



2018 RESPONSIBLE INVESTING REPORT





Table of contents

Letter from Management.....3

Letter from the Chair4

We invest for the future5

What we mean by responsible investing.....6

How we build a sustainable plan7

 Integrate.....8

 Engage.....13

 Influence.....19

 Evolve25

Where we're headed 28

CASE STUDY LIBRARY



Investing in Asia's emerging health and wellness market.....10



Integrating ESG into our due diligence process11



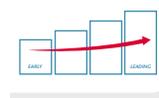
Adding value through sustainable agricultural practices12



The Expert Panel on Sustainable Finance – One way we're helping with Canada's transition to the low-carbon economy 22



Achieving carbon neutrality at a European hub – Interview with the CEO of Brussels Airport 23



How will the ESG Maturity Framework work? 26



Using the LCE Transition Framework to understand the impact of drought 27



Investing responsibly is the only way to invest. Doing so should no longer be seen as a niche or optional for institutional investors. The link between effectively managing environmental, social and governance issues and long-term returns is becoming clearer every year. Sustainable investments and business practices will benefit the plan while also having a positive impact on future generations.

Ron Mock, President and Chief Executive Officer



Those who take action shape the future

Responsible investing is embedded in the way we do business. Our long-term strategy to achieve stable returns to meet our pension promise includes taking a systematic approach to identifying, assessing and managing environmental, social and governance (ESG) risks and opportunities. We see it as a critical component to the success of our total fund investment program. And we are guided by clear principles that enable us to anticipate and take decisive action related to the many changes taking place in the world, while staying true to our values and long-term approach.

Our investment teams, supported by the responsible investing and corporate governance teams, apply four strategic levers – integrate, engage, influence and evolve – that help us to achieve our mission. In 2018, we made some important progress across all four of these levers:

- We applied our Low Carbon Economy Transition Framework to enhance integration of climate-related risks and opportunities in our investment process.
- We progressed on 50 engagements in 2018, covering a wide range of topics, including climate change, executive compensation and health and safety.

- We continued to participate in several major initiatives, such as the Sustainability Accounting Standards Board, which is aimed at promoting greater disclosure of relevant and comparable ESG information.
- In her personal capacity, Barbara Zvan was named to the Government of Canada's Expert Panel on Sustainable Finance to provide recommendations for increasing the flow of capital to climate-related opportunities in Canada.
- We continued to articulate and refine our assessments of how companies and funds manage ESG, with the development of our proprietary assessment tool, the ESG Maturity Framework.

Our responsible investing approach has been built and refined over many years, and continually draws from our investment experience to balance risk and return and give us a competitive advantage. An ESG lens brings focus to a much wider range of considerations that help us identify and evaluate emerging opportunities, and be prepared for when they come. The care we take to ensure the companies we invest in are also managing ESG risks and opportunities makes us an attractive employer, partner and shareholder, and enhances our ability to earn the required returns to pay pensions for generations to come.

As we look forward to 2019, we believe that financial, environmental and social issues are converging. This can benefit everyone: companies, their employees and customers, the wider community and investors. We plan to continue influencing and supporting this convergence, because those who take action shape the future.



Ron Mock
President and CEO

Ziad Hindo
Chief Investment
Officer

Barbara Zvan
Chief Risk and
Strategy Officer



Letter from the Chair



It is our duty as members of the board of the Ontario Teachers' Pension Plan to understand and oversee the risks and opportunities the plan is exposed to, and to put in place governance policies and practices that allow management to prudently manage risks and take advantage of opportunities.

Overseeing the implementation of Ontario Teachers' responsible investing practices is an inherent component of that duty. The plan has made continuous progress in addressing the challenges of transitioning to a more sustainable world – promoting diversity within and outside the organization, and partnering with government and like-minded peers to transition to a low-carbon economy in an expedient, orderly and just way. These ongoing efforts support our reputation as a leading investor.

I'm honoured to accept the role of Chair of the Ontario Teachers' Pension Plan Board, and humbled to follow in the footsteps of so many great leaders. I'd particularly like to thank Jean Turmel for his four years of leadership. Under his guidance, the plan remained healthy and able to adapt to an evolving and often challenging investing world.

As we look forward, we're aware that past success doesn't guarantee future success. To remain a strong pension fund, we will have to continue to be curious, proactive and agile. I challenge the Ontario Teachers' Pension Plan to keep evolving and setting new standards in responsible investing.

SR MCGIRR

Steve McGirr
Chair



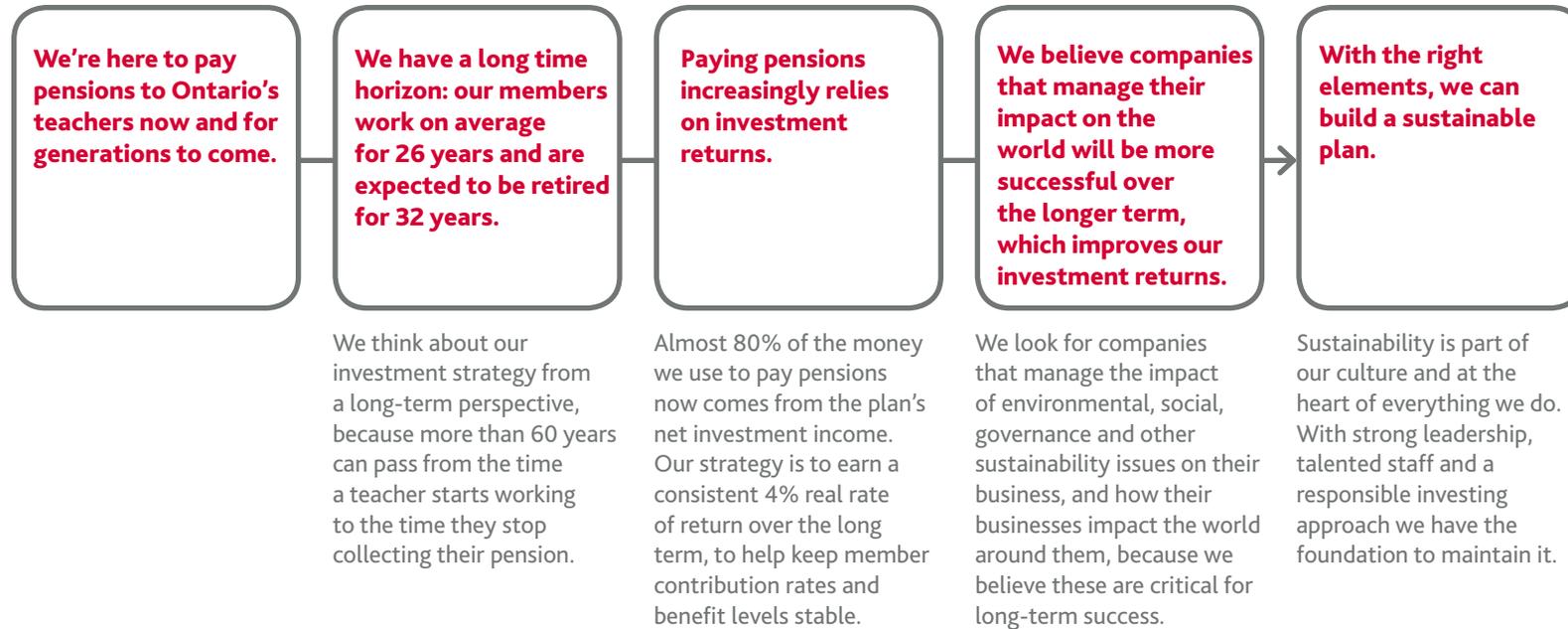
We invest for the future

Ontario Teachers' mission is to provide outstanding service and retirement security for our members — today and tomorrow.

We're Canada's largest single-profession pension plan with \$191.1 billion in net assets. We are proud to pay pensions and invest plan assets on behalf of 327,000 members – 185,000 teachers and 142,000 pensioners. Our plan remains fully funded for a sixth consecutive year.



HOW WE THINK ABOUT INVESTING





What we mean by responsible investing

Successful investing is as much about *how* we invest as it is about *what* we invest in.

Responsible investing at Ontario Teachers' means having a systematic process to identify, assess and manage the environmental, social and governance (ESG) factors in our investments. We use our position as a global investor to drive ESG improvements in our investments and the economy as a whole.

We start with an evaluation of the context the company operates in – for example, its geography and sector – and think through how it interacts with its physical and social surroundings. This helps us identify the ESG factors that are likely to have an impact on the company's strategy, growth and value over time. Some examples of ESG factors include:

Environmental – Factors related to a company's interaction with the physical world

- Climate change
- Water scarcity
- Hazardous waste spills

HOW THEY CAN AFFECT COMPANIES

OPPORTUNITIES:

- Climate-friendly technologies
- Company resilience
- Spill prevention and detection

RISKS:

- Business disruption
- Higher operational costs
- Litigation and remediation costs

Social – Factors that arise from the relationship between a company and its employees, consumers, suppliers and communities

- Health and safety
- Diversity
- Community relations

HOW THEY CAN AFFECT COMPANIES

OPPORTUNITIES:

- Increased employee engagement
- Creation of prosperous value chains
- Business continuity

RISKS:

- Reduced productivity
- Loss of social licence to operate
- Loss of customers

Governance – Factors related to the structures or systems in place to ensure effective direction and control

- Honest and constructive oversight of management
- Culture
- Skills and independence of boards

HOW THEY CAN AFFECT COMPANIES

OPPORTUNITIES:

- Effective company management
- Risk identification and mitigation

RISKS:

- Poor corporate/strategic decisions
- Legal costs
- Reputational damage



Elements of a sustainable plan

We use four levers to make more informed investment decisions.

Integrate

We integrate ESG considerations into our investment process to manage risk and add value.

Portfolio managers integrate ESG factors into their investment process, identifying and managing risks and opportunities. They work with the responsible investing team, which provides subject matter expertise, integration tools, and research.

Engage

We build relationships with the companies we invest in to improve our understanding of the company, influence change and nurture success.

The Stewardship Committee, made up of senior management, oversees our engagement focus. Portfolio managers lead engagement with companies, with support from the responsible investing and corporate governance teams.

Influence

We use our influence as a global investor to improve the investing landscape and clarify expectations of companies.

We lead or participate in industry organizations and initiatives to advance the industry and create a supportive and sustainable business environment.

Evolve

We adapt and improve our own processes as the world evolves and new risks and opportunities arise.

We continually improve our ability to recognize, evaluate and act on ESG opportunities and risks, which builds our institutional knowledge and experience and keeps us ahead of the curve.

RESPONSIBLE INVESTING GOVERNANCE

Our approach starts with the board, and reaches through every level of the plan.

BOARD MEMBERS

Oversee responsible investing practices, approve ESG-related guidelines and are accountable for setting the Enterprise Risk Appetite, among other functions.

CEO

Approves and oversees responsible investing strategy.

INVESTMENTS LEADERSHIP TEAM

Sets frameworks and oversees the integration of ESG in the investment process.

PORTFOLIO MANAGERS

Identify, assess and manage each portfolio company's ESG risks and opportunities.



We integrate ESG considerations into our investment process to manage risk and add value.

Integrate

We consider material ESG factors alongside other factors through the entire investment and ownership cycles.

When we're looking for investment opportunities



When we're making our initial investment in a company



When we're managing our investment in a company



GLOBAL INVESTMENTS, UNIFIED APPROACH

The plan is segmented into asset groups managed by investment professionals in Toronto, London and Hong Kong. We integrate ESG across all of our investment portfolios.

EQUITIES

Buys shares of public companies listed on Canadian and international stock exchanges and invests in private companies or assets either directly or through external managers.

Turn to page 11 to read about how we considered ESG before investing in GFL Environmental Inc.

"We're a long-term, patient investor. By thinking critically, applying an ESG lens and engaging in key issues, we make companies better corporate citizens, create value over time and improve returns to the teachers of Ontario."

Jane Rowe
Executive Managing Director,
Equities



INFRASTRUCTURE & NATURAL RESOURCES

Invests directly in infrastructure (airports, toll roads, power generation, water and waste water utilities, renewable energy and others) and in natural resources (energy, mining, food, timber and others).

Turn to page 12 to read about how we add value to our investments using an ESG lens.

"We think about climate change in infrastructure from two perspectives. We'll look at how a company's products contribute to adapting to a low-carbon economy and how the company manages its own exposure to climate physical risks."

Dale Burgess
Senior Managing Director,
Infrastructure &
Natural Resources



REAL ESTATE

Invests in real estate in Canada and around the world through Cadillac Fairview, our wholly owned subsidiary.

Read more about Cadillac Fairview's approach to sustainability at cadillacfairview.com.

"We see sustainability through many interconnected aspects of our business. From helping clients reduce greenhouse gas emissions to improving occupant wellness – we attract and retain high-quality clients by helping them achieve their sustainability goals."

John Sullivan
President and CEO,
The Cadillac Fairview
Corporation





WHEN WE'RE LOOKING FOR INVESTMENT OPPORTUNITIES

We use a responsible investing lens to anticipate potential impacts on our investments and identify emerging trends, risks and opportunities. This helps us find investments with growth potential that support our long-term investment objectives. It can also give us an early-mover advantage in exciting new areas.

Our teams connect with strategic innovation hubs looking for cutting-edge technology and expertise. Internal working groups, like our cross-departmental disruptive technology forum, help us share knowledge and collaborate across the plan so we are prepared to move quickly when new opportunities come up.

"Our investment in the Pure Group gives us access to strong growth opportunities in Asia's premium fitness market and forms part of our long-term commitment to this region and to our global mindset strategy."

Raymond Shiu
Senior Principal, Equities



Investing in Asia's emerging health and wellness market

THE PURE GROUP

The Pure Group is one of Asia's leading health and wellness brands. Based in Hong Kong, it includes yoga and fitness studios, an online yoga video platform, Pure apparel and a healthy food offering under the proprietary *Nood Food* brand. Pure has 33 locations and 86,000 clients in Hong Kong, China and Singapore.

Our investment

Ontario Teachers' invested in December 2017, alongside FountainVest Partners, one of the largest private equity funds dedicated to China-related investments with offices in Shanghai, Beijing and Hong Kong.

How Pure Group fits into our investment strategy

The emerging and increasingly health-conscious Asian population, especially in China, is driving significant development and demand for health and wellness services and products. Pure was an early mover in this region and has built strong brand awareness within its core geographies for delivering a top quality fitness and yoga experience. Because Pure operates in areas with few fitness studios compared to more developed markets, we believe there is substantial room for future growth.

Pure opened its first yoga studio in 2002 and has since established its premium market positioning through a network of strategic locations and a loyal customer base. It is a highly sought-after tenant because it drives affluent foot traffic, leveraging this appeal to secure prime locations.

Pure is our second investment in a fitness company, allowing us to apply the knowledge and experience we already have to the Asian market while leveraging industry and local expertise from our investment partner.

Pure works with customers, staff, suppliers and the wider community to offer products and services in a way that is sustainable and responsible. The company's *Think! Use Less* campaign educates customers about the impacts of waste, encouraging them to use less and recycle more. In addition, where possible, Pure uses environmentally friendly materials in the construction of clubs and designs its facilities in the most energy and water efficient manner possible.





WHEN WE'RE MAKING OUR INITIAL INVESTMENT IN A COMPANY

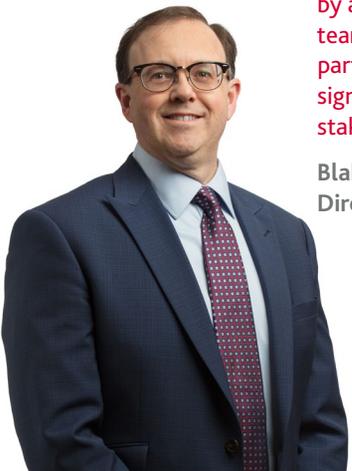
Before we invest in a private company, we go through a due diligence process that includes looking at ESG factors that are significant to the company based on the sector (or sectors) and geographies in which it operates. We examine how the company has performed in these areas compared to its peers and over time. If the investment involves partners, we review the partners' policies and practices to make sure they are aligned with our own.

We draw insights from our ESG Maturity Framework (see page 26), leverage knowledge from our portfolio companies and investment teams and use third-party service providers to help identify and assess ESG risks. We have discussions with management teams to better understand their approach to the identified risks, and may talk to expert consultants about more complex environmental or social issues.

When we're considering a fund manager, our due diligence includes reviewing how the manager identifies, assesses and manages ESG risks and opportunities for the companies in its portfolio.

"GFL is an exceptional Canadian success story led by a proven management team. We expect this partnership to create significant value for our stakeholders."

Blake Sumler
Director, Equities



Integrating ESG into our due diligence process

GFL ENVIRONMENTAL INC.

GFL is the largest privately owned environmental services company in North America, providing solutions including solid and liquid waste management and infrastructure implementation.

Our investment

Ontario Teachers' initially invested in May 2018, alongside BC Partners and other investors. In November 2018, we supported the financing of GFL's merger with Waste Industries, creating the fourth largest North American environmental services platform.

Our partnership and our due diligence process

One of our first steps is to confirm that potential partners' ESG policies and practices are aligned with our own. We already had an existing relationship with BC Partners, and we were satisfied with their ESG approach.

Next, our investment team reviewed the ESG risks and opportunities in the waste management and construction industries, supported by our responsible investing and legal teams and external technical advisors. Some of the material ESG factors identified included emissions, hazardous waste management, and potential environmental contamination. We also benchmarked GFL against strategic peers.

Our due diligence revealed that GFL's practices ranged from standard to leading in every area we focused on. For example:

- GFL had deployed technology that captures landfill emissions and converts them into electricity, managing emissions while creating another source of revenue.
- A portion of its solid waste collection fleet used compressed natural gas, which emits far less greenhouse gas and contaminants than traditional diesel fuel.
- GFL not only had the appropriate training, procedures and facilities to manage hazardous waste, but the capacity to recycle used motor oil and remediate contaminated soils for reuse. These help divert waste from landfills and avoid additional resource extraction.

Since our acquisition, we've continued to support GFL as it carries out a three-year plan to build on the sustainability of its operations. Key initiatives revolve around innovation to reduce the amount of waste being sent to landfills (e.g., through treatment and repurposing) and increased conversion of waste to energy.



WHEN WE'RE MANAGING OUR INVESTMENT IN A COMPANY

We strive to be agents of change by helping the companies we invest in improve their ESG practices, and by sharing information about the good practices of other companies in our portfolio.

Our portfolio managers monitor the material ESG risks associated with each investment. Biannual monitoring memos for private companies include a company's ESG risks, opportunities and status.

We often sit on the boards of these companies, so we're actively involved in overseeing their long-term strategic planning and risk management practices. At least one of the directors we put on the board is accountable for reporting on ESG issues.

For public companies, ESG analysis is included in company assessments and updated regularly. Portfolio managers organize calls or meetings with a company if there is a significant issue.

We review the performance and practices of our external managers every year – for example, how they integrate ESG factors into their assessment of companies, what investment decisions they made, and how they managed any ESG-related incidents.

"Through investments like Aroona Farms, we aim to supply the global demand for safe and nutritious food while minimizing strain on the environment."

Thierry Bédard
Director, Infrastructure
& Natural Resources



Adding value through sustainable agricultural practices

AROONA FARMS

Aroona Farms is one of the largest almond growers in Australia. It has 2,600 hectares of planted almond orchards on two properties in Victoria and South Australia, producing approximately 6 million kilograms of almonds per year.

There's a strong business case for investing in almonds. Global consumption has been steadily increasing for the past 10 years, with a large upside potential in China and India, where per capita consumption remains low. In addition, almonds are a source of protein and calcium that can replace more carbon-intensive animal sources, and can be used as gluten-free flour substitute.

Our investment in Aroona is one of six agricultural investments we have made since 2014, and a key part of our natural resources portfolio. Our goal is to build a diversified food basket portfolio that delivers stable inflation-linked returns over the long term.

Some of the major agricultural trends affecting these investments include water, climate and availability of arable land. For example, fresh water is becoming scarcer and more valuable. Our investment decision must consider the asset's water management practices, the long-term outlook for water availability in the area, and regulatory risks. For these reasons, we look for mature and effective water management practices, and prefer to invest in jurisdictions like Australia, which has a robust water allocation framework that is fairly priced. This helps to ensure sustainability of water resources by putting it to highest and best use.

Once we've made an investment in this sector, we focus on:

- managing key inputs and labour to make sure that we're sustainable;
- advanced monitoring using technology that involves plant sensors and algorithms to detect plant stress and water needs;
- taking a leadership position in employee safety that's aimed at zero harm;
- using food safety audits to monitor what we produce;
- working with local suppliers and advisers to strengthen our relationships with local communities.

Since investing in Aroona we have digitalized the irrigation system, leading to more efficient water use, stronger yields and lower greenhouse gas emissions.

In 2019, we will also be upgrading the occupational health and safety system to improve accountability, reporting and overall management of employee health, safety and well-being at the orchard.



We build relationships with the companies we invest in to improve our understanding of the company, influence change and nurture success.

Engage

We engage to protect and create value. Engagement gives us better insights into how companies are managing ESG risks and opportunities, and we use that information to integrate ESG into our investment process.

We engage to learn and share. We share new knowledge from our engagement activities across our organization, and with the companies we invest in, so the portfolio benefits overall.



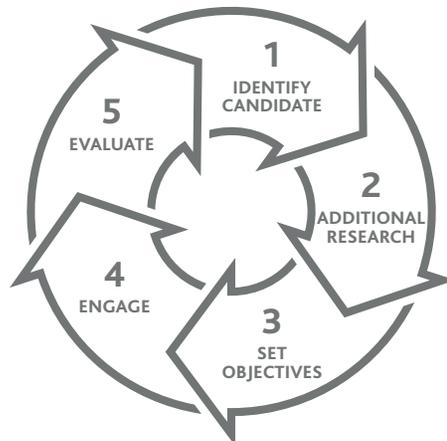
HOW WE ENGAGE

We have four types of engagements:

- **Thematic** – focused on ESG issues that are the most material to our plan (read about our thematic focus for 2019 on page 15).
- **Event-driven** – driven by an ESG-related incident or corporate transaction.
- **Voting** – when we're deciding how to vote our proxies or as a follow-up to a vote.
- **Collaborative** – there is strength in numbers, so we collaborate with other investors or external managers when we have aligned goals. We also collaborate with the industry and policy-makers when an issue affects different sectors. You can read more about this on page 19.

How we engage depends on how we're invested:

- **Private equity and infrastructure** – we tend to have a larger ownership stake in private companies, and often have one or more seats on the board. That gives us regular contact with management and the board, which allows us to directly influence company behaviour.
- **Public companies** – we usually own a small proportion of the public companies we invest in, so we manage risk and opportunities by exercising our right to vote, building better relationships with companies, and influencing positive change when we have a concern.



OUR ENGAGEMENT PRINCIPLES

- **assess** all companies in our portfolios for material ESG concerns
- **balance** the cost of an engagement against the potential for achieving a positive outcome
- **prioritize** engagements based on the severity of the issue and the impact on the plan
- set **clear** objectives before engaging, monitor our progress and re-evaluate as we learn more
- **include** portfolio managers and ESG specialists
- **work** toward a cooperative solution with the companies we engage with
- **align** our voting decisions with our engagement activities whenever possible
- **report** on our engagement activities to our members



A SYSTEMATIC APPROACH

We've established a more formal, systematic engagement strategy that:

- allows for meaningful engagement aimed at influencing change in both the short and long term;
- clarifies our position on ESG issues;
- makes our engagements more effective by linking them with our proxy voting decisions.

A cross-functional Stewardship Committee oversees our overall engagement focus and annual engagement plan. The committee includes our Chief Executive Officer, the Chief Investment Officer, the Chief Risk & Strategy Officer, the Executive Managing Director, Equities and the Senior Managing Director, Infrastructure & Natural Resources, and is facilitated by the heads of our responsible investing and corporate governance teams.

THEMATIC FOCUS FOR 2019 – ESG ISSUES THAT CUT ACROSS OUR PORTFOLIO

CLIMATE CHANGE	DIVERSITY
<p>Business across multiple sectors will be affected both directly and indirectly by climate change.</p> <p>Understanding and managing its effects are fundamental to sustainable growth and value creation.</p> <p>Things we look for:</p> <ul style="list-style-type: none"> • board-level oversight of climate change; • climate change in corporate strategy; • clear and specific information about risk management practices; • climate-related metrics and targets, including emissions. 	<p>Diversity and inclusion on companies' boards are leading indicators of an effective board culture. Diversity in management and the workforce can improve decision making and a company's performance overall.</p> <p>We're initially focused on gender, but we will be looking at other forms of diversity in future years.</p> <p>Things we look for:</p> <ul style="list-style-type: none"> • women on the board; • formal board and corporate policies that describe their approach to diversity; • consideration of diversity in recruitment and succession planning; • support of inclusion through training.



2018 ENGAGEMENT EXAMPLES

DIRECT ENGAGEMENT



Focusing on compensation strategies and policy in the oil and gas sector

Members of the public equities, corporate governance and responsible investing teams met with 10 exploration and production companies in Calgary to discuss concerns about current compensation strategies and policies against a backdrop of low oil prices, climate change and transition risks.



Adding safety metrics to compensation

We engaged with a large energy company about its recent health and safety track record. Senior management acknowledged the issue and laid out a plan to address it, which included adding safety performance metrics to determine compensation, and increasing oversight by adding a new senior role focused on safety. We view this as a positive development that, if implemented successfully, should reduce the risk profile of this investment and create a safer working environment for employees and contractors. We will monitor their progress.



Improving climate change reporting

We did not support a proposal for a climate change report submitted by the shareholders of a large energy company in 2016 because it contained an arbitrary and unrealistic publication deadline. We agreed with the spirit of the proposal, however, and we chose to engage with the company instead. We have had a number of calls with management over the last two years, and have shared our disclosure expectations. The company's 2018 reporting included a significantly improved discussion of climate change and included climate-change related metrics. The company also announced that it will be issuing a standalone climate report in 2019.

COLLABORATIVE ENGAGEMENT



Climate Action 100+ is a five-year initiative to engage with systemically important greenhouse gas emitters. We're leading or participating in engagements with Teck, Suncor, Canadian Natural Resources and United Technologies.



30% Club Canada initiated an engagement campaign to encourage companies to achieve a minimum of 30% women on boards and at the executive management level by 2022. We will begin engaging companies in 2019.



Sustainability Accounting Standards Board (SASB) launched a pilot engagement program to hear company views on the standards, and get their commitment to adopting SASB in their corporate reporting.

We were part of an engagement team that included other SASB Investor Advisory Group members. The team met with several companies in the information technology, biotechnology, financing and insurance sectors. Thirty-three companies have committed to adopting the standards since they were launched in 2018.



PROXY VOTING: A POWERFUL TOOL FOR CHANGE

Proxy voting is an important way shareholders can exercise influence and control over their investments in public companies.

Electing directors, appointing auditors and having a say on executive compensation are three of the ways we can use our vote to hold public companies accountable for their governance practices. We see these as particularly important because companies that have effective boards and good governance practices are better at managing risk, so they perform better and add greater value in the long term.

We also vote on shareholder proposals, which are usually aimed at a specific outcome like creating a sustainability report, achieving pay equity or disclosing lobbying and political expenditures.

When voting, we consider:

- our Corporate Governance Principles and Proxy Voting Guidelines;
- our thematic focus areas;
- what we've learned from our engagement with the company and from our process for monitoring our investments;
- trends identified through our analysis of previous voting and other relevant voting patterns;
- what's in the best interest of shareholders for achieving long-term success.

We publish a detailed annual guide to our approach to corporate governance and voting: *Good Governance Is Good Business: Corporate governance principles and proxy voting guidelines*. The guide is available on our website at otpp.com.



NEW FOR 2019 – BETTER GUIDANCE ON SHAREHOLDER PROPOSALS

Our 2019 *Good Governance Is Good Business: Corporate governance principles and proxy voting guidelines* includes details about our approach to voting on shareholder proposals, and this year includes specific guidance on two topics that frequently come up: climate change and political donations.

Key highlights

We normally support **climate change proposals** that ask for:

- better governance and oversight of climate change issues;
- decision-useful reporting on how a company assesses, manages and monitors climate change related risks and opportunities; or
- information about how a company is aligned with the recommendations of the Task Force on Climate-related Financial Disclosures guidelines.

We normally support proposals about **political expenditures and activities** that:

- introduce or improve board oversight of political expenditures and activities, including policy and procedural reviews and taking industry and peer comparisons into consideration;
- align corporate political activities with corporate strategy and enhance the long-term value creation for shareholders and stakeholders; or
- encourage companies to provide regular disclosure of their expenditures, including dues to trade associations, and the rationale behind their expenditures.



2018 PROXY VOTING EXAMPLES

SUSTAINABLE PACKAGING	HUMAN RIGHTS	EXECUTIVE COMPENSATION PRACTICES
<p>We SUPPORTED a shareholder proposal asking a food and beverage company to provide a comprehensive policy on sustainable packaging.</p>	<p>We DID NOT SUPPORT a shareholder proposal asking a major bank to show how its values align with its policies on investing in companies tied to genocide and other crimes against humanity.</p>	<p>We SUPPORTED a say-on-pay proposal that included several outside of plan awards at a global equipment technology manufacturer.</p>
<p>Why we supported the shareholder proposal We encourage companies to develop recyclable products and packaging, and to actively reduce waste in their operations, production and supply chains.</p> <p>The company has made several commitments on packaging in the past, but fallen short on its stated targets. We believe the company needed to increase these efforts and be accountable to shareholders.</p> <p>What's happened since the vote After it received early shareholder support for the shareholder proposal, the company made some initial progress to develop sustainable packaging that can be recycled or composted anywhere in the world. We continue to monitor this action and others the company has pledged to do in the future.</p>	<p>Why we did not support the shareholder proposal We expect companies to respect human rights regardless of geography, local practices, laws and regulations. Since this proposal was to report on alignment and provide an explanation of investment decisions, we decided engagement would be most appropriate and a more effective way to mitigate risk.</p> <p>What's happened since the vote Our engagement gave us greater clarity and confidence that the bank's investments are aligned with its stated values. It led to a second engagement on implementing the Task Force on Climate-related Financial Disclosures in a mutually beneficial exchange of knowledge and experience. We will follow up after the publication of its report.</p>	<p>Why we supported the management proposal We believe outside of plan awards should only be used in rare cases because unsubstantiated awards are a compensation plan risk. We engaged with the company to clarify the board's rationale for providing the outside of plan awards, which was that the company's move to a new jurisdiction had required significant relocation efforts. We agreed that this was an extraordinary circumstance, reinforced our position on outside of plan awards, and supported the say-on-pay proposal.</p> <p>What's happened since the vote We've continued to engage with the company, providing insight into revisions to the compensation philosophy in advance of the 2019 annual general meeting, and encouraging the board to explain its decisions to shareholders in the company's disclosure.</p>



We use our influence as a global investor to improve the investing landscape and clarify expectations of companies.

Influence

We work with leading organizations, like-minded peers, market regulators, thought leaders and researchers around the world to advance the practice of responsible investing and improve regulations. **Working this way, we can reach a far greater number of companies.**



OUR ACTIVITIES IN 2018

We played a leading role in shaping policy in Canada and internationally in 2018. This helps us contribute to a better environment for our investments and stakeholders and to building a sustainable plan. See how below.

ACCOUNTING FOR SUSTAINABILITY CFO LEADERSHIP NETWORK (CANADIAN CHAPTER)	GLOBAL REAL ESTATE SUSTAINABILITY BENCHMARK (GRESB)	CANADIAN COALITION FOR GOOD GOVERNANCE (CCGG)
<p>What it does</p> <p>Works with Chief Financial Officers (CFOs) and their teams across Canada to advance understanding and enhance discussion about sustainability, commercially viable business models and how the finance industry can contribute.</p>	<p>What it does</p> <p>Assesses and benchmarks the sustainability performance of real estate and infrastructure portfolios and assets worldwide.</p>	<p>What it does</p> <p>Promotes good governance practices in Canadian public companies on behalf of institutional investors.</p>
<p>How we're involved</p> <p>Our CFO, David McGraw, is a member of the network and we're participating on the <i>Engaging Boards and Senior Management Project</i> to:</p> <ul style="list-style-type: none"> • learn how member organizations have helped their board and senior management integrate economic, environmental and social issues into business strategy, processes and decision making; • use that information to develop tools and guidance for companies that need help engaging their senior teams. <p>Why it's important</p> <p>Gives us tools we can use to engage more effectively with the boards and management of the companies we invest in.</p> <p>"We work together and come up with practical solutions that allow us to move our organizations – and encourage others – toward more sustainable outcomes."</p> <p>David McGraw CFO</p>	<p>How we're involved</p> <p>Our Head of Responsible Investing, Deborah Ng, was nominated to GRESB's board in November. She chairs GRESB's Infrastructure Advisory Board, which gives strategic advice, particularly on products and services relating to its Infrastructure Assessments. The advisory board includes peers such as ABP, AIMCo, CalPERS and PGM, which also work to promote the adoption of GRESB's standards.</p> <p>Why it's important</p> <p>Working in collaboration with industry and investors, GRESB provides standardized and validated ESG data that helps us manage, protect and create value in our investments.</p> <p>"GRESB gives us a framework for systematically monitoring and managing the sustainability risks for our real estate and infrastructure assets. It also helps us identify and share leading practices."</p> <p>Deborah Ng Head of Responsible Investing</p>	<p>How we're involved</p> <p>Our Chief Risk & Strategy Officer, Barbara Zvan, sits on the board, where she chairs the Environmental and Social (E&S) Committee. In June 2018, CCGG released a guide to help directors assess and oversee E&S factors. It's also begun to include E&S issues in its governance engagements with companies.</p> <p>Why it's important</p> <p>Helps improve the governance framework and practices of companies.</p> <p>"Good governance is the foundation for effective management of environmental and social factors. There has been a dearth of attention paid to the board's important role and responsibility in ensuring sustainability of a company's business models and practices, which poses a risk to our portfolio."</p> <p>Ron Mock President and Chief Executive Officer</p>



INTERNATIONAL CORPORATE GOVERNANCE NETWORK (ICGN)	INTERNATIONAL CENTRE FOR PENSION MANAGEMENT (ICPM)	SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB)
<p>What it does Promotes effective standards of corporate governance and investor stewardship to advance efficient markets and sustainable economies around the globe.</p>	<p>What it does Stimulates leading-edge thinking and practice about pension design and management.</p>	<p>What it does Sets sustainability disclosure standards that are industry-specific and based on materiality.</p>
<p>How we're involved We've endorsed ICGN's Global Stewardship Principles, and our Head of Corporate Governance, Paul Schneider, sits on the board. We're also participating in ICGN's Shareholder Rights Committee, which works to protect minority shareholder rights by influencing policy-makers and other stakeholders.</p> <p>Why it's important Helps us contribute to and learn from evolving corporate governance practices around the world.</p> <p>"ICGN's work supports our efforts to improve governance practices in the markets and companies we invest in. ICGN's participation on the Council of Experts for the follow-up of Japan's Stewardship Code and Japan's Corporate Governance Code is one example of how it can influence governance change."</p> <p>Paul Schneider Head of Corporate Governance</p>	<p>How we're involved We were part of ICPM's Climate Change Working Group, which developed <u><i>Climate Change for Asset Owners</i></u>, a guide for trustees and management to begin integrating climate change considerations in the investment process.</p> <p>Why it's important Shares our knowledge and experience with other asset owners enabling them to take steps to manage climate risks in portfolios. This helps us by creating additional impetus for regulators, companies and financial service providers to take action as well.</p> <p>"The board needs to treat climate change like any other material risk. The board's Investment Committee oversees responsible investing, which encompasses climate change risks. Ultimately, accountability for climate changes lies with the board, which sets the tone for risk awareness."</p> <p>Patti Croft Board member</p>	<p>How we're involved We're a founding member. In 2019, our Chief Risk & Strategy Officer, Barbara Zvan, will chair the Investor Advisory Group, which encourages companies to disclose material ESG information, among other things. We're also involved with the Standards Advisory Group, which gives guidance on whether emerging issues should be considered in the process of developing standards.</p> <p>Why it's important Helps companies report ESG information in a way that's meaningful, which helps us assess risk and enhances our decision-making process.</p> <p>"SASB metrics are informed by what is financially material for companies, investors and sector experts. This makes them relevant for investment analysis and valuation purposes. As a member of the SASB Standards Advisory Group, I am looking forward to helping ensure the SASB Standards remain relevant for investors and capital markets participants."</p> <p>Jim Sikora Director, Infrastructure & Natural Resources</p>



EXPERT PANEL ON SUSTAINABLE FINANCE

What it does

Helps foster a regulatory and policy framework that is conducive to attracting private sector capital to sustainable finance and encouraging adoption of the Task Force on Climate-related Financial Disclosures recommendations.

How we're involved

Read the feature to the right to learn about our work this year.

Why it's important

Helps create attractive long-term investment opportunities. Transitioning more strategically to the low-carbon economy and improving climate-related disclosures also reduces risk and enhances the value of our investments overall.

"Canada has an enormous opportunity to contribute to sustainable economic growth and our work will help flow capital to assets that offer solutions for reducing emissions, or that are less carbon-intensive and more climate-resilient."

Barbara Zvan
Chief Risk & Strategy Officer



The Expert Panel on Sustainable Finance – One way we're helping with Canada's transition to the low-carbon economy

Transitioning strategically to a low-carbon economy will maintain and enhance Canada's competitiveness in the long term, and lead to sustainable and inclusive growth. Navigating this transition will require a significant investment of capital, alongside a broad suite of actions by governments, businesses and households.

The right finance and investment structures can also help. That's why the Minister of Finance and the Minister of the Environment and Climate Change created a four-member expert panel on sustainable finance in the spring of 2018. Our Chief Risk & Strategy Officer, Barbara Zvan, sits on this expert panel.

After consulting with a wide range of stakeholders from financial services, business, the public sector, think tanks and academia, the panel published its Interim Report in the fall of 2018. It identifies six foundational elements and seven financial products and markets that will increase sustainable investing:

Foundational elements

- Clarity on climate action and carbon policy
- Reliable information
- Effective climate-related disclosures
- Clear interpretation of fiduciary and legal duties
- A knowledgeable support ecosystem
- Effective and consistent financial regulation

Financial products and markets

- Building retrofits for energy efficiency and adaptation
- Sustainable infrastructure
- Clean-tech innovation
- Innovation in the oil and gas industry
- Optimized electricity generation and transmission
- Sustainable asset management and financial products
- Green and transition-linked financial products

The panel's final report is anticipated to be published in the spring of 2019.



Achieving carbon neutrality at a European hub – Interview with the CEO of Brussels Airport

Brussels Airport is Belgium's largest airport and the country's second most important engine of economic growth. It welcomed an all-time record 25.7 million passengers and carried 732,000 tonnes of cargo in 2018. Brussels Airport also celebrated its 60th anniversary in 2018 – more than 610 million people have travelled to, from, or through the airport since 1958.

Deborah Ng, Ontario Teachers' Head of Responsible Investing, asked Brussels Airport's Chief Executive Officer, Arnaud Feist, to talk about the airport's approach to carbon neutrality.

Deborah Ng: Brussels Airport made the decision to go carbon neutral, one of only a few major airports in the world to do so. What was the impetus for making this decision?

Arnaud Feist: Sustainability is one of our most important values, and a concern for the environment is a key feature of our strategic vision for the future. We're aware of our impact on the local surroundings, the environment and the climate, and are working to reduce it. We've developed and are implementing a sustainable development strategy to increase our positive societal impact and to obtain wide support to grow in a balanced way. One of our primary goals is to reduce carbon emissions, and we have been working toward neutrality since 2009.

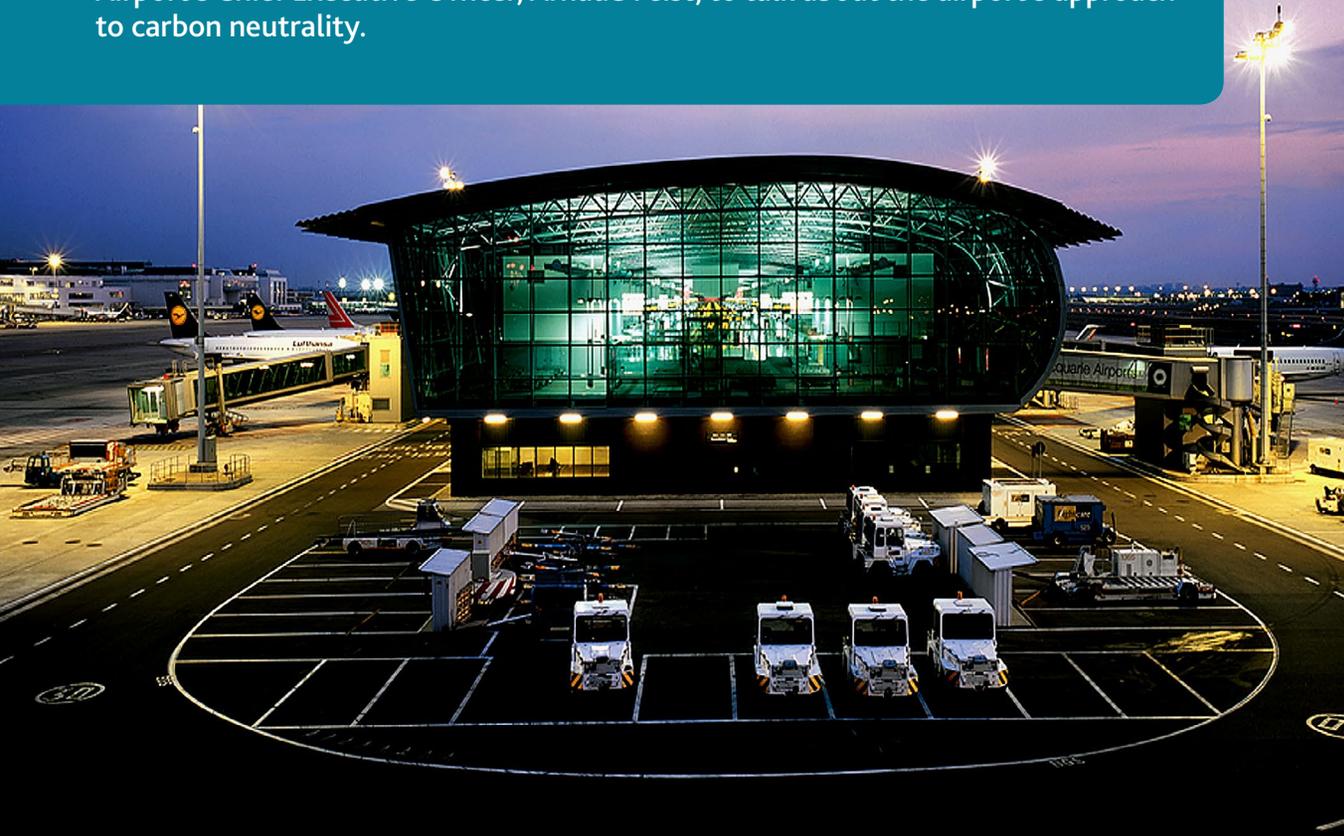
We reached a major milestone in June when we received a carbon neutrality certificate from the Airport Council International (ACI).

DN: What exactly does carbon neutrality mean?

AF: For us, carbon neutrality means working toward permanently reducing the airport's emissions and offsetting residual emissions.

Under the ACI's Airport Carbon Accreditation program, carbon neutrality is its highest level of accreditation. It means an airport has:

- mapped and verified its carbon footprint through an independent external audit;
- set and achieved targets for emissions reduction;
- worked with partners and third parties at and around the airport to manage and reduce emissions;
- offset all residual emissions from the airport's activities.



**DN:** How do you work toward carbon neutrality?

AF: We achieved our carbon neutrality status thanks to investments in energy efficient and renewable energy projects, the purchase of exclusively green electricity and a carbon offset project. We also collaborate with our external partners to reduce carbon emissions that are beyond our control. For example, the implementation of the Single European Sky initiative requires that each airport operate according to the principle of Collaborative Environmental Management. In quarterly bilateral meetings between skeyes (the authority of airways that ensures the safety and efficiency of air traffic in Belgium) and Brussels Airport, we learn about the challenges and constraints each of us is facing, decide on realistic and sustainable actions to improve environmental performance, work out joint proposals and set common priorities.

DN: What's next on your sustainability journey?

AF: We will continue working towards consistently reducing our carbon footprint and we've set a target of emitting 40% less carbon by 2030 than we did in 2010. We also look into reducing our overall ecological footprint by managing water, noise, mobility, waste and other aspects of our operations. We're working on that in several ways:

- Promoting the use of public transport by increasing public transit frequency and providing improved access for bicycles to help reduce congestion around the airport.
- Incentivizing airlines to reduce emissions and noise. Airline companies pay for the use of the runways at Brussels Airport. The amount depends, among other things, on the noise performance of the aircraft, which provides a financial incentive for airlines to acquire ever quieter and fuel-efficient aircraft.

- Greening our vehicle fleet by embracing compressed natural gas fuel, plug-in hybrid and full electric technologies for our company cars and utility vehicles, and taking delivery of 40 electric buses for the airside transport of our passengers in early 2019.
- Assessing every new construction or renovation project to determine how we can make it more energy efficient. For example, Connector, the building that links the terminal to the piers, uses thermal energy storage, which means less energy is required to heat and cool the building. Heating and cooling is derived from circulating groundwater between 10 wells.

It's a conscious, ongoing approach – one that helps us achieve our most important environmental targets and continually reduce our carbon emissions, energy and water consumption and waste produced.

"Sustainability is one of our most important values, and a concern for the environment is a key feature of our strategic vision for the future."

ARNAUD FEIST
Chief Executive Officer, Brussels Airport



We adapt and improve our own processes as the world evolves and new risks and opportunities arise.

Evolve

The world is constantly changing and we need to always be learning and developing our understanding of ESG topics and trends. **Our goal is to continue to improve our ability to recognize, evaluate and act on ESG opportunities and risks, so we stay ahead of the curve and the plan remains resilient.**



PROMOTING LEADING ESG MANAGEMENT

In 2017, we began developing an ESG Best-in-Class Framework, a tool to help us classify the companies in our investment portfolios according to how they manage their material ESG factors.

In 2018, after extensive investment in time and research, we completed our first sector prototype, for oil and gas. We also gave the framework a new name, the ESG Maturity Framework, which reflects our understanding that practices evolve and become more sophisticated with time and resources.

The framework is a proprietary tool that helps us assess companies based on a set of levels and expectations for ESG practices and performance. Its objective is to develop a common language around ESG, and identify industry-specific practices and performance reference points that will:

- inform investment analysis, due diligence, and asset management activities;
- identify potential corporate engagement opportunities;
- compare companies' ESG maturity alongside a relevant portfolio.

The framework is a dynamic document that we will continually update and refine as new issues arise and practices evolve.

We've started testing the framework for companies in the oil and gas sector, and over the coming years will be developing it to apply across all sectors in our public and private portfolios. We expect the framework to provide us with:

- a standardized context to recognize strong performers and leading practices;
- established levels of maturity to facilitate portfolio management and value creation.

How will the ESG Maturity Framework work?

First, we confirm the material ESG factors for each industry/sector by:

- consulting with our internal teams;
- looking at external sources and experts, such as international standards, industry groups and councils, and the Sustainability Accounting Standards Board.

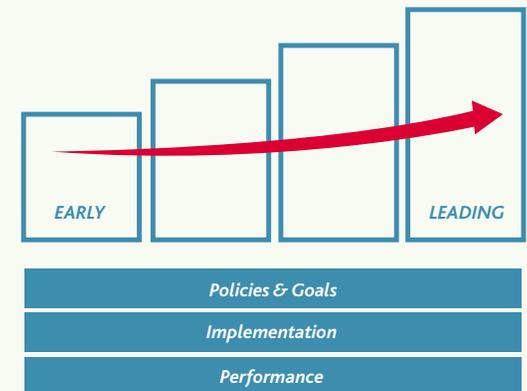
Next, we look at individual companies. For each ESG factor, we'll examine the company's practices or outcomes across three categories: *policies & goals*, *implementation* and *performance*. We will also assess its exposure to specific ESG factors. For example, we may assess the company's exposure to water scarcity based on geography.

Using this information, we assign each ESG factor one of four stages of ESG practices, ranging from *early* to *leading*.

For example, with health and safety *early stage* may mean the company has a policy that addresses health and safety factors in broad terms, and does not have a systematic process to manage or measure them.

Leading stage may mean the company has a specific policy backed by management's oversight, performance targets are set, systems are consistently implemented across operations and these measures are backed by top quartile performance on injury rates.

The results for each ESG factor are aggregated across all material ESG factors to arrive at an overall assessment for the company and the results can also be extended to the portfolio.





MANAGING THE TRANSITION TO A LOW-CARBON ECONOMY

We introduced our Low Carbon Economy (LCE) Transition Framework in 2017, to help us visualize the potential impacts of climate change under a range of future scenarios, identify the catalysts driving the scenarios and provide insights that help us make better investment decisions as we navigate the uncertain path to a low-carbon economy.

The first phase of the LCE Transition Framework is a qualitative assessment of external factors. It includes a number of indicators or “signposts” related to the catalysts – things like carbon policy, carbon pricing, fossil fuel subsidies, energy costs, deforestation and meat consumption – that together can provide indications of which pathway we’re moving toward. The next phase of the framework will focus on quantifying the impact of these factors.

In 2018, we began rolling out the LCE Transition Framework across the organization. Some key progress:

- Systematically included climate change considerations in the due diligence process for new investments – for example, thinking about the implications of a low-carbon scenario on the investment thesis, and adding carbon pricing scenarios to stress test this.
- Incorporated the framework’s indicators into company monitoring memos and new investment analysis and presentations.
- Developed a series of research reports that help us think about different ways we can use the framework across the investment lifecycle. Some of the areas covered by the reports include macro implications of extreme drought, electric vehicles, and carbon capture and sequestration.
- Published a [report](#) on the misalignment between shareholder value and management compensation programs that reward short-term absolute production growth regardless of expense. The report also questions the long-term sustainability of the oil and gas business model in an era of energy transition.

Using the LCE Transition Framework to understand the impact of drought

Extreme weather and drought events are expected to become more common. Many major cities and regions are at high risk for severe water restrictions – for example, Cape Town’s recent near complete shut-down of its water system. Many other cities, like Beijing, Mexico City and Jakarta, face a similar risk to their water supplies.

Our capital markets team examined the implications of extreme water restrictions and drought in major urban centres, and developed a report that outlines the potential macroeconomic implications and investment strategy considerations of the next major water crisis.

Using the Cape Town drought as a starting point, one group outlined the direct and indirect impacts and responses to the drought. A second group applied the results to Beijing. Even though the two groups had different subject matter knowledge, they came up with similar results, and together their results point to some generalized responses to drought that could be applied in other regions. The impacts of a drought are likely to be relatively consistent between jurisdictions, but the investment opportunities, strategies and responses are likely to be more context-specific.

We’re using the drought report as the blueprint for developing a more thorough and tailored plan for understanding the potential impact of future large-scale drought on large regions and cities. This will help us mitigate risk and take advantage of emerging opportunities.





Where we're headed

We'll continue to develop our responsible investing practices and approach, emphasizing total-fund and value-added returns, and volatility management.

In 2019, we plan to broaden our approach to climate change, continue improving ESG integration across the investment lifecycle, and expand our knowledge in emerging areas of interest. Here are some of the key activities we have planned:

Integrate

Continue improving how we integrate ESG into our investment process and decisions.

KEY ACTIVITIES:

Build on our ESG Maturity Framework (see page 26) by completing the rollout for oil and gas and developing frameworks for other sectors.

Implement the External Manager ESG Maturity Framework for private and capital market funds.

Enhance how we integrate ESG in private company valuations.

Engage

Refine our thematic, long-term approach to engagement.

KEY ACTIVITIES:

Prioritize engagements around the themes of climate change and diversity in addition to ongoing engagement activities.

Develop long-term, issuer-specific and tailored engagement plans for public and private companies aimed at value creation.

Develop customized governance guidelines and expectations for specific markets and countries.

Increase efficiency in our proxy voting process by leveraging custom technology solutions.

Influence

Continue to influence change in our key focus areas.

KEY ACTIVITIES:

Develop a plan for climate change policy advocacy.

Continue participating in leading industry organizations and initiatives such as the Expert Panel on Sustainable Finance, GRESB, CCGG, SASB, the Investor Leadership Network and others, to achieve meaningful, positive influence over the economy and our own assets.

Evolve

Keep learning and adapting.

KEY ACTIVITIES:

Evolve and enhance our approach to climate change in our investment strategy, develop our metrics and models for assessing portfolio climate risk, and enhance transparency and disclosure to stakeholders.

Explore meaningful ways to contribute to the Sustainable Development Goals.

Expand our knowledge in emerging issues, like single-use plastics, corporate governance in China and cannabis.

Climate change will have an impact on everyone's future. You can read more about how Ontario Teachers' is actively managing the related risks and opportunities of climate change in our *2018 Responses to the Task Force on Climate-related Financial Disclosures*, coming soon.