



SUSTAINABLE FINANCE IN CANADA

Summary of the PPF-Ivey Foundation
National Roundtable Series

JANUARY, 2019



I V E Y foundation



ABOUT PPF

Good Policy. Better Canada. The Public Policy Forum builds bridges among diverse participants in the policy-making process and gives them a platform to examine issues, offer new perspectives and feed fresh ideas into critical policy discussions. We believe good policy is critical to making a better Canada—a country that’s cohesive, prosperous and secure. We contribute by:

- Conducting research on critical issues
- Convening candid dialogues on research subjects
- Recognizing exceptional leaders

Our approach—called **Inclusion to Conclusion**—brings emerging and established voices to policy conversations, which informs conclusions that identify obstacles to success and pathways forward. PPF is an independent, non-partisan charity whose members are a diverse group of private, public and non-profit organizations.

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WATCH AND SHARE THE SERIES VIDEO

The need for greater awareness about sustainable finance was a key message heard across the country during our roundtables. To help explain the issues, PPF and the Ivey Foundation have produced a series of videos featuring presenters from the roundtables, including:



Bruce Lourie, President, Ivey Foundation

- **Barbara Zvan** on energy retrofits and the urgency for Canada to act
- **Bruce Lourie** on why Canada needs to be at the table, disclosure, and energy efficiency finance
- **Ben Caldecott** on financing transition and policy certainty
- **Sean Kidney** on the International context and infrastructure investment
- See the videos at www.youtube.com

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EXECUTIVE SUMMARY

As the world comes to terms with the scale of investment needed to address climate change and other sustainable development goals, the importance of aligning financial policies and practices to these challenges is becoming clear.

While there is no universal definition of “sustainable finance,” it can be broadly described as the capital flows, risk management activities, and financial processes that accomplish environmental and social outcomes while promoting economic growth and the long-term stability of the financial system.

Following the lead of many countries, the Canadian government established an Expert Panel on Sustainable Finance to better understand the risks and opportunities for Canada as they relate to financing the transition to a more sustainable economy. During the winter of 2018, the Public Policy Forum and the Ivey Foundation, with the participation of Expert Panel members, convened a series of five roundtables across Canada to hear from leaders in industry, the financial sector, governments, academics and NGOs. Several of the roundtable conversations included experts from Europe (Ben Caldecott, U.K. Green Finance Taskforce and Sean Kidney, EU High Level Working Group on Sustainable Finance) who have participated in similar exercises.

The roundtables were designed to solicit input from business leaders and experts across the country with respect to sustainable finance issues and priorities for Canada. Several themes were seen consistently in all five sessions, while the emphasis of certain issues and the tone of discussions reflected the regional diversity of Canada. The following are the themes that emerged from roundtable conversations:

- A simple, clear and universal **definition of sustainable finance** needs to be created and embedded in the discussions about this subject.
- This **definition needs to go beyond just climate change** and encompass the broader issues that define long-term sustainability.
- An agreed, **common taxonomy** needs to be in place that supports the definition and provides a clear basis for comparison and measurement of sustainable finance initiatives.
- **Shared, accessible data** that allows the development of sustainable finance products and measures, without compromising the data providers, will need to be available.
- With definitions, a common taxonomy and accessible data, **a sustainable finance narrative** needs to be created that highlights risks and opportunities unique to Canada.
- Building momentum around sustainable finance will require greater **certainty around government policies and regulation** in this space.

- There is the potential to create larger, more attractive sustainable finance opportunities through the **aggregation of smaller initiatives**.
- **Skills and education are required to** help policy-makers, financial experts and Canadians more broadly understand, embrace and adopt sustainable finance practices.

Sustainable finance has the potential to provide a framework, analytical tools and products for long-term stability and growth within the Canadian economy. Further discussion, in a more detailed fashion and with reference to specific policies and financial products, is needed to articulate a clearer role for sustainable finance in Canada.

INTRODUCTION

In winter 2018, the Public Policy Forum in partnership with the [Ivey Foundation](#) organized a series of five roundtables in five Canadian cities – Calgary, Montreal, Ottawa, Toronto and Vancouver – to explore in detail the subject of sustainable finance through a Canadian lens. The aim was threefold:

1. to increase the level of awareness and understanding of sustainable finance in Canada;
2. to underscore the importance of finance and innovation in delivering Canada’s transition to a low carbon economy and;
3. to provide a structured engagement process to complement the ongoing work of the [Canadian Expert Panel on Sustainable Finance](#).

The Canadian Expert Panel was established in spring 2018. The four Expert Panel Members are:

- Andy Chisholm, Member of the Board of Directors, Royal Bank of Canada
- Tiff Macklem, Dean, Rotman School of Management, University of Toronto
- Kim Thomassin, Executive Vice-President of Legal Affairs and Secretariat, Caisse de dépôt et placement du Québec
- Barbara Zvan, Chief Risk and Strategy Officer, Ontario Teachers’ Pension Plan

The Expert Panel is mandated to recommend a Canadian approach to sustainable finance, including climate-related risk disclosures, to the federal government in 2019. This followed the undertaking of similar sustainable finance focused initiatives in other G7 countries, including China, France, the [U.K.](#) and the [European Union](#) in recent years. Despite the increased global activity in this space, there is not yet a universal definition of sustainable finance. Nonetheless, the Canadian Expert Panel views it as: “the capital flows (as reflected in lending and investment), risk management activities (such as insurance and risk assessment), and financial processes (including disclosures, valuation, and oversight) that assimilate environmental and social factors as a means of promoting sustainable economic growth and the long-term stability of the financial system.”

The PPF-Ivey roundtable series was specifically structured to align with the Expert Panel’s [Interim Report](#), published in October 2018. Besides providing an overview of what the Expert Panel has heard to date, the Interim Report outlines a set of elements that, according to the Expert Panel, appear to be foundational in unlocking mainstream engagement in sustainable finance in Canada. These include clarity on Canada’s carbon pricing policy, reliable data to perform financial climate-related risk analysis, effective climate-related financial disclosures, clear interpretation of legal and fiduciary duties, a knowledgeable support ecosystem and effective and consistent financial regulation. In addition, the Interim Report explores a range

of financial market structures, activities and products with the potential to offer transformative and economic benefits to Canada. These include:

- building retrofits for energy efficiency and climate adaptation;
- sustainable infrastructure; cleantech innovation;
- innovation in the oil and gas industry;
- optimized electricity generation and transmission;
- sustainable asset management and financial products and;
- green and transition linked financial products.

The five roundtables specifically comprised three core sessions to complement the ongoing work of the Expert Panel. Each roundtable kicked off with an overview of the Canadian sustainable finance landscape. This included a series of presentations from members of the Expert Panel, who spoke to their process as well as the content of the Interim Report and the rationale behind it. In four of the five roundtables, this was followed by a summary of the global context from two international participants – Ben Caldecott, Director of the Oxford Sustainable Finance Program, Oxford University and Sean Kidney, CEO, Climate Bonds Initiative – who were members of the U.K. Green Finance Taskforce and the European Union High-Level Expert Group on Sustainable Finance respectively.

The second core component of the Roundtables comprised a general discussion of the seven foundational elements outlined in the Expert Panel's Interim Report. The third was a more focused discussion of one – or two – of the financial market structures, activities, and products. The topics for each of the five roundtables were:

- innovation and energy transition (Calgary);
- financial disclosure and asset management (Montreal);
- infrastructure and policy (Ottawa);
- financial disclosure and investments (Toronto) and;
- building retrofits and clean technology (Vancouver).

Besides the Expert Panel and international participants, each roundtable brought together a range of high-level stakeholders to discuss and debate the content, including representatives from business, finance, government, foundations, NGOs and academia. The roundtables were conducted under the Chatham House Rule.

This summary report outlines the key points from the PPF-Ivey Foundation Sustainable Finance Roundtable Series. Highlights from each of the five city dialogues are summarized below. The views expressed in this

note do not necessarily reflect those of PPF or the Ivey Foundation and should not be interpreted as research findings.

PPF and the Ivey Foundation would like to thank our partners, Environment and Climate Change Canada (ECCC), the Royal Bank of Canada (RBC), La Caisse de depot et placement du Quebec (CDPQ), the City of Vancouver, and Suncor, for supporting – and hosting – this initiative. We are grateful to the Expert Panel and their Secretariat for their collaboration and dedication to developing recommendations for Canada’s strategy on sustainable finance.

THE GLOBAL CONTEXT

Four of the five roundtables kicked off with an overview of the global context with regard to sustainable finance, the highlights of which are summarized below:

- **Canada needs to be part of the global effort on sustainable finance and should commit to it with “high ambition.”** We heard that the global focus on sustainable finance was intensifying and that it was likely that the global architecture to deliver sustainable finance will crystallize over the next two to three years. Despite Canada’s slow start, there is still an opportunity for it to play a key role in setting the global agenda and to possibly overtake some of the early stages of this process that have been led by the EU, the U.K. and China.
- **Finance can change quickly when clear signals are given.** We heard that climate adaptation is the most capital-intensive transition in history, requiring the mobilization of low-cost capital at scale. The financial sector has the opportunity to develop structures and products to support this transition but will require clear and consistent policy signals to do so. The glut of savings globally and the need for productive investments could also help to provide the necessary drive for the development of new financial products.
- **Other global players are adopting a more expansive approach to the issue.** The EU High Level Expert Group on Sustainable Finance and the U.K. Green Finance Taskforce are going beyond climate and looking at wider environmental and social priorities and impacts. But there is a need for caution here as social issues need to remain integrated within sustainable finance initiatives.
- **Taxonomies are developing.** The first draft of the EU Taxonomy, to determine whether an economic activity is environmentally sustainable, was released for consultation in November 2018. The market needs comparability of frameworks and system compatibility, which places an urgency on Canada to get involved and be part of shaping appropriate taxonomies for its transition.
- **Building capacity in the financial sector to engage in sustainable finance is required globally.** The City of London Corporation, alongside the U.K. Government, will fund a new Green Finance Institute to champion sustainable finance in the U.K. and abroad. This is envisioned to be a global one-stop shop for world-leading climate science, and for capital. The institute will ultimately aim to create new business opportunities and communicate to the wider market what is on offer in terms of green finance and insurance.

FINANCIAL DISCLOSURE & ASSET MANAGEMENT

Roundtable Panelists:

- Kim Thomassin, Executive Vice-President of Legal Affairs and Secretariat, Caisse de dépôt et placement du Québec
- Barbara Zvan, Chief Risk and Strategy Officer, Ontario Teachers' Pension Plan
- Ben Caldecott, Founding Director, Oxford Sustainable Finance Programme, University of Oxford Smith School of Enterprise and Environment
- Sean Kidney, Chief Executive Officer, Climate Bonds Initiative

Moderator:

- Jérôme Lussier, Director of Stewardship Investing, Caisse de dépôt et placement du Québec

HIGHLIGHTS FROM THE DISCUSSION

- **Public policy plays a critical role in developing and delivering on Canada's sustainable finance strategy.** We heard that there is a need for leadership by the federal government as well as collaboration across all levels of government in order to develop a robust strategy on sustainable finance. Roundtable participants maintained that the Expert Panel's final report should include recommendations for amendments to financial policies and regulations aimed at promoting sustainable finance. Incentives were singled out as important for driving changes across the economy and for attracting private sector investment to sustainable initiatives. This was especially noted for smaller companies with limited resources.
- **The conversation on sustainable finance needs to go beyond climate change.** We heard that looking at sustainable finance solely through a climate change lens could serve to undermine the assimilation of environmental and social practices into the Canadian financial system, given the divisive nature of the topic and its potential to provoke skepticism and opposition. Participants maintained that framing the conversation about sustainable finance more broadly, for example around environmental, social and governance issues, is likely to get more traction among key stakeholders.
- **Underscoring the material nature of climate-related risks may encourage companies to develop long-term strategies.** Roundtable participants noted that many firms view short-term threats like cyber-

security as more important than climate change. They explained that this perspective is reinforced by the diffuse impacts and long-term lens through which climate-related risks are seen. Participants proposed that demonstrating the material consequences through public policies (e.g. cost of carbon emissions) and presenting climate-related risks in material financial terms (e.g. costs of flooding) would prompt companies to engage on the issue sooner and to develop more comprehensive strategies.

- **There needs to be a simpler and shared framework for how sustainable finance is defined, conceptualized and implemented.** Participants identified a lack of common understanding of the term “sustainable finance” as a barrier to financial sector engagement. We heard that many stakeholders defined it differently based on their expertise and professional experience. Further, participants added that the technical nature in which sustainable finance was currently discussed limited its reach and made it inaccessible to the public.
- **Canada should learn through doing.** We heard that it was important not to get too focused on, and caught up in, the perceived complexity of sustainable finance and instead take the plunge into implementation. Roundtable participants maintained that the market would grow organically as a result of action, as would the necessary talent and expertise.
- **Canada should consider developing its own taxonomy.** Participants repeatedly pointed to the lack of a shared vocabulary as a key barrier to adopting sustainable finance in Canada. While some participants welcomed the taxonomy put forward by the [Task Force on Climate-related Financial Disclosures \(TCFD\)](#), others maintained that Canada should develop its own as several factors made the adoption of the TCFD taxonomy challenging. More generally, participants noted that the work of the TCFD was a lowest common denominator approach and as such, it should be viewed as a starting point.
- **Opportunities to share data among key stakeholders should be considered.** Participants agreed that the data required to assess climate-related financial risk already existed. That said, we heard that the aggregation of this data by external organizations made it difficult and expensive to access. Further, for individual organizations, collecting the data was a complex, resource-intensive process. As a result, participants proposed greater collaboration and data sharing among academia, the financial sector and governments. One participant suggested the creation of a public data set around climate-related financial risks.
- **There needs to be a change of mindset when thinking about financial disclosure.** We heard that financial disclosure was often simply seen as providing the right data to perform financial analysis. While we heard that this was important, participants emphasized that financial disclosure was also about getting senior leaders to think more strategically about capital flows and the material risks from climate change and other sustainability issues.

- **Canadian expertise and capacity need to increase.** Participants agreed that there was a lack of experience and expertise on sustainability and climate change in the Canadian financial sector and measures needed to be taken to address the gap. Some proposed turning to post-secondary institutions to encourage students to specialize and develop expertise in this field, while others noted that the financial sector could not afford to wait for students to graduate. Executive training and programs that feed expertise directly into the financial sector were seen as critical requirements. One participant highlighted the importance of calling on executives to educate themselves and be at the forefront of awareness-raising efforts because corporate leadership was required. Greater understanding at the executive level within corporations was seen as important in moving from awareness to action.

INFRASTRUCTURE & POLICY

Roundtable Panelists:

- Barbara Zvan, Chief Risk and Strategy Officer, Ontario Teachers' Pension Plan
- Kim Thomassin, Executive Vice-President of Legal Affairs and Secretariat, Caisse de dépôt et placement du Québec
- Ben Caldecott, Founding Director, Oxford Sustainable Finance Programme, University of Oxford Smith School of Enterprise and Environment
- Sean Kidney, Chief Executive Officer, Climate Bonds Initiative

Moderator:

- Bruce Lourie, President, Ivey Foundation

HIGHLIGHTS FROM THE DISCUSSION

- **Canada should consider developing a sustainable finance “roadmap”.** Participants underscored the importance of articulating a clearly defined roadmap to guide Canada’s effort. We heard that this roadmap should clearly articulate objectives based on defined priorities and set out clear and concrete actions to achieve them while complementing ongoing actions by relevant federal departments and agencies. Participants noted that the development of a roadmap should be independent from the political process, priorities should be evidence-based, and collaboration across business, finance and other sectors should be hardwired. Participants noted that the transition of Canada’s oil and gas sector should be prioritized given that it was one of the largest emitters of greenhouse gases in the country.
- **Hardwiring sustainability into Canada’s capital flows would have multiple benefits.** We heard that it is important to study and draw strong links between sustainable finance and microeconomic and macroeconomic policies, as well as social impacts and issues. For example, participants argued that it is important to recognize the role sustainable finance efforts can play in realizing the UN’s Sustainable Development Goals, which Canada has committed to meet.
- **The federal government should consider playing a bigger role in promoting the importance of sustainable finance to Canadians.** We heard that creating greater awareness of the issue would promote positive change in Canada’s financial sector but also among the public. For example, risk-based pricing and resources like flood maps can incentivize individuals to prepare for, and guard against, a variety of climate risks.

- **The federal government and the financial sector need closer collaboration.** Participants agreed on the importance of greater collaboration in delivering the goal of sustainable finance. We heard that developing robust partnerships across government and between government and Canada's financial sector was critical. Equally important was a genuine, two-way dialogue.
- **Aggregation is key to the viability of sustainable investment opportunities.** Participants noted that many investment opportunities would be generated at the municipal level. But in isolation they were typically too small to generate significant investor interest. It is critical to explore ways to make these opportunities more attractive to investors. Participants maintained that aggregation of these smaller opportunities into larger investment portfolios offered one way of attracting large capital flows and that a suitable mechanism to facilitate greater aggregation should be explored.
- **More clarity regarding the role of each level of government is required.** One participant highlighted the need to define the roles of the different levels of government vis-à-vis sustainable finance. Ottawa's successful implementation of green bonds was highlighted as an example of good collaboration between federal and municipal actors. This involved the City of Ottawa partnering with Export Development Canada, which provided guidance and leadership, and effectively facilitated the transaction.

FINANCIAL DISCLOSURE & INVESTMENTS

Roundtable Panelists:

- Tiff Macklem, Dean, Rotman School of Management, University of Toronto
- Barbara Zvan, Chief Risk and Strategy Officer, Ontario Teachers' Pension Plan
- Ben Caldecott, Founding Director, Oxford Sustainable Finance Programme, University of Oxford Smith School of Enterprise and Environment
- Sean Kidney, Chief Executive Officer, Climate Bonds Initiative

Moderator:

- John Stackhouse, Senior Vice-President, Office of the Chief Executive Officer, Royal Bank of Canada

HIGHLIGHTS FROM THE DISCUSSION

- **The private sector could play a role in building sustainable finance expertise within government.** Many participants discussed the role of government and the private sector in embedding sustainable finance in Canada. Some questioned whether the government and regulators had the necessary expertise to play a key role. As a result, it was suggested that Canada's financial sector consider ways to support policy-makers and regulators develop the knowledge and expertise required. Subsequently, there was discussion about how the private sector might do this.
- **Accessible, reliable data is critical to sustainable finance.** Participants noted that inaccurate data to assess climate-related financial risk was one of the main reasons why sustainable investments were viewed as being risky. We heard that it was hard to price climate and other sustainability risks without accessible and reliable data. The lack of a common framework to analyze the data was also highlighted as a challenge. Taking a more prescriptive approach, one participant proposed that Canada develop its own data set and establish a repository where Canadians can store and share data to allow for a more consistent approach to analyzing risk.
- **Canada needs to adopt its own taxonomy around sustainable finance.** Participants underscored the importance of conducting market research on the Canadian economy as well as identifying which data is valuable to investors. This information combined with an understanding of the Canadian financial

sector should inform the development of a taxonomy tailored to fit Canada. This should build on existing taxonomies, while ensuring alignment with the reality of the Canadian economy.

- **Clarification on fiduciary responsibility is required.** Opinion diverged on the issue of fiduciary responsibility. Some participants maintained that investing in sustainable finance can conflict with fiduciary duty. They argued that the inability to predict the future and a lack of reliable information make investing in sustainable finance risky. On the other hand, some participants argued that investing in sustainable initiatives can align with the interest of shareholders and involves less risk. We heard that greater clarification and education in sustainable finance would boost adoption.
- **Climate-related financial disclosure requires a “safe harbour” approach.** We heard that climate-related financial disclosures create fear around legal and financial liability. Some participants raised the need for a safe harbour for companies where they can disclose information without fear of penalties. This also applies to sustainability reporting over the long term because companies may be hesitant to disclose accurate information if they risk being punished in the market.
- **It is necessary to be proactive in mitigating climate-related natural disaster risks.** Participants noted that the increasing severity of climate-related disasters has implications for the insurance sector and Canadians more broadly. Consequently, the financial sector needs to be proactive in mitigating these risks and help the population adapt to this new reality. One participant highlighted that many communities cannot afford natural disaster risk insurance and are ill-informed on the issue and argued that the cost of these risks needs to be established and presented in balance sheets and other relevant documents.
- **Recognize the challenge of transitioning to a low-carbon economy for the oil and gas industry.** Given that the oil and gas industry is an important part of the Canadian economy, participants stressed that it is important to acknowledge that the transition to a low-carbon economy will have significant impacts in this sector, including job losses and, potentially, company bankruptcies. Discussion centered on how to incentivize oil and gas companies to reduce carbon emissions; suggestions and examples put forward included refusing to insure coal companies, rewarding companies when they attain established climate targets, and creating tools like transition bonds and loans.
- **Engage Canadians on sustainable investment options for their portfolios and RRSPs.** Participants stressed that it is important to engage retail consumers and Canadians in sustainable finance efforts and to encourage them to learn about and invest in green or sustainable investment products. We heard that certain demographics, like millennials, are more inclined to adopt green investments and should be targeted accordingly. One participant argued that people are more open to sustainable investment products when they are safe, easily available and have been explained and recommended to them. Consequently, participants underscored the importance of financial planners explaining sustainable

investment products to their clients using common, simple language. Many participants put forward ideas that could attract Canadians to adopt sustainable investments. For example, one participant suggested an RRSP structure that encourages people to think about going green and investing some of their savings into products that facilitated the transition to a low-carbon economy. Another participant suggested creating green Canadian savings bonds, while another raised the possibility of supplying energy efficiency or clean energy retrofit financing products for clients.

- **Green bonds are a valuable investment product that need to be made more widely available.**

Throughout the discussion, many participants talked about green bonds – a financial product linked to climate change solutions – and transition bonds. Many agreed that green bonds are a popular and useful financial product that contributes to sustainable finance. Participants highlighted that the current demand for green bonds in Canada far exceeds supply and should therefore be made more widely available and accessible to all Canadians.

BUILDING RETROFITS & CLEANTECH

Roundtable Panelists:

- Tiff Macklem, Dean, Rotman School of Management, University of Toronto
- Barbara Zvan, Chief Risk & Strategy Officer, Ontario Teachers' Pension Plan
- Andy Chisholm, Member of the Board of Directors, Royal Bank of Canada

Moderator:

- Andrea Moffat, Vice-President, Ivey Foundation

HIGHLIGHTS FROM THE DISCUSSION

- **A predictable regulatory trajectory is key to delivering greenhouse gas (GHG) emission reductions and promoting cleantech innovation.** We heard that one of the biggest current barriers to delivering meaningful results in sustainable finance within Canada was the uncertainty around the country's carbon pricing policy. Participants noted that policy-makers need to adopt a predictable trajectory towards net-zero carbon emissions. There were strong examples of how regulatory certainty has delivered swift results. Brussels was one. In the space of eight years, the city had gone from worst to best in class globally in terms of the energy efficiency retrofits of its buildings due to the clear adoption of a new energy code. In addition, we heard that regulatory uncertainty was undermining innovation and growth within Canada's cleantech industry. In this context, California was cited as an example of how policy predictability had spurred growth and innovation within the sector.
- **Harmonize built environment policies to drive GHG emission reductions.** Attendees said it was important that the federal government prioritize which high-GHG emitting sectors should be targeted. Specifically, they argued that efforts should focus on the carbon intensity of buildings. They underscored the importance of 'deep' efficiency retrofits. While these are more capital intensive, they deliver more GHG reductions than 'light' retrofits, which save energy but do not necessarily reduce GHG emissions. For example, lighting upgrades do little to reduce carbon emissions, one participant said. Switching fuels results in 70 to 80 percent reduction in GHG emissions, in contrast to energy efficiency measures, which result in a 15 percent reduction. A policy suggestion to address this issue was embedding a carbon price in the national building code to drive deeper retrofits.
- **Building energy performance labelling should be mandatory.** We heard from participants that the current model of voluntary disclosure of building energy performance was not delivering the desired

results. Disclosure was a vital component in laying the foundations for the market. Data currently disclosed is not good enough to make investment decisions. There is a need for regulation that requires standardized and accessible data on carbon efficiency, energy efficiency and resiliency. Participants maintained that greater transparency makes investments more likely as it allows investors to have the evidence they need to make more informed decisions. Participants highlighted the importance of being able to assess and show investors whether or not measures taken had achieved predicted efficiency targets. Regulators also need this type of data for informing policy and monitoring impacts.

- **More rigorous energy efficiency benchmarking is required.** Many participants made the case for standardized and rigorous benchmarking of energy efficiency. Greater transparency would serve to boost investment and it was mentioned that there is a specific opportunity in public buildings (e.g. municipal, university, school, hospital) to increase efficiency investments. It was also pointed out that target regions with lots of buildings, such as Alberta and Ontario, could allow the scaling of investment structures through the sheer number of buildings. One participant, however, cautioned against being over reliant on building codes. The time lag between defining and adopting a new code and the pace of technology change means that codes will likely already be outdated before they are implemented. Finally, a participant commented that the biggest barrier to implementation of benchmarking was the lack of capacity and technical know-how to assess the energy efficiency of buildings. This could be a new growth area for training at technical colleges.
- **Develop financial aggregation mechanisms to pool retrofit projects for scalable investment.** We heard that the aggregation of projects could drive institutional investment in supporting the large-scale transformation of current building stocks. This could specifically benefit small and medium sized enterprises (SMEs). It was suggested that utilities were better placed to play the role of aggregator for residential properties, while ‘professionals’ were more suited to managing commercial stock. The Canadian Infrastructure Bank was raised as an investor that could support the development of these types of warehousing financial structures for energy efficiency and adaptation to sea level rise.
- **Canada-wide regulatory harmonization is key to unlocking growth and cleantech innovation.** Participants mentioned that one of the main obstacles to the growth of Canada’s cleantech sector was the country’s fragmented regulatory framework. There needs to be greater regulatory harmony across the country. It is easier to develop innovative solutions in bigger, simpler markets. Canada needs to develop a common market for cleantech. We heard that, at present, Canada’s regulatory fragmentation was one of the main barriers to achieving this. Furthermore, it not only undermined growth in this sector but also had a social cost. Buying cleantech solutions from other countries would undermine Canadian opportunities in this area and the jobs that could come with a growing cleantech industry.
- **More financial support and procurement of Canadian cleantech from the Government of Canada would encourage cleantech investment.** Some participants called for the government to play a more

active role in financially supporting Canada's cleantech industry. We heard that there was a role for the government in reducing investor risk by stimulating cleantech solutions through financing the early stages of technology development, as well as implementing government procurement practices to support the uptake and commercialization of Canadian cleantech.

- **Harnessing Canada's network of global trade ambassadors would boost capital flows for cleantech development in Canada.** We heard that Global Affairs Canada's network of trade ambassadors was currently underutilized. The network was viewed as a valuable asset that could be harnessed to accelerate global interest and investment in Canadian cleantech products.

ENERGY & THE TRANSITION

Roundtable Panelists:

- Tiff Macklem, Dean, Rotman School of Management, University of Toronto
- Barbara Zvan, Chief Risk & Strategy Officer, Ontario Teachers' Pension Plan
- Andy Chisholm, Member of the Board of Directors, Royal Bank of Canada

Moderator:

- Bruce Lourie, President, Ivey Foundation

HIGHLIGHTS FROM THE DISCUSSION

- **There needs to be more clarity regarding the federal government's process for setting climate and energy policies.** A number of participants shared their concerns around the federal government's current policy-making process, including that climate change is not a Canadian problem but a global one and that Canada's existing targets were undermining the country's global competitiveness. We also heard that GHG emission reduction targets were undermining the building of new infrastructure aimed at doing just that. Some participants noted that the federal government needed to adopt a more holistic approach to the issue that went beyond just climate policy.
- **Reducing regulatory burdens could help stimulate the transition to a low-carbon economy.** After the discussion on climate and energy policies, there were some suggestions around the importance of reducing the regulatory burden in order to speed up the transition to a low-carbon economy. Participants noted that Canadian regulatory approvals for new projects are incredibly slow in contrast to Canada's competitors, slowing down investment and, ultimately, the transition process as well.
- **Transition bonds could be one solution to support changing the negative views of the Canadian oil and gas industry.** We heard from many participants that the Canadian oil and gas industry was globally competitive in terms of the quality of the product, the industry's competence and the production processes. We also heard that the sector was innovative. But participants also noted that the current perception of the Canadian oil and gas industry was negative. There was interest by some participants in exploring transition bonds as a way of transforming this perception and attracting investment, as this would send a signal to investors that the industry is committed to

getting clean. Many participants noted that any 'new' narrative would need to be based on hard facts (e.g. data) and not opinion.

- **Canada should consider ways to accelerate the energy industry transition.** We heard from participants that more needed to be done to incentivize the transition to a low-carbon economy and promote innovation within the energy sector. There was some dialogue on the need for new types of financing mechanisms to support this type of transition. A number of options were raised including transition bonds, as well as a version of 'flow-through' investments. There was also a specific idea that Innovation, Science and Economic Development Canada's 'Strategic Innovation Fund', which totaled over \$1 billion, would be a better way to direct capital to the sector for transition rather than flow-through investments.
- **Standardization is important.** This issue repeatedly bubbled up in discussion. Participants spoke about the importance of more consistency, comparability and transparency of what is meant by the terms 'green' and 'sustainable' across the oil and gas sector. One proposal was an industry standard lexicon, and standards for measuring the industry's performance. This would need to set out what was being measured and how, while at the same time being robust and credible. Attendees posited that standardization across the industry could serve to enhance its appeal to potential investors and thus attract more capital, especially if the industry was shown to be transitioning. One participant suggested that there might be a role for organizations such as the Clean Resource Innovation Network in pulling industry-wide information together. Participants had mixed views on whether Canada needed to subscribe to a global system or whether a made in Canada approach was preferable.

