

2016 RESPONSIBLE INVESTING REPORT



The Ontario Teachers' Pension Plan, better known as Ontario Teachers', is Canada's largest single-profession pension plan. For information about the plan's funded status, investment and service performance, governance and financial statements, please consult the 2016 Annual Report on otpp.com.

MISSION

Outstanding service and retirement security for our members – today and tomorrow.

VISION

Striving to be the world's leading pension plan.

VALUES

Humility: We temper our accomplishments.

Integrity: We do the right thing.

Performance: We are driven to succeed.

Partnership: We are stronger together.

Innovation: We have the courage to forge new paths.

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ABOUT ONTARIO TEACHERS'

At Ontario Teachers', pensions mean the world to us. We exist to provide outstanding service and retirement security for 318,000 plan members – today and tomorrow.

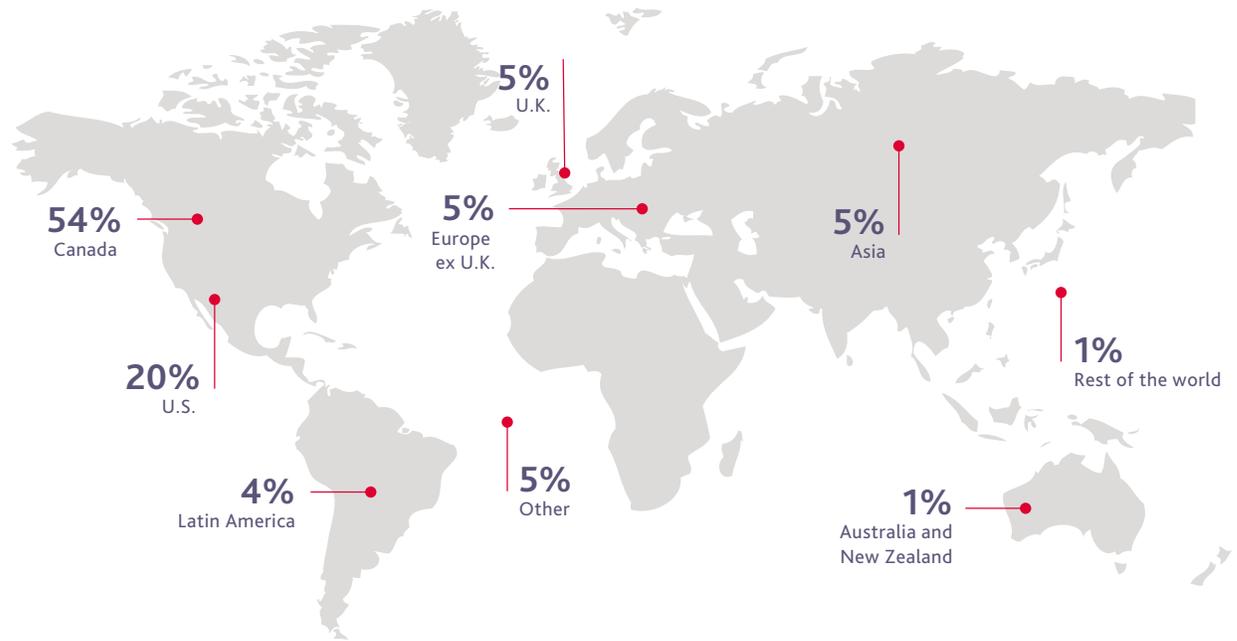
To fulfill that mission, we look ahead and abroad. We take the long-term view, because we will be paying pension benefits to today's youngest teachers decades from now. We seek opportunities around the

globe. The \$172.1 billion investment portfolio is broadly diversified by assets and geography, and is managed by our experienced investment professionals in Toronto, London and Hong Kong.

\$172.1B
broadly diversified investment portfolio
As at December 31, 2016

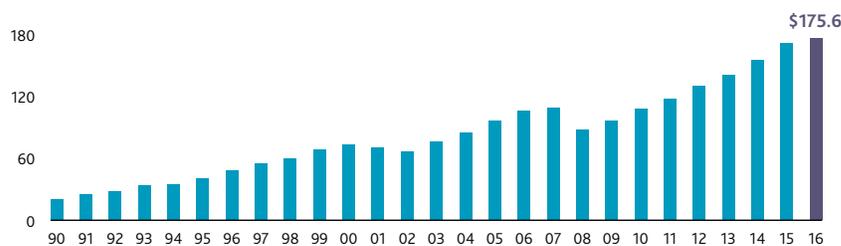
Geographic Exposures

As at December 31, 2016



Net Assets

As at December 31, 2016 (Canadian \$ billions)



Net assets include investment assets less investment liabilities (net investments), plus the receivable from the Province of Ontario, and other assets less other liabilities.

LETTER FROM THE CHAIR



As an organization charged with building and safeguarding the retirement savings of generations of Ontario school teachers, the Ontario Teachers' Pension Plan strives to take a comprehensive approach to managing and assessing risk across all levels and time horizons.

We have long believed that good governance is good business, and sound corporate governance practices enable a board to oversee risks of all kinds. Ontario Teachers' is known for pursuing corporate governance improvements, and management continues to support such advancements. Investors today face a multitude of complex and fast-changing environmental and social risks. Ontario Teachers' has built internal capabilities to better assess the implications of these factors for the pension plan. Education on environmental, social and governance (ESG) factors is part of the board and employee orientation processes, and is also a component of the plan's ongoing education and development programs.

The board oversees management's implementation of responsible investing principles. We set the overall tone and approve investment policies and risk appetite. There are also clear responsibilities throughout the organization. The plan's investment professionals

evaluate company-specific factors as well as broader ESG factors that could affect the long-term value of the investment portfolio.

This report offers information about management's responsible investing priorities and daily practices. It is our hope that reporting on these activities will have a positive influence on the investment industry and our portfolio companies, as well as companies in which the pension plan may invest in the future.

A handwritten signature in black ink that reads "Jean Turmel".

Jean Turmel, B.Comm., MA
Chair



Responsible investing issues are always emerging and ESG standards are constantly being established or refined. Ontario Teachers' is committed to learning and applying knowledge in new ways. We welcome your comments and suggestions on our responsible investing activities and this report.

We can be reached at Responsible_Investing@otpp.com.

LETTER FROM THE CEO



At Ontario Teachers', responsible investing is synonymous with effective stewardship. Quite simply, companies that are good at managing ESG factors are likely to make sound business decisions that support long-run sustainability. That makes them attractive investments for Ontario Teachers', with its long-term investment horizon.

In the past five years, we have built rigorous frameworks for managing environmental, social and governance (ESG) risks. Our decision to issue a stand-alone report on responsible investing was inspired by several factors:

- The notion of responsible investing around the world is evolving rapidly. Awareness of ESG factors is increasing. Many investors, like us, are striving to bring a reasoned and balanced voice to the table, and this report is part of that effort.
- We aim to lead by example. We are asking portfolio companies for more transparency and disclosure on ESG matters, so it is appropriate that we provide more information as well.
- Our plan sponsors (Ontario Teachers' Federation and the Ontario government) and plan members are increasingly interested in responsible investing issues. While the sponsors are not involved in making investment decisions, we are committed to transparency with these key stakeholders.

THE GLOBAL CONTEXT

The pension plan's investments span the globe. We own stakes in more than 2,500 companies, which collectively employ millions of people and operate in thousands of communities. We are evaluating a larger universe of risks than ever before, many of them interconnected. This necessitates a more comprehensive examination of global risk factors.

Respondents to the latest World Economic Forum survey listed extreme weather events, natural disasters, large-scale involuntary migration, failure of climate change mitigation and adaptation, water crises, terrorist attacks and cyberattacks as the global risks with the greatest likelihood and impact. We need to understand how these risks affect asset values – yet many don't fit easily into traditional risk management or financial models, which are data-driven and often backward-looking.

Considering all material ESG risk factors provides a forward-looking perspective and enhances our risk management capabilities. We also work with peer groups, governments, companies and other interested parties to develop global, consistent and relevant standards that will lead to better investment insight.

OUR INAUGURAL REPORT

This report has three core areas.

First, it provides a snapshot of our management approach to responsible investing and features 2016 proxy voting and engagement highlights.

Second, we selected three focus areas for in-depth discussion – climate change, cybersecurity and board effectiveness – because we strongly believe they are material to a wide range of industries and companies in our portfolio. They are examples of issues that are better understood when viewed through a responsible investing lens.

Third, we want to signal where we're heading with our 2017 responsible investing goals. Our actions will continue to be driven by our key strengths: using influence where we can be effective, and making sound investment decisions to support the plan's long-term sustainability.

Ron Mock, B.A.Sc., MBA
President & CEO

RESPONSIBLE INVESTING PRINCIPLES AND FRAMEWORK

Ontario Teachers' carefully considers a variety of risks and opportunities when making investment decisions, consistent with its fiduciary duty to plan members.

Financial risks to the pension plan can come from diverse factors.

Traditional investment analysis focuses on a company's financial statements, business context, and some established environmental, social and governance (ESG) factors, such as air and water contamination, health and safety or executive compensation.

Ontario Teachers' has actively promoted best practices in corporate governance for many years: we were a founding member

of the Canadian Coalition for Good Governance in 2003 and were leaders in disclosing voting decisions online. In our view, a strong governance structure underpins a company's ability to effectively deal with risks of all kinds, including environmental and social risks.

ESG factors are constantly evolving, as are our practices. We are continually enhancing the integration of broader ESG analysis into our investment processes so that we consider all relevant factors that could affect the value of an investment.

Ontario Teachers' has been a signatory to the UN-backed Principles for Responsible Investment (PRI) since 2011, and the Principles informed our own principles, below. Our PRI Transparency Report demonstrates accountability and facilitates dialogue with our stakeholders. It is available on otpp.com/responsibleinvesting.

PRINCIPLES

Ontario Teachers' responsible investing principles provide a common understanding of how we consider ESG factors in order to ensure a systematic and balanced approach across the plan.



1. Integrating ESG

We consider and evaluate ESG factors alongside other risk factors in our investment processes because we believe they can materially impact the value of our investments.



2. Engaged Ownership

We are engaged owners and take a responsible approach in our asset management practices. We believe that good governance is fundamental to effective management of ESG factors.



3. Continuous Learning

We continue to expand our knowledge, deepen our understanding and evolve our practices by continually assessing current and emerging ESG risks. We share experiences across the pension plan by fostering a culture of thought leadership and collaboration.



4. Seeking Disclosure

We seek clear and relevant disclosure of information that may assist us in making investment decisions.

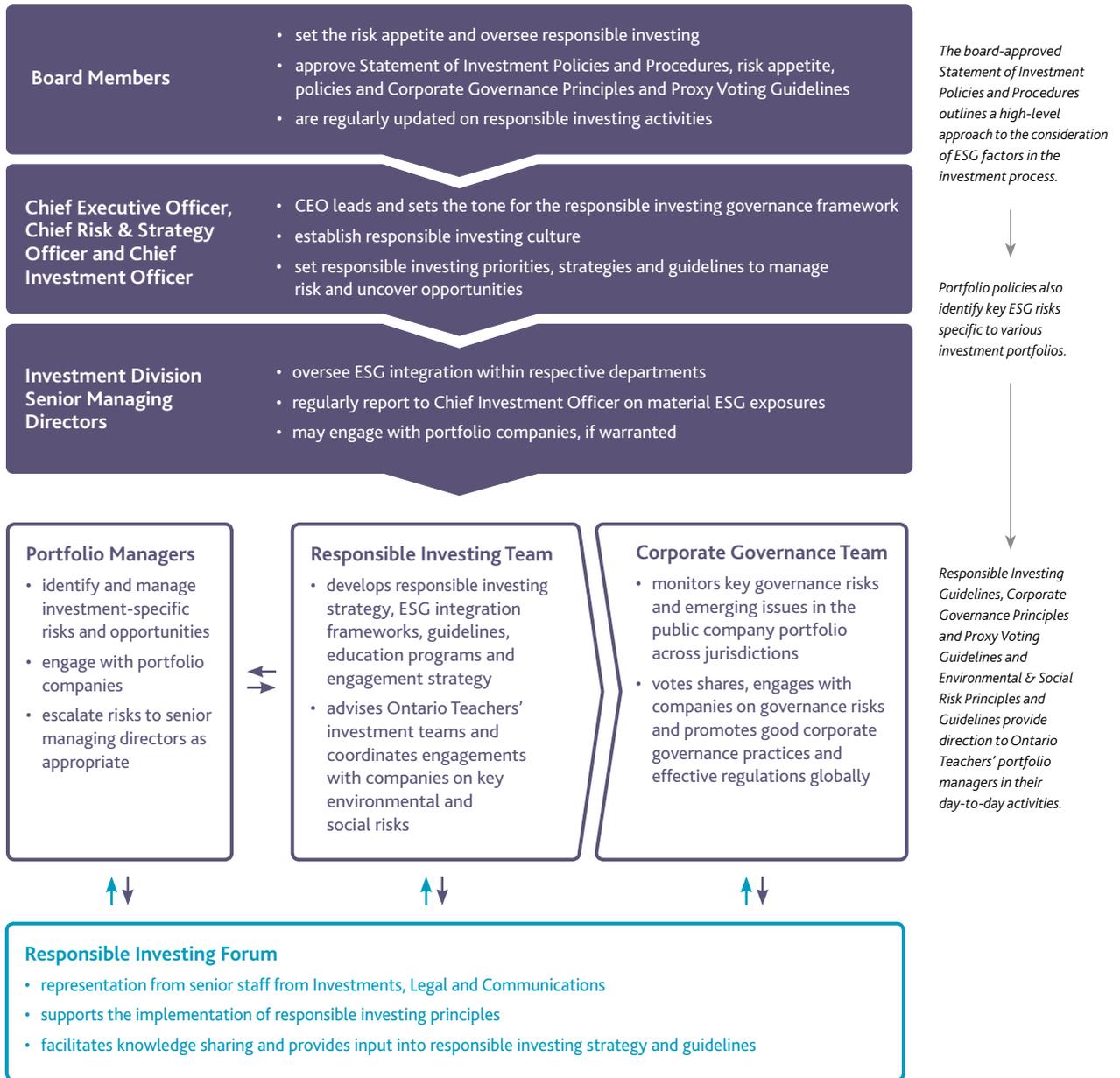


5. Collaboration and Influence

We collaborate with like-minded investors to more effectively execute these principles.

RESPONSIBLE INVESTING GOVERNANCE FRAMEWORK

Accountability for responsible investing is overseen by Ontario Teachers' board members, who set the overall tone for risk consciousness and approve investment policies and risk appetite. There are clear responsibilities for responsible investing throughout the organization. Accountability for managing investment-specific risks, including ESG risks, rests with those best suited to managing them: individual portfolio managers.



INTEGRATION OF ESG FACTORS

Analysis of ESG factors is integrated across all stages of the investment process at Ontario Teachers'.



At the **opportunity stage**, before investing, portfolio managers look at environmental, social and governance (ESG) factors and how they may affect growth and sustainability in various business sectors. For example, examining trends in food security, climate and consumer preferences led investment professionals to consider permanent crop opportunities in the agricultural sector.

At the **due diligence stage**, the focus shifts to uncovering and assessing all material risks in a company's business before making an investment decision.

We look at the ESG risks and assess any mitigating factors, and may use external environmental and social impact consultants as part of due diligence. For example, when we considered an investment in an Australian almond producer, we looked at the company's management of key environmental risks, such as local water use and security. We also looked at key social factors, such as labour practices, food safety and the ability to trace raw materials back to their source.

At the **decision stage**, our analysis of ESG factors is included in the documentation required for deal approvals. If we feel the risks, including those stemming from ESG factors, are greater than the potential financial return, then we do not invest. For example, we do not actively seek investments in companies primarily focused on thermal coal as we feel the risks outweigh any potential return.

After we make an investment, we regularly monitor the ESG risks that were identified at the due diligence stage, as well as new and emerging risks. Managing ESG risks may include conversations with a company's board or management teams to understand more about the risk factors and how the company manages them, with the intention of influencing positive change.

For example, we invested in a drip irrigation system at our almond farms to make more efficient use of water resources.

Our investment professionals continually monitor their portfolios for risks, including those stemming from ESG factors, which may impact the forecasted returns of their investments. This is a regular part of the portfolio management process.

INTEGRATION ACTIVITIES IN 2016

Building on previous years' foundational ESG education, we launched a series called ESG Studio Sessions to bring in industry experts and offer education on key ESG topics identified by investment staff. We conducted five targeted education sessions with staff in 2016 on the topics of supply chains, cybersecurity, disruptive technology and water risks, as well as integration of ESG factors into the cost of capital.

In our Public Equities department, to augment the annual portfolio company ESG review, we performed in-depth reviews of companies identified by ESG research as being exposed to heightened risks. Where warranted, we initiated discussions with these companies about our main concerns.

We regularly scan and monitor our passive equity index holdings in public companies to identify and manage emerging ESG risks. In 2016, we developed a framework to proactively manage severe ESG risks for passive equity investments to supplement our governance and voting practices.

External fund managers oversee about 20% of the pension plan's assets. When evaluating firms to manage equity holdings, we focus on how ESG is integrated into external manager processes. In 2016, we documented best practices to inform future public equity manager selection, and began working more closely with

select managers on corporate engagement efforts. For external managers of private capital, we launched an ESG due diligence questionnaire. This has been used for all new private equity funds, and we initiated a review of all existing fund managers using this systematic framework.

\$134.5B
invested in real estate and
company shares and debt

As at December 31, 2016

› ESG INTEGRATION at Global Container Terminals

Sustainability has always been part of our discussions with GCT Global Container Terminals (GCT), a marine transportation company held in our infrastructure portfolio. Infrastructure assets can have significant impacts and sustainable practices help foster stronger relationships with stakeholders, governments and the communities that they serve.

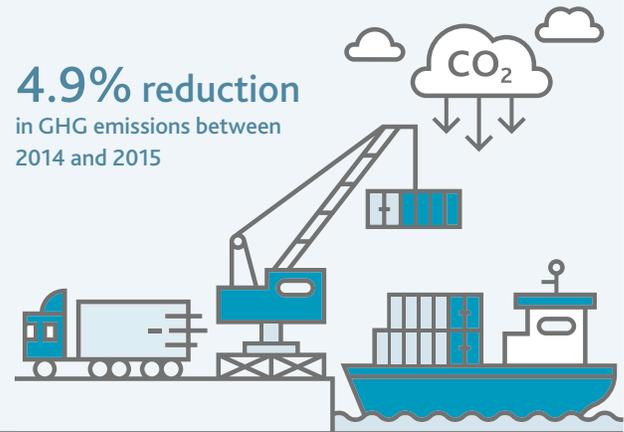
All four of GCT's North American terminals are individually certified by Green Marine, an environmental certification program. It requires participants (ship owners, ports, seaway corporations, terminals and shipyards) to demonstrate measurable annual improvement in environmental performance in such areas as emissions, spill prevention and community impacts to maintain their Green Marine certification.

GCT Canada was honoured with a *Clean50 Top 15 Projects Award* for 2017 for measures that reduced truck congestion and greenhouse gas (GHG) emissions at its two Vancouver facilities. GCT Canada was the first terminal operator to introduce a truck reservation system that reduced waiting times in North America in 2004, at GCT Deltaport and GCT Vanterm in the Port of Vancouver. GCT Canada built on these efforts and established a coordinated system to improve truck processing times. The introduction of night gate operations in 2014

reduced traffic congestion and emissions, removing nearly 1,000 trucks from the road during peak daytime hours.

Together, truck reservations and the night gate program reduced idling and associated GHG emissions and air pollutants along the terminals' value chain, while improving stakeholder productivity and enabling future business growth. In 2014–15, GHG emissions from trucks at GCT Canada's terminals were reduced by approximately 4,100 tonnes of carbon dioxide equivalent (tCO₂e), or the equivalent of taking 800 cars off the road.

4.9% reduction
in GHG emissions between
2014 and 2015



ENGAGEMENT

We view corporate engagement as an essential component of responsible investing. Face-to-face meetings and phone discussions with company managers can help us build relationships, better understand risks and spot investment opportunities. These discussions allow us to assess culture and obtain context that may not be gleaned from written public disclosures.

We believe in engagement with companies rather than divestment or screening out certain types of investments. Engaging takes time and effort but is effective because it can prompt companies to change their practices. By simply divesting or avoiding investments, we diminish our voice as shareholders and reduce our ability to positively influence companies.

Topics for engagement vary widely, depending on industry sector and company performance. They could include discussions on executive compensation or succession planning, how environmental, social and governance (ESG) factors are integrated into corporate strategy and risk management, or how the company has dealt with a past situation or event.

We also look thematically at significant issues that cut across our portfolio, such as forced labour and child labour. Supply chains today are extremely complex global systems and companies may not be aware of unethical or illegal business practices in their supply chains if effective monitoring and management practices are not in place.

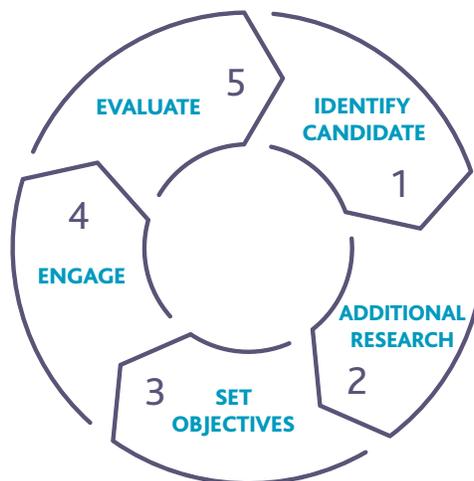
Engagement issues are selected because they pose material risks across multiple assets and sectors, are important to business success, and typically could be better managed.

We identify engagement candidates based on company-specific risks. We have found the Sustainability Accounting Standards Board's (SASB) sector-specific guidance

to be a useful starting point, as it helps identify key ESG metrics that are material. Such risks vary by sector, so a one-size-fits-all approach is not effective.

Finally, in identifying engagement candidates, we also consider the size of our ownership stake, as a measure of both risk to the investment portfolio as well as our ability to influence positive change.

Corporate Engagement Process



Companies with the highest combination of ownership and risk are flagged for engagement, while lower-risk companies might be engaged through letter or e-mail.

COLLABORATIVE ENGAGEMENT

Collaborative engagements with like-minded peers allow us to combine resources and amplify our influence with companies. Decisions to collaborate with other investors are made based on alignment of objectives, the ability to influence positive change and the size of our holdings.

We also collaborate through broad industry initiatives that set or raise the bar on ESG management or help us to more effectively manage risk.

Ontario Teachers' is active in several industry organizations seeking to standardize disclosure in various sectors and regions. For example:

- Ontario Teachers' was an early supporter of the Global Real Estate Sustainability Benchmark (GRESB), serving on its Benchmark Committee since 2011. GRESB assesses the sustainability performance of real estate assets in seven areas. Our wholly owned commercial real estate subsidiary, Cadillac Fairview, was ranked first in Canada among diversified real estate in the 2016 GRESB Survey and 10th overall in its sector.
- Ontario Teachers' is a founding member of GRESB Infrastructure and co-chair of the advisory board, which is working to develop an assessment and benchmarking process for infrastructure that is similar to the one used for real estate.

This infrastructure assessment was piloted in 2016 and is being refined for 2017.

- We are collaborating with global peers to encourage Japanese companies to increase the number of independent directors to a minimum of 30% of the board. We view independence as fundamental to building effective boards, and Asian companies have historically lagged other markets in appointing independent directors. This engagement has included writing letters and meeting with Japanese companies, industry groups and regulators. Since this effort began in 2015, the percentage of the largest Japanese companies on the Tokyo Stock Exchange having two or

› ENGAGED OWNERSHIP: Shearer's Foods

Shearer's Foods, a U.S.-based producer of snack products, has been in our private equity portfolio since 2012. We partnered with the company in 2014 to conduct a thorough examination of ESG factors, looking across the business for value creation and protection opportunities.

The initiative confirmed that the company had sound sustainability practices within its operations, and identified opportunities to take a leadership position in supply chain management. Consumers are now more informed about and interested in the origins of products they buy, and company managers are asking suppliers more detailed questions about their practices.

In 2016, we followed up with Shearer's on its supply chain progress. The company is:

- partnering with its key supplier, Black Gold Potato Farming, to start tracking environmental impacts, such as irrigation and fertilizer use, crop yield and soil erosion;
- creating a sustainability survey for use with the remainder of its supply chain in 2017.

Working with portfolio companies on these in-depth examinations fosters stronger relationships: we become better informed about company operations, while the company appreciates our support of their efforts to manage ESG risks and opportunities.



more independent directors has increased from 48% to 80% and the percentage of issuers with more than three independent directors has doubled to 25%, according to stock exchange data. This collaboration is ongoing. We hope this initiative will positively influence other markets.

- Along with our Canadian peers, we submitted comments to the Canadian Securities Administrators (CSA) on issues related to shareholder rights and voting. The first letter encouraged CSA to adopt mandatory say-on-pay votes (also known as advisory votes on compensation). A second letter provided feedback on proposed changes to improve the Canadian proxy voting system. This multi-year consultation is ongoing.
- We provided feedback and support for the U.S. Securities Exchange Commission's Concept Release on Business and Financial Disclosure Required by Regulation S-K, which outlines requirements for non-financial statement disclosure for listed companies in the U.S. While material ESG-related information is already required, we called for standardized, industry-specific and material ESG disclosure to provide investors with clear, relevant information in a fragmented disclosure environment.

We expect companies to provide clear, reliable, consistent and relevant disclosures related to their material ESG risks, and how their boards and executive teams are managing these risks. This information is an essential part of our investment decision-making process.

› SEEKING DISCLOSURE: Sustainability Accounting Standards Board

In 2016, Ontario Teachers' became a founding member of the Investor Advisory Group (IAG) of the Sustainability Accounting Standards Board (SASB). SASB was formed to improve the quality and comparability of sustainability-related disclosures across industries. The IAG aims to close the gap between the general disclosures companies are currently providing and the kind of disclosures that investors need (specific data points, comparable to other companies in the same industry).

Our Chief Risk & Strategy Officer Barbara Zvan accepted an invitation to join the group because we believe standardized public disclosures will encourage companies to better manage sustainability issues and allow Ontario Teachers' to make better-informed investment decisions on behalf of plan members.

IAG members support a market standard for disclosure of material sustainability information to investors in a form that is useful for decision making and cost-effective. They also:

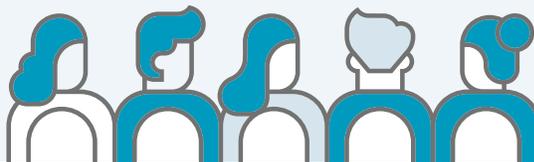
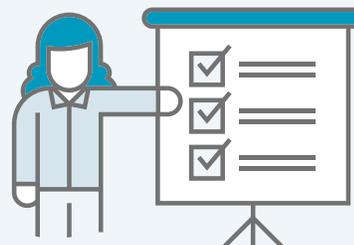
- encourage corporations to adopt the SASB standards for reporting sustainability information in U.S. Securities Exchange Commission filings;

- advance the use of SASB standards to integrate sustainability factors into investment decision making, risk management and engagement with portfolio companies;
- advocate for public disclosure of material sustainability information to all investors to replace private questionnaires.

93%

of companies face climate risk, but only 12% disclose it

Source: Forbes



VOTING OUR SHARES

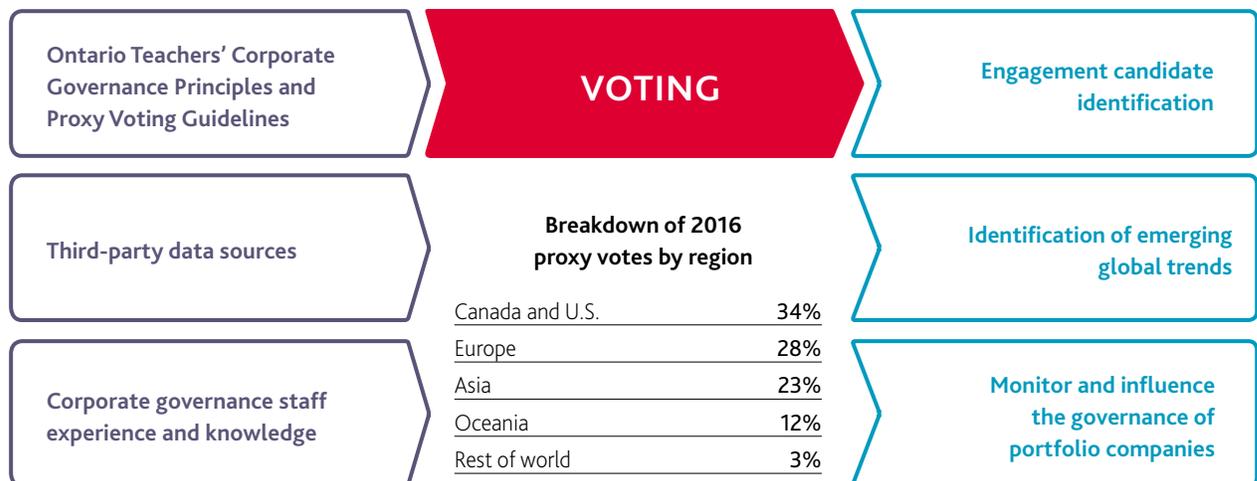
As shareholders of public companies, we take our right to vote seriously. Voting is one of our most effective tools for promoting good corporate governance and holding boards accountable for their decisions.

Guided by our Corporate Governance Principles and Proxy Voting Guidelines, we consult a variety of sources (including all relevant company filings and research reports) before voting on proposals or business transactions. Ontario Teachers' endeavours to vote 100% of the shares of the companies it owns and, for transparency, publishes its decisions

before each shareholder meeting at otpp.com/proxyvotes.

The research we conduct prior to voting also helps to uncover emerging governance issues and trends, identify companies for possible engagement, and identify public policy topics on which we may want to express our views.

1,842 meetings
In 2016, Ontario Teachers' cast votes on 22,266 resolutions at 1,842 meetings in 33 countries



VOTES ON COMPENSATION

Compensation issues are often high-profile. Our view is that compensation decisions are indicative of overall board decision making and effectiveness. When we have concerns with a compensation program, we outline our concerns to the company directly.

When we vote against management's recommendation on compensation issues, we publish our rationale on otpp.com/proxyvotes. Common reasons for votes against management in 2016 were:

Compensation

Decisions on compensation were not aligned with the company's performance. For example, performance metrics weren't challenging to achieve. In other cases, the board used discretion without disclosing

sufficient rationale for its decision. We support a board's use of discretion if applied with care and accompanied by a persuasive rationale.

Equity Plans

Equity compensation plans can increase the number of shares of a company and therefore dilute the value of existing shares. We voted against proposals when the stock issuance (dilution) or the company's annual equity grant as a percentage of total outstanding shares (burn rate) was excessive.

Director Fees

We voted against variable compensation or bonuses awarded to directors. In our view, directors should be focused on long-term success; they should not be influenced by or compensated for short-term results.

18%
voted against
compensation programs

(82% voted in favour)

21%
voted against equity plans

(79% voted in favour)

4%
voted against director fees

(96% voted in favour)

The following is a small sample of 2016 issues and our votes.

Manulife Financial Corp.

Issue: Concern with one-time payment made to an executive for exceptional performance.

Evaluation: We had conversations with the company and we were satisfied that a) such awards are not commonplace and b) there are sufficient conditions attached to the award that require the executive to hold the award in equity form before it is paid in cash.



Supported the one-time payment.

Magna International Inc.

Issue: Concern that the performance conditions used to determine compensation awards could be subject to retesting (i.e., if performance target was missed in one year, full payment of the award could still be achieved if that performance target was met in a subsequent year).

Evaluation: We held discussions with the company and received assurances that retesting was not possible under the compensation plan.



Supported the compensation plan.

Sports Direct International plc

Issue: Company was the subject of a report by the U.K. Department for Business, Innovation & Skills, which highlighted significant failings in the company's human capital management practices.

Evaluation: We reviewed the report and contacted the company in an attempt to hear its side of the story. Unfortunately, we had no response to our inquiries and thus made our vote decision based on the information in hand.



Voted against the board chair for the board's failure to effectively discharge its oversight responsibilities.

VOTES ON SHAREHOLDER PROPOSALS

A proposal introduced by a company shareholder can encourage or force a board to turn its attention to important issues. Environmental and social factors are increasingly viewed as posing material risks to companies and, as such, are increasingly the subject of shareholder proposals.

We generally do not support shareholder proposals that, in our view, place arbitrary constraints on a company, duplicate existing practices or hinder the creation of long-term shareholder value. We generally do support proposals that enhance disclosure on material issues or improve corporate governance processes and practices.

We carefully assess each shareholder proposal on its own merits before

making a decision. Some factors we consider include:

- whether the scope of the proposal and any conditions or constraints are reasonable;
- whether the proposal duplicates existing initiatives or disclosures;
- whether the company is already committed to the proposed action or change.

We vote against many environmental issue disclosure proposals because they are overly prescriptive, duplicate existing work or place unreasonable demands on the company.

Where there is merit to the proposal, but it fails due to problematic elements, we engage with the company as a follow-up.

75%
voted against ineffective environmental issue disclosure*
(25% voted in favour)

60%
voted in favour of lobbying activity and/or political donations
(40% voted against)

92%
voted in favour of separation of Chair/CEO roles
(8% voted against)

The following is a small sample of 2016 shareholder proposals and our votes.

Noble Energy Inc.

Proposal: Request for a report on the company's short- and long-term business plans to align with the goal of limiting global warming to below 2°C.

 Supported the proposal in principle, but voted against it because we considered the proposed deadline of five months to be unreasonable and will encourage the company through engagement to complete the report.

AmerisourceBergen Corp.

Proposal: Request to implement proxy access (a process for shareholders to add candidates to the list of director nominees).

 Voted against the proposal. The company had already committed to implementing proxy access.

Exxon Mobil Corp.

Proposal: Request to provide an annual assessment of long-term impacts of public climate change policies.

 Voted for the proposal. We concluded that enhanced disclosure would provide shareholders with important and relevant information to better assess climate change risks facing the company.

* Shareholder proposals on environmental issue disclosure include requesting boards to report on activities related broadly to climate change, or specifically on greenhouse gas (GHG) emissions, adoption of renewable energy or energy efficiency targets.

2016 FOCUS AREAS

We are reporting in depth on three focus areas in 2016: board effectiveness, climate change and cybersecurity.

Each is a global issue, with the potential to materially impact a wide range of companies and sectors in the Ontario Teachers' portfolio. Board effectiveness is relevant to all companies and sets the foundation for overseeing a broad set of risks. Climate change and cybersecurity are rapidly evolving factors and are among the top systemic risks identified by the World Economic Forum.



BOARD
EFFECTIVENESS



CLIMATE
CHANGE



CYBERSECURITY

These focus areas are not the only environmental, social and governance (ESG) issues that we actively assess and manage. These three areas are discussed in depth because of their importance to our investments.

We have begun to assess the total portfolio using an ESG risk lens. Starting with the Sustainability Accounting Standards

Board’s (SASB) Sector Materiality Map and definitions, we mapped the most relevant sustainability risks to all of our equity investments, both public and private, and then aggregated the results.

This provided a clearer view of the types of issues that could materially impact the total portfolio. For example, risks related to factors such as energy, water and

wastewater management, greenhouse gas (GHG) emissions and supply chain management were prominent in the analysis and can all be affected by climate change, making climate change overall one of the portfolio’s greatest exposures.

Top Five Environmental and Social Issues across All Portfolio Companies



Source: internal analysis of Ontario Teachers’ public and private portfolio companies using SASB risk categories.



BOARD EFFECTIVENESS

We have long held that good governance is good business. In our view, a strong governance structure underpins a company’s ability to effectively deal with risks of all kinds, including environmental and social risks.

Board effectiveness is a focus area for Ontario Teachers’ because of its importance across the total portfolio. An effective board is fundamental to good governance, regardless of company size or industry sector.

A board composed of competent and independent members with diverse backgrounds, skills and qualifications, who understand the company’s business and industry, can be expected to make well-informed and high-quality decisions that are in the best long-term interests of the company, and therefore in the best interests of Ontario Teachers’ and its members.

Through our governance research, proxy voting and engagement with companies, we work to better understand the factors that contribute to board effectiveness. Proxy voting is an important tool in this process: it uncovers issues on which we will conduct additional research and is a catalyst for our company engagement program.

During our 2016 engagement meetings, we discussed board evaluation, recruitment and selection – processes we strongly believe are critical in creating effective boards. Through these discussions, we

learn about processes in place, identify best practices we can share with other companies or relay our views about how a board can improve its processes.

Decisions signal a board’s effectiveness. In particular, decisions around compensation are a good indicator of a board’s ability to effectively execute its oversight responsibilities.

Each year, we send a letter to large public companies listed in Canada, the United States and the United Kingdom identifying key changes to our Corporate Governance Principles and Proxy Voting Guidelines and our governance priorities for the upcoming year. This letter often prompts company calls and requests for meetings, and is a part of our engagement activities. In our 2016 letter to 651 companies (available at otpp.com/responsibleinvesting), one of the issues we highlighted was gender diversity on boards.

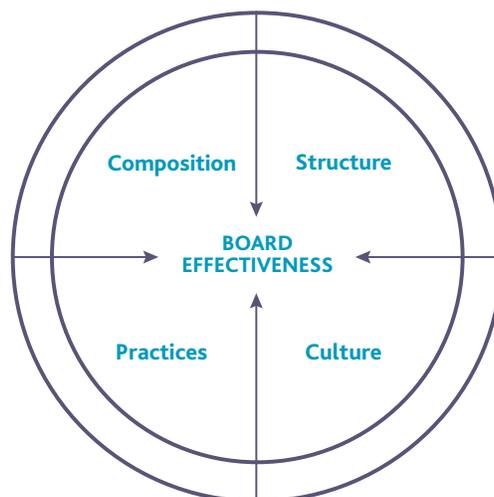
GENDER DIVERSITY

Ontario Teachers’ supports board diversity in all its forms because differing perspectives enhance board discussions and thus, board effectiveness.

Gender is one form of diversity. We believe that promoting gender diversity is a good start toward increasing overall board diversity among public companies, since women make up 50% of the population yet remain under-represented on boards around the world. Globally, women held 15.8% of all directorships as of September 26, 2016, based on an MSCI examination of MSCI ACWI Index constituents.

Several studies have shown that gender diversity is good for business. For example, a 2014 Credit Suisse Research Institute study of more than 3,000 companies worldwide found that companies with

Elements of Board Effectiveness



*Board effectiveness is revealed by the decisions directors make. We consider board **composition** (relevant experience, skills, diversity), **structure** (size, committees), **practices** (recruitment, assessment, strategy and risk oversight) and **culture** (independence, candour, relationships) to be the essential building blocks of an effective board.*

higher female representation at the board level or in top management exhibit higher returns on equity, higher valuations and higher payout ratios.

Our view, based on academic research findings, is that a board needs a minimum of three women directors to substantially benefit from the effects of increased gender diversity. When three or more women serve on a board, female directors are treated as individuals – they are not considered to be representing the views of

all women. In a 2013 letter to the Canadian Securities Administrators, we proposed that public company boards should have a minimum of three women directors.

In 2016, Ontario Teachers' joined the Canadian chapter of the 30% Club, a global business-led movement to promote women on boards and in senior management, and we raised the issue of diversity at engagement meetings when we discussed board evaluation, recruitment and selection.

“When recruiting and selecting directors, boards should embrace diversity in all its forms in sufficient numbers and encourage the expression of different opinions to enhance discussion and debate.”

Ontario Teachers' Corporate Governance Principles and Proxy Voting Guidelines

› DIGGING INTO Discretionary Compensation

During our proxy voting research in 2015, we uncovered an emerging trend: the increasing use of outside-of-plan awards – or discretionary compensation outside of remuneration agreements – by boards in North America.

This prompted collaboration with the Canada Pension Plan Investment Board to examine the issue in greater detail, and understand the scope and rationale for these awards. Our joint study report was released in 2016. According to our findings:

- outside-of-plan awards from January to October 2015 were significant, at US\$4.1 billion for U.S. companies alone;
- compared to the amount of total direct compensation paid to executives in 2015, this had the effect of increasing compensation by 12.6%;

- outside-of-plan awards were granted at almost half (48%) of the 2,354 U.S. companies surveyed;
- awards were concentrated in certain industries: the consumer discretionary, healthcare, information technology, industrial and financial sectors;
- the largest awards were related to executive succession.

Ontario Teachers' is continuing to track and study outside-of-plan awards. We believe the onus is on boards to provide a clear rationale for granting these awards, as well as how their structure and amounts were determined, to give shareholders clarity on why such awards are acceptable.

US\$4.1 billion
paid in outside-of-plan awards at
U.S. companies to October 2015





CLIMATE CHANGE

With ratification of the 2015 Paris climate change agreement to limit the earth's temperature rise to "well below" two degrees Celsius above pre-industrialization levels, the global transition toward a low-carbon economy became a clear goal.

A low-carbon economy is one that greatly reduces or even eliminates reliance on fossil fuels. The direct and indirect effects of this transformation will impact multiple sectors and aspects of society, including transportation, industrial sectors and energy consumption patterns. As a global long-term investor, we cannot afford to ignore these wide-ranging repercussions.

While the transition to a low-carbon economy will not happen overnight, we

believe it has already begun. Companies that are not positioned well will suffer, while companies that adapt, innovate and uncover climate-friendly business models will prosper.

Climate change could significantly affect financial returns well into the future, not only through physical environmental risks across sectors but also through political, technological and market risks as the transition to a low-carbon economy unfolds.

› REDUCING EMISSIONS: Cadillac Fairview

As much as 13% of greenhouse gas (GHG) emissions in North America is attributable to buildings, according to Natural Resources Canada.

As one of North America's largest commercial real estate companies, Cadillac Fairview Corporation Limited (CF) focuses on energy efficiency because it is good environmental stewardship as well as prudent financial management. To lower operating costs, the company – a wholly owned subsidiary of Ontario Teachers' Pension Plan – works to introduce energy-efficiency upgrades and smarter operational procedures. Reducing GHG emissions combined with other environmental initiatives also helps to attract and retain tenants.

Improvements are driven through operational practices and technology upgrades. For example:

- At any given time, up to five energy-efficiency projects are underway at Simcoe Place, a landmark office complex in Toronto's financial district. A recent transformer optimization project yielded 400,000 kWh in electricity savings, along with reduced maintenance and cooling costs.
- At 777 Dunsmuir, an office tower in downtown Vancouver, CF completed the first geo-exchange retrofit of an occupied high-rise building in North America. A geo-exchange system stores a building's rejected heat underground and returns it when needed, reducing energy costs and emissions. The award-winning project involved drilling 34 boreholes 375 feet into the earth below the building's underground

parkade – all while maintaining normal business operations. During 2015, the first year of operation, steam consumption declined by 71%.

In 2016, CF generated 110,500 tonnes of GHG across its Canadian portfolio, a 2% decrease from the previous year and a 43% decrease from the 2008 baseline. Detailed information can be found at cadillacfairview.com.



The physical impacts of climate change are already being felt in different ways, such as extreme weather disrupting operations, damaging buildings or altering demand for goods and services. To mitigate physical risks, we need to build resiliency into our physical assets, ensure companies make plans to adapt to climate change where vulnerabilities exist, and encourage the sustainable use of resources and reductions in emissions.

CLIMATE CHANGE ENGAGEMENT WITH COMPANIES

Engagement is a key tool to manage climate change risks, influence positive change and uncover potential opportunities to create value. Our goal in engaging with companies is to build constructive relationships by:

- communicating Ontario Teachers’ position on climate change to our portfolio companies;
- better understanding a company’s exposure to climate change risks and its approach to identifying and addressing these risks.

We encourage companies to take proactive measures that are tied to corporate strategy and the company’s long-term sustainability.

CLIMATE CHANGE ENGAGEMENT WITH POLICY-MAKERS

Ontario Teachers’ has consistently emphasized the need for long-term, clear policy signals to support investment decision making and the Paris Agreement provided a clear direction.

Governments are adopting a variety of strategies and timetables to achieve their commitments under the Paris Agreement. For example, the Canadian federal government and most Canadian provinces agreed on a wide-ranging climate change and clean energy framework in December 2016 that includes carbon pricing; measures to reduce emissions and adapt to the impacts of climate change; and actions to accelerate innovation and support clean technology.

Ontario Teachers’ engages with global policy-makers and regulators and advocates for clear, long-term policies because this allows our investment professionals to conduct better analysis of long-term risks and opportunities.

› **ENGAGEMENT WITH NuVista Energy**

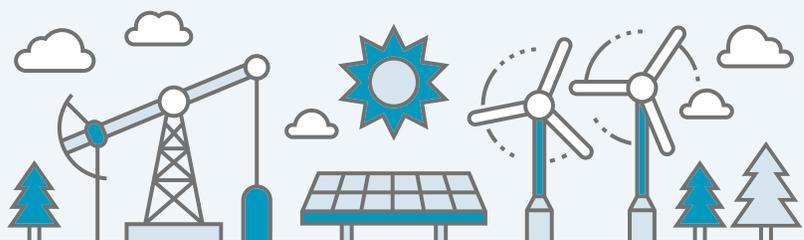
Ontario Teachers’ portfolio managers began a dialogue about sustainability in 2015 with NuVista Energy Ltd., a portfolio company that operates in the Canadian natural gas sector.

As part of our ongoing discussions, we met with the CEO in 2016 to discuss issues such as climate change, water use and the impact of company operations on communities. As a result, we gained a better understanding of the company’s culture and attitude to sustainability and how it is responding to a changing regulatory environment. We also gained greater insight into the company’s proactive collaboration with First Nations communities to build and maintain relationships and ensure mutual benefit. To that end, NuVista is investing in new technologies to limit the use of shared groundwater resources and to enhance detection and response time to pipeline leaks. The company is using alternative sources of water (up to 45% from non-freshwater sources in some

operations) and has reduced total GHG emissions by more than 50% since 2011. After our discussions, the company invited us to evaluate additional sustainability information it was making publicly available. While our portfolio companies are often pacesetters on many issues, they are not always sure what information investors want to see. As engaged shareholders, we offered guidance and, a year later, we met with senior management to continue the dialogue.

Our engagement with 15 oil and gas companies in 2016 also led to the development of a set of disclosure expectations to help guide oil and gas exploration and production companies meet our informational requirements. The document, *Our Approach to Sustainability Disclosures*, outlines the environmental, social and governance disclosures that are most relevant for Ontario Teachers’ and the preferred presentation format. This document is available at otpp.com/responsibleinvesting.

15
number of oil and gas company engagements in 2016



For example, in 2016 we:

- Provided feedback to the Canadian federal working group on Clean Tech, Innovation and Jobs. We commented on the financing challenges for capital-intensive clean technology opportunities from the perspective of a large pension fund. We encouraged the development of innovative models to create opportunities for asset owners such as Ontario Teachers'.
- Signed the Institutional Investors Group on Climate Change's August 2016 letter to the G20 leaders. The letter asked G20 leaders to ratify the Paris Agreement and support related measures.
- Provided feedback to the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD),

which produced draft recommendations in December 2016 on disclosure for public companies as well as investors. We support this work, and expect it will move the climate change discussion into mainstream financial arenas, such as regulatory bodies and stock exchanges. While some of the recommended disclosures will be relatively easy for public companies and investors to prepare, the TCFD acknowledged that others will require more work and several years to implement.

CLIMATE CHANGE OPPORTUNITIES

The transition to a low-carbon economy is expected to present investment opportunities in a variety of sectors.

In 2016, Ontario Teachers' established a team to evaluate opportunities in renewable energy, which supports the expansion of portfolio companies Cubico Sustainable Investments and BluEarth Renewables, and is looking into other emerging fields, such as battery storage, offshore wind and other innovations. At the end of 2016, we held \$1.2 billion in direct renewable energy investments.

Our investment teams routinely consider the physical impacts of climate change, as well as possible regulatory changes in the investment process. We may use technical consultants to help us understand relevant climate change impacts, which can vary greatly by project and sector. We seek not only to mitigate risks, but to identify potential efficiencies to enhance value and find opportunities in new or emerging areas.

› OPPORTUNITIES: GE Aviation's GE9X Engine

The International Civil Aviation Organization agreed in October 2016 to control carbon emissions from international airline flights, beginning in 2020. Aviation-related emissions are growing rapidly, making it likely that airlines in participating countries will have to keep their emissions down through more fuel-efficient aircraft and operations or offset emissions with carbon credits.

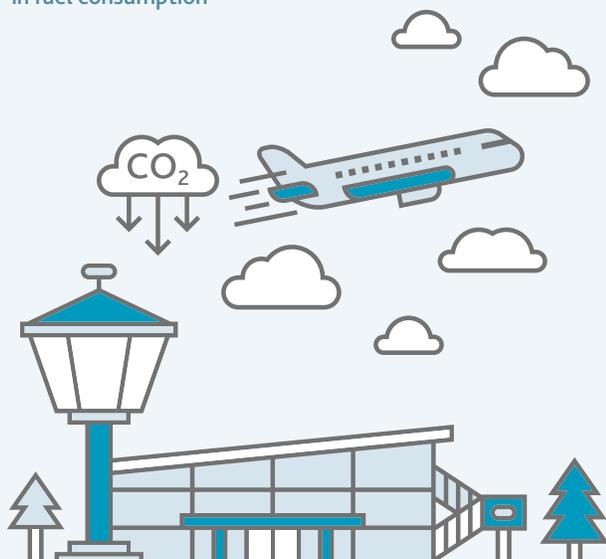
Transportation-related emissions account for 14% of global emissions, according to the Intergovernmental Panel on Climate Change. In the United States, transportation-related emissions account for 24% of total greenhouse gas emissions, according to the Environmental Protection Agency.

Ontario Teachers' entered a strategic partnership in 2014 with GE Aviation to finance the technology for development of the GE9X jet engine – the most fuel-efficient, quietest, and lowest-emission engine produced in its class. The GE9X engine, which will power Boeing's new 777X aircraft beginning in 2020, is expected to provide a 10% improvement in fuel consumption over the existing jet engine.

Certification testing on the GE9X program is slated to begin in the first half of 2017 and engine certification is expected in 2018.

This is a good example of our commitment to find investments that are profitable for the pension plan and also drive environmental progress.

10%
expected improvement
in fuel consumption





CYBERSECURITY

Cybersecurity risks affect nearly every type of company, from small retailers that process credit card payments to large power utilities that rely on connected networks. Every company that derives value from intellectual property, stores sensitive information or transacts with customers online is exposed to cybersecurity risks.

There are broad social considerations related to customer information and privacy. A company's commercial success is linked to its customer relationships and reputation. Breaches of customer data or privacy can lead to loss of trust,

reputational damage, financial loss, legal disputes and regulatory compliance issues.

Ontario Teachers' is taking more time to deepen its understanding of the data security and customer privacy issues at its portfolio companies and how these risk exposures may impact its portfolio. To enhance our understanding and management of such risks, we have:

1. Built our in-house expertise through an education session for investment professionals with cybersecurity experts.
2. Developed a cybersecurity and privacy guide to assist portfolio managers when they engage with companies on these issues.
3. Initiated a portfolio-wide review of cybersecurity readiness at our directly held private companies, with follow-up discussions planned in 2017.
4. Started engagements with select public companies with significant cybersecurity exposures to better understand best practices in managing digital threats, data security and privacy. Companies we talked to in 2016 included Alibaba Group, CTrip and Baidu, Inc.

According to the Breach Level Index compiled by Gemalto, an international digital security company, there were 974 publicly disclosed data breaches around the world in the first half of 2016, which led to the theft or loss of 554 million data records. Identity theft accounted for 64% of those breaches. The Verizon 2016 Data Breach Investigations Report found the finance, accommodation, information, public and retail sectors led other industry sectors in the number of security incidents with confirmed data losses in 2015.

› ENGAGEMENT WITH Nielsen Holdings

A third-party service flagged market research firm Nielsen Holdings plc as a company with potentially elevated risks due to changing regulations in Europe around the management of personal data.

The European Union's (EU) General Data Protection Regulation (GDPR) is scheduled to go into effect in 2018. Its goal is to protect EU citizens from privacy and data breaches and it will apply to all companies processing the personal data of EU residents.

Ontario Teachers' investment professionals reviewed Nielsen's available disclosure, including information about data privacy in its Global Sustainability Report, and decided to contact Nielsen to learn more about its preparations for GDPR. We discussed with management ways to better understand the projects, policies and governance of risks at the company. Through this interaction, we learned that the

company had sound board oversight and risk management practices around cybersecurity and that it was preparing for the new regulations.

This constructive approach to engagement led to follow-up discussions, with Nielsen better understanding the environmental, social and governance disclosures we want to see, as an institutional investor with a long investment horizon.



2017 PRIORITIES

We are building on efforts to integrate the management of ESG issues across Ontario Teachers' assets, engage with companies and policy-makers, and collaborate with like-minded peers to promote responsible investing in various forums.

INTEGRATION AND ENGAGEMENT INITIATIVES

We continue to research ways to improve our management of environmental, social and governance (ESG) issues in our passive index investments. Index investments are more challenging than direct investments because indices contain hundreds or thousands of relatively small holdings. This means we have less ability to make meaningful change through corporate engagement, yet managing ESG risk in these assets requires as much of a resource commitment as large portfolio holdings.

The new Global Real Estate Sustainability Benchmark Infrastructure assessment will be an additional tool for monitoring the ESG management practices at our infrastructure companies, and identifying best practices.

We are enhancing practices among our private direct assets by systematically integrating ESG considerations into the value creation plans of portfolio companies, and increasing educational support for Ontario Teachers' employees who sit on the boards of portfolio companies.

We are creating a framework to better coordinate corporate engagement activities across our public and private assets, and seeking ways to enhance the monitoring, assessment and reporting of engagements.

CLIMATE CHANGE INITIATIVES

In 2016, we created an internal climate change working group composed of senior investment professionals to consider how the structural shift to a low-carbon economy may affect the pension plan. The working group will develop transition scenarios to inform our thinking and investment strategies in a highly uncertain political and policy environment. We will refine these scenarios over time as new information emerges.

This work will augment the existing analysis and integration of climate change risk factors in our investment processes.

We will also build a solid foundation for Ontario Teachers' own climate change disclosure in 2017, taking into account the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures. Given the challenges acknowledged by the task force, we expect this work will take several years.

As part of our engagement program, we are continuing climate-related conversations with companies that we initiated in 2015 and 2016, and will continue to reach out to other companies where we have investment exposure: major emitters and other companies exposed to greater transition risk due to climate change actions, such as those in the oil and gas, mining, transportation and utilities sectors.

GOVERNANCE INITIATIVES

Ontario Teachers' is an active member of the Canadian Coalition for Good Governance, with representatives on the board, the Public Policy Committee and the new Environmental and Social Committee.

In 2017, we are focusing on issues of board composition, including diversity (e.g., gender, skill, experience, geography, etc.), as well as director recruitment, assessment and evaluation. We continue to examine compensation issues, including pay ratios, alignment of compensation to performance and outside-of-plan compensation awards.

We are expanding our governance footprint in Asia. We continue to be active with the Asia Corporate Governance Association and are part of a working group on South Korean corporate governance. As a member of the Global Asset Owners' Forum of the Government Pension Investment Fund, Japan (GPIF), we advise the fund on how to advance its stewardship activities.

We are also working with other investors and members of the Canadian Securities Administrators to improve the proxy voting system in Canada.

Our responsible investing principles help us do what we do best: make sound investment decisions.

1. Integrating ESG
2. Engaged Ownership
3. Continuous Learning
4. Seeking Disclosure
5. Collaboration and Influence



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