



REPORT ON SUSTAINABLE INVESTING

Investing Responsibly for CPP Contributors and Beneficiaries

2018



CPP
INVESTMENT
BOARD

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PRIORITIES FOR THE
COMING YEAR





CPP Investment Board (CPPIB) is an investment organization established to help ensure the Canada Pension Plan (CPP) will be there for generations to come.

We compete around the world to secure and manage public and private assets to maximize returns and deliver sustainable value. We have global teams who bring deep expertise and local knowledge.

We ensure the Fund has both asset and geographic diversification to make it more resilient to single-market volatility and to safeguard the best interests of current and future beneficiaries against other factors affecting the funding of the plan.

CPPIB's arm's-length structure is globally recognized as a best practice for national pension plans.

ATTRIBUTES THAT HELP DIFFERENTIATE US INCLUDE

Governance

Oversight of CPPIB is provided by a professional Board of Directors that operates independently of federal and provincial governments. Oversight of the Fund's development, composition and performance is a critical element of Board governance.

Investment-Only Mandate

We have a legislated mandate to maximize returns without undue risk of loss. CPPIB's decisions are not influenced by government direction; regional, social or economic development considerations; or any non-investment objectives.

Transparency

CPPIB publishes quarterly and annual financial statements. We hold public meetings every second year in each province that participates in the CPP, during which Canadians and stakeholder groups can ask questions of our senior leadership. In addition, we go well beyond what is required of us by legislation to provide timely and continuous disclosure of our investments, ensuring optimal visibility for stakeholders.

Segregated Assets

The assets we manage in the best interests of 20 million CPP Fund contributors and beneficiaries are strictly segregated from government funds.

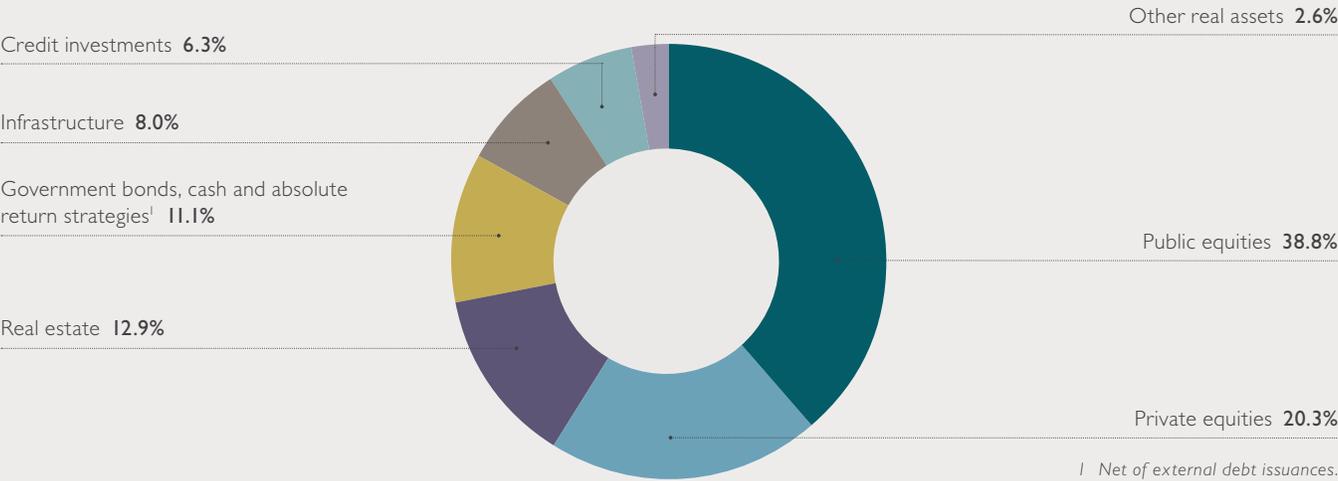
Professional Management

We are a professional investment management organization and seek to recruit top investment talent globally.

CPPIB Portfolio and Performance

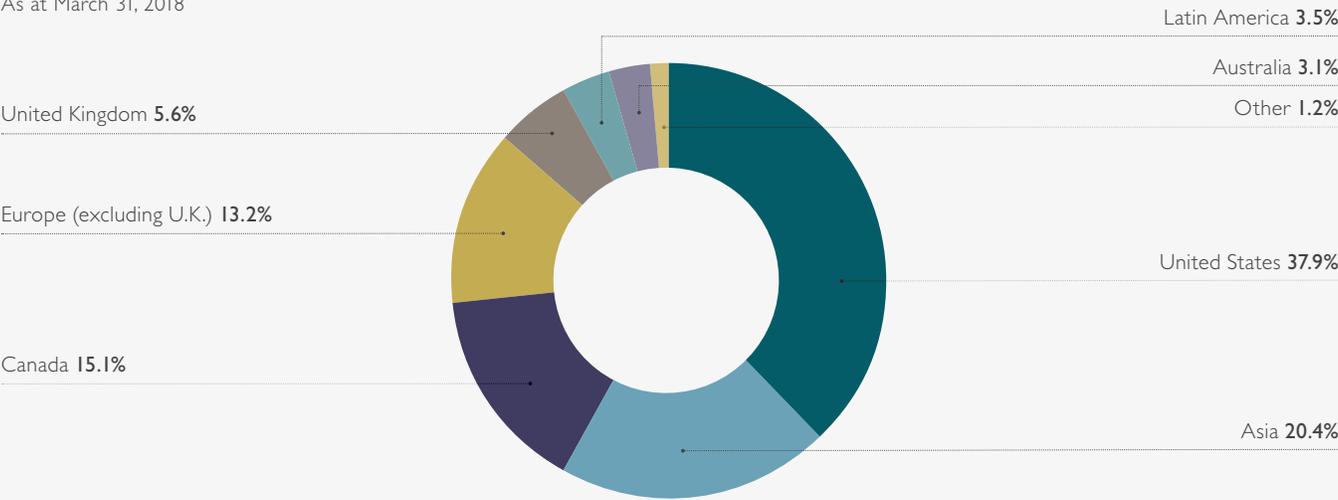
ASSET MIX

As at March 31, 2018



GLOBAL DIVERSIFICATION BY REGION

As at March 31, 2018



FISCAL 2018 RESULTS

As at March 31, 2018

<p>11.6%</p> <p>Rate of return (net nominal)</p>	<p>8.0%</p> <p>10-year annualized rate of return (net nominal)</p>	<p>12.1%</p> <p>Five-year annualized rate of return (net nominal)</p>
<p>\$356.1 Billion</p> <p>CPP Fund value</p>	<p>\$36.7 Billion</p> <p>Net income after all CPPIB costs</p>	<p>\$183.3 Billion</p> <p>Cumulative net income for 10-year period after all CPPIB costs</p>

President's Message

I once met a European business executive whose organization had been involved in one industry for generations. I was deeply impressed when he discussed how his team had calculated returns over a full century.

At CPPIB, we pride ourselves on investing for the long term, and buying assets we are prepared to hold for years or even decades. This means we must pay close attention to those things that sustain an organization over time.

Each year, CPPIB produces a Report on Sustainable Investing so that CPP contributors and beneficiaries, as well as other Canadian and international stakeholders, can see how environmental, social and governance (ESG) factors are incorporated into the way we invest. For me, it is a welcome opportunity to reflect on what our organization has achieved, and our plans to address future challenges.

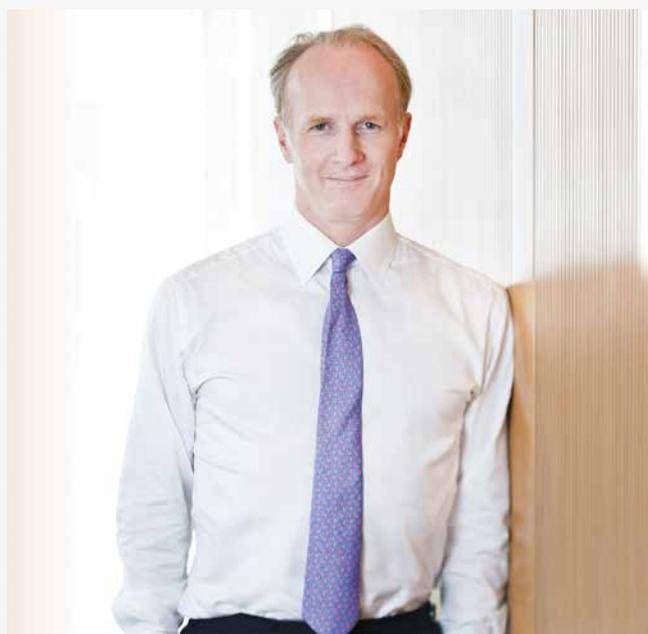
Those challenges can seem daunting. They range from preparing for the impacts of climate change — which include a global transition to use of lower-carbon energy — to encouraging companies to better plan for the long term, and taking steps to improve board effectiveness and gender balance.

But in reviewing our work on these and similar issues each year, I am reminded that CPPIB enjoys several advantages that position us well for addressing such challenges.

First among these is our mandate, which has provided clear guidance for CPPIB's leadership since the organization's creation in 1997. To help ensure the CPP will be there for generations to come, we invest its assets with a singular objective — to maximize returns without undue risk of loss, taking into account the factors that may affect the funding of the plan. We have developed our sustainable investing approach recognizing the influence that ESG factors have on returns, especially for very long-term investors like ourselves. Quite simply, we believe that businesses that do well in addressing ESG issues will deliver greater value over the extended timeframe we care about.

CPPIB also benefits from having spent more than a decade actively addressing many of these issues, including climate change. Our early work set us on a path to become a leader in encouraging companies to better consider and disclose how they manage climate change factors. You can read more about this on pages 38–41. This work, in turn, supports CPPIB's current firm-wide efforts to improve our processes and tools to help us better understand the potential impact of climate change on our portfolio.

Finally, no organization can succeed without great people. Having grown to manage more than \$366 billion (as of June 30, 2018),



Mark Machin, President & CEO

CPPIB has the scale, activities and profile to attract top talent globally. More importantly, our culture places proper onus on integrity and high performance. It is a culture I inherited when I became CEO more than two years ago, and a comparative advantage we work hard to maintain. Our employees have an especially strong sense of purpose when it comes to addressing ESG issues like climate change and gender balance on boards, something I think you will see reflected in the following pages.

Climate Change

The 12 months to June 30, 2018 covered by this report saw three significant developments for CPPIB's approach to climate change.

The first was the establishment of our Climate Change Steering Committee, under the executive sponsorship of our Chief Financial and Risk Officer. The committee's main purpose is to accelerate our understanding of and take action on both the risks and opportunities stemming from climate change. We aim to be a leader among asset owners and managers in understanding these aspects, not for the sake of being ahead, but to promote the best interests of our stakeholders.

Our work on this front includes the design and implementation of a toolkit that our investment teams will use to strengthen our investment evaluation processes. We also are creating a dynamic global energy outlook to serve as a reference point for investment reviews and other portfolio decisions.

Another major development was the creation in late 2017 of our stand-alone Power & Renewables group. It is tasked with expanding our renewables portfolio, taking advantage of increasing global demand for low-carbon energy and the sector's improving cost efficiency.

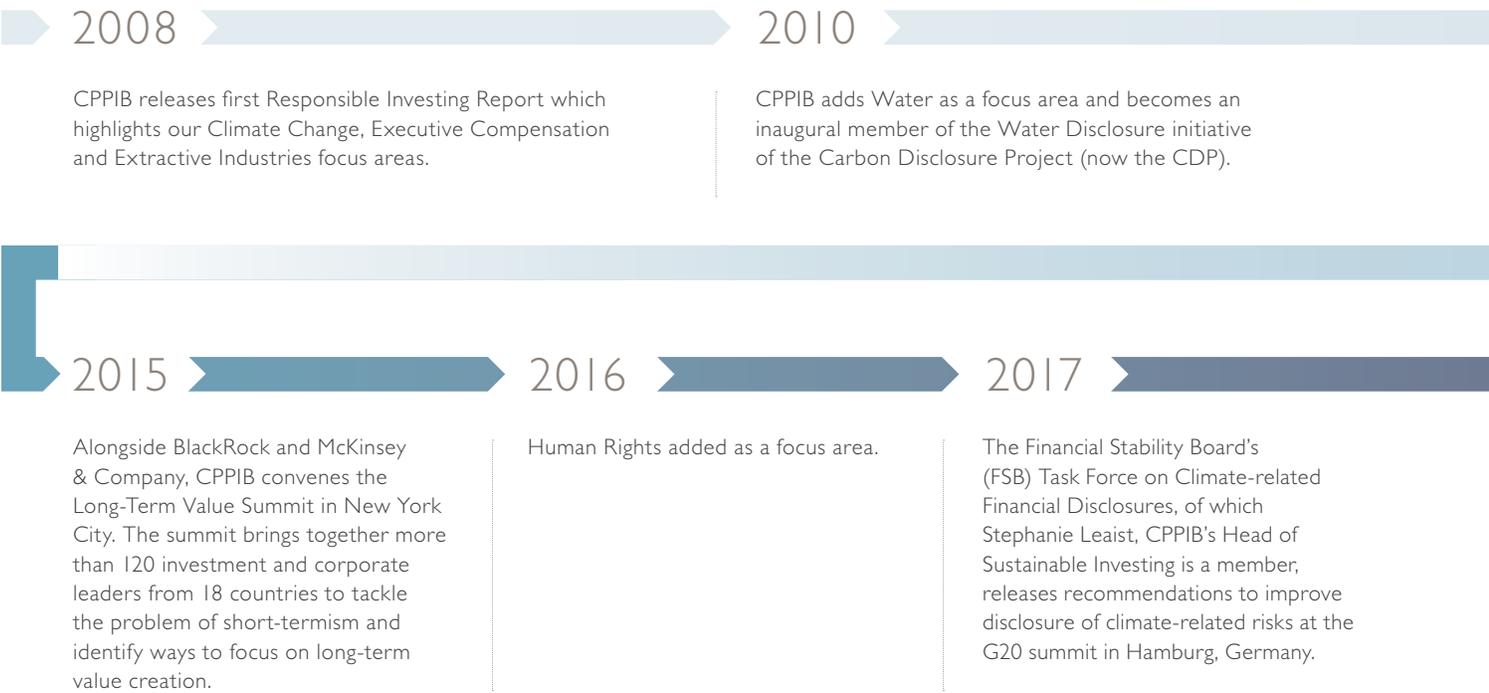
CPPIB has since announced deals to invest more than \$3 billion in the renewable energy sector, including assets in North America, Europe, Brazil and India. You can read more about these investments on page 21. We believe such investments will provide attractive risk-adjusted returns for our contributors and beneficiaries as demand for lower-carbon energy increases globally.

To help fund these, CPPIB issued a green bond in June 2018, the first time any pension fund has done this. The sale was well received and set a record for a single green bond sale in Canada. You can read more about this important transaction and how the funds will be used on page 31.

Finally, we are encouraged by the strong traction of the work of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (Task Force), the international private-sector initiative that developed recommendations for mainstream financial disclosure of climate risks and opportunities. Stephanie Leaist, CPPIB's Head of Sustainable Investing, serves as a member of the Task Force, helping to both produce the recommendations and encourage their adoption.

The recommendations have been endorsed and put to practical use by governments, regulators, standard-setting bodies, exchanges, banks, rating agencies, companies and our fellow investors. CPPIB will keep working with peers and investee companies to build upon this watershed moment for climate change disclosure.

Sustainable Investing: Select Milestones



Board Effectiveness

The past year also saw CPPIB's Sustainable Investing team add Board Effectiveness as a fifth engagement focus area, joining Climate Change, Water, Human Rights and Executive Compensation. This was a natural choice for us. We believe that effective boards are critical to the long-term value of our investee companies and have been addressing board-effectiveness issues in our portfolio for many years.

An example of this is the use of our voting power to influence boards. As outlined on page 49, in 2017 we voted at the shareholder meetings of 45 Canadian companies with no women directors to demonstrate our desire for improved diversity. A year later, nearly half of those companies had added a female director. This is the type of positive change we work for.

More recently, we have significantly increased our proactive board-effectiveness work. These efforts will grow further now that we have formally made Board Effectiveness one of our focus areas. You can read more about this on pages 48–51.

Conclusion

Our work on climate change and board effectiveness during the past year was notable, though still represents only two parts of a broader effort to address ESG issues across our portfolio and operations. In the pages that follow, you will get a sense of the scale and complexity of these.

At the same time, I hope that, like me, you will come away with the confidence that CPPIB has the right framework, experience and people to tackle ESG-related challenges and opportunities as they evolve over the long term, whether that is measured in years, decades or even centuries. The 20 million contributors and beneficiaries who rely on the Canada Pension Plan to provide a foundation for their retirements deserve nothing less.



Mark Machin
President & Chief Executive Officer

2012

CPPIB appoints Head of Responsible Investing to help expand ESG activities.

2013

CPPIB's 2013 Responsible Investing Report wins Best RI Report by a Large Fund in the 2014 Responsible Investor Reporting Awards.

2014

Responsible Investing group renamed Sustainable Investing, reflecting CPPIB's view that ESG factors are fundamental to enhance long-term returns.

2018

New Climate Change Steering Committee accelerates climate change-related projects and activities across the organization, including creating a Climate Change Toolkit and Energy Outlook.

CPPIB becomes first pension fund in the world to issue green bonds.

Board Effectiveness added as a focus area.

CPPIB and Sustainable Investing

Our mandate and the consideration of environmental, social and governance factors

When Canada’s provincial and federal governments created CPPIB, they legislated that the organization would seek a maximum rate of return without undue risk of loss. 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.

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, CPPIB places great importance on ESG factors. 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.

WHAT DO WE MEAN BY ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) FACTORS?



Environmental

Climate change and greenhouse gas (GHG) emissions, energy efficiency, air and water pollution, water scarcity and biodiversity.



Social

Human rights, local impact and employment, child labour, working conditions, health and safety, and anticorruption.



Governance

Alignment of interests, executive compensation, board independence and effectiveness, and shareholder rights.

CPPIB's approach to sustainable investing for long-term value

We believe that properly considering ESG factors in investment decisions can lead to better long-term performance across the Fund. In light of this belief, CPPIB prudently dedicates resources to sustainable investing, integrating ESG considerations with our obligation to maximize value to CPP contributors and beneficiaries. Our approach to ESG-related activities focuses on three key functions: integration, engagement and collaboration. When looking at an ESG issue, we consider taking one or more of these actions to generate positive changes that will create more value in our portfolio companies. This report details our approach and activities from July 1, 2017 to June 30, 2018 in respect of the thousands of companies in which we invest.

CPPIB's in-house Sustainable Investing group supports integration of ESG considerations in our investment decisions and monitoring processes, actively engaging with companies in which we are invested and exercising our proxy voting rights. The group, working closely with our investment departments, also conducts in-depth research on companies, industries and assets in which ESG factors are material to the value of our investments.

The group regularly reviews industry standards and best practices and collaborates with other investors and organizations globally. CPPIB has established governing policies, approved by our Board of Directors, to guide our ESG activities. *Our Policy on Responsible Investing* (www.cppib.com/ResponsibleInvestingPolicy) defines

how CPPIB approaches ESG factors within the context of our mandate. Our *Proxy Voting Principles and Guidelines* (www.cppib.com/PVPG) provide guidance on how CPPIB is likely to vote on matters put to shareholders at companies in which we invest and communicate CPPIB's views on governance matters.

To effectively oversee our ESG activities, we also have a Sustainable Investing Committee, with members from different teams across the organization. See page 9 for more details on our integrated Sustainable Investing Framework.

How do ESG factors affect long-term value creation?

The impact of ESG factors on long-term value creation can emerge gradually, or through a crisis that may result from years of mismanagement or poor assessment by a company of the strategic relevance of ESG matters. These factors can have clear and direct impacts on a company's profitability, for example, through greater regulation leading to higher operating costs. They can also influence customer loyalty, brand equity, ability to attract talent and a company's 'licence to operate.'



Caption: In January 2018, CPPIB announced plans to acquire a stake in ReNew Power, a leading Indian renewable energy developer.

Sustainable Investing Activities

When considering ESG factors and their impacts on our investments, we focus on three action areas: integration, engagement and collaboration



PAGES 10–31

Integration

Our Sustainable Investing group works directly with our investment departments to ensure that risks and opportunities stemming from potentially material ESG factors are integrated into investment decision-making processes and asset management activities organization-wide.



PAGES 32–53

Engagement

We seek meaningful engagements with our portfolio companies by having informed dialogue about ESG disclosure and practices, monitoring corporate activities and exercising our ownership rights.



PAGES 54–67

Collaboration

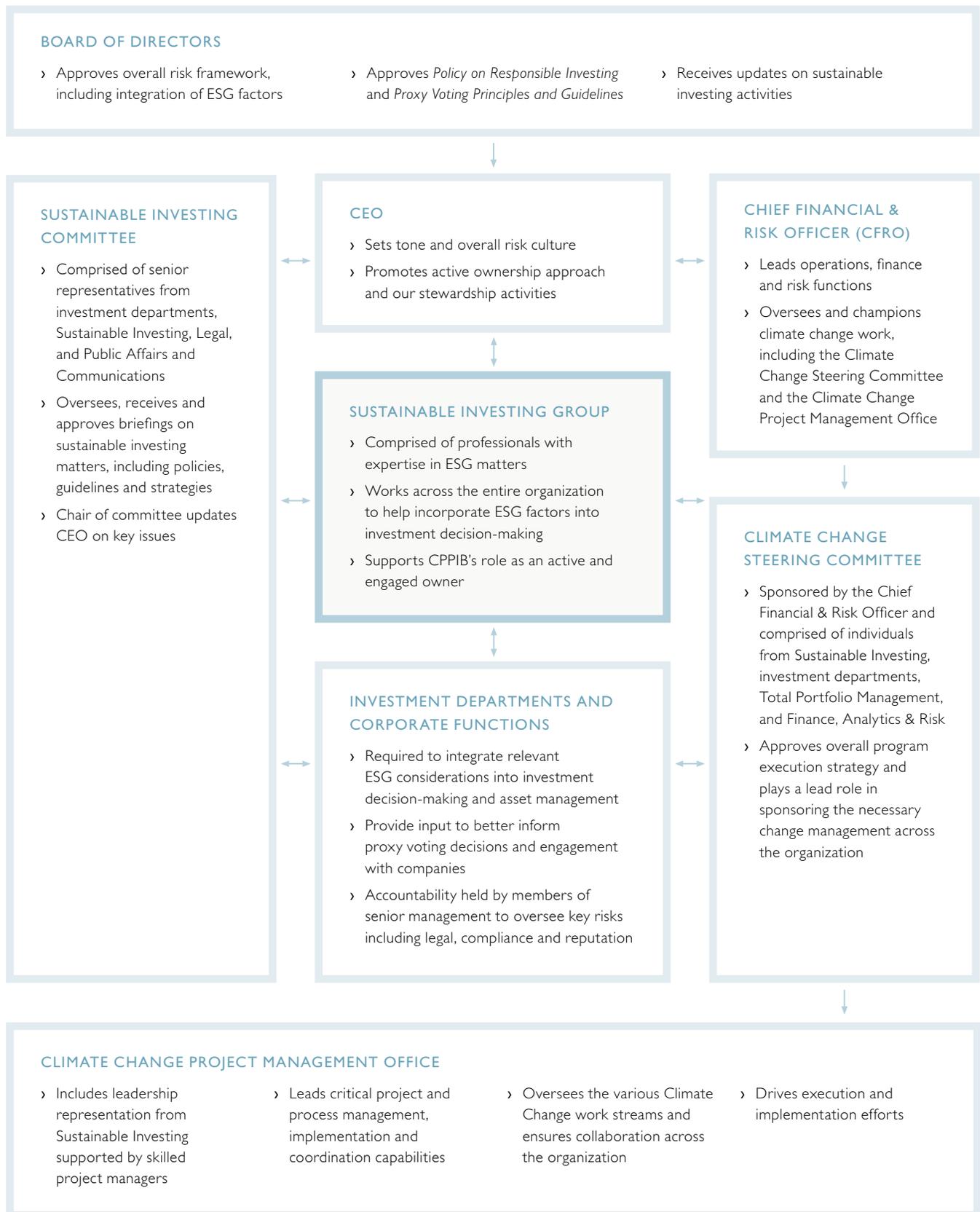
We collaborate with like-minded organizations to engage with companies, encourage better ESG-related practices and advocate for long-term policies and actions to reduce risks and promote value-building growth.

Why does CPPIB not divest?

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. Risks of divestment include missing out on potential returns needed to support CPP beneficiaries, or being compelled to sell assets at sub-optimal times.

In general, CPPIB believes we can more effectively press for positive change by being an active, engaged investor than we can by sitting on the sidelines. CPPIB treats ESG factors as an integral part of our investment considerations. The aim is win-win: more responsible corporate behaviour from investees and higher returns for 20 million contributors and beneficiaries.

CPPIB'S INTEGRATED SUSTAINABLE INVESTING FRAMEWORK



Integration

OUR APPROACH:

Integrating Environmental,
Social and Governance Factors
into Investment Decisions



What do we mean by **Integration**?

When we talk about integration in this context, we are referring to how the organization incorporates risks and opportunities arising from potentially material ESG factors into investment decision-making processes and asset management activities.

We integrate environmental, social and governance factors into our investment analysis, both before and after making investments. Our Sustainable Investing group works with investment teams throughout CPPIB to help them identify and assess ESG matters.

CPPIB's assessment of ESG considerations can be an important factor in determining whether a potential investment is attractive. Where such ESG considerations are material, they can significantly affect our assessment of a company's risk profile and value.

CPPIB's Sustainable Investing group works across the organization to support investment analyses on the impact of ESG factors. It also conducts research on industry standards and best practices, and expands our knowledge and resources by collaborating with external partners and industry associations.

Caption: In December 2017, CPPIB entered a new joint venture with Brazil's Votorantim Energia, acquiring two operational wind parks in the Piauí and Pernambuco states of Northeastern Brazil. CPPIB continues to pursue attractive opportunities in the renewable energy space.



Members of the Sustainable Investing Group (left to right): Ben Lambert, Samantha Hill, Michael Ma, Redon Gallani, Stephanie Leaist, Tammy Bodnar, Adriana Morrison, Lauren Gonsalves and Amy Flikerski.



Members of our Sustainable Investing Committee (left to right): Stephen Huntley, Rob Mellema, Paul McCracken, Rio Mitha, Stephanie Leaist, Lisa Olsen and Scott Lawrence. Absent: Andrea Jeffery

Sustainable Investing Group

Our Sustainable Investing group comprises individuals with expertise in environmental, social and governance matters. It assesses and provides input on evolving trends and industry best practices in these areas, as well as on company-specific, thematic and sector ESG issues. In addition, it works with investment departments across the organization to ensure ESG risks and opportunities are incorporated into our investment decision-making and asset management activities. It supports our role as an active engaged owner by carrying out all our proxy voting activities and it works to enhance the long-term performance of companies in which we invest by engaging, either individually or collaboratively, with other investors.

Sustainable Investing Committee

Our Sustainable Investing Committee comprises senior representatives from different teams across the organization and is responsible for overseeing the functions of the Sustainable Investing group, with senior management and Board oversight as appropriate. The Committee explores, discusses and approves a wide range of topics, including climate change-related matters, engagement focus areas, ESG integration process updates with investment teams and CPPIB's *Proxy Voting Principles and Guidelines*. Committee members also share their own teams' ESG-related activities, experience and expertise with the Committee and keep their respective teams informed about the Sustainable Investing group's activities. The Committee held four formal meetings in the reporting period in addition to other ad hoc interactions.

ESG reports: An important tool for evaluating ESG factors

One of the Sustainable Investing group's regular activities is creating ESG reports about publicly traded companies for our investment teams to consider in their active investment decisions, enabling them to identify material ESG risks and opportunities early on. The reports provide an analysis of companies' practices, policies, oversight mechanisms and disclosure related to ESG matters.

The analysis is informed by a variety of sources, including corporate disclosure and third-party research, as well as the Sustainable Investing group's own domain expertise and experience from interactions with companies and stakeholders. This year, the Sustainable Investing group produced more than 80 ESG reports for our investment teams, twice the number produced last year.

2018 Report on Activities

Climate Change Steering Committee

CPPIB views climate change as one of the world's most significant physical, social, technological and economic challenges. The complexity for investors is compounded by factors that include the absence of a historical fact set, the requirement to forecast probabilities into the future and a lack of standardized disclosure among companies.

We make decisions in the best interests of current and future beneficiaries – including what and when we buy, hold or sell. To do so, we access and carefully evaluate data and leverage external scientific expertise with the aim of making prudent forecasts. As world energy markets transition to lower-carbon sources, the implications for investors will be far-reaching.

We aim to be a leader among asset owners and managers in understanding the investment risks and opportunities presented by climate change. Portions of our portfolio, including fossil fuel producers, are exposed to policy, technology, shifting demand, market and other climate change transition risks. As such, investments and assets must be properly priced to reflect these risks and offer sufficiently attractive potential returns. At the same time, new investment opportunities in sectors such as renewable power and resource efficiency will continue to emerge.

We apply insight and expertise and monitor developments as we construct our long-term portfolio, rather than setting targets or timelines that could compel us to sell or buy assets at a sub-optimal time. This is integral to our overall investment philosophy and positions us to maximize our future returns. It also protects our holdings against potential losses, the risk of stranded assets and overpaying for investments as the global energy transition takes place.

With these considerations in mind, CPPIB launched an internal Climate Change Working Group (CCWG) in 2016 to provide more effective focus in this area. The group's efforts have since been formalized into a Climate Change Steering Committee (CCSC) that governs our climate change initiative organization-wide.

The Climate Change Project Management Office, which was created in 2017 and is accountable to the CCSC, oversees CPPIB's multiple climate change work streams, including those focused on the development of a climate change toolkit, a dynamic global energy outlook and a carbon footprinting tool (see call-out box on page 15). These climate change-related work streams involve a coordinated, cross-departmental effort.



Climate Change Steering Committee (left to right): Ben Lambert, Rocky Ieraci, Amy Flikerski, Stephanie Leais, Neil Beaumont and Caroline Rogers. Absent: Sam Blaichman, Dominic Dowd, Martin Healey, Bill Holland, Martin Laguerre and Steven Richards.

Key climate change-related initiatives

Climate Change Toolkit

CPPIB is developing a toolkit to help its investment teams better assess and understand the impact of climate change on both our existing portfolio and potential investments. The toolkit also includes a framework for evaluating risks at the asset, sector and geographic levels. Other tools include regulatory monitoring, stress testing and organizing a catalogue of climate change research, analysis and external expertise.

Energy Outlook

When buying or selling energy assets, CPPIB teams carefully review energy demand forecasts. We are creating an in-house dynamic global energy outlook to serve as a reference point for investment reviews and portfolio allocation decisions. This energy outlook incorporates a range of views and analysis from the market to determine the path and pace of the transition to a lower-carbon economy.

Reporting and Communications

We apply a comprehensive communications strategy to share information on our climate-related efforts, including expanded disclosure through existing publications such as our Sustainable Investing and Annual reports. The Financial Stability Board's (FSB) Task Force on Climate-related Financial Disclosures will continue to inform our work. Transparency is critical to foster and promote the confidence of our stakeholders.

Top Down Assessment

We are assessing CPPIB's climate risk exposure at the total portfolio level and analyzing the potential economic impact of different climate-related scenarios on the overall portfolio. This is part of our long-term portfolio design framework.

Technology and Data

CPPIB is enhancing our technology tools and processes to enable enterprise-wide data and information capabilities to support climate change-related work in an integrated manner.

Carbon Footprinting Tool

CPPIB has developed an in-house technology tool to measure greenhouse gas emissions and other climate change-related data from our public equities portfolio. This information can help inform our investment risk assessment and provide future insights to assist in the expansion of our measurement efforts beyond public assets. In developing this technology, we have been closely monitoring emerging best practices.

Consulting with Investment Teams on Proxy Voting

The Sustainable Investing group is responsible for voting CPPIB's shares at all shareholder meetings for all publicly traded companies in which we invest. The Sustainable Investing group frequently consults with investment teams for their views on voting matters and integrates them into voting decisions. Investment teams across CPPIB's global offices provide input based on their in-depth knowledge of specific companies, industries and geographic markets.

Last year, we implemented a new automated system for notifying investment teams of upcoming shareholder meetings. This helps ensure investment teams are notified in real-time and facilitates a productive and efficient two-way communication between the investment teams and the Sustainable Investing group on voting matters.

This year we scaled up and refined this system – which sent more than 1,500 voting notifications to teams across the organization. This has both increased and enhanced the discussions between the Sustainable Investing group and investment teams globally. For example, during the proxy voting season, we regularly consulted with CPPIB's Active Fundamental Equities, External Portfolio Management and Relationship Investing teams in Toronto, Hong Kong and London. Integrating views from the investment teams into voting decisions helps ensure we are leveraging our global expertise and relationships.

Anti-Personnel Landmines and Cluster Munitions

Pursuant to our *Policy on Responsible Investing*, we invest only in businesses that would be lawful if operated in Canada. We use third-party expert research to identify companies globally that may be ineligible for investment under this policy. Our Sustainable Investing group conducts its own research and, if necessary, communicates directly with companies. The Sustainable Investing Committee reviews and approves all additions and deletions from CPPIB's list of ineligible companies. These include:

Anti-personnel landmines: We will not invest in companies that are not in compliance with Canada's *Anti-Personnel Mines Convention Implementation Act*, or that would not be in compliance if they operated in Canada.

Cluster munitions: We will not invest in companies that are not in compliance with Canada's *Prohibiting Cluster Munitions Act*, or that would not be in compliance if they operated in Canada.

Our annual disclosure of public equity holdings may show amounts for companies that would be precluded from investment under the *Policy on Responsible Investing*. Any and all such exposures are indirect, resulting from CPPIB's use of market-traded index futures contracts. The composition of the indices is standard and beyond the control of CPPIB. Our exposures do not assist or affect the capital formation of these companies and CPPIB has no direct investment in them.

Active Equities

ESG factors are considered across the Active Equities department and play a key role in work done by our Active Fundamental Equities, Relationship Investments and Thematic Investing groups. The Head of Sustainable Investing is a member of the Active Equities investment committee.

Active Fundamental Equities

The Active Fundamental Equities (AFE) group is responsible for generating above-benchmark returns through equity investments informed by deep, bottom-up fundamental research. This research is used to create a concentrated long-short, market neutral portfolio. The portfolio is global in scope, encompassing both developed and emerging markets, and leverages AFE's presence in Toronto, London, New York and Hong Kong.

AFE conducts in-depth research to generate company-specific insights with the singular focus of identifying mispriced securities. As part of this, AFE evaluates risk that could impact a company's future profitability, including detailed assessments of potential ESG risks. While ESG risks are more publicized in some sectors than others, they are important across all companies.

AFE's evaluation of companies considers the ESG report prepared by CPPIB's Sustainable Investing group and, depending on that assessment, can progress into focused research on specific ESG factors relevant to the investment decision. AFE also works closely with Sustainable Investing on matters related to proxy voting, particularly if they are contentious or relate to key considerations for our investments.

ESG issues can impede a company's profitability. ESG concerns can become even more pronounced when we consider CPPIB's long-term investment horizon. AFE's analysis of these factors informs its assessment of risk and expectations for returns on prospective investments and helps determine an investment's long-term appeal.

Relationship Investments

The Relationship Investments (RI) group makes significant direct minority investments in public (or soon-to-be-public) issuers. RI focuses on investments where CPPIB can make a meaningful difference to the success of the company and thereby generate long-term outperformance relative to peers. Each investment involves active ongoing relationships with the company's management team and board of directors.

RI seeks to benefit from being a long-term investor in public markets where the majority of participants are focused on short-term results. RI views a company's governance structure and its approach to managing environmental and social factors as indicators of its ability to grow sustainably and create long-term value. If an investment moves to the due diligence phase, relevant ESG factors and practices are further evaluated through discussions with the company's management team and directors, supported by internal analysis and expert advice.

Once an investment is made, RI can often leverage its status as a significant shareholder to engage with company management teams to promote ESG best practices.

Thematic Investing

The Thematic Investing (TI) group researches and invests in securities exposed to long-horizon structural changes. TI's investment process comprises in-depth research beginning with a global, top-down approach to identify the most compelling long-horizon themes. This top-down research is complemented by bottom-up fundamental research to identify investment opportunities in both public and private markets.

TI focuses on companies exposed to structural growth, which typically occurs over time horizons exceeding 10 years. This being the case, it is important that the companies in which TI invests are sustainable over the long term. TI incorporates ESG assessment into its investment process to ensure the investee companies are sustainable and deliver long-term growth. In addition, TI considers how climate change may impact companies and industries.

For example, TI has researched how the transportation industry may transform from one reliant on gas to one reliant on batteries. By analyzing current and expected costs of lithium-ion batteries, TI anticipates electric vehicles are approaching price competitiveness in many scenarios and increased sales of electric vehicles are expected to boost battery demand in the coming years. TI has identified segments of the market where it forecasts healthy profitability.

SHAREHOLDER ENGAGEMENT IN PRACTICE:
RELATIONSHIP INVESTMENTS

CPPIB takes its responsibility as a shareholder seriously and, as much as possible, engages directly with companies and management teams to promote ESG best practices. Nowhere is this more evident than in investments in which CPPIB takes a significant ownership interest, and RI's portfolio provides some excellent examples. Sustainable Investing works closely with RI to shape the dialogue with investee companies. Sustainable Investing brings deep ESG expertise to the table and helps management and boards think through their approaches and align with best practices. Here are a few recent examples where Sustainable Investing has provided bespoke assistance to RI portfolio companies:

ESG Program Development

On several occasions, CPPIB was asked to provide advice to a portfolio company to help it build out and enhance its ESG practices and performance after going public. We provided guidance on topics such as ESG benchmarking, setting meaningful environmental Key Performance Indicators and building internal capacity related to ESG factors.

ESG Rating Agencies

In early 2018, one of our portfolio companies reached out to better understand CPPIB's use of global ESG rating agencies and to solicit our thoughts and input on how the company's rating could be improved.

Shareholder Democracy

We engaged with a portfolio company to promote greater shareholder democracy. Consistent with CPPIB's recommendations, the company announced a proposal to amend the company's bylaws to declassify the board and implement a majority voting standard for uncontested director elections.

Say on Pay

As part of an ongoing effort to improve governance practices at one of our portfolio companies, CPPIB provided guidance to the board on developing an effective shareholder engagement program. This led to a substantial increase in support for the company's Say on Pay proposal.

Compensation Structure

CPPIB provided feedback to the Chair of the Remuneration Committee at one of our portfolio companies on a new long-term incentive plan aimed at simplifying the overall compensation structure, fostering an organization-wide ownership mentality and clarifying the link between pay and performance. At another of our holdings, the CPPIB director nominee joined the Compensation Committee and worked with Human Resources and the Chair of the Compensation Committee to help design a new framework for short-term and long-term incentive compensation.

Private Equity and Real Assets

Approach to Direct Investments in Private Equity and Real Assets

CPPIB has a large degree of ownership, interest and influence in our direct equity investments, including through direct private equity or real assets transactions (such as infrastructure, energy, resources, power and renewables). Our intention is to hold direct equity investments for several years — and even decades in the case of infrastructure or energy investments.

The ongoing management of ESG factors can impact investment values significantly during the long holding periods for such investments. For this reason, evaluation of ESG opportunities and risks is integrated into our due diligence process for direct investments in private equity and real assets. With our growing direct equity investment portfolio, we must manage ESG factors across a wide range of companies in diverse sectors. We tailor our approach for the ESG evaluation of each transaction, because circumstances differ by deal structure, company, sector and geography.

Guided by the United Nations-supported Principles for Responsible Investment and other internationally recognized standards, we focus our ESG evaluations and management approach for direct equity investments on six areas: environment, health and safety, labour and working conditions, community relations, business integrity and corporate governance.

Opportunity Screening and Due Diligence

CPPIB's due diligence is not time-bound, but rather ongoing. Once we make a direct investment in a private company or real asset, we closely monitor ESG risks and opportunities over the life of the investment using customized approaches that reflect industry, geography and company-specific factors.

Monitoring

Once CPPIB acquires a major stake in a private company, we become a constructive, long-term partner to enhance the company's ongoing operational and financial performance.

Through the active governance model of direct equity investments, CPPIB and our partners are able to directly influence portfolio companies commensurate with our ownership stake. Depending on the level of CPPIB's influence, our ongoing engagement in the company's monitoring of ESG performance can take several forms.

For example, where we have access to a company's regular board reporting, we can monitor and act on ESG performance indicators. Where we have board seats, we make our views known and seek to influence through those positions and through the relevant board committees, such as health and safety, environmental, compliance, audit and others. This work with other directors and senior management gives us valuable insights, provides

ESG-related accountability, allows us to encourage responsible business practices from within the organization and is expected to improve the company's financial performance and CPPIB's return on investment.

We seek to influence composition of boards and board committees to best reflect required competencies and independence from company management. We press for appropriate executive compensation arrangements that are properly aligned with long-term shareholder interests. Executive compensation and board composition are high priorities for us and improvements in these areas may be part of contractual agreements with companies in which CPPIB is a significant shareholder.

MANAGING ESG FACTORS IN THE DILIGENCE OF DIRECT EQUITY INVESTMENTS

1

Opportunity screening

CPPIB's deal team identifies and highlights key ESG factors in the preliminary evaluation of a target company at the screening stage.

2

Primary due diligence

If CPPIB proceeds to due diligence, we conduct a structured and intensive review of a target company's business model and key ESG risk factors by accessing a number of sources, including senior management and corporate information, in-house specialists and environmental, technical, engineering, legal, security and accounting experts we engage as necessary.

3

Governance & investment recommendation

The investment approval process includes an assessment of material ESG matters. The deal team assesses the potential financial impact of ESG risks and opportunities. CPPIB encourages best practices for board governance; as owners, we work to put appropriate controls and processes into each of our portfolio assets.

Portfolio Value Creation Group: Enhancing Outcomes as an Engaged Owner

CPPIB's Portfolio Value Creation (PVC) group is actively involved in the governance and management of CPPIB's direct equity investments across all investment departments. The group works with deal teams, management and partners to drive value within portfolio companies through board oversight, performance monitoring and value creation from operations.

PVC enables us to realize financial benefits of private ownership by monitoring developments and commitments by our portfolio companies and helping resolve governance and operational issues. The group carries out a regular semi-annual monitoring process that includes ESG factors for major assets where CPPIB holds significant governance rights or control. In addition, PVC ensures implementation of CPPIB's ESG diligence and monitoring process for all investments in direct private equity and real assets.

Energy & Resources

The Energy & Resources group pursues investments in traditional energy production, transport and storage, as well as mining, and the innovation, technology and services opportunities related to these sectors. The group prioritizes the evaluation and monitoring of environmental, social and governance factors, working with portfolio companies to ensure best practices are implemented.

The group routinely discusses climate change and energy transition issues when evaluating new and existing investments, as well as with the boards of its portfolio companies. Recently, the group presented CPPIB's energy transition work to a portfolio company's board, contributing to the company establishing Environmental and Stakeholder Impacts, including emissions reduction, as a key strategic theme. The company subsequently announced a transaction to develop infrastructure supporting a carbon capture utilization and storage project. The capture and permanent storage of CO₂ from this project is expected to result in significant reductions in emissions of greenhouse gases.

ESG practices for direct equity investments continue to evolve

CPPIB has used a structured and consistent approach for due diligence and monitoring of ESG risks in our direct equity investments since 2012. This approach is highly adaptive and designed to be applicable to direct equity investments in any industry or geography. It encompasses priorities such as environmental impacts, water usage and human rights. PVC continues to work with our investment teams and external advisors to refine this approach. This year, PVC worked with internal groups, such as Legal and Compliance and select specialist advisors, to update the list of topics of increasing importance (e.g., anti-bribery

and corruption, cyber risks and data security). Since 2012, more than 147 potential investments have been screened through our ESG due diligence process, with 31 using the refined process this year.

The Sustainable Investing group also works with investment teams to consider potential investment implications of key ESG matters, including the provision of domain expertise on issues related to climate change and water throughout the investment process and after an investment is made.

CPPIB's expanding portfolio of renewable energy assets

CPPIB's investment in renewables is aligned with our mandate and belief they can provide attractive risk-adjusted returns when done in a thoughtful, prudent manner. CPPIB has actively explored opportunities in this sector, which led to the following transactions:

- › In December 2017, CPPIB signed agreements with Brazil's Votorantim Energia to form a joint venture, acquiring two operational wind parks located in Northeastern Brazil through an initial contribution of \$272 million in equity.
- › In January 2018, CPPIB announced plans to acquire a 6.3% stake in ReNew Power, a leading Indian renewable energy developer and operator with clean energy capacity diversified across wind, utility-scale solar and rooftop solar power-producing assets. CPPIB's initial investment of US\$144 million was followed by an additional US\$247 million in April, bringing our total investment in ReNew to US\$391 million. This investment was undertaken by our Relationship Investments group.
- › In April 2018, CPPIB signed an agreement to acquire a portfolio of six Canadian operating wind and solar power projects from NextEra Energy Partners for \$741 million. We continue to work with affiliates of NextEra under a long-term agreement to manage operations of these assets. The business now operates as Cordelio Power.
- › In May 2018, CPPIB signed agreements with Enbridge Inc. to acquire 49% of Enbridge's interests in select North American onshore renewable power assets, as well as 49% of Enbridge's interests in two German offshore wind projects. CPPIB's total commitment is about \$2.25 billion. The assets include 14 long-term fully contracted operating wind and solar assets in four Canadian markets and two operating wind and solar assets in the United States.



\$272 MILLION
Votorantim Energia, Brazil



US\$391 MILLION
ReNew Power, India



\$741 MILLION
Cordelio Power, Canada



\$2.25 BILLION
Enbridge, Canada, Germany and United States

Photo courtesy of Enbridge, Inc.

Power & Renewables

The mandate of the Power & Renewables (P&R) group is to take advantage of opportunities as the global energy market transitions and global power demand grows – particularly for low-carbon energy alternatives. Electricity is the fastest growing form of energy consumption globally and renewables are becoming a more prominent part of the energy mix as deployment costs decrease and green technology increasingly becomes mainstream. Agriculture investments are also managed by the P&R group.

This group was created to help access attractive investments in the sector, since the industry's dynamics align closely with our competitive advantages – notably our scale, flexibility and long-term horizon. The group focuses on strategic opportunities and the ability to apply long-term investment horizons, with latitude to explore promising, less mature development and greenfield investments.

P&R collaborates with colleagues in both Infrastructure and Energy & Resources, as well as the Sustainable Investing team.



An interview with Bruce Hogg

Investing for the global energy transition

Bruce has been instrumental in helping CPPIB build a world-class infrastructure program since he joined the organization in 2007. He now heads CPPIB's Power & Renewables (P&R) group. Since its inception in 2017, P&R has been working to take advantage of emerging opportunities as global power demand grows and the energy market shifts towards lower-carbon alternatives.

Q: What is CPPIB's outlook for the Power & Renewables sector?

A: Globally, electricity is the fastest-growing form of energy consumption, with new investment in generation expected to total \$10 trillion by 2040. It's long been presumed renewables are highly subsidized, which was the case when development costs were higher. But we've reached the point where renewable assets are getting built at relatively low costs and there is demand for them.

We track multiple investment themes. Now that renewable power investments are cost-competitive with coal and low-priced natural gas, many emerging markets can leapfrog into renewables, bypassing conventional energy production. With global solar power generation expected to double over the next seven years, and wind over the next 10, that cost-competitiveness will accelerate.

Our ability to do this will be helped along by disruptions, such as better storage systems – expected to grow fivefold in capacity over the next five years. What's more, as utility grids decentralize, demand management systems, smart meters and related technologies will gain traction. And, the industry will actively seek storage solutions to compensate for the fact that renewable power is generated intermittently – it's not always windy or sunny.

Q: How does CPPIB's portfolio benefit from a team dedicated specifically to Power & Renewables?

A: Having a dedicated team enables us to effectively match CPPIB's capital with global investment opportunities created by transitions to lower-carbon energy sources. Our approach will translate CPPIB's comparative advantages – which include scale and a long-term investment horizon – to achieve better risk-adjusted returns.

On top of that, benefits offered by increased focus on Power & Renewables include asset diversification and broader access to emerging markets, which is a significant long-term investment opportunity. Furthermore, a focused group builds capabilities and knowledge that go hand-in-hand with our Sustainable Investing group's global climate change initiatives.

We also anticipate significant opportunities for the Power & Renewables team to collaborate with investment teams across CPPIB. Synergies with the Energy & Resources group and knowledge sharing with Infrastructure and Direct Private Equity will build value across our Real Assets portfolio.

Q: What are CPPIB's current strategies on Power & Renewables in established and emerging markets?

A: Simply put: remain nimble. To generate the best portfolio, and risk-adjusted returns, we are flexible across geography, stage of investment (development, greenfield and operating), and technology type.

Within that simple mandate, we focus on transparent, reliable markets that offer clear economic frameworks and established power markets. While opportunities are screened globally, the team will focus on North America, Latin America, Europe, India and elsewhere in Asia.

We believe we can access higher risk-adjusted returns in growing subsectors, market dislocations and emerging markets, due to significant demand-driven generation growth. Within developed markets, we are more likely to focus on greenfield and other new developments, as well as opportunistic acquisitions of operating assets and newer subsectors – such as commercial and industrial applications.

Global and local market dynamics vary widely, so we work with top-tier financial and strategic partners, as well as management teams, to ensure we have specialized presence on the ground. This approach suits an investing environment in which returns are increasingly driven by the ability to develop, build and operate assets efficiently; and to access markets where there is less competition.

Maintaining a long-term outlook means our capital partners benefit from CPPIB's considerable flexibility. As we collaborate and grow with these companies, we watch for opportunities, without pressuring their management to invest.

Further, while we want to be on the leading edge of the build-outs of newer technologies, we focus on high-quality resources and commercialized technologies whose performance specifications have been proven.

Real Estate

The Real Estate group seeks to further enhance the value of our real estate holdings through prudent management of ESG factors in partnership with our operating partners. While full compliance with local environmental regulation is a basic requirement for any real estate investment by CPPIB, making a building more environmentally sustainable can increase revenue and occupancy, reduce operating costs and increase a property's value and return on investment.

The office sector is especially sensitive to environmental factors and operating efficiencies. Leading tenants frequently seek environmentally advanced buildings for their corporate offices to reflect their company's commitment to ESG standards, address expectations of their stakeholders and control costs. For new office developments or major renovations, environmental quality is a major element in determining a property's attractiveness to prospective tenants, the rents that can be charged, the economic value of the property and its sustainability.

Opportunity Screening and Due Diligence

When assessing opportunities, our Real Estate investment team follows a formal ESG due diligence procedure that integrates consideration of ESG factors. This process includes assessment of the importance of operating efficiencies, including energy consumption, greenhouse gas emissions, water use and waste generation. While the factors examined are tailored to the specific opportunity, we examine ESG factors across five broad categories (see call-out box on the right).

Monitoring

Working with CPPIB's real estate partners, our Real Estate Investments team assesses ESG factors and operating efficiencies on an ongoing basis to maintain and enhance the competitive position, value and marketability of property investments.

Once CPPIB acquires a real estate asset, our team puts annual ESG monitoring tools in place to enhance communications with our investment partners on ESG factors. This annual monitoring involves asking operating partners to disclose significant ESG issues or events, to provide updates on the latest regulatory changes and corporate initiatives with respect to environmental and social matters, and to report on new environmental certification and performance against operating efficiency targets achieved over the past year.

Assessing ESG in potential real estate investments

1. **Sustainability Features:** Assess the quality and level of green building design and incorporate these into our assessment of the attractiveness of the asset.
2. **Partner's Approach:** Determine our prospective partner's approach to sustainable investing principles and ESG practices.
3. **Regulatory Compliance:** Ensure environmental regulatory compliance and, where necessary, quantify remediation costs into capital requirements.
4. **Operational Efficiencies:** Identify and factor-in operational efficiencies, which often have environmental implications, and incorporate them into our valuation as applicable.
5. **Social Impacts:** When applicable, assess social impacts and issues to ensure they are part of the decision process.



AMLI 3464: An award-winning property in Atlanta

AMLI is a private real estate development, management and investment company focusing on luxury apartment communities across the U.S. Its current portfolio comprises over 23,000 apartment units across nine markets. CPPIB has invested in 11 projects made up of 4,300 units, valued at US\$480 million in equity commitments with AMLI, and has been a supporter of its sustainable design program.

The City of Atlanta Urban Design Commission named its AMLI 3464 property the recipient of its prestigious Award of Excellence in 2018. The award honors projects and organizations that enhance the City of Atlanta's built environment through quality and sustainable design.

The 240-unit residential high-rise includes energy-efficient appliances and environmentally conscious amenities, proximity to alternative transit systems, the addition of a 1.4-acre dual-purpose rainwater collection and Greenspace Park and the use of healthy building materials. AMLI 3464 also recently became the first Atlanta residential high-rise to achieve Gold level status under the LEED for Homes program, certification system for assuring homes are designed and built to be energy- and resource-efficient and healthy for occupants.

Caption: The City of Atlanta Urban Design Commission named luxury residential apartment building AMLI 3464 the recipient of its prestigious Award of Excellence in 2018.

ESG Monitoring Questions

To deepen our understanding of our partners' sustainability operations and near-term objectives, we track our existing partners' participation in the Global Real Estate Sustainability Benchmark (GRESB) and the CDP – formerly known as the Carbon Disclosure Project. Our total Real Estate Equity portfolio has a GRESB participation rate of 62%. A majority of the survey respondents indicate they have environmental sustainability policies or initiatives in place at their companies. Almost all respondents indicate they have policies in place for anti-bribery and corruption and frameworks to monitor worker health and safety requirements.

Continued Focus on Green Building Certifications

We continue to focus on acquiring assets with high sustainability metrics that align with our long-term investment goals. The level of green certification is one of the most important metrics we use to assess asset quality. For example, in October 2017, we acquired Parkway, Inc. (Parkway), which owns one of the largest office portfolios in Houston, totalling approximately 8.7 million square feet across 19 high-quality properties.

A leader in sustainability, Parkway fits with CPPIB's dedication to staying ahead of the market's shift toward ESG principles and sustainable development. To date, 18 of the 19 buildings are Leadership in Energy and Environmental Design (LEED) certified, with eight buildings earning LEED Silver certification and nine earning LEED Gold certification. In addition, the Phoenix Tower property was recognized by the U.S. Environmental Protection Agency in 2016 as the longest continuously labeled ENERGY STAR building in the United States. Since the ENERGY STAR program was launched in 1999, Phoenix Tower has maintained a perfect record, earning 18 consecutive ENERGY STAR labels.

Today, our 25-country portfolio has a total of 279 green certified buildings. The LEED certification program and Green Building Councils across the globe encourage sustainable building and development practices through standards and performance criteria. A full 93 of our buildings are LEED certified, with 13 earning the LEED Platinum (highest level) certification, and 41 earning LEED Gold certification.

ANNUAL REAL ESTATE SURVEY RESULTS

PERCENTAGE OF SURVEY RESPONDENTS WITH SUSTAINABILITY-RELATED POLICIES

PARTICIPATION RATE

100% YES

ENVIRONMENTAL POLICY

79% YES

HEALTH & SAFETY POLICY

87% YES

ANTI-BRIBERY AND CORRUPTION POLICY

89% YES

279
Green Building
Certifications

25
Countries



GLP Japan: A partnership focused on developing leading sustainability logistics facilities in Japan

CPPIB has a 50/50 joint venture with one of the world's largest logistics players, GLP, to develop and hold large-scale, modern logistics facilities in Japan. The partnership develops logistics facilities with high sustainability standards mainly in the Greater Tokyo and Greater Osaka regions; there are currently seven LEED certified logistics facilities in the portfolio (three Platinum and four Gold).

GLP is one of the first providers of modern logistics facilities and technology-led solutions to develop LEED certified logistics projects in Japan.

GLP Nagareyama, a large-scale development project providing 3.4 million square feet of total floor area in Greater Tokyo, was LEED Gold pre-certified in 2017.

GLP has previously developed leading sustainability logistics facilities. GLP Misato III was the first logistics facility in Japan to be awarded a LEED Platinum rating and was selected as one of 13 international winners in Urban Land Institute's 2014 Global Awards for Excellence. The building features light-emitting diode (LED) lighting, solar panels and green parking spaces.

Caption: GLP Nagareyama, a CPPIB/GLP large-scale development in Japan, attained LEED Gold pre-certification in December 2017.

Funds

The Funds team commits capital and invests alongside top-tier managers of private equity funds around the world who share CPPIB's belief in the importance of good management of ESG factors to enhance long-term value.

The team's approach includes the use of a structured ESG questionnaire that is completed by private equity fund managers (general partners or GPs) to help evaluate their approaches to ESG factors, including how they integrate ESG into due diligence, monitoring and reporting and their commitment of resources to these activities.

Opportunity Screening and Due Diligence

GPs are required to complete an ESG questionnaire as part of CPPIB's due diligence process. The Funds team uses the responses to inform and drive an active dialogue with the GP about its ESG practices. The team incorporates findings from the questionnaire and due diligence meetings into the investment recommendation.

Monitoring and Enhancing Outcomes as an Engaged Investor

Many GPs provide updates and reports on their ESG practices to limited partner (LP) advisory boards on a semi-annual basis. CPPIB chooses to partner with GPs who are also transparent and responsive to ad hoc investor inquiries into ESG practices. To the extent there is a material ESG matter impacting our investment thesis in a fund, the Funds team would include this in their quarterly monitoring process or ad hoc discussions.

EVALUATING POTENTIAL GENERAL PARTNERS

1

Aligned Approach

How do the GPs' ESG policies, processes and approach compare to CPPIB's?

2

Due Diligence Integration

What ESG due diligence does the GP conduct during the investment review process for potential new investments?

3

Resources

What resources does the GP commit to ESG considerations?

4

Monitoring and Reporting

What ongoing monitoring and reporting of ESG factors and risks does the GP implement throughout its ownership of portfolio companies?

Funds: ESG Process Review and General Partner Engagement

CPPIB believes organizations that manage ESG factors effectively are more likely to endure and create sustainable value over the long term. As such, the Sustainable Investing group periodically conducts a review of ESG processes across the organization to ensure they are effectively identifying risks and opportunities.

In 2017, the Sustainable Investing group conducted an initial review of the Funds team's ESG process, which led to conversations with 10 of our global GPs to better understand

those ESG practices. Beyond general process discussions, the Sustainable Investing group also spoke with the GPs about three key themes: climate change, diversity and reporting. Overall, the GPs welcomed the conversations and echoed the importance of interactions with LPs to encourage GPs' efforts to consider financially relevant ESG matters. The Sustainable Investing team found the discussions insightful and plans to integrate relevant learnings into internal ESG processes.

KKR: Driving diversity for better results



KKR was one of the general partners engaged by Sustainable Investing throughout the process outlined above and was noted for its thoughtful diversity practices. Becoming more diverse and inclusive is a strategic imperative for KKR, because it believes this can maximize its performance.

In 2014, KKR created the Inclusion & Diversity Council, whose global leadership is composed of 11 KKR members and an Advisory Group of approximately 20 diverse KKR executives. Since then, KKR has improved its pipeline of diverse candidates, built a more diverse organization, and expanded its external partnerships with diversity-focused organizations. Areas of progress for KKR include:

- › Scored 100% on the Human Rights Campaign's (HRC) Corporate Equality Index
- › Joined the CEO Action for Diversity & Inclusion, with KKR Co-Founders and private equity pioneers Henry R. Kravis and George R. Roberts committing to this pledge

- › Launched the Inclusion Network to bring employees together across regions and offices to foster greater inclusion and celebrate workforce diversity
- › Continued offering comprehensive policies and programs for working parents, including extended paid leave for primary and non-primary caregivers, Parental Leave Executive Transition support and a firm-paid Childcare Travel Program
- › Introduced adoption reimbursement benefits for all U.S. and London employees and seeks to expand that benefit to employees in its European and Middle Eastern offices in 2018

At the portfolio company level, in 2017, KKR partnered with the non-profit BSR to develop an inclusion and diversity questionnaire to gather baseline information about select portfolio companies' practices and to provide recommendations and resources to improve their long-term performance.

KKR's programs will expand and evolve, reinforcing its position as a diverse, supportive employer of choice.

Capital Markets and Factor Investing

External Portfolio Management

The External Portfolio Management (EPM) team creates value through engagement of external managers whose distinct strategies and expertise in public markets are accretive and complementary to our own. Members of the EPM team, who recommend the external managers they invest with, are required to consider ESG matters and stewardship activities in the course of due diligence for all investment opportunities. Prospective external managers are asked, when applicable, how they monitor ESG risks at their portfolio companies, how they engage with these companies and what their approach is to assessing and integrating ESG factors into investment decisions, including any relevant processes and policies.

After making a commitment to a manager, EPM continues to monitor its stewardship activities and ESG practices, including regular communication to identify how those practices may be evolving. This information is then incorporated into EPM's ongoing monitoring processes.

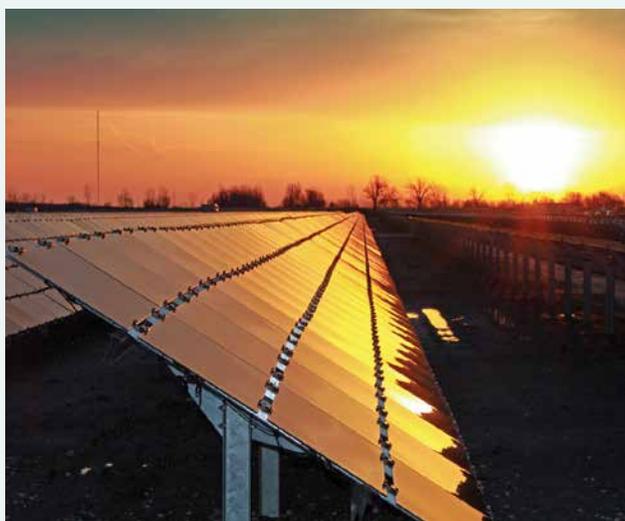
Poul Winslow, CPPIB's Global Head of Capital Markets and Factor Investing, became a director of the Standards Board for Alternative Investments (SBAI), previously known as the Hedge Fund Standards Board, in September 2015. CPPIB joined as a member of the SBAI Investor Chapter in November 2015. The SBAI is a standard-setting body for the alternative investment industry and custodian of the Alternative Investment Standards. The SBAI creates a framework of transparency, integrity and good governance for the industry and facilitates investor due diligence. CPPIB continues to work with the SBAI on improving transparency and governance for the alternative investment industry.

CPPIB becomes the world's first pension fund to issue Green Bonds

In June 2018, CPPIB completed its inaugural issuance of green bonds, becoming the first pension fund in the world to do so. Investors bought \$1.5 billion of the 10-year bond, which Bloomberg reported was a record at the time for a single green bond transaction in Canada.

Since their introduction in 2007, green bonds have become a mainstream way for companies, governments and other organizations to raise funds for projects with environmental benefits. The issuance of a green bond was a logical next step to our investment-focused approach to climate change. Capital was raised to provide additional funding as we pursue acquisitions of strong, long-term investments eligible under our Green Bond Framework. In the 12 months to June 30, 2018, we announced plans to invest more than \$3 billion in renewable energy assets.

CPPIB established a cross-departmental Green Bond Committee, comprising representatives from Sustainable Investing, Cash and Liquidity (part of the Capital Markets and Factor Investing department), Power & Renewables, Legal, and Public Affairs and Communications. The Green Bond Committee determines which projects are eligible for green bond proceeds in the following categories:



Renewable energy (wind and solar)

- › Acquisition, operation, maintenance and upgrades of wind and solar energy projects
- › Efficiency improvements of wind and solar energy projects

Sustainable water and wastewater management

- › Acquisition, operation and upgrades of projects that improve efficiency of water distribution and water recycling services
- › Investments in tail water recovery systems, which collect run-off water from fields that is then recycled for agricultural production

Green Buildings (LEED Platinum certified)

- › Direct investments in buildings certified as LEED Platinum over the 24-month lookback period and during the life of the bond

In addition, CPPIB engaged a world leader in providing second opinions on qualification of debt for green bond status, the Center for International Climate Research (CICERO), to evaluate the Green Bond Framework.

The Green Bond Committee met in July 2018 to make an initial decision on how the \$1.5 billion in proceeds from the first bond sales would be allocated. It decided the proceeds will be invested in renewable energy assets chosen from among a series of acquisitions announced starting in December 2017. Additional details on these assets can be found on page 21. They include:

1. Wind parks acquired in a joint venture with Brazil's Votorantim Energia
2. Investment in India's ReNew Power, which owns wind, utility-scale solar and rooftop solar power-producing assets
3. A portfolio of Canadian wind and solar power projects acquired from NextEra Energy Partners
4. A 49% stake in Enbridge Inc.'s interests in select North American onshore renewable power assets (wind and solar), as well as 49% of Enbridge's interests in two German offshore wind projects

Further details on CPPIB's Green Bond and the use of proceeds can be found at: cpbib.com/en/our-performance/investor-relations/

Engagement

OUR APPROACH:

Actively Engaging as Owners



What do we mean by **Engagement**?

When we talk about engagement in this context, we mean communicating with companies that we invest in or other key stakeholders about enhancing environmental, social or governance disclosure and practices. We engage via a variety of methods, including proxy voting, in-person meetings and formal correspondence, either independently or in collaboration with other investors.



CPPIB believes our stewardship of the CPP Fund must go beyond simply buying and selling assets. We have a responsibility to conduct ourselves as principled, constructive and engaged owners. As such, we work to enhance the long-term performance of companies we invest in by engaging with them, either individually or collaboratively with other investors.

Engagement activity is directed at companies that present material ESG risks and opportunities. This is determined by in-depth research into the company, consideration of the industry and region, and an examination of industry standards and global best practices related to ESG factors. Proactive and constructive dialogue with senior executives, board members, regulators, industry associations and other stakeholders can significantly reduce investment risks and contribute to enhanced and sustained returns over time.

Collaborative engagement provides us with the opportunity to substantially increase the influence, resources and expertise we can bring as part of a group of investors in seeking to positively influence corporate behaviour. Whether we engage with a company on our own or collaboratively, we typically do not disclose the company's name publicly or to third parties, as it has been shown that this negatively impacts dialogue and the ultimate outcome.

Caption: In 2018, CPPIB celebrated the 10th anniversary of our Hong Kong office. This location has helped the organization grow exponentially in key Asian markets, while increasing CPPIB's understanding of ESG issues in the region.

DETERMINING WHEN TO ENGAGE



ENGAGEMENT: FROM INITIATION TO PARTNERSHIP



Hermes EOS

CPPIB is part of Hermes Equity Ownership Services (Hermes EOS), a global collaborative engagement platform that offers an effective means to expand our engagement activities across a large number of our international public equity portfolio companies and a large number of topics. During the reporting period, Hermes EOS engaged with over 225 companies globally on behalf of CPPIB. Our Head of Sustainable Investing, Stephanie Leaist, is a member of the Hermes EOS Advisory Board, a user group that provides guidance to Hermes EOS management on its coverage of themes, asset classes and networks, and the scope and quality of Hermes EOS's services to clients.

Hermes EOS: Working with Duke Energy on board effectiveness and climate change



Hermes EOS's engagement with Duke Energy, one of the largest electricity generators in the U.S. and a large greenhouse gas emitter, began in the aftermath of a spill of coal ash at one of the company's disused sites in early 2014.

The incident highlighted a need to refresh the company's board of directors, as some long-tenured directors did not have the skills required to steward the company during this difficult period. Over subsequent years, Hermes EOS's engagement with Duke Energy focused on two key areas: board effectiveness and climate change.

Shortly after the coal ash accident, Hermes EOS met the company's sustainability and governance management, including the Chief Financial Officer. Since then, Hermes EOS has had regular communication with company representatives and its board to outline concerns regarding governance and sustainability issues and make suggestions for improvements.

Hermes EOS's active engagement with Duke Energy has helped bring about a number of important changes. First, Duke Energy agreed to publish a climate change report and improve transparency on the issue. This report was published in March 2018 and outlines Duke Energy's strategy and ongoing efforts to mitigate climate-related risks. Second, Duke Energy strengthened the specification for its lead independent director role and significantly refreshed its board of directors. Following a campaign that Hermes EOS supported, Duke Energy also implemented the right of shareholders to have access to nominate candidates to its board in its management proxy statement.

Exercising Our Rights as Owners in Public Markets

One of the most effective ways to engage with public companies is by voting our proxies at annual and special meetings of shareholders. CPPIB is an engaged owner of public securities and we use our best efforts to exercise ownership rights in all cases. Proxy voting is one way we meet our stewardship responsibility to be an active owner and effectively convey our views to boards of directors and management.

CPPIB makes all of our proxy voting decisions independently. We engage Institutional Shareholder Services Inc. to make initial, customized recommendations based on our voting guidelines. Our Sustainable Investing group considers these recommendations, conducts research, consults with our investment teams and communicates with companies and stakeholders, if necessary, to arrive at CPPIB's own voting decision. When appropriate, we supplement our voting activities with high-touch, concentrated interactions with our investee companies.

As an active owner, we are transparent in our voting activities and implement the leading practice of posting individual proxy vote decisions in advance of meetings. This ensures full prior disclosure of our voting intentions, both to the companies concerned and to other interested parties. Our website provides a searchable database, by company name, of our votes at each shareholder meeting: www.cppib.com/ProxyVoting.

CPPIB also conducts an annual review of our *Proxy Voting Principles and Guidelines* to ensure they reflect evolving global governance best practices. The process involves input from our Sustainable Investing group, our Sustainable Investing Committee and external advisors. Revisions to the *Guidelines* are reviewed and approved annually by CPPIB's Board of Directors. As a result of this year's review, our *Proxy Voting Principles and Guidelines* have been updated to provide additional explicit guidance on our board effectiveness expectations.

CPPIB'S Engagement Focus Areas

Topics listed (on page 37) are our key engagement focus areas, which are chosen because they have significant and meaningful impact on the long-term financial sustainability of our public equity portfolio. Because the topics we engage on are often interconnected, engagements may cover more than one focus area. While we focus our efforts on these five areas, we also discuss other relevant topics.

What type of proposals do we support in our proxy votes?

CPPIB's published *Proxy Voting Principles and Guidelines* provide insights on how we are likely to vote on a range of issues put to shareholders (see www.cppib.com/PVPG). We also normally support resolutions that empower boards of directors to act in the best interests of the corporation, enhance management accountability and support shareholder democracy. We also normally support resolutions that request enhanced practices, policies and/or disclosure related to environmental and social matters. For example, since 2004, CPPIB has backed more than 50 shareholder proposals at tobacco companies requesting improved disclosure and standards on a range of ESG factors, including health impacts and human rights-related matters.

CLIMATE CHANGE



PAGES
38–41

Climate change can present material financial risks and opportunities for companies and impact long-term investment value.

WATER



PAGES
42–43

Effective management of water supply, use and quality is fundamental to the long-term sustainability and operations of many companies.

HUMAN RIGHTS



PAGES
44–45

Human rights are relevant from an investment perspective because they are key to building long-term sustainable value and when not appropriately managed can lead to operational disruptions and reputational damage.

EXECUTIVE COMPENSATION



PAGES
46–47

To align the interests of management and long-term investors, clear and appropriate links between pay and performance must be in place.

BOARD EFFECTIVENESS



PAGES
48–51

The independence, expertise, experience and diversity of a company's board are critical factors in long-term value creation.

2018 Report on Activities

CLIMATE CHANGE

Why We Engage

Climate change can present material financial risks and opportunities for companies and impact long-term investment values. The global transition to lower-carbon sources of energy will have far-reaching implications for investors. We believe companies should have a transparent and robust approach to assessing the challenges posed by climate change, so investors can make informed decisions.

What We Seek

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

Engagement

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 broad-ranging. Scientists believe it is critical to limit global warming to less than two degrees Celsius (2°C) above pre-industrial levels in order to prevent irreversible damage. Rising temperatures and sea levels create physical and transition risks, such as water scarcity, threats to biodiversity, extreme weather and policy and market risks.

Such changes also create potential investment opportunities in areas such as technological innovation and renewable energy (see table on page 39 for details) that may present themselves in the near, medium or long term. Given our exceptionally long investment horizon, we are actively addressing climate change to increase and preserve economic value, in accordance with our mandate. The implications of the global transition to lower-carbon sources of energy will be far reaching for investors and companies alike.

CPPIB's efforts to understand these implications and take commensurate action started more than a decade ago and will accelerate in coming years. Our comprehensive enterprise-wide approach integrates climate change considerations into our risk framework and across relevant investment activities to build and protect long-term investment value (see page 14 for details on our Climate Change Steering Committee and Climate Change Project Management Office).

We take a leading role in encouraging companies to improve climate change disclosure and practices and helping to develop global standards for how they do this, such as through our participation on the Financial Stability Board's (FSB) Task Force on Climate-related Financial Disclosures (Task Force) (see page 58 for more information). CPPIB's commitment to stewardship and determining material financial impact means we have a responsibility to press companies to be transparent about challenges posed by climate change.



What types of climate change-related risks and opportunities should investors consider?

The table below from the Task Force highlights numerous investment risks and opportunities associated with climate change. Climate change-related risks can be broadly classified into two categories: transition risks – regulatory, technological, market-based demand and/or reputational risks that could result from the shift towards a lower-carbon economy; and physical risks – direct event-driven (acute) or longer-term (chronic, potentially resulting in food and water scarcity) risks associated with climate change. Climate change-related opportunities can be classified according to resource efficiency, energy source, products and services, the development of new markets and asset resilience.

CLIMATE CHANGE-RELATED RISKS AND OPPORTUNITIES

TYPE	CLIMATE CHANGE-RELATED RISKS	TYPE	CLIMATE CHANGE-RELATED OPPORTUNITIES
TRANSITION RISKS	Policy and Legal <ul style="list-style-type: none"> › Increased pricing of GHG emissions › Enhanced emissions-reporting obligations › Mandates on and regulation of existing products and services › Exposure to litigation 	RESOURCE EFFICIENCY	<ul style="list-style-type: none"> › 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 <ul style="list-style-type: none"> › Substitution of existing products and services with lower emissions options › Unsuccessful investment in new technologies › Costs to transition to lower emissions technology 	ENERGY SOURCE	<ul style="list-style-type: none"> › 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 <ul style="list-style-type: none"> › Changing customer behaviour › Uncertainty in market signals › Increased cost of raw materials 	PRODUCTS AND SERVICES	<ul style="list-style-type: none"> › 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 <ul style="list-style-type: none"> › Shifts in consumer preferences › Stigmatization of sector › Increased stakeholder concern or negative stakeholder feedback 		
PHYSICAL RISKS	Acute <ul style="list-style-type: none"> › Increased severity of extreme weather events such as cyclones and floods 	MARKETS	<ul style="list-style-type: none"> › Access to new markets › Use of public-sector incentives › Access to new assets and locations needing insurance coverage
	Chronic <ul style="list-style-type: none"> › Changes in precipitation patterns and extreme variability in weather patterns › Rising mean temperatures › Rising sea levels 	RESILIENCE	<ul style="list-style-type: none"> › Participation in renewable energy programs and adoption of energy-efficiency measures › Resource substitutes/diversification

Source: See pages 9–10 of *Recommendations of the Task Force on Climate-related Financial Disclosures*. Available at www.fsb-tcfd.org.
 Note: The risks and opportunities described in the table are not mutually exclusive, and some overlap exists.

For more than a decade, we have been working with our portfolio companies on climate change-related issues, including understanding their levels of greenhouse gas (GHG) emissions, improving their climate change-related disclosure and advancing best practices related to climate change. We believe these interactions, as well as pressing them for improvements, 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 help the companies we invest in bring about positive change. Rather than automatically selling investments that are exposed to possible climate change risks, we are an active asset owner that seeks to better understand these risks, take them into consideration and respond accordingly.

Direct engagements

This year, we again led and participated in collaborative engagements alongside other Canadian and global investors to press large GHG emitters in oil and gas, utilities and other sectors to improve disclosure related to GHG emissions, strategies and performance. It is encouraging that a number of companies provided enhanced disclosure regarding climate change-related matters and the potential long-term impacts to their businesses. We will continue pressing for additional enhanced disclosure, which will better enable investors to assess the risks and opportunities presented by climate change.

Hermes EOS engagements

In addition to engagement work done by CPPIB's Sustainable Investing group directly, CPPIB also works with Hermes EOS, our global collaborative engagement platform. Hermes EOS's work focuses on sectors most exposed to climate change, including oil & gas, mining, metals, materials, utilities, automotive and financial services, as well as supply chain considerations in the retail and consumer goods sectors. 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 (see page 58).

CDP Climate Change Program

We support the CDP, formerly known as the Carbon Disclosure Project, which seeks increased disclosure and management of climate change risks from over 6,300 companies globally. Since its inception in 2006, more than 800 investors have signed on to the initiative, representing US\$100 trillion in assets under management.

Working with companies to reduce methane emissions

CPPIB is on the Advisory Committee of the United Nations-supported Principles for Responsible Investments (PRI) collaborative engagement on methane risks in the oil and 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.

Methane, the main constituent of natural gas, is a colourless, odourless greenhouse gas (GHG). The gas has a wide range of sources, from decomposing biological material to leaks in natural gas pipelines. It is a far more potent greenhouse gas than carbon dioxide (CO₂). Methane traps much more heat than the equivalent amount of CO₂ while in the atmosphere, although it dissipates more quickly. According to data from the Intergovernmental Panel on Climate Change (IPCC), methane is 84 times more potent than CO₂ over a 20-year time frame and is responsible for a quarter of the global warming we are experiencing today.

The PRI initiative was launched in early 2017. We continue to take an active role and have chosen to lead a number of the more than 30 engagements alongside 35 other global investors.

Managing methane is particularly important because of the role natural gas is playing in the global energy transition, with many power generators migrating from coal to natural gas as part of their transition to renewable energy sources.

We continue to collaborate with the CDP to engage with energy companies on climate change risks and opportunities. In 2017, a representative from CPPIB attended CDP's energy company and investor roundtable which included discussions from companies about their views on the CDP climate change information request, the Financial Stability Board's Task Force on Climate-related Financial Disclosures recommendations (see page 58) and climate-related scenario analysis.

Proxy voting

Over the reporting period, CPPIB supported more than 20 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, (ii) asset portfolio resilience, (iii) low carbon energy research, (iv) management of methane emissions and (v) board oversight of climate change (see pie chart to the right).

CPPIB has been supporting shareholder proposals that encourage companies to improve disclosure of climate change-related risks and opportunities for over a decade. Shareholder support for these climate change-related resolutions can be seen in the bar chart to the right for a select number of companies. Fewer of these shareholder resolutions were brought forward at annual meetings compared with a year earlier. We believe this is because companies have been more willing to reach agreements with proponents of climate-related proposals. CPPIB views this as a welcome sign of progress.

The support for climate change-related resolutions is encouraging, and we hope it will continue to motivate companies to improve their disclosures and management of relevant climate change-related risks and opportunities.

The bar chart to the right shows the proportion of shareholders who agreed the companies in question should conduct assessments of long-term impacts of climate change policies aimed at reaching the globally agreed-upon two degrees Celsius target or improve their reporting in relation to methane emissions management.

CLIMATE CHANGE-RELATED SHAREHOLDER PROPOSALS THAT CPPIB SUPPORTED IN 2018

SHAREHOLDER PROPOSALS BY TYPE

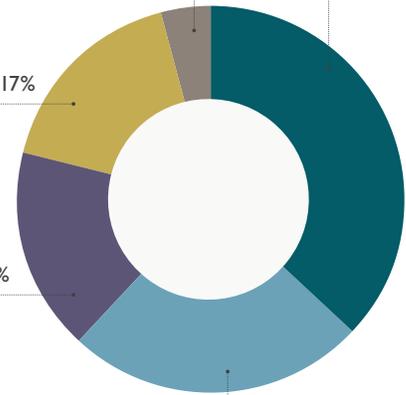
Ongoing operational emissions management **37%**

Board oversight of climate change **4%**

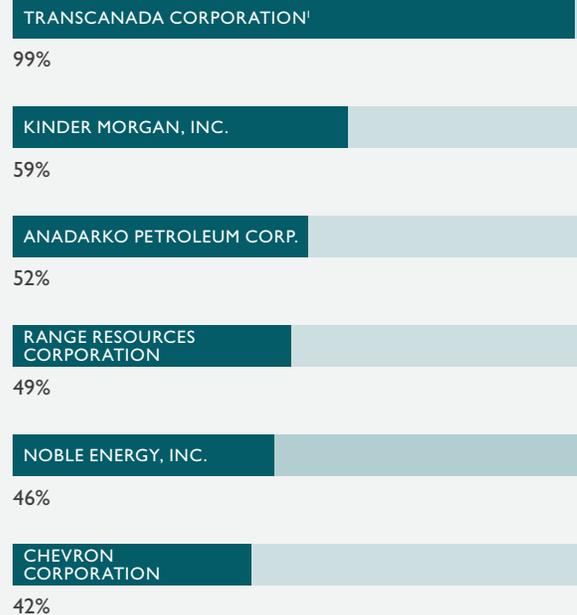
Management of methane emissions **17%**

Low carbon energy research **17%**

Asset portfolio resilience **25%**



SELECT RESOLUTIONS THAT RECEIVED HIGH LEVELS OF SHAREHOLDER SUPPORT



¹ Board recommended shareholders support the proposal

2018 Report on Activities

WATER

Why We Engage

Effective management of water supply, use and quality is fundamental to the long-term sustainability of many companies. These factors can have direct operational impacts, with the potential to affect companies' performance. This makes understanding water-related risks especially relevant to investors both today and over the long term.

What We Seek

- › Increased reporting on water-related strategies and performance.
- › Improved and more comparable disclosure of water-related data.
- › Better management of water risks.

Engagement

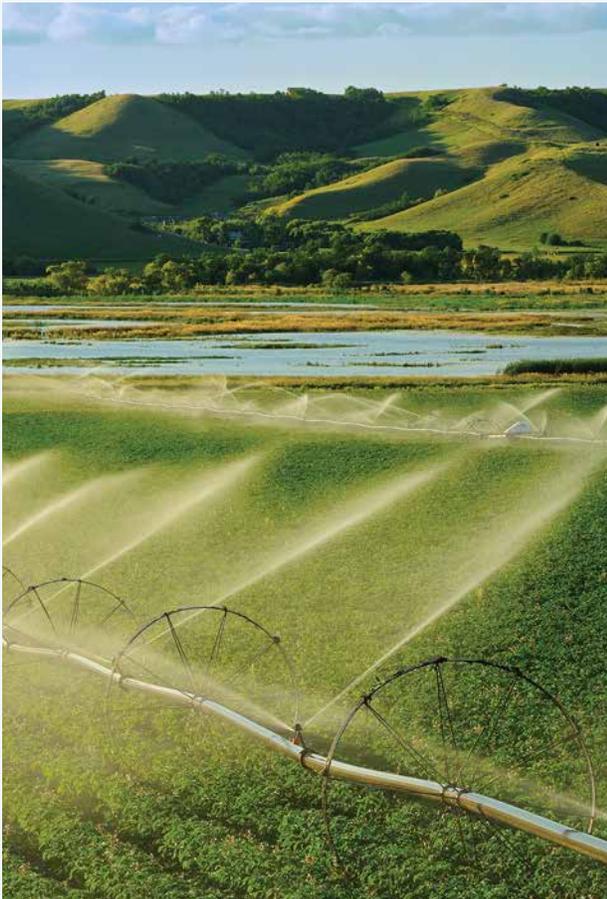
Direct engagement

Over the years, we have monitored and encouraged the work being done by oil and gas and mining companies to create consensus around key performance indicators and reporting guidelines for water.

This past year, we continued our work with companies, industry bodies and investors on ways to improve disclosure of water-related risks and build consensus around what metrics and information are most relevant. An example of this work is our involvement with CDP Water. CPPIB was among the initial investor signatories supporting the launch of the CDP Water program in 2010.

Investor signatories can use data collected by CDP to better engage with portfolio companies, mitigate risk, capitalize on opportunities and inform investment decisions. The CDP Water program asks companies to disclose, via a questionnaire (the CDP Water Information Request), efforts to manage water-related risks.

The most recent CDP Water Information Request was supported by 639 institutional investor signatories representing over US\$69 trillion in assets. The CDP 2017 Global Water Report, which analyzed 742 of the world's largest publicly-listed companies, noted that 70% of respondents have board level oversight of water-related risks and 63% measure and monitor all aspects of water use and discharge. Over half (56%) of respondents have set targets or goals to better manage water resources.



Hermes EOS engagements

Water risk has been a long-standing theme for Hermes EOS, our global collaborative engagement platform. Hermes EOS's water-related engagements focus on the consumer goods, mining and utilities sectors and include topics such as water stress (shortages of water), water management systems and water risk in supply chains. Companies are also encouraged to respond to the CDP Water Information Request.

Proxy voting

This year, we continued to support shareholder proposals requesting improved management and disclosure of water-related risks, including those stemming from water availability and quality. Proposals we supported relating to requests for increased disclosure of water risk management practices included those at Tyson Foods, Inc. and Ameren Corp. The Ameren proposal was notable as it received majority support from shareholders.

What is the global water crisis?

Over the past decade, the World Economic Forum has consistently identified water supply crises as one of the greatest global risks to society. Climate change is adding to the challenges related to water quality and availability. The 2018 United Nations World Water Development Report estimates that by 2050, more than five billion people could suffer water shortages.

Engaging on water risks in agricultural supply chains

In early 2018, CPPIB joined the United Nations-supported Principles for Responsible Investments (PRI) collaborative engagement on water risks in agricultural supply chains. Agriculture is a significant user of water and responsible for a majority of the world's consumption.

The PRI effort targets companies with operations and supply chains that are dependent on agriculture and can be subject to various water-related risks, such as water shortages and flooding. These companies include those across the agricultural products, apparel and luxury goods, food and beverage and retail sectors.

CPPIB chooses to play an active role in this effort, alongside over 35 global investors, by leading an engagement with one of the more than 15 targeted companies.

The FSB Task Force has also issued additional guidance for companies in sectors reliant on agricultural supply chains to provide relevant climate change-related financial disclosure, including exposure to water stress (see page 64 of the Annex to the TCFD Recommendations report, available at www.fsb-tcfd.org).

2018 Report on Activities

HUMAN RIGHTS

Why We Engage

Human rights are relevant from an investment perspective because operational disruptions and reputational damage can arise when these matters are not appropriately managed. Effective human rights management is important for companies' enhancement of long-term value.

What We Seek

- › Enhanced reporting on identifying, managing and mitigating human rights-related risks.
- › Improved human rights practices, including those specific to supply chain management.



We believe strong human rights practices contribute to sustaining long-term value. Working with companies in our portfolio on this topic is an important part of our mandate to maximize long-term returns. Companies with strong human rights policies and practices are less likely to face disruptions to operations from legal and regulatory risk, protests, workforce action and other activities. They are also less likely to suffer reputational damage due to human rights-related controversies. We also assess human rights risks within the supply chain of companies, primarily considering poor working conditions and labour issues (such as child labour). We are currently focusing our efforts on supply chain management in the consumer and information technology sectors.

Engagement

Collaborative engagements

We became a member of the Advisory Committee of the United Nations-supported Principles for Responsible Investment's collaborative engagement on Human Rights in the Extractive Sectors (oil and gas and mining companies) in 2014 and participated in the work that followed from 2015 to 2017. The focus was to encourage companies to implement the United Nations Guiding Principles on Business and Human Rights (UNGPs) and to improve disclosure of their human rights policies and processes. It was directed at 32 companies alongside over 50 global investors, with CPPIB leading and participating in a number of the conversations. A few key outcomes identified by the PRI are (the full report can be found here www.unpri.org):

Human rights policy: 100% of the target companies now disclose a human rights policy.

Human rights risk identification and assessment: While only two target companies publicly reported on these indicators in 2015, two thirds now do in their annual disclosure. This signifies a ten-fold increase. 75% of target companies have also incorporated human rights considerations into their risk management processes and evaluate their potential human rights impact from the project development stage through all subsequent stages.

Access to grievance mechanisms and processing grievances: The number of target companies that provide access to grievance mechanisms, both at the corporate and site level and in publicly reporting on the way they process complaints, tripled from 2015 to 2017. However, very few companies provide evidence they meet the effectiveness criteria for non-judicial grievance mechanisms as per the UNGPs.

Monitoring business relationships: The number of target companies monitoring relationships with suppliers and contractors in relation to human rights factors has quadrupled between 2015 and 2017 from five to 20 companies.

Tracking training effectiveness: While 75% of target companies state they conduct human rights-related training for employees and security personnel, only three companies have a mechanism in place to track its effectiveness.

A second phase of this effort is currently being developed and we will consider participation as details become available.

Hermes EOS engagements

Human rights is also a theme for engagements conducted by Hermes EOS. Hermes EOS engages on topics such as child labour, indigenous rights and the protection of basic rights. Companies are also encouraged to adhere to, or align with, initiatives such as the UNGPs and the Responsible Business Alliance (formerly the Electronic Industry Citizenship Coalition).

Proxy voting

Over the reporting period, CPPIB supported shareholder proposals at Domino's Pizza, Inc. and Monster Beverage Corp. requesting more disclosure of human rights risks in supply chains.

What do we mean by human rights?

We consider human rights broadly and are guided by the definitions set out in the United Nations Universal Declaration of Human Rights. For companies, this can take the form of forced, slave or child labour; may involve impacts from bribery and corruption; and can result from poor working conditions (including health and safety practices), poor relations with local populations and indigenous peoples or poor security practices. Any of these can also be relevant matters within the supply chains of companies.

Engaging on human rights in the cobalt industry

Lithium-ion batteries power products ranging from smartphones and laptops to electric vehicles. Increasing consumer demand for such products has resulted in growing demand for cobalt – a key ingredient in these batteries. Cobalt mining has been associated with such concerns as child labour and poor safety practices, which could expose companies and investors to operational, regulatory and reputational risks.

Since 2016, we have participated in a collaborative engagement with over 20 global investors related to child labour and other human rights concerns in the cobalt mining industry in the Democratic Republic of the Congo, the world's largest producer of cobalt. The effort aims to encourage 13 electronics, automotive and battery manufacturing companies to improve their supply chain management systems, particularly related to identifying and mitigating human rights risks in the procurement of cobalt. The group has also had numerous interactions with global industry associations, which have since instituted initiatives related to cobalt. These include:

- › Responsible Business Alliance's (formerly the Electronics Industry Citizenship Coalition) Responsible Minerals Initiative
- › Chinese Chamber of Commerce for Metals, Minerals & Chemicals' Responsible Cobalt Initiative
- › World Economic Forum's Global Battery Alliance

Since work on this began, we have seen the following improvements in target company practices regarding cobalt sourcing:

- › Mapping of supply chains down to the mine level
- › Public disclosure of smelters/refiners
- › The consolidation of cobalt sources for greater control over supply chains
- › Involvement in industry initiatives
- › Partnerships with relevant NGOs
- › Third-party audit expectations for smelters/miners

We are encouraged by the increase in disclosure and practices to date, and expect more positive steps to be taken related to cobalt sourcing in the future as the topic gains momentum and more relevant resources and tools become available.

2018 Report on Activities

Why We Engage

Clear and appropriate links between executive pay and company performance contribute to alignment of the interests of management and long-term investors. When these interests are properly aligned, long-term shareholder value is more likely to be created.

What We Seek

- › A clear link between executive pay and company performance that appropriately aligns management and investors.
- › Appropriately structured executive compensation programs that emphasize long-term and sustainable growth of shareholder value.
- › Full disclosure in corporate reporting of compensation information and clear rationales for compensation decisions.

Engagement

Executive compensation is an important factor in a company's prospects for creating sustainable long-term value. Well-designed incentive schemes shape the actions of management and the level of risk they are willing to assume. They also contribute to a company's ability to attract and retain talent. We exercise our ownership rights and advocate for companies to adopt good governance practices with respect to executive compensation. We focus not only on how much executives are paid, but, more importantly, on how a compensation plan aligns the interests of management with those of long-term investors.

Direct engagement

Executive compensation is a key focus of our governance engagements. We engaged with more than 35 companies on executive compensation issues during the reporting period. This provided an opportunity for companies to explain their rationale for key compensation decisions and for us to provide feedback aimed at strengthening the link between pay and performance, encouraging an appropriate level of risk-taking and promoting long-term decision-making.

Hermes EOS engagements

CPPIB also acts on executive compensation matters through our global collaborative engagement platform, Hermes EOS, which engages with company compensation committees and boards, regulatory authorities and industry bodies to promote compensation structures that align executives' interests with those of long-term investors.



What is Say on Pay?

Say on Pay refers to the ability of shareholders to vote directly on executive compensation. Depending on regulatory requirements or internal corporate policies, Say on Pay can be either a binding or non-binding vote.

Engaging with regulators on Say on Pay

Say on Pay is an important part of ongoing conversations between shareholders and boards on compensation practices. While Say on Pay is considered a key part of shareholder democracy and is mandatory in a number of markets, Canada stands out by not requiring a mandatory vote on executive compensation. We continued our collaboration with other Canadian institutional investors to advocate for mandatory annual Say on Pay votes in Canada. As part of this effort, we met with the Ontario Securities Commission and submitted recommendations to Canada's federal finance department to encourage regulators to take concrete steps to advance adoption of mandatory annual Say on Pay for all publicly listed issuers in Canada.

Proxy voting

Say on Pay provides shareholders with the means to provide direct feedback on the board's compensation decisions. We believe Say on Pay encourages better investor-corporate dialogue on executive compensation, leading to improved disclosure and pay practices. A number of companies that received low support for Say on Pay in 2017 responded to feedback from CPPIB and other investors and implemented positive changes this year.

Outside of plan awards engagements

Outside of plan awards describe compensation granted to executives that is not part of a company's pre-established compensation scheme applicable during the normal course of the executive's employment. Examples include payments granted for the purposes of retention, severance, sign-on and the successful completion of a transaction. By their nature, outside of plan awards represent extra compensation paid to executives.

In advance of the 2016 proxy voting season, CPPIB and Ontario Teachers' Pension Plan (OTPP) identified outside of plan awards as an emerging executive compensation practice of potential concern and worked in collaboration to analyze such awards granted to executives by U.S. and Canadian companies. As a result of this work, we released a joint report (see www.cppiib.com/OOPA2015) and a follow-up a year later (see www.cppiib.com/OOPA2016).

CPPIB and OTPP acted on the results of these joint studies and worked throughout 2017 with Canadian and U.S. companies that repeatedly granted outside of plan awards without a robust explanation. The companies contacted represented over \$600 million of economic exposure in CPPIB's portfolio.

We met with members of the compensation committees at each of these companies to better understand their rationale for the use of one-time payments and how the awards were structured. We also discussed other compensation concerns. During these conversations, we were provided with details explaining the decisions to grant outside of plan awards. Going forward, some of the companies committed to only using outside of plan awards in extraordinary circumstances and to providing enhanced public disclosure for the use and structure of these grants.

2018 Report on Activities

BOARD EFFECTIVENESS

Why We Engage

Board effectiveness is one of the most important topics in corporate governance. Having the right board in place to help guide strategy and oversee risk is critical to the long-term value of our investee companies.

What We Seek

- › Boards with the requisite independence, skills, expertise, experience and diversity to ensure effective oversight of management and the business.
- › Robust and transparent processes for evaluating and improving the effectiveness of the board as a whole, its committees and each director individually.
- › Transparent and formal director nomination processes that seek a diverse pool of qualified candidates.

This year we introduced a new focus area for board effectiveness. The Sustainable Investing team has been engaging on topics related to board effectiveness for years. We are formalizing our existing work under this new focus area and continuing to increase our proactive work on this topic.

We believe that board effectiveness is essential to long-term value creation. Our updated *Proxy Voting Principles and Guidelines* (see www.cpiib.com/PVPG) provide explicit guidance on our board effectiveness expectations. As a long-term investor, we believe it is part of our stewardship responsibilities to take steps to ensure that the boards of our investee companies have and maintain appropriate independence, skills, expertise, experience and diversity to effectively carry out their duties.

Board diversity is a critical component of board effectiveness. Our expectation is that boards should be diverse, including with respect to gender. We believe companies with diverse boards are more likely to achieve superior financial performance. Having directors with a range of experiences, views and backgrounds will help ensure the board as a whole has the right mindset to properly evaluate management and company performance.

Engagement

Direct engagement

During the reporting period, we engaged with 42 companies on board effectiveness issues, such as how they select their directors and gender diversity of the board. These engagements provide CPPIB with an opportunity to share our views on board effectiveness issues and focus on ways for companies to make improvements. We meet with an increasing number of board chairs or directors, which gives us a better understanding of the rationale for key decisions and an opportunity to provide direct feedback to the board.



Hermes EOS engagements

Hermes EOS, our global collaborative engagement platform, works with companies on the theme of board effectiveness. Hermes EOS seeks assurance that companies have an appropriate board structure, and that board members have the right skills, diverse backgrounds and sufficient independence.

Proxy voting

Since 2017, for all our Canadian public holdings, we have been voting against the election of the nominating committee chair if the board has no female directors and there are no extenuating circumstances warranting an exception to this voting practice. In 2018, we escalated this practice to vote against all nominating committee members at companies where we voted against the committee chair in 2017 if the company had since made no progress at improving its lack of board gender diversity.

We are very encouraged by the progress seen this year. In 2017, we voted at shareholder meetings for 45 Canadian companies with no female directors. We were pleased to see that 47%, that is, 21 of those 45 companies, have added a female director to their boards over the last year. We commend companies for taking steps to professionalize their director search processes and appoint female directors.

During the 2018 reporting period, we voted at shareholder meetings for 22 Canadian public companies with no female directors. We made efforts to work with these companies before voting against their directors. This year, we voted against the nominating committee chair at six companies and the entire nominating committee at seven companies. We will continue monitoring developments and improvements in the representation of women directors on the boards of our investee companies.

We also continued to support shareholder proposals seeking to improve board effectiveness this year. For example, we supported 98% (48 of 49) of shareholder proposals requiring companies to separate the board Chair and CEO roles. We also supported 62% (five of eight) of shareholder proposals requiring companies to adopt a policy for improving their board diversity. We supported these proposals in instances where the company was not already taking meaningful steps to improve its diversity.

What do we mean by board effectiveness?

Board effectiveness refers to the overall makeup and functioning of the board. We evaluate effectiveness by looking at whether the board as a whole has the independence, skills, expertise, experience and diversity required for proper oversight of the company's business. These are case-by-case judgments based on a number of considerations, including the nature of the business, the skills needed to oversee existing and emerging challenges (for example, climate change and cyber risk) and diversity.

We look at whether the company has robust processes in place to select directors and ensure it maintains an appropriate board composition over time. Specifically, we look at whether there are strong processes for regularly (i) identifying the evolving needs and weaknesses of the board through a well-designed board skills matrix, (ii) evaluating the individual directors and the board as a whole, and taking steps to address the results of evaluations, (iii) refreshing the board and (iv) nominating new directors with skills, expertise, experience and attributes relevant to the board's evolving needs.

Promoting greater board accountability through majority voting

Majority voting allows shareholders to vote against the election of a director nominee (as opposed to merely withholding a vote). Under a majority voting standard, candidates who fail to receive a majority of shareholder votes in an uncontested election will not be elected. By ensuring shareholders have a greater say in director elections, majority voting helps promote greater director accountability.

CPPIB has a long history of helping advance majority voting for uncontested director elections in Canada. As a result of this advocacy, by CPPIB and others, in 2014 the TSX introduced a requirement for listed issuers to adopt majority voting policies. It was a significant step forward, but the TSX rules did not apply to all stock exchanges in Canada, and in some cases allowed directors to remain on boards in spite of failing to receive a majority of votes.

In 2016, the federal government introduced Bill C-25, which proposed amendments to the *Canada Business Corporations Act* (CBCA) and included a majority voting requirement for all federally incorporated public companies.

Earlier this year, the advocacy work of the Canadian Coalition for Good Governance, on behalf of CPPIB and others, contributed to passage of Bill C-25. Royal Assent was granted in May 2018. Enshrining majority voting into law represents a major advancement over existing practice for director elections in Canada. Passage of Bill C-25 ensures majority voting applies to all CBCA companies on all stock exchanges. With limited exemptions, nominees failing to obtain the majority support of shareholders would not become directors.



An interview with Adriana Morrison

Working to improve board effectiveness and diversity

Adriana Morrison, Senior Associate on CPPIB's Sustainable Investing team, has closely followed the increasing investor focus on gender diversity and regularly evaluates opportunities for CPPIB to work with portfolio companies on issues pertaining to board diversity and effectiveness. Her efforts in this area have driven the inclusion of board effectiveness as a formal focus area for 2018 and beyond.

Q: Why have we added board effectiveness as its own focus area?

A: An effective board directly links to positive long-term company value, and that's the driving factor behind all of our ESG work. Formalizing board effectiveness as a focus area allows us to be more proactive and create a top-down strategy on how we'll be overseeing the issues related to it. We purposely chose to call the focus area Board Effectiveness – which is intentionally broad – to avoid pigeonholing us into looking at just a few aspects.

Q: How do you evaluate board effectiveness?

A: We look at two aspects: attributes and processes. Evaluating attributes means looking at things like director independence, skill sets, diversity and other characteristics of a company's existing board. On the process side, we examine a range of board processes. What are the board's evaluation processes and how is feedback used to determine its future needs? What's the director nomination process? How are directors selected? How does the board determine when they need refreshment? What's the process for determining when it needs to bring on new directors, or when a current director needs to step off?

Q: Can you discuss your group's work on gender diversity and how it fits into the new focus area?

A: Our gender diversity work has been one catalyst for the new focus area. We identified lack of gender diversity on the boards of our investee companies as a business and financial risk a few years ago and have since ramped up our proactive work to address this issue in a number of ways.

Over the past year I've personally spoken with roughly 40 companies where we've had concerns about their board diversity and composition, and one of the things I'm finding is that directors will say, "We are very interested in having a diverse board but our primary focus is selecting directors based on merit." And I reply, "We don't want you to put someone unqualified on the board, but tell me, how did you find your last director?" If the answer is that they canvassed the current board members who brought forward five

names, all men, and after interviews chose the best from that group, then we have a right to ask, "Are we sure they got the best person?"

We follow those expressions of concern with a more detailed conversation about how to professionalize the process and open it up to a broader pool of candidates. Based on how they respond, we can then follow up to determine whether progress is being made, and how quickly. Every interaction is different, depending on what kind of story they have to tell and how willing they are to make changes.

Last year we adopted what I think was a market-leading voting practice; to start voting against nominating committee chairs at companies with no female directors. This year, we ramped that up. If we contacted a company last year and ended up voting against their nominating committee chair, and then see there's been no progress this year, we're voting against the entire nominating committee.

Q: What trends are we seeing more broadly around board effectiveness?

A: Over the past few years, we have seen a surge in attention to board effectiveness topics by investors, companies and others. Board effectiveness has become central to the governance conversation. We have seen a particularly intense focus on board gender diversity, as well as a growing focus on board skills matrices and board competency to deal with emerging risks such as climate change and cybersecurity.

It's coming up a lot more in governance circles, because we've seen high-profile examples where board oversight issues have been very destructive for the company. As opposed to waiting until there's been a huge scandal, we're trying to be proactive and make sure we have the right oversight structure in place to capture and address these issues before they turn into something that can destroy company value.

Proxy Voting Overview

2018 proxy season facts

WE CONVEYED OUR VIEWS AT:

4,921
meetings in total



WE VOTED ON:
52,288
agenda items

WE VOTED IN:
58
countries

WE VOTED AGAINST
MANAGEMENT IN:
8.69%
of cases

2018 proxy season themes

The following tables present key themes in the 2018 proxy season and our voting decisions. Our *Proxy Voting Principles and Guidelines* can be found at www.cppib.com/PVPG. We do not support shareholder proposals if they are overly prescriptive or duplicative of initiatives already in place or underway or if they are likely to detract from long-term company performance.

PROPOSAL	VOTE	GENERAL RATIONALE FOR VOTE
VOTES ON COMPENSATION		
Say on Pay/Approve Remuneration Report	<p>15% AGAINST</p> <p>1,678 VOTES</p>	Voted against where the company was deficient in linking executive pay with long-term company performance.
Say on Pay Frequency	<p>100% FOR</p> <p>168 VOTES</p>	Annual Say on Pay votes promote effective oversight of executive compensation and allow shareholders to provide timely feedback to the company.
Approve Share Plan Grant	<p>45% AGAINST</p> <p>212 VOTES</p>	Voted against where the plan cost was excessive and did not contain challenging performance criteria.
Compensation Related Shareholder Proposals	<p>33% FOR</p> <p>73 VOTES</p>	Supported shareholder proposals that strengthen pay and performance alignment and help mitigate compensation-related risk.
VOTES TO ENHANCE SHAREHOLDER DEMOCRACY		
Proxy Access	<p>100% FOR</p> <p>38 VOTES</p>	The ability to nominate board candidates enhances shareholder rights and increases board accountability.
Right to Call Special Meeting	<p>95% FOR</p> <p>58 VOTES</p>	Granting shareholders the right to call special meetings with a reasonable ownership threshold enhances shareholder democracy.
Require Independent Board Chair	<p>98% FOR</p> <p>49 VOTES</p>	An independent chair is better able to represent shareholder interests and oversee management without conflicts.
VOTES TO ENCOURAGE ENHANCED DISCLOSURE AND PRACTICES ON ENVIRONMENTAL AND SOCIAL MATTERS		
Enhance Disclosure on Environmental and Social Risks and Performance	<p>67% FOR</p> <p>73 VOTES</p>	Improved disclosure allows investors to assess the operational risk profile of companies with respect to financially relevant, long-term environmental and social factors.
Adopt/Disclose Corporate Responsibility Standards	<p>49% FOR</p> <p>47 VOTES</p>	Companies that adopt and enforce high standards of business conduct are likely to achieve better long-term financial performance.
Report on Political Contributions/Lobbying	<p>92% FOR</p> <p>61 VOTES</p>	Greater disclosure of political spending helps shareholders assess associated costs, risks and benefits.

Collaboration

OUR APPROACH:

Making an Impact
through Collaboration



How do we choose and work
with our **collaboration** partners?

We collaborate with organizations seeking improvements in transparency and standards on ESG, conduct research and participate in ESG-related regulation consultations and advocacy. We join and actively contribute to initiatives focusing on specific subject matters, such as governance practices and others that advocate for broader factors, such as fostering long-term thinking in the investment and corporate worlds. These efforts further our ability as an investor to enhance long-term performance of the CPP Fund.



CPPIB believes in the power of partnership and collaboration. We work with peers to improve environmental, social and governance-related practices and advocate for long-term focused policies and approaches. We believe this reduces risks and promotes value-building growth for all investors. In our view, many voices are stronger than one, so we frequently join with like-minded organizations on initiatives we believe will create positive long-term outcomes for ESG-related matters and investment performance.

Caption: As part of CPPIB's collaboration work, a member of the Sustainable Investing group has joined PRI's Private Equity Advisory Committee (PEAC), which focuses on ESG-related projects and activities in private equity funds. Members of the PEAC met in-person in June 2018 in London, U.K., and have calls on a quarterly basis.

2018 Collaboration Partners



FOUNDING MEMBER

CPPIB's Chairperson is a founding member of the 30% Club (Canada) and our President & CEO joined upon assuming his role in 2016. This group of business leaders is committed to improving gender balance at all levels of organizations through voluntary actions.



MEMBER

Independent, non-profit membership organization dedicated to working with investors, companies and regulators in the implementation of effective corporate governance practices throughout Asia.



MEMBER

CPPIB's Head of Sustainable Investing Stephanie Leaist is a member of the Public Policy Committee. This organization promotes good governance in Canadian public companies.



INVESTOR SIGNATORY

Non-profit organization (formerly known as Carbon Disclosure Project) acting on behalf of over 800 institutional investors globally, encouraging companies to measure, disclose, manage and share climate change information. CPPIB also supports CDP's Water program.



ASSOCIATE MEMBER

A member of CPPIB's Sustainable Investing group is a member of the Corporate Governance Advisory Council. This non-profit association of pension funds, other employee benefit funds, endowments and foundations promotes good corporate governance and shareowner rights.



CO-FOUNDER

CPPIB's CEO is a member of FCLTGlobal's board and chairs its Finance and Audit Committee. FCLTGlobal is a not-for-profit organization dedicated to developing practical tools and approaches to encourage long-term behaviours in business and investment decision-making.



ADVISORY BOARD MEMBER

Stephanie Leaist, CPPIB's Head of Sustainable Investing, is a member of the Hermes Equity Ownership Services Advisory Board. This organization provides collaborative engagement services globally.



MEMBER

Global organization aims to raise standards of corporate governance worldwide. Membership includes investors responsible for assets under management in excess of US\$34 trillion from more than 40 countries.



LTI PROJECT PARTNER MEMBER

International organization helps governments tackle the economic, social and governance challenges of a globalized economy. CPPIB has been a Partner of the OECD's Institutional Investors and Long-Term Investment (LTI) Project (Phase I) and is a Member of the Network on Institutional Investors and Long-Term Investment, both of which aim to facilitate long-term investing by institutional investors.



Pension Investment
Association of Canada
Association canadienne des
gestionnaires de caisses de retraite

MEMBER

A member of CPPIB's Sustainable Investing group is a member of the Investor Stewardship Committee. This group of Canadian pension funds promotes sound investment practices and good governance for the benefit of pension plan sponsors and beneficiaries.



Principles for
Responsible
Investment

FOUNDING SIGNATORY

International network of the world's largest institutional investors works to put its six Principles for Responsible Investment into practice.



TASK FORCE ON
CLIMATE-RELATED
FINANCIAL
DISCLOSURES

MEMBER

Stephanie Leait, CPPIB's Head of Sustainable Investing, is a member of the Task Force on Climate-related Financial Disclosures. The Task Force was established by the Financial Stability Board to develop voluntary, consistent climate-related financial disclosures by companies to provide useful decision-making information to investors, lenders, insurers and other stakeholders.

World Economic
Forum

INDUSTRY PARTNER

Independent international organization committed to improving the state of the world by engaging business, political, academic and other leaders of society to shape global, regional and industry agendas. Incorporated as a not-for-profit foundation, the Forum is not tied to any political, partisan or national interest.

2018 Report on Activities

Task Force on Climate-related Financial Disclosures

The Financial Stability Board (FSB) is an international body created in the wake of the 2008 financial crisis to monitor financial system stability. It is currently chaired by Bank of England Governor Mark Carney and is affiliated with the G20. The FSB established the Task Force on Climate-related Financial Disclosures (Task Force) in 2015 to develop voluntary recommendations for more efficient and effective climate-related financial disclosures to promote more informed investment, credit and insurance underwriting decisions.

The FSB believes that more effective climate change disclosures will help reduce financial stability risks by avoiding an abrupt repricing of asset values as the impacts of climate change become clearer. We agree and this belief is reflected in our longstanding climate-related engagement work with companies.

The Task Force, which is chaired by Michael Bloomberg, includes capital providers, insurers, large global companies from a range of financial and non-financial sectors, accounting and consulting firms and credit rating agencies. Stephanie Leaist, CPPIB's Head of Sustainable Investing, is a member of the Task Force and has

actively contributed to the development of the Task Force's recommendations by bringing an investor perspective to the work. CPPIB is one of only two global pension funds represented on the Task Force.

Since their release in June 2017, the Task Force's recommendations have had a growing impact on the global financial system's approach to and understanding of climate change, acting as a catalyst for transparency and action. As of June 2018, more than 290 companies, governments and organizations have pledged their support.

These recommendations are structured around four thematic areas: governance, strategy, risk management and metrics and targets. They provide a framework intended to help investors and others in the financial community better understand and assess climate-related risks and opportunities. CPPIB itself is aiming for full adoption of these recommendations by the end of fiscal 2021. In the following pages we provide an overview of steps we are taking to implement the recommendations:



Photos Courtesy of the Task Force on Climate-related Financial Disclosures.

Implementation of the Task Force's recommendations

Governance

Disclose the organization's governance around climate-related risks and opportunities.

- a) Describe the board's oversight of climate-related risks and opportunities
- b) Describe management's role in assessing and managing climate-related risks and opportunities

The Board oversees CPPIB's efforts to understand and manage climate-related risks and opportunities. They receive updates about broad trends and specific investment-related developments via ongoing risk reporting and approve our overall risk appetite and risk policy, including the integration of ESG factors and climate change specifically.

Our CEO sets the tone and establishes the overall risk culture. The Head of Sustainable Investing provides the Board with updates on our sustainable investing activities (see page 9 for our Integrated Sustainable Investment Framework).

In July 2017, Neil Beaumont joined as CPPIB's Chief Financial and Risk Officer (CFRO). The CFRO has explicit accountability to oversee and enhance the risk management framework and to ensure it is appropriate given CPPIB's unique mandate and risk profile. The CFRO is working closely with the new ad hoc Risk Committee of the Board to advise management and the Board on the evolution of our risk management practices. He also sponsors CPPIB's climate change initiative, overseeing the Climate Change Steering Committee, which, along with the Climate Change Project Management Office, guides our climate-related efforts. (For more on the Climate Change Steering Committee and Climate Change Project Management Office (see page 14).

"Increasingly, climate change is showing significant physical, social, technological and economic impacts with implications for investment strategy and success. The Board is therefore very much engaged in the oversight of the organization's efforts to understand and manage these, including regular updates about broad trends and specific investment-related developments via ongoing enterprise risk management reporting."

– Dr. Heather Munroe-Blum, Chairperson

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning, where such information is material.

- a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term
- b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning
- c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a two degrees Celsius or lower scenario.

Caption: CPPIB's Head of Sustainable Investing, Stephanie Leaist, is a member of the Task Force and attended its Plenary Meeting held in London, U.K. on February 13, 2018.

By taking climate change into account in our investment activities, we are better positioning ourselves to make appropriate investments over the long term. Not only does climate change present a complex array of new risks, it also presents attractive investment opportunities, including those found in the renewable energy sector. During fiscal 2018, the Climate Change Steering Committee led the development of a comprehensive and coordinated approach to climate change to consider both investment risks and opportunities across CPPIB. Elements of this approach include:

- › Refining an energy transition outlook
- › At the portfolio level, developing a top-down portfolio risk assessment including specific stress tests
- › At the security selection level, developing a toolkit for investment teams to better assess climate change as part of future investment recommendations. We are creating a process for evaluation in addition to a catalogue of resources, data and research materials
- › Reporting and communications, including our carbon footprint disclosure

This firm-wide approach comprises work streams led by individuals across CPPIB's investment departments, Total Portfolio Management, Finance, Analytics & Risk, Technology & Data and Public Affairs & Communications. This approach is overseen and directed by the Climate Change Steering Committee.

Risk Management

Disclose how the organization identifies, assesses and manages climate-related risks.

- a) Describe the organization's processes for identifying and assessing climate-related risks
- b) Describe the organization's processes for managing climate-related risks
- c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management

In 2017, CPPIB established the Climate Change Steering Committee, sponsored by the CFRO, to guide a multi-year effort to identify, assess and manage climate-related risks and opportunities at both the organizational and portfolio investment

group levels (see page 14). Consistent with this, we added a longer-term risk model to our comprehensive suite of risk tools. This enhances our ability to measure investment risk across various time periods to better align with our investment horizon.

As part of our ongoing investing process, we have pressed large greenhouse gas emitters in oil and gas, utilities and other sectors for improved disclosure related to climate change risks. Additionally, CPPIB has a structured approach for the due diligence and monitoring of ESG risks, including climate-related ones, in our direct equity investments. Our Portfolio Value Creation group continues to work with our investment teams and external advisors to refine this approach (see page 20).

Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities, where such information is material.

- a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process
- b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks
- c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets

We consider key performance indicators for GHG emissions, water consumption and energy efficiency in our individual investments. We have developed a tool for measuring GHG emissions and other climate change-related data in our public equity portfolio (see pages 61–62). CPPIB believes this information can help inform our investment risk management process, and provide insights that will assist in the expansion of our measurement efforts beyond public equities in the future.

We continue to support the annual Climate Change Information Request by the CDP (formerly the Carbon Disclosure Project) (see page 40).

Carbon Footprint

The recommendations of the Task Force are widely recognized as the global standard for climate change disclosure. Building on our support of and commitment to the Task Force, CPPIB is disclosing the carbon footprint of our public equities portfolio for the first time in this year's Report on Sustainable Investing.

This disclosure represents part of our broader effort (see pages 59–60) to align with the Task Force recommendations and develop a better understanding of our exposure to climate change-related risks.

The Task Force has said there are challenges and limitations with carbon footprinting metrics and noted these should not necessarily be interpreted as risk metrics. At the same time, they have said they expect the release of this data to prompt important advancements. We agree with this position.

There is variability in the quality, completeness and timeliness of currently available greenhouse gas (GHG) emissions data. This variability affects the accuracy of the resulting metrics. We will continue to refine our methodology as improved data becomes available. Over time, we plan to expand our carbon disclosure beyond public equities to our broader portfolio.

CPPIB developed an in-house technology tool to produce the metrics below. The numbers reflect our carbon metrics as of June 30, 2018 and show metric tonnes of carbon dioxide equivalent (CO₂e)¹. The formulas for metric tonnes calculations are based on Task Force recommendations.

METRIC ²	CPPIB PUBLIC EQUITIES PORTFOLIO ³	DESCRIPTION
TOTAL CARBON EMISSIONS	15.6 million tonnes of CO ₂ e	The absolute GHG emissions associated with a portfolio, expressed in tonnes CO ₂ e. This figure would typically rise as assets under management grow.
CARBON FOOTPRINT	125 tonnes of CO ₂ e/\$million invested	Total carbon emissions for a portfolio normalized by the market value of the portfolio, expressed in tonnes CO ₂ e / \$million invested.
CARBON INTENSITY	220 tonnes of CO ₂ e/\$million revenue	Volume of carbon emissions per million dollars of revenue (carbon efficiency of a portfolio), expressed in tonnes CO ₂ e / \$million revenue.

¹ Based on the most recent annual emission information (often from 2016 or 2017) available at June 30, 2018 and allocated based on CPPIB's June 30, 2018 holdings. Exchange rates applied are those as at the year-ends of the reported emissions and sales data, and as at June 30, 2018 for market capitalizations of holdings.

² Issuers' Scope 1 and 2 GHG emissions are allocated to our portfolio based on an equity ownership approach, and the data is normalized based on the total in-scope portfolio value. Under the equity ownership approach, if an investor for example owns 5 percent of a company's total market capitalization, they own the same percentage of the company's emissions.

³ The portfolio within the calculation perimeter is all publicly traded equity holdings for which we have both underlying holdings data and S&P Trucost Ltd. (Trucost) carbon emissions data. This includes directly held equities, depository receipts, ETFs, equity futures, REITS and swaps (long and short positions). This excludes credit ETFs, options, rights and warrants. It also excludes any ETFs, swaps, REITS, and externally managed funds for which we have no look-through to the underlying exposure data. We have Trucost carbon emissions data for 93% (\$125 billion) of our perimeter portfolio (\$134 billion). We have reported on 34 per cent of CPPIB's total holdings.

Our Methodology

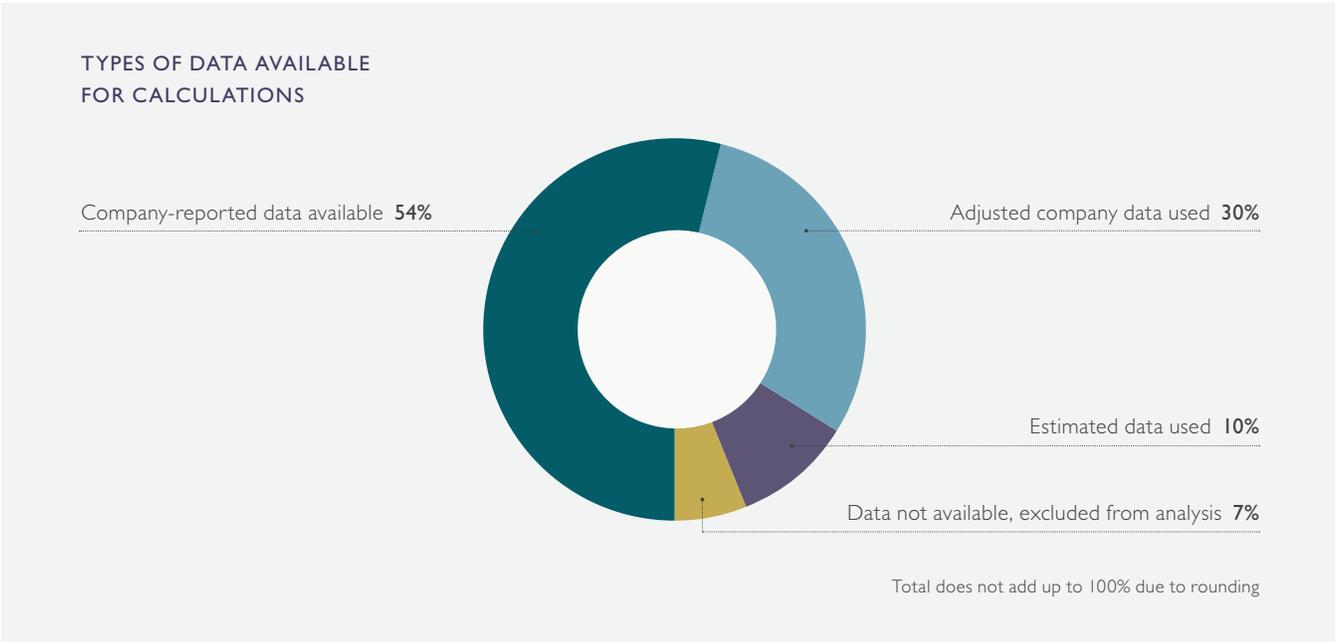
For our initial carbon disclosure, we have opted to use Scope 1 and 2 GHG emissions. Scope 1 refers to direct GHG emissions from an organization’s owned and controlled sources. Scope 2 refers to indirect emissions from the generation of purchased energy. The dataset for Scope 1 and 2 emissions is currently the most complete and robust available.

We have used emissions data provided by S&P Trucost Ltd. (Trucost⁴), a division of S&P Global that provides investment-grade carbon and environmental data to investors, companies and governments. While this data is the best we currently have available, it has limitations due to the use of differing GHG calculation methodologies by companies, incomplete reporting by some companies and the resulting use of partial company data to extrapolate or estimate historic emissions based on sector emissions performance.

The data we have presented, while the best available, is subject to inherent uncertainties and these uncertainties may be material.

We also recognize the assumptions made in applying the methodologies noted had a material impact on the resulting metrics. These include the use of a point-in-time approach to reporting on our portfolio, which may not fully reflect our holdings throughout the year, and the selection of the exchange rate when calculating carbon intensity. There is, as yet, no authoritative body of guidance or emerging standard of disclosure in relation to these assumptions. As a result, the comparability of the data presented here for our public equities portfolio to the carbon data disclosed for other portfolios is significantly reduced.

The chart below shows the different types of data available for our calculations (percentages based on value of holdings).



⁴ Trucost, its affiliates, or its and their third-party data providers and licensors (collectively “Trucost Parties”) do not guarantee the accuracy or completeness of the Information. Trucost Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Information. The Trucost parties make no warranties or representations, and, to the maximum extent permitted by law, each Trucost party hereby expressly disclaims all implied warranties, including warranties or merchantability and fitness for a particular purpose. Without limiting any of the foregoing and to the maximum extent permitted by law, in no event shall any of the Trucost parties have any liability regarding any of the information for direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited.

Advocating for gender diversity in the boardroom

CPPIB's Chair, Heather Munroe-Blum, is a founding member of the 30% Club (Canada) and Mark Machin joined upon becoming President & CEO in 2016. The 30% Club is a group of business leaders committed to achieving better gender balance on corporate boards and at the executive management level. The 30% Club works to bring about change through a number of targeted initiatives that include encouraging and supporting boards to appoint more women, providing information and help for businesses trying to improve their diversity, and keeping the spotlight on the issue through media channels and educational programs. The driving premise of the 30% Club is that gender diversity is about business performance, rather than being a women's issue. It addresses gender diversity from the perspective of building long-term value in companies. Despite its name, the 30% Club does not believe mandatory quotas are the right approach. Instead, it aims for meaningful, sustainable change in the representation of women. The 30% Club launched in the U.K. in 2010 and has since become an international business initiative with chapters in Australia, Canada, Hong Kong, Ireland, South Africa and the United States, among other countries.

CPPIB is also a member of the 30% Club's Canadian Investor Group, which works to coordinate the investment community's approach to gender diversity.



Dr. Heather Munroe-Blum, Chairperson

30% Club's Canadian Investor Group Statement of Intent

In September 2017, CPPIB released a public statement alongside Canadian investment peers calling on companies listed in the S&P/TSX composite index to take prompt and considered action to achieve a minimum of 30% women on boards and in executive management by 2022 (see <https://30percentclub.org/about/chapters/canada>).

We called on companies to (i) adopt a professional and structured approach to director nominations that ensures directors are appointed based on merit, with due regard for the benefits of gender diversity, and (ii) commit to rigorous assessment of director and executive performance, as well as regular board refreshment.

Promoting governance best practices in Asia

Since 2013, CPPIB has been a member of the Asian Corporate Governance Association (ACGA), an independent organization dedicated to implementing effective corporate governance practices throughout Asia. Membership in the ACGA gives us access to expertise on local governance matters, which leads to better-informed proxy voting decisions and an established platform for the region.

CPPIB participates in bi-monthly ACGA Investor Discussion Group calls, which let global investors raise emerging governance matters and solicit support for collaborative initiatives. The calls also offer opportunities for members to provide input on ACGA's advocacy work.

Advocacy with financial regulators, stock exchanges and other standard-setting bodies is a key element of the ACGA's scope of work. During the year through June 30, 2018, it submitted a number of comment letters on behalf of members, including CPPIB, to promote best practices in corporate governance and shareholder stewardship.

Commonsense Principles for Corporate Governance

In July 2016, CPPIB joined a coalition of executives from leading public companies and institutional investors to seek common ground on key corporate governance issues in the U.S. This group included major U.S. asset managers, as well as some of the largest public companies, shareholder activists, public pension funds and mutual fund companies so as to represent all perspectives.

This led to the development of the *Commonsense Principles of Corporate Governance* (Commonsense Principles), which establish a basic framework for long-term oriented governance practices, and encourage dialogue on the topic. We drew on CPPIB's own comprehensive and robust set of *Proxy Voting Principles and Guidelines* (www.cppib.com/PVPG) to provide input into the framework. During the reporting period, the group reconvened to continue discussions on strengthening corporate governance and consider the work of other groups that have emerged since the Commonsense Principles' release. It is important that the many corporate governance principles currently in circulation be harmonized to reflect the combined views of companies and investors. To this end, the Commonsense Principles were updated with the goal of creating a single, unified set of corporate governance principles to guide the engagement of companies, boards and institutional investors.

Canadian Coalition for Good Governance

CPPIB's Head of Sustainable Investing, Stephanie Leait, serves on the Public Policy Committee (PPC) of the Canadian Coalition for Good Governance (CCGG), which plays a key role in developing policy positions on various corporate governance issues and making submissions to regulators and standard-setting organizations.

CPPIB worked through PPC to develop comments on several regulatory proposals and guidelines that have resulted in adoption of market best practices. Our actions on Canadian regulatory matters include:

- › Submission to the Department of Finance Canada regarding amendments to federal financial institution regulations recommending adoption of initiatives to address lack of diversity on boards and in senior management, strengthen shareholder democracy in the election of directors and other governance best practices (November 30, 2017).
- › Submission to the British Columbia Securities Commission (BCSC) regarding gender diversity and term limits (April 10, 2018). Provided comments supporting the BCSC's proposal to align disclosure requirements in British Columbia with those of the nine other jurisdictions in Canada that have adopted requirements regarding mechanisms of board renewal, such as age or term limits, and the representation of women on boards of directors and in executive officer positions.

Updates to CCGG policies in 2017–2018

The CCGG updated some of its existing policies and issued a new statement:

- › The Proxy Access Policy (November 2017) reflects the CCGG's updated position on proxy access based on significant developments on proxy access since the release of the CCGG's initial policy in 2015 in both Canada and the U.S.
- › The Director Compensation Policy (October 2017) updates the CCGG's earlier principles on director compensation released in 2011.
- › The Empty Voting Position Statement (September 2017) explains CCGG's views on harm done by empty voting (that is, when a holder of the voting right attached to a share has reduced or eliminated its economic interest in that share), the need for securities regulatory intervention and possible regulatory initiatives to address empty voting.

The CCGG conducted 41 board engagement meetings with Canadian issuers during the review period, representing 19% of the total market capitalization of the S&P/TSX composite index. These activities generally focused on companies with a market capitalization of less than \$5 billion across a diverse range of industries. The scope of dialogue included discussions on governance policies, executive compensation, risk management, strategy setting and succession planning.

Examples of engagement success

As a result of discussions with the CCGG, several companies improved disclosures and executive compensation practices.

Examples include:

- › Disclosure of the board's involvement in management succession planning
- › Description of metrics used by the board to determine variable executive compensation awards
- › Adoption of an incentive compensation clawback policy
- › Offering shareholders an annual Say on Pay vote
- › Enhanced disclosure of director skills and experience

Active involvement in the Principles for Responsible Investment

In 2005, the United Nations Secretary-General invited CPPIB, along with a small group of the world's largest institutional investors, to address the issue of responsible investing from a global and fiduciary perspective. In collaboration with experts from the investment industry, civil society, academia and others, we helped formulate the Principles for Responsible Investment (PRI), which are supported by the United Nations. Today, the PRI has grown to include over 1,800 signatories worldwide, representing more than US\$70 trillion in assets under management.

Over the years, CPPIB has contributed to the PRI in several ways:

- 1. Active participants in several PRI-facilitated collaborative engagements.** We were a member of the Advisory Committee of the PRI's collaborative engagement on Human Rights in the extractive sectors from 2014 to 2017 (see page 44 for further details). We joined the Advisory Committee for PRI's collaborative engagement on methane risks in the oil and gas and utilities sectors in February 2017 (see page 40 for further details). We also joined PRI's collaborative engagement on water risks in agricultural supply chains in early 2018 (see page 43 for further details).
- 2. Serving on the board.** CPPIB served on PRI's board from December 2012 to December 2015 and contributed to the PRI 2015-2018 Strategic Plan, which focused on evolving the organization from awareness to impact and extending the PRI's collective influence.
- 3. Implementing the PRI's six Principles for Responsible Investment.** PRI's asset owner and investment manager signatories are accountable for implementing the six principles (see below) and utilizing the PRI Reporting Framework to describe their activities. In addition to CPPIB's annual Report on Sustainable Investing, we provide information on our sustainable investing activities yearly through the PRI Reporting Framework, which is publicly available on the PRI's website (see www.unpri.org).

PRI's Private Equity Advisory Committee

In January 2018, a member of the Sustainable Investing group joined the PRI's Private Equity Advisory Committee (PEAC) for a three-year term. PEAC focuses on objectives and projects related to ESG in private equity funds for PRI signatories, primarily in relation to integration, outreach and thought leadership. The Committee comprises a balanced mix of representatives from LPs, GPs and Funds of Funds. Past PEAC projects include development of an ESG due diligence questionnaire for LPs and guidance on incorporating ESG into LP contract agreements. Most recently, the Committee finalized an ESG monitoring and reporting guidance for LPs. We look forward to participating on PEAC in coming years and applying relevant insights and lessons to our internal processes.

CPPIB IS GUIDED BY THE PRI'S SIX PRINCIPLES FOR RESPONSIBLE INVESTMENT

1

We incorporate ESG factors into investment analysis and decision-making processes.

2

We are active owners and incorporate ESG factors into ownership policies and practices.

3

We seek appropriate disclosure on ESG factors by the entities in which we invest.

4

We promote acceptance and implementation of the Principles within the investment industry.

5

We collaborate to enhance our effectiveness in implementing the Principles.

6

We report on our activities and progress towards implementing the Principles.

Conferences



PRIVATE EQUITY INTERNATIONAL

September 2017 | Berlin, Germany

Largest and longest-running meeting globally focused on ESG issues and market trends within private equity, attracting over 250 delegates annually

- › Spoke on a panel exploring implications of climate risk in investment and best practices for implementing the disclosure recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures



CAPITAL MARKETS INSTITUTE

November 2017 | Toronto, Canada

Event addressing the state of climate-related financial disclosures by Canadian issuers, and related concerns and areas for improvement

- › Participated in a panel discussion on financial impacts and risks associated with climate change and growing attention to quality of issuers' climate-related financial disclosures
- › Presented insights and recommendations from the FSB Task Force on Climate-related Financial Disclosures



CHARTERED FINANCIAL ANALYST (CFA) SOCIETY TORONTO

November 2017 | Toronto, Canada

Seminar emphasizing the impact of ESG considerations on investment and how to best integrate ESG factors in investment framework

- › Spoke on a panel on the evolution and prominence of ESG factors, importance of integrating ESG factors in the current investment climate, and best practices for asset owners to incorporate ESG factors in investment decision-making processes



RESPONSIBLE INVESTMENT ASSOCIATION

June 2018 | Toronto, Canada

Annual conference attracting over 400 investment professionals focused on the exchange of ideas, trends and insights in the field of responsible investing and ESG-related topics

- › Participated in a session exploring investor expectations and best corporate practices regarding ESG performance and reporting



PRI CLIMATE FORUM

June 2018 | New York, U.S.

Part of a new global series of climate events that focuses on key climate topics and practical advice for investors

- › Participated in sessions focused on investing in the low-carbon economy and how asset owners can implement the FSB's Task Force on Climate-related Financial Disclosures recommendations

Priorities for the coming year

In 2019 we will continue to focus on the priorities we set forth in 2018, as well as adding some new objectives:

1

Take a leadership role across CPPIB to develop a firm-wide view of climate change and tools to better identify and assess specific risks posed by climate change to the Fund.

Sustainable Investing played a key role in establishing an effective governance structure for the Climate Change Steering Committee that manages our approach to climate change at an enterprise level. We will continue to advance our multi-year climate-related work streams through an enterprise-wide approach that develops and refines tools such as carbon footprinting, investor toolkits and a dynamic global energy outlook.

2

Build on the existing ESG integration process in public markets through a greater focus on ESG materiality.

Through research, data and collaboration with CPPIB industry experts we are building out a framework of ESG materiality by industry. This will complement our existing assessment of ESG risks and opportunities by providing granular insights into specific ESG issues that are financially and operationally material for a given sector.

3

Increase the size of the Sustainable Investing team commensurate with its expanding role across CPPIB and establish a permanent presence in our London office.

We will continue to onboard and recruit talent to support the increasing breadth of the Sustainable Investing mandate across CPPIB. As part of this, the Sustainable Investing team will expand into our London office for the first time.

4

Produce research on ESG issues that touch multiple investment departments and are of broader interest to CPPIB.

This year we will start to produce internal ESG research whitepapers on matters of interest to our investment teams. The aim is to provide insight on specific, material ESG issues that can advance thinking and improve decision making across the Fund. As part of this collaborative effort, we will create a cross-departmental sustainability virtual team to encourage information flow and best practice.

5

Transfer the existing ESG integration process from CPPIB's Portfolio Value Creation (PVC) group to the Sustainable Investing group.

Working closely with PVC, the Sustainable Investing group will take full ownership of the ESG integration and due diligence process for direct private equity investments. We will also undertake a detailed benchmarking exercise, engaging with peers, GPs and industry bodies to establish best-practice and areas of potential process enhancement.

Why CPPIB was created

In the mid-1990s, concerns arose about the CPP's long-term viability. In response, Canada's provincial and federal governments came together to create bold reforms to put the CPP back on a sound financial footing for long-term sustainability. They increased contribution rates and created the Canada Pension Plan Investment Board to invest funds not currently needed to pay CPP benefits in markets around the world.



1966

CPP created. 6.5 workers for every retiree.



1990

Projections show that by 2055 there will be only 2 workers per retiree.



1993

CPP benefits paid out start to be higher than contributions and investment income coming in.



1997

Canadian governments act to address demographic changes and create CPPIB.



2016

Canadian governments agree to expand CPP with increased contributions and benefits.



2019

CPPIB begins to receive and invest first contributions from expanded CPP.



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