunities should investors consider?

As the table below highlights, there are numerous risks and opportunities associated with climate change. Climate change-related risks can be broadly classified into two categories: transition risks – regulatory, technological, market-based or reputational risks that could result from the move towards a lower-carbon economy; and physical risks – i.e., direct event-driven (acute) or longer-term (chronic) risks associated with climate change. Climate change-related opportunities can be classified according to resource efficiency, energy source, products and services, markets and resilience.

<table>
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<tr>
<th>TYPE</th>
<th>CLIMATE CHANGE-RELATED RISKS</th>
<th>TYPE</th>
<th>CLIMATE CHANGE-RELATED OPPORTUNITIES</th>
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| Transition Risks | Policy and Legal  
  - Increased pricing of GHG emissions  
  - Enhanced emissions-reporting obligations  
  - Mandates on and regulation of existing products and services  
  - Exposure to litigation | Resource Efficiency |  
  - Use of more efficient modes of transport  
  - Use of more efficient production and distribution processes  
  - Use of recycling  
  - Move to more efficient buildings  
  - Reduced water usage and consumption |
|  | Technology  
  - Substitution of existing products and services with lower emissions options  
  - Unsuccessful investment in new technologies  
  - Costs to transition to lower emissions technology | Energy Source |  
  - Use of lower-emission sources of energy  
  - Use of supportive policy incentives  
  - Use of new technologies  
  - Participation in carbon market  
  - Shift towards decentralized energy generation |
|  | Market  
  - Changing customer behaviour  
  - Uncertainty in market signals  
  - Increased cost of raw materials | Products and Services |  
  - Development and/or expansion of low emission goods and services  
  - Development of climate adaptation and insurance risk solutions  
  - Development of new products or services through R&D and innovation  
  - Ability to diversify business activities  
  - Shift in consumer preferences |
|  | Reputation  
  - Shifts in consumer preferences  
  - Stigmatization of sector  
  - Increased stakeholder concern or negative stakeholder feedback | Markets |  
  - Access to new markets  
  - Use of public-sector incentives  
  - Access to new assets and locations needing insurance coverage |
| Physical Risks | Acute  
  - Increased severity of extreme weather events such as cyclones and floods | Resilience |  
  - Participation in renewable energy programs and adoption of energy-efficiency measures  
  - Resource substitutes/diversification |
|  | Chronic  
  - Changes in precipitation patterns and extreme variability in weather patterns  
  - Rising mean temperatures  
  - Rising sea levels | | |
Over the reporting period, CPPIB supported more than 30 climate change-related shareholder resolutions. Several of these sought deeper disclosure on five areas related to climate change risk and opportunity management: (i) ongoing operational emissions management, including on methane, (ii) asset portfolio resilience based on scenario analysis, (iii) low carbon energy research and development and investment strategies, (iv) director skill-set and experience and (v) public policy interventions (see pie chart below).

CPPIB has been supporting shareholder proposals that encourage companies to improve disclosure of climate change-related risks and opportunities for over a decade. This year marked a turning point for shareholder support on climate change-related resolutions. We witnessed an unprecedented level of support from shareholders globally, particularly at oil & gas and utility companies (see bar chart below). CPPIB will continue to support proposals that enable stakeholders to better understand a company’s exposures to climate change-related risks and opportunities. This increased support for climate change-related resolutions is encouraging, and we hope it will further motivate companies to improve their disclosure and management of relevant climate change-related risks and opportunities.

The bar chart below shows the change from 2016 to 2017 in the proportion of shareholders who agreed that the companies in question should conduct assessments of long-term impacts of public climate change policies aimed at reaching the globally agreed upon 2-degree Celsius target.
In mid-2016, CPPIB launched an internal Climate Change Working Group (CCWG), in order to more effectively focus our efforts with respect to climate change and coordinate work across the organization. This is an investment-driven initiative aimed at i) developing appropriate tools, processes and metrics to assess climate change-related risks and opportunities in our investment and asset management activities and ii) developing and recommending relevant actions for CPPIB to address these risks and opportunities in our existing and future investments. The cross-departmental CCWG is comprised of representatives from Sustainable Investing, investment departments, Investment Risk, Total Portfolio Management and Public Affairs and Communications. The CCWG works to develop analysis, processes and methodologies so that CPPIB can more systematically consider the impact of these risks and opportunities on our portfolio as a whole, as well as on individual investments across our investment departments.

Through this initiative, we are:

• Conducting a comprehensive assessment of how climate change is considered in our investment strategies and processes across all of our investment departments and developing recommendations for enhanced resources to assist investment teams across CPPIB in their assessment of climate change-related risks and opportunities;

• Considering how to assess climate change risks at the total portfolio level, including an assessment of climate change risks at the country level, and exploring ways to better evaluate physical risks;

• Ensuring that climate change is appropriately incorporated into our enterprise risk framework; and

• Considering a forward-looking view of the long-term energy transition to lower carbon sources, production and use and its impact.

Members of our Climate Change Working Group (left to right): Caroline Rogers, Samantha Hill, Mark Shulgan, Shelina Ilic, Stephanie Leaist, Jeff Hodgson, Kevin Godwin, Redon Gallani and Rio Mitha
Absent: Kevin Bespolka, Avik Dey, Martin Healey, Rocky Ieraci, Martin Laguerre, Tara Perkins and Cindy Lee
In May 2016, Stephanie Leaist, CPPIB’s Head of Sustainable Investing, joined the Task Force on Climate-related Financial Disclosures (“Task Force”).

The Task Force has 32 international members from the private sector, including capital providers, insurers, large global companies from a range of financial and non-financial sectors, accounting and consulting firms and credit rating agencies. The Task Force is chaired by Michael Bloomberg.

The FSB established the Task Force to develop voluntary recommendations for more efficient and effective climate-related financial disclosures so as to promote more informed investment, credit and insurance underwriting decisions. This mandate is well aligned with CPPIB’s longstanding engagement work with companies related to climate change. The Task Force released its initial report and recommendations for public consultation in December 2016 and issued its final report and recommendations to the FSB in June 2017. These recommendations are structured around four thematic areas: governance, strategy, risk management and metrics and targets.

More than 100 firms, with market capitalizations of over US$3.3 trillion and financial firms responsible for assets of more than US$24 trillion joined in a statement of support for the Task Force report and recommendations urging adoption by companies. The work of the Task Force will continue into 2018 and consider approaches to encourage organizations in the financial and non-financial sectors to adopt and implement the Task Force’s recommendations. More information can be found at www.fsb-tcfd.org.

“‘The Task Force’s recommendations have been developed by the market for the market. They set out the disclosures that a wide range of users and preparers of financial filings have said are essential to understanding a company’s climate-related risks and opportunities. Widespread adoption will provide investors, banks and insurers with that information, helping minimize the risk that market adjustments to climate change will be incomplete, late and potentially destabilizing.’

– FSB Chair and Bank of England Governor Mark Carney