ONTARIO TEACHERS'
PENSION PLAN – RÉGIME DE RETRAITE DES ENSEIGNANTES ET DES ENSEIGNANTS

Our Approach to Sustainability Disclosures

ENGAGING INVESTORS

At the Ontario Teachers' Pension Plan (Ontario Teachers'), responsible investing is central to managing risks and opportunities so that we can make well-considered decisions and remain effective stewards of our investments for as long as we own them. We continue to evaluate how various environmental, social, and governance (ESG) factors impact the value of our assets, and meet with many companies as part of this process. As we seek to understand the impact that ESG factors have on their respective strategies and operations, we have also encouraged these firms to enhance their related disclosures, and do so consistently.

We have developed this guide as a tool primarily for oil and gas companies in which we have invested our assets. It outlines which ESG disclosures are most relevant for Ontario Teachers' and the format for presenting this information to the plan. As such, the guide lists: i) the disclosure element; ii) why investors seek this ESG disclosure; and iii) examples of best practices.

For additional guidance on how to report, the Canadian Coalition for Good Governance has outlined a set of recommended tools for companies' disclosures. To see them, visit www.ccgg.ca, select "Best Practices" and click "2015 Best Practices for Proxy Circular Disclosure."

OUR SUSTAINABILITY POSITION

Ontario Teachers' is Canada's largest single profession pension plan, investing the assets and administering the pensions on behalf of over 300,000 members in the province of Ontario, Canada. To deliver the returns needed to ensure retirement security for our members, we take a thoughtful and pragmatic approach to investing, which includes the assessment of a number of traditional and non-traditional factors. Non-traditional considerations include ESG issues. Our investment process considers the magnitude and management of material risks compared to the potential return uncovered through our research. Our strong risk focused investment process forms the bedrock for our performance record that includes an average annual return of 10.3% since our inception in 1990.

We expect companies to provide clear, reliable, consistent and relevant disclosures related to their material risks, as well as insights on how their respective boards and executive teams are managing these risks. Such disclosures are essential inputs into our investment decision-making process and we generally support initiatives that promote enhanced corporate disclosures. For example, Ontario Teachers' has long been a signatory to the CDP (formerly known as the Carbon Disclosure Project) and CDP Water initiatives, as well as the Extractive Industries Transparency Initiative (that seeks payment transparency for companies in the oil, gas and mining sectors).

We believe climate change poses a material risk to the sustainability of a wide range of companies. Climate change gives rise to a number of environmental, social and governance issues, including regulatory, operational and strategic risks. While corporate disclosures on climate risks have been gaining prominence, some companies may struggle to understand what information is relevant. Reporting this information in a consistent and comparable way for investors can also be challenging.

We recognize that companies may receive mixed messages from investors relating to the disclosure process and the key information needed. Many distinct, yet complementary guidelines and standards have emerged over time, adding to the confusion. While aimed at getting a comprehensive set of disclosures, these guidelines may serve different and/or multiple stakeholders. This has often also resulted in companies being asked for numerous disclosures that are not anchored in materiality and lack in context for investors.

The nature of the information investors seek has also evolved. For example, Ontario Teachers' is increasingly concerned about how companies are managing energy transition risks, which is a new area of disclosure not covered by existing standards. This has been highlighted by the numerous shareholder proposals for climate scenario analysis and strategy disclosures we have recently seen.

As a result, companies we have met with have asked us for assistance with understanding what information is relevant and with reporting this information in a consistent and comparable way.

DISCLOSURE PRINCIPLES

The Financial Stability Board's Taskforce on Climate-related Financial Disclosures outlined seven fundamental principles of effective corporate climate risk disclosures in its recent Phase 1 Report, which we believe to be equally applicable to all financial disclosures. It states financial disclosures should be:

1. Relevant
2. Specific and complete
3. Clear, balanced, and understandable
4. Consistent over time
5. Comparable among companies within a sector, industry or portfolio
6. Reliable, verifiable, and objective
7. Provided on a timely basis

These principles guide our request for information from companies, and we encourage companies to consider these principles when providing ESG disclosures.

To support these principles, disclosures should be in plain language and provide investors the necessary context to interpret disclosures. They should also be widely and easily accessed by all stakeholders. To that end, ESG disclosure should be integrated in the annual report, but we understand that initially they may need to be standalone or highlighted so that investors know where to find this information.

While there may be some commonalities (e.g., governance and management), typically the material disclosures will differ depending on the industry. As such, this guide is intended to primarily address sustainability risks in companies in the oil and gas – exploration and production sector.

We find the Sustainable Accounting Standards Board's Sector Guidance to be a useful starting point for identifying the key ESG metrics for each sector and we were guided by SASB's standards for Oil & Gas – Exploration & Production.

The Financial Stability Board (FSB), which is a global consortium of central banks tasked with identifying and addressing deterrents to a stable financial and economic system, has created the Taskforce on Climate-related Financial Disclosures (TCFD) to develop a global framework for organizational disclosures on climate-related financial risks as a means to help address the broad systemic risks posed by climate change. While it is too soon to tell if the TCFD's work will achieve its objectives, if successful, it would provide a single, globally-consistent, framework for financially-relevant disclosures for all organizations, including pension funds such as Ontario Teachers', thereby reducing duplication and other inefficiencies in the current sustainability disclosure landscape.

USING THE GUIDE

Our desired corporate disclosure format is divided into two main sections:

1. Governance – board and management

Disclosures on the governance of ESG factors should have the objective of communicating the following to stakeholders:

i) strong culture for responsible corporate behaviour;

ii) appropriate prioritization of material sustainability factors; and

iii) effective board oversight and risk management.

Elements that we have observed to be effective in communicating this include:

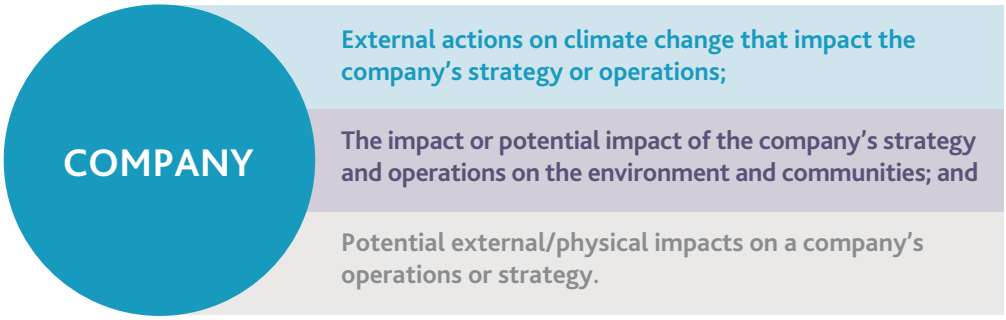
DISCUSSION ITEM	IMPORTANCE TO STAKEHOLDER	EXAMPLE OF GOOD REPORTING
CEO and / or Director Discussion on Sustainability	Tone from the top provides an indication of the organizational culture and the **importance and priority** of ESG.	Total S.A. identifies climate change related factors as a key risk to the company's sustainability. The importance of managing this risk is underlined by messages from the CEO and Lead Director to stakeholders in the Climate Strategy.
Description of accountabilities and governance structure around management of climate change risks	Board and senior management accountability supports culture and establishes the right frameworks for **ensuring climate change risks are managed**.	Hess Corporation's 2015 Sustainability Report and Suncor Energy's 2015 CDP response provide detailed discussions of board committees, accountabilities, and review process.
Description of what and how Environmental and Social (E&S) metrics factor into performance evaluations and compensation at executive, management and employee levels	Investors have a sense of what outcomes are incentivized, so that they can evaluate E&S alignment to strategy and assess how board / management views E&S priorities and objectives.	Suncor Energy's Proxy Circular provides a detailed table of E&S metrics and targets that affect compensation.
Comprehensive, detailed policies on ESG issues	Policies support governance structures and communicate importance to all stakeholders. Policies should be comprehensive and detailed (specific) vs. high level (vague), as it helps stakeholders (governments, suppliers, employees, consumers, investors, etc.) understand what and how risks are being managed.	Some key policies companies should consider are: Code of Conduct; Employee Health & Safety, Anti-bribery & Corruption, and Environmental. Cenovus provides links to all corporate policies in one place on its website.
Detailed board skills and experience matrix	Allows investors to assess whether the board has the necessary skill to execute duties with regards to risks and directing strategy.	Companies should define the attributes needed, and how various directors fill the necessary requirements. Cameco Corporation's proxy circular lists the director skills that are critical to the organization and why, then links each director to those skills.
How does the board and management team stay up-to-date on climate change and other ESG risks?	Investors have an interest in ensuring that the board is staying on top of emerging issues as they evolve, so they can be proactive in managing them.	Cenovus' proxy circular provides disclosure of board educational seminars that were identified as important to director development.
Clear and specific statement of how ESG risks, are factored into long-term and short-term strategy and how strategy is supported through its capital expenditure decisions, as well as a company's competitive positioning vis-à-vis its industry / peers, particularly where climate change is concerned	This indicates that the company is taking a thoughtful and sufficiently long-term view of the business.	Total S.A.'s climate strategy outlines the five steps the company is taking to manage climate risks.
Discussion of how materiality and focus areas are determined	Demonstrate how management applies its judgment in managing ESG risks.	Suncor Energy discusses how material ESG issues are identified and provides a materiality matrix that categorizes all material ESG issues along with their respective evaluations.
A clear description of the company's risk management process, including escalation procedures to senior management and the board.	Clear, detailed, specific disclosures, rather than high level disclosures allow investors to assess the efficacy of the company's risk management framework.	Hess Corporation's 2015 Corporate Sustainability Report details their risk management procedures and provides case studies of how their ERM process was used to identify focus areas and their resolution
Discussion of company's environmental management policies and practices	Allow investors to better understand the company's strategy for maintaining a "license to operate" within a given geography or community.	In its 2015 Sustainability Report, Hess Corporation identifies material environmental issues and provides a clear framework for short and long-term plans to mitigate and resolve those concerns. This includes goal-setting, tracking, priority identification, substantial stakeholder engagement(s) and relevant and timely disclosures.

USING THE GUIDE

2. Strategy – Actions and Outcomes

Companies should consider which risks and opportunities posed by ESG factors are relevant to their long-term business sustainability. Where ESG risks are relevant, they should be addressed in corporate strategies, and communicated clearly and in sufficient detail for investors to assess their efficacy. Boilerplate, high level, discussions have little value to investors as they do not provide sufficient information for analysis and understanding. Similarly, single anecdotal discussion also have little value. We seek detailed discussions that show a systematic integration of relevant ESG considerations into corporate processes backed by appropriate metrics.

Climate change factors affect companies through three main pathways:



Companies should be transparent on the actions or steps they are taking in support of their strategy for managing climate change and other sustainability risks, including objectives or targets, scope and timelines. There should also be discussion on the company's progress towards achieving these objectives. Outcomes should be evaluated and supported by quantitative and qualitative metrics.

Companies may take different approaches and have different focus areas depending on the nature of their business (e.g., what may be material for conventional oil-focused development may be different than that which is relevant for natural gas and oil sands development). Their scope for improvement and the associated costs may also be different. Therefore, companies may not undertake all the actions listed below. Rather, judgment needs to be applied and actions need to be tied to a thoughtful and cohesive long-term strategy.

1. Discussion of the company's exposure to external actions/reactions to climate change (e.g., regulatory actions and behavioural changes, such as the energy transition, that may impact company's business), and how the actions being taken by the company, if any, mitigate these risks.

DISCUSSION /ACTION ITEM	RATIONALE	SUPPORTING METRICS	EXAMPLE OF GOOD REPORTING
Company's exposure to regulations and public oversight aimed at climate change mitigation	A description of the regulatory regimes the company is subject to, including a breakdown of the percentage of assets subject to each regime (whether geographically, by product type, or otherwise), in order to allow investors to better understand the company's exposure to regulatory risks.	• Geographic distribution of reserves and reserve types (% of wellhead production) – conventional oil, unconventional oil, conventional gas and unconventional gas. • % covered by various regulatory regimes • cost of compliance with regulations, including any offsets applied	Hess Corporation breaks down reserves by type and location and provides disclosure of carbon taxes paid.
Discussion of the company's emissions management plan, including context around actions being taken, targets established and performance against plan over time.	Investors need to be able to assess and quantify the effectiveness of the company's emissions management strategy in mitigating regulatory and social risks, adverse operational impacts, and minimizing or avoiding fines. Insights on how targets are set allow investors to assess the appropriateness of the targets (e.g., conservative, right, or lax) and how it ties to the company's long-term strategy.	• Trend in historical emissions (CO_2, and also NO_X, SO_X, VOCs and PM) both absolute volumes and relative to total and product line production and revenues • Estimated impact on operating/ capital expenses • Context for any targets established • Performance against targets and industry or peer standards	Total S.A. and Cenovus Energy both provide information on how they set targets, e.g., emissions intensity is consistent with emissions intensity required under a scenario that keeps global temperature rise to 2°C (Total SA); or aim to be competitive with conventional oil (Cenovus Energy).
Discussion of company's exposure to: regulations and public oversight aimed at addressing water scarcity, and impact of climate change on water supply	Overuse or misuse of water poses regulatory and social risks, while the shortage of water for operations is a physical risk to companies. The geographic distribution of a company's production, along with its water use (below), allow investors to understand the company's exposure to water risk	• % of operations using freshwater located in water-stressed locations and proximity to communities that share same water source • % of operations in areas vulnerable to extreme weather or natural events • Description of regulatory environment for water in each major operating area relying on freshwater.	Hess Corporation provides a good discussion that addresses: inclusion in strategy, exposure to water stressed areas, company's impact on water sources (% volume withdrawn), activities being taken and historical performance.
Discussion of the company's water risk management plan, including context around actions being taken, targets established and performance against plan over time.	Investors need to be able to assess and quantify the effectiveness of the company's water management strategy in mitigating regulatory and social risks, minimizing business disruption and improving operational costs.	• Trend in water usage (freshwater, brackish, recycled), including absolute and relative to total and product line production and revenues • Estimated impact to operating / capital expenses • Context for any water usage or source targets made • Performance against targets and relative to industry or peer standards	Eni S.p.A. outlines water usage priorities in each operating segment, along with initiatives for them to achieve each segment priority. The company also provides information on plans to ensure sustainable water resources into the future in multiple jurisdictions. Canadian Natural Resources provides context about why their water targets are relevant to the company and reviews past year performance for water targets.
Extent and objective of the company's involvement with trade or industry groups, political and lobbying activities	Provides investors transparency on how company is using its influence and resources externally to manage or mitigate ESG risks, and stay informed	• List of industry and / or political associations and company's involvement through money or other resources provided	Suncor Energy provides a table of each political and industry association it is involved in, its role and what position it is encouraging or supporting.

DISCUSSION /ACTION ITEM	RATIONALE	SUPPORTING METRICS	EXAMPLE OF GOOD REPORTING
Investment in, and objective of research & development in technology and innovation	Allows investors to gauge company's resiliency to regulatory and other external influences, and whether and how capital and other resources are being effectively used	• List of projects, objective, and amounts spent, and potential impact on future cash flows. • Capital expenditures on new technology	Canadian Natural Resources provides summaries of the projects they are leading or actively involved in with Canada's Oil Sands Innovation Alliance (COSIA) and how it contributes to more efficient oil sands operations. Hess provides case study of some of the work they are doing on shale gas and International Petroleum Industry Environmental Conservation Association (IPIECA)
Discussion of company's scenarios analyses around carbon pricing impact, including details on assumptions used (e.g., the range of carbon prices, demand)	Provides insight into the robustness of the company's business model, and its ability to withstand a variety of regulatory outcomes.	• Timeframes considered • Range of carbon prices used in analysis • Demand scenarios	We are not aware of any company that provides adequate disclosures on this, particularly on demand side modelling.

2. Discussion of the impacts of the company's operations on the environment and communities (e.g., toxic air, water and solids production), which can result in loss of license to operate, monetary fines and how actions being taken by the company, if any, minimize these risks.

DISCUSSION /ACTION ITEM	RATIONALE	SUPPORTING METRICS	EXAMPLE OF GOOD REPORTING
Discussion of how the company manages regulatory, environmental, operational and reputational risks associated with contamination (air, land, water) and treatment, including detection, prevention, containment, clean-up and remediation	Allows investors to assess the financial and reputation risk of catastrophes or accidents and the company's ability to contain and minimize impact and business disruption	• Qualitative and quantitative (where possible) assessment of environmental impact on biodiversity and wildlife, including: volume and number of leaks/spills • Produced water and flow back volumes and treatment	Hess Corporation provides discussion on how they manage produced water and flow back, as well as groundwater testing procedures and well integrity (note that much of this is regulated, but not all companies provide this detail) Hess reports all Loss of Primary Containment (LOPC) incidents regardless of size, this includes leaks and spills. The company also describes their actions following the event.
Discussion of environmental and social incidences and how the company has addressed issues on a going forward basis	Allow investors to assess the company's track record in minimizing incidences of non-compliance and their impacts. Also allows investors to assess the risk of future occurrences	• History of all incidences, including those of non-compliance, near misses and complaints, including numbers, descriptions, and resulting regulatory actions/ impacts	Encana has determined that spills are a focus area and has set a very low threshold for spill disclosure to regulators.
Discussion of how company manages and engages with the communities	Allows investors to assess the risk of project delays, increased costs, and concessions related to community issues, as well as potential reputation risks	• Community outreach strategy/ plan, where required, including employment statistics, contributions to community programs/infrastructure, and training opportunities • Quantification and description of significant project delays or deferrals as a result of environmental or community concerns	Enbridge outlines their stakeholder engagement process throughout each stage of their projects, and gives separate detailed breakdowns for aboriginal engagement, general community engagement and community investments.

DISCUSSION /ACTION ITEM	RATIONALE	SUPPORTING METRICS	EXAMPLE OF GOOD REPORTING
If relevant, disclosure of chemicals used in fracking, reported to FracFocus* or equivalent hydraulic fracturing chemical disclosure registry	Provides assurance to investors that company is managing toxic chemical use in its fracking operations	• Percentage of wells where fracking chemicals are disclosed	Most companies engaged in the fracking subsector disclose to FracFocus or other national equivalent
Companies should discuss the frameworks and processes in place to address worker and contractor health and safety, including a discussion of emergency preparedness and safety culture.	Allow investors to assess the company's track record in minimizing incidences and their impacts. Also allows investors to assess the risk of future occurrences	• Number of non-technical delays • Loss time, injury rates, fatalities, near misses (full-time and contractors) • Number of Tier 1 Loss of Primary Containment incidences	Repsol S.A. provides detailed quantitative and qualitative information about employee turnover, benefits, development initiatives, H&S and labour relations. They also outline their strategy for optimizing the company's human capital resource (Respol CSR Report)

3. Discussion of the company's exposure to physical risks from climate change (e.g., extreme weather, changing sea levels, resource scarcity), and how the actions being taken, if any, mitigate these risks.

Discussion of how the company protect assets from physical risks of climate change, e.g., such as flooding, droughts, rising sea levels	Helps investors assess the operational risk in the event of natural disasters such as floods, droughts, rising sea levels, etc.	• Existence and results of asset stress tests, including underlying assumptions, where possible	BP plc discusses what resources they use for physical climate impact research, what/how they use the information, when they implement during project analysis, and some examples of how it was used in different types of projects, in different ways, and in diverse regions.
Discussion of how physical risks parameters are incorporated in project / construction planning and maintenance	Allows investors to assess and quantify impacts to the business	• Types of events or impacts considered in planning as well as timeframes considered • Where necessary, a description of plans/projects related to redundancy and uptime in the event of a catastrophic environmental event	Total S.A.'s Climate Strategy discusses the additional work they are taking (above generally accepted practices) to assess the impacts of climate change on future projects, including rising sea levels, extreme weather, and temperature changes.

* FracFocus is managed by the Ground Water Protection Council and Interstate Oil and Gas Compact Commission, two organizations whose missions both revolve around conservation and environmental protection.

Please contact Responsible_Investing@otpp.com, if you wish to discuss this document, require further information.