



INSTITUT C.D. HOWE INSTITUTE

POLICY CONFERENCE REPORT

SUSTAINABLE GREEN FINANCE

OCTOBER 2019



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AN OVERVIEW

On October 30, 2019, trusted experts in both the public and private sectors came to the C.D. Howe Institute to discuss sustainable finance, with a focus on what it means for the future of finance, regulations and competitiveness. The speakers addressed four primary questions:

- 1) What is sustainable finance, and how could it impact Canada's financial services sector?
- 2) How does Canada compare internationally?
- 3) What are the challenges related to sustainable finance and climate related risk disclosure in Canada?
- 4) What does Canada need to do to embrace sustainable finance?

The speakers, participants, and their lively discussions all contributed to an illuminating day from which a series of common themes and key issues emerged.

First, there was widespread agreement that sustainable finance is the future of finance around the world. Canada must embrace this global trend to maintain its competitiveness and ensure long-term sustainable economic growth. The participants agreed that climate change is irreversible, and we must integrate the risk of climate change and its impacts into the decision-making process and normal functions of finance and channel funds into sustainable activities and adaptation.

Second, Canada is lagging behind global leaders in the area, such as Europe, and perhaps surprisingly, China. Canada could significantly enhance its competitiveness if it recognizes its opportunity in the transition bonds¹ market space and acts upon the Expert Panel on Sustainable Finance (EPSF) recommendations. Public and private players must work together and create a vision to shift the system in the right direction.

Third, Canada faces challenges with its regional differences and its large energy sector. We must balance the global perspective with the Canadian context and create an actionable plan that takes into account these transitional challenges.

1 Transition bonds are a new class of bonds, the proceeds of which are used to fund a firm's transition towards a reduced environmental impact or to reduce their carbon emissions. See <https://smith.queensu.ca/centres/isf/pdfs/ISF-PrimerSeries-20190919-TransitionBonds.pdf>.

AGENDA

2019 FINANCIAL SERVICES CONFERENCE: SUSTAINABLE GREEN FINANCE

Wednesday, October 30, 2019, 8:30 am - 4:15 pm

C.D. Howe Institute, 67 Yonge Street, Suite 300, Toronto



8:30 am – 9:00 am

RECEPTION AND REGISTRATION

9:00 am – 9:10 am

WELCOMING REMARKS

William B.P. Robson, President and Chief Executive Officer, C.D. Howe Institute

9:10 am – 10:25 am

Session I – What is Sustainable Finance, and How could it Impact Canada’s Financial Service Sector?

Key discussion points include:

- *What is sustainable finance?*
- *What is driving investment in sustainable finance in Canada — is it the government’s climate commitments, growing climate risk or the market?*
- *How could sustainable finance impact Canadian economic growth and the long-term stability of our financial system?*

Moderator:

William B.P. Robson, President and Chief Executive Officer, C.D. Howe Institute

Presenters:

- **Andy Chisholm**, Corporate Director, Royal Bank of Canada; Member, Expert Panel on Sustainable Finance, Government of Canada
- **Karen Clarke-Whistler**, Principal, ESG Global Advisors
- **Blair Feltmate**, Head of the Intact Centre on Climate Adaption, University of Waterloo

10:25 am - 10:45 am

BREAK

10:45 am – 12:00 pm

Session II – Sustainable Finance in Canada and Around the World — How do we Compare?

Key discussion points include:

- *How is sustainable finance developing in other jurisdictions? What should we emulate or change?*
- *What is driving investment in sustainable finance in other parts of the world?*
- *Is sustainable finance going to help or hinder Canada’s long-term competitiveness?*

Moderator:

Peter van Dijk, National Tax Policy Leader, PwC Canada; Senior Fellow, C. D. Howe Institute

Presenters:

- **Heather Lang**, Executive Director, Sustainable Finance Solutions, Sustainalytics
- **Kurt Reiman**, Chief Investment Strategist, BlackRock Canada
- **Manju Seal**, Head of Sustainable Finance Advisory, BMO Capital Markets

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12:00 pm—12:30 pm	LUNCH
12:30 pm – 1:30 pm	Keynote Luncheon
	<p>Moderator: William B.P. Robson, President and Chief Executive Officer, C.D. Howe Institute</p> <p>Presenter: Tiff Macklem, Dean, Rotman School of Management, University of Toronto; Member, Expert Panel on Sustainable Finance, Government of Canada</p>
1:30 pm – 2:45 pm	Session III - What are the Challenges Related to Sustainable Finance and Climate-Related Risk Disclosure in Canada?
	<p><i>Key discussion points include:</i></p> <ul style="list-style-type: none"> • <i>As with other countries, Canada is experiencing the high economic cost of severe weather damage. What kind of exposure does our financial services sector have?</i> • <i>What can the federal government do to improve the disclosure of climate-related risk to better protect investors?</i> • <i>Banks and financial institutions are already starting to voluntarily implement sustainable finance standards. Should regulators embed sustainability into our regulatory frameworks?</i> <p>Moderator: Peter van Dijk, National Tax Policy Leader, PwC Canada; Senior Fellow, C. D. Howe Institute</p> <p>Presenters:</p> <ul style="list-style-type: none"> • Benjamin Eddy, Managing Director, Financial Markets Advisory, BlackRock • Moira Gill, Associated Vice President, Government and Industry Relations, TD Insurance • Paul Kovacs, Executive Director, Institute for Catastrophic Loss Reduction • Cheryl McGillivray, Manager, Corporate Finance, Alberta Securities Commission

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2:45 pm—2:55 pm

BREAK

2:55 pm - 4:10 pm

Session IV - What does Canada Need to do to Embrace Sustainable Finance?

Key discussion points include:

- *In what ways can Canada increase investment in sustainable finance?*
- *The Canadian green bond market is now over \$5.5 billion. What expectations do investors have of green bond issuers, and what other products can we expect as the market matures?*
- *How can policy-makers set appropriate measurement and climate-related risk disclosure standards?*
- *Should consideration of ESG factors fit with fiduciary responsibility?*

Moderator:

Jeremy Kronick, Associate Director, Research, C.D. Howe Institute

Presenters:

- **Glen Hodgson**, Senior Fellow, C.D. Howe Institute
- **Jennifer Reynolds**, President and Chief Executive Officer, Toronto Finance International
- **Sarah Thompson**, Vice President, Sustainable Finance, RBC Capital Markets

4:10 pm – 4:15 pm

CLOSING REMARKS

Jeremy Kronick, Associate Director, Research, C.D. Howe Institute

Sponsored by:



RAPPORTEUR'S SUMMARY

The conference was composed of four major sessions. The proceedings began with participants discussing sustainable finance, what it is, what's driving it, and how it can impact Canada's financial services sector and economic growth. The second session then looked at sustainable finance in the world and how Canada compares. The third session saw participants discuss the challenges to implementing sustainable finance standards and the role of government in improving the disclosure of climate-related risk. The final session of the day investigated the way forward on sustainable finance and the role of regulation. The keynote session summarized the report of the Expert Panel on Sustainable Finance and the main recommendations coming out of it.

SESSION I – WHAT IS SUSTAINABLE FINANCE, AND HOW COULD IT IMPACT CANADA'S FINANCIAL SERVICES SECTOR?

The first session of the conference began with the question: what is sustainable finance? Panelists argued that sustainable finance is the natural evolution and modernization of finance. Finance is considered the allocator of capital and enabler of the economy to turn savings into investments. Sustainable finance performs the same functions in a more up-to-date fashion, integrating climate-related risks into the decision-making process.

Panelists discussed Canada's position as a carbon-emission intense economy, one that is highly exposed to climate-related risks. However, with the appropriate incentives, Canada can get ahead of the problem, and turn it into an opportunity. Although market forces may adapt on their own to this small tweak in how we think

about finance, regulation and policy must provide a push, given the size of the system, and the need to move more quickly than we have.

The panelists then introduced the Environmental, Social, and Governance (ESG) criteria, which are a set of standards for sustainable activities and investments. The panelists described ESG as the evolution of what we traditionally know as corporate social responsibility and its overlap with social investments that impact critical issues in a material way. As company value increasingly depends on intangible value, which includes ESG, demand for ESG investments has increased. Whereas ESG used to mean sacrificing value, the reverse is now true. Indeed, a lack of disclosure regarding ESG issues, for example, is more harmful to company value than being upfront on where risks lie.

The panelists agreed that climate change is irreversible, and we need to build adaptation measures into the system. While it is important to invest in transition as the world moves to reduce its dependence on carbon, panelists argued that we must also invest in adaptation in order to limit knock-on effects to the rest of the economy, such as impacts on the housing sector from floods and other climate-related risks. Canada is moving in the right direction towards adaptation, but not fast enough. We need to use the tools available to us – data, disclosure, fiduciary responsibility, regulatory oversight and financial instruments – to build smarter infrastructure that anticipates climate change, funds clean technology, and creates a cleaner and more efficient economy.

The panelists also highlighted the perceived short-term risk to Canada's competitiveness due to its economic integration with the United States and the differences in approach to sustainable finance activities. However, as the world collectively moves in that direction, Canada's long-term

competitiveness will benefit from staying ahead of the trend.

SESSION II – SUSTAINABLE FINANCE IN CANADA AND AROUND THE WORLD – HOW DO WE COMPARE?

Panelists in the second session of the conference provided the global picture. Europe, the clear leader in the sustainable finance space, put in place an action plan with a rigorous taxonomy of green assets and activities. Although its momentum seems to have slowed, the panelists reasoned it is due to its head start. The United States trails Europe in terms of volume, but surpasses it in momentum. China and Japan are also making strides towards sustainable finance, allocating equity towards green bonds and incentivizing investments in them. Canada has some catching up to do, and given the importance of its energy sector, transition bonds are a clear opportunity for it to align with international efforts. The panelists argued for made in Canada solutions rather than isolating ourselves by creating solutions that are made for Canada. We need to address our regional needs in an actionable and cooperative matter.

The panelists highlighted regulations, societal changes, technological development, and physical factors as the key drivers of sustainable finance around the world. The panelists reiterated that sustainable finance is a trend that will persist, and it is now a signal to investors of operational excellence. Investors are looking to maximize return and reduce risk through the combination of traditional investing and sustainability, without having to choose one or the other. Panelists discussed data showing that companies with sustainable methods and better ESG metrics are outperforming laggards in the transition to a low-carbon world.

The panelists reckoned this sustainable finance and ESG trend would benefit Canada's long-term

competitiveness tremendously if Canada exploits this opportunity. Currently, however, there are not enough products for investors to invest in; a diverse and robust suite of widely accepted products still does not exist today. Canada could significantly enhance its competitiveness if it recognizes its opportunity in the transition bonds market space and acts upon the expert panel recommendations.

KEYNOTE SESSION AND LUNCHEON – CANADA'S EXPERT PANEL ON SUSTAINABLE FINANCE (EPSF)

This session provided an overview of the report of the EPSF and the overarching goal of sound environmental stewardship intersecting with market access. The reward is sustained competitive advantage. Canadian companies are increasingly realizing this as customers and investors demand knowledge about the environmental footprint of the products they buy and invest in. It is no longer the environment or the economy; it is the environment and the economy.

Canada is perhaps more exposed than other countries in the transition to a low-carbon economy given the contribution of the natural resources industry to our economy. As a result, we suffer from unique transition challenges, which is why the EPSF did not borrow much from other countries' task forces, instead producing a report that is relevant to Canada and provides an actionable plan with the goal of channeling capital to build a better, low-carbon economy.

The recommendations of the EPSF report revolve around three pillars: opportunity, foundations for market scaling, and financial products and markets for sustainable growth. Disclosure and fiduciary duty were underlined as some of the most important concerns.

The report also recognized the need to deal with the challenge of transition for the energy sector, and shed light on the way forward. It is essential for

Canada's success in this space to reconcile goals for its energy sector with those for the overall economy and pursue a vision of being the world's cleanest energy provider in all forms. We need to utilize returns from sustainable investments to double down on innovation in the oil and gas industry to reduce GHGs, and enhance incentives around transition bonds. The industry has a role to play, and needs to commit to enhanced disclosure. There has been progress from the private sector in the last year, where large financial institutions are coming together to create a taxonomy for disclosure that is relevant to Canada and its regional differences. Lastly, Canada needs to move forward with building pipelines, creating certainty for investors, and rebranding to highlight our relatively cleaner emissions in order to get oil and gas to other jurisdictions.

SESSION III – WHAT ARE THE CHALLENGES RELATED TO SUSTAINABLE FINANCE AND CLIMATE-RELATED RISK DISCLOSURE IN CANADA?

The session began with a discussion of Canada's financial services sector and its high exposure to climate-related risk and damage. The panelists highlighted the substantial increase in insurance claims due to climate-related risks, and the significant physical damage Canada is estimated to face over the next 10 years. The panelists pointed to room for improvement in the disclosure of climate-related risk, specifically when it comes to transition and physical risks. Panelists discussed the evolving role of the financial services sector with respect to climate change, noting it did not become a major part of the discussion until 2015. However, its evolution has moved at a rapid pace since then, in particular as a result of Mark Carney and his leadership of the Financial Stability Board (FSB).

The panelists also offered some examples of global efforts to address climate exposure, such

as the Principles for Sustainable Insurance – a global framework for the insurance industry in collaboration with the UN to address ESG risks and opportunities – and the United Nations Environment Programme Finance Initiative – a pilot project to ensure strategies and portfolios are in line with the recommendations of the FSB Task Force on Climate-related Financial Disclosures.

Panelists highlighted some of the challenges around disclosure, including the maturity of climate methodologies, uncertainty of climate scenarios, and availability of client data. Panelists, however, were optimistic, highlighting big strides in recent years and the emerging new approaches that integrate climate risks into strategy. As panelists looked ahead, a major key will be improved consistency. Without consistent standards across companies and jurisdictions, comparisons are impossible. The panelists emphasized the need for a common taxonomy with Canada's jurisdictional differences in mind, which would benefit firms and create more industry collaborations.

On the question of whether regulators should embed sustainability into our regulatory framework, the panelists agreed there remain gaps to be addressed. The Canadian Securities Administrators recognized the impact of disclosure on capital markets. The Alberta and Ontario Securities Commissions worked together to create a regulatory framework for Canadian companies and held a broad consultation with the industry. The panelists agreed that the critical role of regulators is to have conversations on best practices, and ensure they are applied broadly.

SESSION IV – WHAT DOES CANADA NEED TO DO TO EMBRACE SUSTAINABLE FINANCE?

The final session of the conference began with a global overview of other financial centres and their activities with respect to sustainable finance. The

panelists agreed that global momentum has been accelerating. Financial centers are active on this front all over the world, with some well advanced in planning and execution and others just starting off. The private sector has played a significant role in driving this trend. Quality and availability of data, inadequate policy and regulatory frameworks, and lack of green products are some of the challenges to such initiatives. As had repeatedly been highlighted through the day, we need to create Canada's taxonomy to drive capital towards sustainable activities and create more green products.

The panelists noted the wide-spread awareness of the importance of accounting for climate-related risk among Canadian companies, driven by increased investor demand for responsible investing, increased evidence that ESG factors are material – where higher ESG ratings indicate better outcomes, lower cost of capital, higher profitability, and better risk management – and product innovation. Panelists argued for further

harnessing of this increased focus, achieved through more research from, and cooperation among, all market participants, including ESG consistent and comparable data, more and better disclosure by, and for, the financial community, and clear and standardized reporting frameworks.

The session ended with a discussion on the role of government in supporting Canada's transition to sustainable finance while keeping its regional differences in mind. We need smart regulation, a stable policy platform, certainty on carbon price, and consensus. The government has started to provide better information and risk analysis. The Bank of Canada is to begin including climate risk in its Financial System Review and other research. The government can also provide clearer financial regulatory oversight, such as more clarity on how climate risk and energy transformation will be assessed. Lastly, there is a role for Crown corporations in filling market gaps and sharing risks alongside the private sector.

BIOGRAPHIES OF PRESENTERS AND MODERATORS

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ANDY CHISHOLM

CORPORATE DIRECTOR, ROYAL BANK OF CANADA; MEMBER, EXPERT PANEL ON SUSTAINABLE FINANCE, GOVERNMENT OF CANADA

Andy is a member of the Board of Directors of Royal Bank of Canada. Prior to that he spent most of his career at Goldman Sachs & Co, which he joined in 1985 in New York. He served in a variety of progressively more senior leadership roles within the organization during his 30 year career including as Senior Strategy Officer of the firm globally from 2012 - 2014, as Head or co-Head of the Global Financial Institutions Group in both London and New York from 2002 - 2012, and as co- Chair of the Firmwide Commitments Committee (primarily overseeing the firm's equity underwriting activities) from 2011 - 2015.

He is currently a member of the Federal government's Expert Panel on Sustainable Finance.

He holds a B. Comm from Queens University (1981) and graduated with an MBA from the Ivey Business School at Western University in 1985. He is Chair of the Ivey Business School Advisory Board, is a Board Member of Evergreen, and sits on the Advisory Board of ArcTern Ventures. He lives in Toronto with his family.



KAREN CLARKE-WHISTLER PRINCIPAL, ESG GLOBAL ADVISORS

Karen served as Chief Environment Officer at TD Bank Group where she led efforts to establish an industry-leading sustainable finance platform that included a commitment to being carbon neutral, issuance of \$1.5B in green bonds and, and a commitment by TD to provide \$100B in financing the support of the transition to a low carbon economy. Prior to joining TD she had a distinguished career as a global environmental consultant. Karen sits on the boards of Enerplus Corporation, Evergreen Brickworks, and Plug N'Drive, and is an advisor to Canada's Ecofiscal Commission. She has twice been awarded the Clean 16 for her leadership in the financial sector.

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BENJAMIN EDDY

MANAGING DIRECTOR, FINANCIAL MARKETS ADVISORY,
BLACKROCK

Benjamin Eddy, Managing Director, is a leader of the Financial Markets Advisory group at BlackRock. Within the Americas, Benjamin chairs the Climate Risk Advisory and Regulatory Strategy practice areas.

Prior to joining BlackRock, Benjamin served as SVP and Head of the Regulatory Liaison Office at HSBC. In this role, he was responsible for remediation of regulatory issues and interaction within the bank's U.S. Holding Company. As part of his array of responsibilities, Benjamin advised the board of directors and executive management on strategic and tactical remediation efforts and responses to regulatory concerns.

From 2011 to 2013, Benjamin worked as Assistant Director of Liquidity Risk in AIG's Treasury & Capital Markets division where he led the development and deployment of a new firm-wide liquidity risk framework. As part of this role, Benjamin managed the Treasury Liquidity Risk Oversight team with a mandate to monitor liquidity risk at the Holding Company and subsidiaries. As Liquidity Risk Officer for AIG, Benjamin utilized scenarios such as the Pandemic of 1918 and Hurricane Sandy, amongst others, to assess liability stresses and risk of liquidity shortages for the operating entities, including Life and P&C companies.

Prior to AIG, Benjamin served as a Senior Examiner at a bulge bracket bank in bank supervision at the Federal Reserve Bank of New York. During that time, among other responsibilities, Benjamin was responsible for bank liquidity risk monitoring and data acquisition designed to monitor liquidity risk and counterparty funding for large and complex institutions. Before working at the Federal Reserve Bank of New York, Ben spent nearly ten years as an Audit Manager at PwC.

As leader of the Americas Climate Risk Advisory practice, Benjamin has participated in several industry forums on sustainable finance and climate-related disclosure, including the World Economic Forum's Sustainable Development Impact Summit. Benjamin holds a BBA from the Isenberg School of Management at the University of Massachusetts, Amherst.



BLAIR FELTMATE

HEAD OF THE INTACT CENTRE ON CLIMATE ADAPTION,
UNIVERSITY OF WATERLOO

Blair Feltmate is Head, Intact Centre on Climate Adaptation, University of Waterloo, an incubator for research and knowledge mobilization, with an aim to limit the negative impacts associated with climate change and extreme weather events in Canada. His previous positions include Vice President, Sustainable Development, Bank of Montreal; Director, Sustainable Development, OPG; and partner, Sustainable Investment Group/YMG Capital Management. Earlier he developed the sustainable development programs for such companies as Noranda, Falconbridge, Placer Dome, Barrick Gold, Consumers Gas and the American Chemistry Council in Washington. Blair has written textbooks on Sustainable Banking (University of Toronto Press), and Aquatic Ecology (CAB International).

He is Chair, Federal Government of Canada Expert Panel on Climate Adaptation and Resilience Results. He is also Chair, Electricity Transmission and Distribution Adaptation Standard, Canadian Standards Association; he serves on other flood mitigation standards committees for the CSA. He is former Chair of Pollution Probe, and he was Chair/Founder of the Sustainable Electricity Program, Canadian Electricity Association. Blair holds a Ph.D from the University of Toronto where he did his masters work after undergraduate work at Wilfrid Laurier University.

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MOIRA GILL

ASSOCIATED VICE PRESIDENT, GOVERNMENT AND INDUSTRY RELATIONS, TD INSURANCE

Responsible for leading Government and Industry Relations and Environment at TD Insurance, Moira's focus on strong, long term, stakeholder and government relationships has led to successful collaboration and resolution of issues across a range of political, regulatory and operational files. Her responsibilities extend over both the life and health and general insurance businesses.

Moira serves on the Board of Directors for CADRI (Canadian Association of Direct Relationship Insurers) is an Executive Committee Member of CAFII, (Canadian Association of Financial Institutions in Insurance) and chair of several taskforces and committees with CADRI, CAFII, IBC (Insurance Bureau of Canada) and CLHIA (Canadian Life and Health Association). Moira also leads TDI's sustainability and climate change action strategy and participates in UN Environment Insurance programs/committee focused on climate risk disclosure, Canadian Government/industry working groups on flood risk, and advocates directly with Canadian stakeholders on public policy related to climate change risk adaptation and resilience.

Prior to joining TD Insurance, Moira was a management consultant in a regulatory compliance practice and held positions at the Financial Services Commission of Ontario (Joint Forum of Financial Market Regulators) and the Department of Finance Canada (Financial Sector Division). A graduate in International Relations from the University of Toronto, Moira also has an MBA from the Rothman School of Management. Moira is an active supporter of the United Way, the Ride for Heart (Atlantic and Ontario), the Ride to Conquer Cancer, and local environmental initiatives.



GLEN HODGSON

FELLOW-IN-RESIDENCE, C.D. HOWE INSTITUTE

Glen Hodgson has 36 years of experience in global and Canadian macro-economics, international trade analysis and finance, fiscal and tax policy, and other "big picture" topics.

Prior to joining the C.D. Howe as Fellow-in-Residence, Glen's career spanned the International Monetary Fund (IMF) in Washington D.C., the federal Department of Finance, Export Development Canada (EDC), and the Conference Board of Canada. He has travelled the world and Canada as an economic analyst and public speaker, financial negotiator, and advisor to governments, businesses and international organizations.

Topics of expertise and interest include: global, U.S., Canadian and provincial economic performance; globalization, trade and disruption; managing catastrophic risk; the emerging low-carbon economy; fiscal and tax policy; and the business economics of sports.

Glen has co-authored two books and over 375 reports, briefings and articles, with a regular commentary in the Globe and Mail. He has delivered many presentations to audiences of all types and sizes, and done numerous media interviews via print, TV, radio and social media.

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PAUL KOVACS

EXECUTIVE DIRECTOR, INSTITUTE FOR CATASTROPHIC LOSS REDUCTION

Paul Kovacs is founder and Executive Director of the Institute for Catastrophic Loss Reduction at Western University. ICLR has been designated by the International Council for Science as an international centre of excellence for integrated research on disaster risk.

Since 1996 Paul has been a contributing author to the Intergovernmental Panel on Climate Change, the world's leading forum for the study of climate issues. The Panel won the 2007 Nobel Peace Prize "for their efforts to build up and disseminate greater knowledge about man-made climate change". He is Canada's leading authority on insurance and climate extremes, and has been a contributing author to numerous international and Canadian reports on reducing the risk of loss from earthquakes, flood and severe wind to achieve disaster resilience.

For more than thirty-five years Paul has been a popular commentator on insurance, disaster safety and economic policy. He has written more than 200 publications and articles and he is a passionate champion for insurance, disaster resilience and adaptation to climate extremes.

Paul has worked in private industry, the public sector and academia. He is Co-Chair of the Infrastructure and Buildings Working Group of Canada's Adaptation Platform. Paul is a member of the Board for the Global Alliance of Disaster Research Institutes. He is a proud husband and father, with a growing collection of bow ties.



JEREMY KRONICK

ASSOCIATE DIRECTOR, RESEARCH, C.D. HOWE INSTITUTE

Jeremy is Associate Director, Research at the C.D. Howe Institute, where he is in charge of the financial services and monetary policy research programs. He has written on a range of topics including the link between demographics and monetary policy, how blockchain technology will impact the economy, and the importance of the financial services sector in trade negotiations.

Prior to joining the C.D. Howe Institute in early 2015, Jeremy worked in the international tax department at Deloitte & Touche LLP, in both the financial stability and international departments of the Bank of Canada, and as a lecturer at Brandeis University where he taught both macroeconomics and microeconomics while completing his PhD studies.

He holds an Undergraduate Degree in Economics and Mathematics from Queen's University, a Master's in Financial Economics from the University of Toronto, and a PhD in International Economics and Finance from Brandeis University. His PhD research areas focused on the international transmission of monetary policy shocks from the developed to the developing world, as well as the Canadian housing market and the effects of macroprudential regulation.

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HEATHER LANG

EXECUTIVE DIRECTOR, SUSTAINABLE FINANCE SOLUTIONS,
SUSTAINALYTICS

Heather Lang is heading up the Sustainable Finance Solutions business unit at Sustainalytics, focussing on green bonds and sustainable lending. She collaborates with leading global underwriters, lending institutions and issuers to allocate capital towards sustainability performance through innovative financing instruments.

Having worked at Sustainalytics since 2004, Heather has held director positions on the ESG research, institutional relations and client advisory teams across multiple regions, based out of both Canada and the Netherlands. She represents Sustainalytics at conferences and speaks regularly on a variety of ESG and sustainable finance topics.

Prior to joining the company, Heather worked as a corporate social responsibility consultant and a human rights worker. She has an undergraduate degree from McGill University and a master's degree from Carleton University.



TIFF MACKLEM

DEAN, ROTMAN SCHOOL OF MANAGEMENT, UNIVERSITY OF
TORONTO; MEMBER, EXPERT PANEL ON SUSTAINABLE FINANCE,
GOVERNMENT OF CANADA

Tiff Macklem became Dean of the Rotman School in 2014.

From 2010-2014, Tiff served as senior deputy governor of the Bank of Canada, sharing responsibility with the governor and four deputy governors for monetary policy and for the Bank's role in promoting financial stability. He was also the Bank's chief operating officer and a member of its board of directors, overseeing strategic planning and coordinating the Bank's operations. Macklem has also played a leading role in efforts to ensure stable financial systems worldwide.

Prior to his appointment at the Bank, Tiff served as associate deputy minister of the federal Department of Finance and Canada's finance deputy at the G7 and G20, the IMF, and the Financial Stability Board. He also served as chair of the Standing Committee on Standards Implementation of the Financial Stability Board. In that role, he worked to establish an international system of peer review to promote and assess the implementation of new financial standards across the 24 most financially important countries in the world.

Tiff is a well-known expert in monetary and financial systems and has contributed articles to academic journals, as well as providing chapters and commentaries on monetary and financial sector policy and international economics in books and conference proceedings.

Since coming to Rotman, Tiff has also been appointed the chair of the board of the Global Risk Institute, chair of Ontario's Panel on Economic Growth and Prosperity, a director of Scotiabank, and a member of the Asian Business Leaders Advisory Board.

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CHERYL MCGILLIVRAY

MANAGER, CORPORATE FINANCE, ALBERTA SECURITIES COMMISSION

Cheryl joined the Alberta Securities Commission in 2006. As Manager, Corporate Finance, Cheryl leads a team of securities analysts who conduct comprehensive reviews of continuous disclosure filings and prospectuses for Alberta reporting issuers to ensure high-quality information is provided to investors. Her team also reviews relief applications and advances policy work and other CSA initiatives.

In addition, Cheryl is a senior-level contributor to several Canadian Securities Administrators (CSA) projects. This includes co-leading both the climate change-related risk project and certain reducing regulatory burden projects, as well as participating as a committee member of the women on boards project. She is also the CSA representative on the Securities Regulation Advisory Group to the Auditing and Assurance Standards Board.

Prior to joining the ASC, Cheryl held senior financial management roles for more than eighteen years in industry, including time with a large international accounting and audit firm. Cheryl holds a Bachelor of Commerce from the University of Calgary and is a Chartered Accountant.



JENNIFER REYNOLDS

PRESIDENT AND CHIEF EXECUTIVE OFFICER, TORONTO FINANCE INTERNATIONAL

Jennifer Reynolds is the President & CEO of Toronto Finance International (TFI), a public-private partnership whose mission is to promote and develop Toronto's financial services sector, and to establish its prominence as a leading global financial centre.

Jennifer's 20-year career in the financial services industry has included senior roles in investment banking, venture capital, and global risk management. Prior to joining TFI, Jennifer was the President & CEO of Women in Capital Markets (WCM), Canada's largest industry association and advocacy group for women in the financial sector.

Jennifer is a Director on the Board of Citibank Canada, Director on the Board of the Canada Development Investment Corporation ("CDEV"), Director on the Board of Women's College Hospital Foundation, and Director on the Board of Tourism Toronto. In 2015 and 2017, she was named a Women's Executive Network (WXN) Canada's Most Powerful Women: Top 100 Award Winner.

Jennifer is a graduate of the Harvard Business School Women's Leadership program, and she received her MBA from McGill University, as well as a Bachelor of Arts with a double major in Economics and Political Science from McGill University. Jennifer also holds the Institute of Corporate Directors Designation, ICD.D.

BIOGRAPHIES OF PRESENTERS AND MODERATORS

2019 FINANCIAL SERVICES CONFERENCE: SUSTAINABLE GREEN FINANCE

Wednesday, October 30, 2019, 8:30 am - 4:15 pm

C.D. Howe Institute, 67 Yonge Street, Suite 300, Toronto



KURT REIMAN

CHIEF INVESTMENT STRATEGIST, BLACKROCK CANADA

Kurt Reiman, Managing Director, is BlackRock's Chief Investment Strategist for Canada and is a member of the BlackRock Investment Institute (BII). Kurt is responsible for creating value added Canadian financial market and investment insights and communicating them, alongside our global views, to our clients as well as to investors and our client-facing professionals throughout Canada. Prior to his current role, Kurt was a Global Investment Strategist with responsibility for presenting BlackRock's multi-asset investment views to clients throughout North America, primarily in the U.S.

Kurt joined BlackRock in 2013 with over 15 years of experience in investment research and strategy. Prior to joining BlackRock, he was the Head of Thematic Research at UBS Wealth Management in New York and Zurich. He also held various analyst positions at Reuters and the G7 Group.

Kurt appears regularly in Canadian financial news media, including BNN, Bloomberg, the Financial Post and the Globe and Mail.

Kurt earned a BS degree in business and economics from the State University of New York College at Plattsburgh and his MS degree in international relations with a concentration in international economics from the Johns Hopkins University School of Advanced International Studies in Washington, DC. Kurt also spent a year at McGill University in the finance department and focused on Canadian studies during his undergraduate and graduate degree programs.



WILLIAM B. P. ROBSON

PRESIDENT AND CHIEF EXECUTIVE OFFICER, C.D. HOWE INSTITUTE

Bill Robson took office as President and CEO of the C.D. Howe Institute in July 2006, after serving as the Institute's Senior Vice President since 2003 and Director of Research since 2000. He has written more than 230 monographs, articles, chapters and books on such subjects as government budgets, pensions, healthcare financing, inflation and currency issues. His work has won awards from the Policy Research Secretariat, the Canadian Economics Association, and the Donner Canadian Foundation. He is a Senior Fellow at Massey College and holds an ICD.D designation from the Institute of Corporate Directors. He is a member of the Panel of Senior Advisors to the Auditor General of Ontario and the Ifo World Economic Survey expert group, and a regular commentator on BNN/Bloomberg. Bill taught public finance and public policy at the University of Toronto from 2000 to 2003, and currently teaches a Master's level course in public finance at the University of Toronto's Munk School of Global Affairs and Public Policy.

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MANJU SEAL

HEAD OF SUSTAINABLE FINANCE ADVISORY, BMO CAPITAL MARKETS

Manju Seal is the head of Sustainable Finance Advisory at BMO Capital Markets and spearheads strategy and thought leadership around sustainable finance and investment considerations as well as ESG matters. She leads efforts in sustainable bond underwriting, lending and financing activities and product development while implementing a client-focused strategy. Her expertise in Green/Sustainable Bonds makes her privy to engage with issuers and investors on the client side and offer them thought-provoking insights on sustainable investing. Manju has over 20 years of professional experience ranging in institutional asset management for about a decade, investment banking, nonprofit and board leadership. She has spent over 13 years in the financial industry with an emphasis in client advisory, structured finance, risk management and quantitative methods. Her banking career started at Goldman Sachs where she worked in the Structured Finance Group, CMBS Trading Desk, and finally co-led GSAM's Risk & Performance Analytics Group for Fixed Income.

In the recent years, Manju has provided transformative leadership, financial management, and corporate governance for organizations focused on social/environmental impact in areas including poverty alleviation and domestic violence. A polymath, she has master's degrees in business administration, mathematics and ethnomusicology. She was awarded American Marshall Memorial Fellowship (gmfus.org), 2008. Seal's unique combination of buy-side and sell-side experience along with demonstrated leadership in ESG brings distinctive and valuable perspectives.



SARAH THOMPSON

VICE PRESIDENT, SUSTAINABLE FINANCE, RBC CAPITAL MARKETS

Sarah Thompson is a business and sustainability professional with over 15 years of experience in the Information Technology and Financial Services industries.

She joined RBC in 2011 as the bank's first Green IT Manager. In 2013, she moved to RBC's Environmental Affairs team to oversee enterprise-wide operational footprint reduction initiatives. More recently, she worked with RBC's business units to support the growth and development of environmentally sustainable and socially responsible financial products and services, with a focus on green bonds.

In 2019, Sarah joined the newly created RBC Capital Markets Sustainable Finance Group as Vice President, Sustainable Finance. The group leads the integration of Environmental, Social and Governance (ESG) factors into Capital Markets' core businesses globally by providing advice and developing solutions across all areas of sustainable finance for both corporate and institutional clients.

Sarah is based in Toronto, Canada. She holds a Bachelor of Commerce from McGill University and an MBA specializing in Sustainability from York University's Schulich School of Business.

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PETER VAN DIJK

NATIONAL TAX POLICY LEADER, PWC CANADA; SENIOR FELLOW,
C. D. HOWE INSTITUTE

Prior to joining PwC, Peter was Senior Vice President, Tax, at TD Bank Group and led the tax function of TD Bank Group. Previous positions held by Peter include Senior Vice President, Tax, at Sun Life Financial and International Tax Partner at EY in Toronto.

After graduating from law school in the Netherlands, Peter worked as an international tax consultant – gradually progressing to the partner level – for over 15 years in the Netherlands, Luxembourg, the US and Canada for both law and accounting firms. His main technical area of expertise is international corporate tax planning, including cross border financing structures, leasing transactions, holding structures, mergers and acquisitions, intellectual property structures and tax effective supply chain management. Following his career as an international tax consultant, Peter spent over 12 years leading large tax functions for two leading Canadian financial institutions, TD Bank Group and Sun Life Financial.

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