



In Conversation with

Mr. Paul Beaudry

Deputy Governor, Bank of Canada

(March, 2021)

1. When and why did your institution join the NGFS?

Climate change is relevant for the Bank of Canada because it has implications for our responsibilities from a macroeconomic and financial stability perspective. Although we are not responsible for environmental policy, our mandate is to promote the economic and financial welfare of Canada. That includes helping the economy get through whatever difficulties it may face and making sure the Canadian financial system is working properly. To fulfill our mandate, we need to understand the major forces on our economy. Climate change is having profound impacts on the entire economy in some fashion or another, and so it is important that we understand its implications for economic growth and inflation. Central banks are in a unique position to improve society's understanding of the economic and financial-system impacts of climate change, and the policies to address it. Our work related to climate change is aimed at helping investors, regulators and everyday Canadians make informed decisions.

Of course, as a resource-rich country, the transition to a low-carbon economy will have a big impact on Canada. Resources play a vital role in our economy, and the natural environment is a defining feature of our economic prosperity. We need to better understand and prepare for how climate change can cause a re-evaluation of the value of these resources.

A shift to a low-carbon world could slow our economic growth and present financial stability risks. New technologies, like those that capture and store carbon, could help ease the transition. We also know many people may be impacted by this shift to a lower carbon world: their job may be affected directly. That is why it is important for policymakers to understand these forces and, when possible, cushion the impact.

Climate change is a global problem and we want to leverage, and contribute to, global solutions. We have been involved for some time in international efforts to analyze and understand the impact of

climate change. Joining the NGFS in 2019 was an important part of our broader efforts to understand and engage on climate-related risks.

We recently increased our commitment to the NGFS by joining the Network's Steering Committee in November 2020¹, which we are pleased about because it enables us to contribute the perspective of a resource-rich and heavy-industry-intensive economy to the Network's efforts to understand climate change transition risks.

This perspective, which is relevant for many countries, will allow us to make an important contribution to the NGFS research and analysis effort. And we know that collaborating with other central banks would be valuable to advancing our own expertise.

2. Can you share with us the key elements of the Bank of Canada's climate strategy?

In 2019, we identified climate change as a vulnerability to the financial system and economic outlook in our Financial System Review, a pulse check on financial stability in Canada. We highlight our climate-change work on our Financial System Hub, a one-stop shop on our website where you can find our latest research on financial stability topics².

We also developed an ambitious multi-year research plan focused on evaluating climate-related risks to the macroeconomy and financial system, which is guiding our work. Our plan outlines some of the questions we are tackling, such as: what are the impacts of climate-change transition risks—pathways to emissions reductions driven by changes in policy, technology, and consumer and investor preferences—on the financial system?

As part of our research plan, we have developed a scenario-based approach to disclosures of climate-related risks and integrated this analysis into our assessment of the risks and vulnerabilities to the financial system. This work has been a key part of the Bank's contribution to the NGFS.

Our scenario work was put into action in November 2020, when we launched a pilot project with the Office of the Superintendent of Financial Institutions—Canada's financial-sector regulator—and a small group of major private companies from the banking and insurance sectors³. The project will use climate-change scenarios to help quantify the risks to the financial system related to a transition to a low-carbon economy. Participating institutions will use the scenarios to explore how their businesses and holdings may be exposed to climate-related risks. We will share details of the project with a broad range of stakeholders throughout 2021 and will publish a full report by year's end.

Finally, we have made a lot of progress over the years when it comes to greening our day-to-day operations at the Bank, and we are continually looking for ways to improve further. For example, we made our renovated Ottawa headquarters more energy-efficient, reducing our electricity use by 50 percent. That is the equivalent of removing more than 1,300 homes from the electricity grid. Efforts like that helped us achieve Leadership in Energy and Environmental Design (LEED) Gold certification for our head office. We have also diverted almost half of our waste away from landfills by implementing recycling and compost programs, and limiting single-use plastics in our cafeteria.

¹ <https://www.ngfs.net/en/communique-de-presse/three-new-members-join-ngfs-steering-committee>

² <https://www.bankofcanada.ca/core-functions/financial-system/financial-system-hub/>

³ <https://www.bankofcanada.ca/2020/11/bank-canada-osfi-launch-pilot-project-climate-risk-scenarios/>

Speaking of recycling, manufacturers use the polymer from old bank notes to create things like benches, trash containers and deck boards. In 2019 alone, we recycled 53,590 kilograms of bank notes.

My colleagues on the Bank's Governing Council and I have spoken publicly about the importance of climate-related financial disclosure. Central banks need to lead by example, and I am proud of our efforts defining our path for disclosing our carbon footprint. In 2020, we started building on our high-level Greening the Bank of Canada strategy published in 2019. We have also started implementing a multi-year initiative focused on measuring and reducing our carbon footprint and waste. It includes a road map for transitioning to 100 percent clean electricity by 2022, reducing buildings-related greenhouse gas emissions by 80 percent by 2030 (compared with 2018 levels) and achieving net zero emissions by 2050. These targets are aligned with those of the Government of Canada and support the objectives of the United Nations' Paris Agreement.

We are continuously learning from the carbon disclosure plans of others, reaching out to other central banks and private financial institutions to discuss best practices. The NGFS is a fantastic forum for cooperation.

3. To which extent did the Bank of Canada leverage the work of the NGFS in its own domestic journey? Any concrete examples?

Of course, the NGFS is supporting sustainable finance by encouraging the development of de facto global standards for climate-related disclosure. By being in the room during these discussions, we are able to bring the perspective of a diversified and resource-rich economy.

A key part of our contribution to the NGFS is our work to develop and promote a scenario-based approach to disclosures of climate-related risks. Together with other members of the Network, we have been working to make the NGFS climate scenarios more robust and informative for central banks, supervisors and the financial institutions⁴. We are doing this by improving macro-modelling, providing more granular outputs for individual countries, and offering training and support on using the scenarios. Using the publicly available resources developed by the NGFS⁵, companies should be able to begin to describe the resilience of their organizations and strategies based on different climate scenarios.

The joint pilot project I mentioned earlier leverages these scenarios in pursuit of three main goals. The first goal is to build climate scenario analysis knowledge and support the Canadian financial sector in enhancing the disclosure of climate-related risks. Next, we want to increase understanding of the financial sector's potential exposure to risks associated with a transition to a low-carbon economy. Finally, the project aims to improve authorities' understanding of financial institutions' governance and risk-management practices around climate-related risks and opportunities.

While the current project is focused on transition risks, future Bank analysis will consider physical risks associated with more extreme and more frequent weather events. Our work will also examine the interaction between the two types of risk.

⁴ <https://www.bankofcanada.ca/2020/06/bank-canada-contributes-new-publications-network-greening-financial-system/>

⁵ <https://www.ngfs.net/en/publications/ngfs-climate-scenarios>

One of our other goals is to ensure that such analysis is useful for Canada. Aligned with the efforts of the NGFS on developing climate scenarios, we are working to develop ones that are relevant to Canada for Canadian financial institutions to use.

4. *One last word?*

Climate change is an issue that requires urgency and collective action. We all play a role in supporting a smooth transition to a greener, smarter economy. Governments, businesses, households and the financial sector all have responsibilities when it comes to climate transition risk.

As I mentioned off the top, the Bank has a responsibility to assess risks to the financial system, including those presented by climate change. But risk management is a shared responsibility.

Sound risk management starts with sound measurement. Companies must be able to consistently measure and disclose climate-related risks to investors. Financial institutions must also understand and be transparent about their exposures. Understanding these risks is a long journey and one we are delighted to share with the partner institutions that make up the NGFS.

Furthermore, we need better and more practical information that combines climate-data analysis with economic and financial information. Not only will better data improve our ability to assess, price and manage climate risks, it will make the financial system and economy more resilient. Finally, it will strengthen the ability of the financial system to fulfill its most critical role, which is to allocate savings to its most productive uses. The appropriate pricing of climate risks will help Canadians take advantage of sustainable investment opportunities.

As we are demonstrating through our pilot project, scenario analysis for assessing economic risks is paramount for climate change, where the evolution of key variables is uncertain. Multi scenario-based analysis examines different plausible future states of the world and forecasts numerous situations that could happen, rather than predicting what will happen. As I said earlier, one of our ultimate goals is to develop climate stress-testing frameworks to assess the resilience of the financial system to hypothetical extreme but plausible scenarios. This requires a high degree of collaboration. To address data gaps, central banks and regulatory authorities must co-operate and combine standard economic and financial data with climate databases.

Finally, I will add one thought on how the pandemic ties into our work in this area. COVID-19 has been a test-drive for the climate change shock we have been aware of for a long time. As an energy producer and exporter, Canada will feel the adjustments associated with moving toward a lower-carbon economy. The global response to COVID-19 is resulting in structural changes, and we will see similar changes as we pivot to a greener economy.

We can use these lessons to further align our policy responses and other initiatives with environmental and social priorities. Central banks have a responsibility to assess the economic risks of climate change, as global economies recover from this sudden economic shock.