

Sustainable finance for a safe climate

Perspectives on mobilizing capital for a swift, resilient recovery

Cedric Smith and Morrigan Simpson-Marran March 2021



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About the Pembina Institute

The Pembina Institute is a national non-partisan think tank that advocates for strong, effective policies to support Canada's clean energy transition. We employ multi-faceted and highly collaborative approaches to change. Producing credible, evidence-based research and analysis, we consult directly with organizations to design and implement clean energy solutions, and convene diverse sets of stakeholders to identify and move toward common solutions.



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Introduction

As governments attend to the immediate needs of households and businesses in the face of the COVID-19 pandemic, they must also chart a long-term financial plan for economic recovery. In this context, you might think the pandemic reduced Canadians' appetite for climate action. It didn't. Canada, the U.S. and Europe are among those jurisdictions choosing to design economic plans that can deliver multiple benefits, including jobs, clean energy, and resilience in the face of future disruption. To maximize impact, Ottawa must be able to leverage the capacity of the private sector to invest in climate solutions.

Since the onset of the COVID pandemic, Ottawa has announced billions in spending aimed at creating one million jobs while reducing greenhouse gas emissions. Most significantly in December 2020, the federal government introduced an updated climate plan (entitled *A Healthy Environment and a Healthy Economy*) designed to achieve the Paris Agreement goal of net-zero emissions by 2050.¹ The importance of mobilizing private sector capital in the transition to a low-carbon economy is reflected in a \$7.3 million investment to establish a Sustainable Finance Action Council, previously announced in the Fall Economic Statement.² In addition, the government stated it will be issuing its first ever green bond to help finance green initiatives.

The Institute for Sustainable Finance (ISF) at Queen's University estimates a capital plan for the next 10 years that would keep Canada on track to meet our commitment under the Paris Agreement will require an annual investment of at least \$12.8 billion per year.³ While that may sound like a lot, it represents only 0.6% of Canada's GDP in 2018, and less than 10% of annual capital expenditures of firms listed on the Toronto Stock Exchange.⁴ ISF believes it is definitely doable, albeit not by government alone.

¹ Environment and Climate Change Canada, *A Healthy Environment and a Healthy Economy: Canada's strengthened climate plan to create jobs and support people, communities and the planet* (2020), 12, 15, 21, 36-37, 40. https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climateplan/healthy environment healthy economy plan.pdf

² A Healthy Environment and a Healthy Economy, 51.

³ Simon Martin and Ryan Riordan, *Capital Mobilization Plan for a Canadian Low-Carbon Economy* (Institute for Sustainable Finance, 2020), 7. https://smith.queensu.ca/centres/isf/pdfs/ISF-CapitalMobilizationPlan.pdf

⁴ Capital Mobilization Plan for a Canadian Low-Carbon Economy, 7.

ISF also estimates at least half of the capital required could be supplied by the private sector. Canada had some \$3.6 trillion of investment assets under management as of June 30, 2019, according to Benefits Canada. A quarter of pension assets were held in bonds and 12% in Canadian equities.⁵

Under the right conditions, some of this capital can be mobilized to finance the clean energy projects and emissions reduction technologies that will be required for Canada to meet its climate commitments while making our economy more resilient, equitable and competitive in the future. But what should those conditions look like? And how will Canadian investors — whether large institutional asset managers like pension funds, or individual Canadians saving for their own retirement — react to them?

To help answer these questions the Pembina Institute partnered with GlobeScan in the summer of 2020 to put these and other related questions to ordinary Canadians as well as representatives from companies, financial institutions, and the non-profit sector.

This report summarizes what we learned from this research, which includes:

- 1. Canadian investors have a growing interest in ensuring that companies have policies in place to consider environmental, social and governance (ESG) issues in their strategy and operations.
- 2. Canadian investors feel stymied by a financial system that is still working out how to provide them with the information required to determine if their investments advance climate objectives.
- 3. Six in 10 Canadians want to build back the economy in ways that address climate change and inequality, and eight in 10 want to address climate change with the same urgency as COVID-19.

As new vaccines for COVID roll-out in 2021, government efforts to rebuild the economy will also accelerate. This research supports the argument that, with the right architecture in place for sustainable finance, Canadian capital markets can be fully engaged in the process of building back better.

Canada's new net-zero emissions accountability legislation sets out to establish fiveyear targets for reducing greenhouse gas emissions. As the federal government engages with the provinces on new 2030 targets for emissions reductions, the other inescapable conclusion from this research is that the time to act on financing strategy to enable Canada to reach those targets is now.

⁵ Benefits Canada, *2019 Top 40 Money Managers Report* (2019), 2-3. https://www.tdaminstitutional.com/tmi/pdfs/2019Top40MoneyManagers_November.pdf

Sustainable finance for a safe climate Key findings and takeaways



Key findings: Individual investors

How well disposed to the principles of responsible investing are Canadian investors? And what are the roadblocks to pursuing that interest?

GlobeScan surveyed 1,000 Canadians on this issue in its June 2020 annual public opinion survey.⁶ Notwithstanding the fact that this research was conducted during the initial shutdown phase of the COVID-19 pandemic, the results confirm that Canadian investors have a growing interest in ensuring that the companies in which they are investing have policies in place to consider environmental, social and governance (ESG) issues in their strategy and operations.

However, at the same time, it confirmed that many feel stymied by a financial system that isn't providing the information required to determine if their investments advance climate objectives.

Progress is being made to clear away those roadblocks, but at a pace that arguably lags behind both interest and need.

Climate change still a strong interest for investors

Whether they are individual savers or large institutional money managers, investors are paying more attention to environmental, social and governance (ESG) issues in their decision-making. GlobeScan's June 2020 survey found an ongoing interest in longerterm issues of climate change and social equality. And notwithstanding the pandemic, climate change remained on the screen for many Canadians.

Some 79% of respondents want to see society respond to climate change "with the same urgency" as the response to the COVID-19 pandemic.

Even as Canadians were being thrown out of work and shuttering their small businesses, 60% of those polled said they want to see a recovery that restructures the economy to deal better with climate change and social equality.

⁶ GlobeScan's Radar Research Program, which is built around a 27,000-person, 27-country survey on issues and trends affecting business and society. GlobeScan, "Study Finds People Want to Make Healthy and Sustainable Living Choices but Do Not Know Where to Start." https://globescan.com/people-want-healthysustainable-living-choices-2020/

Individual investors have started channelling their money into Canadian ESG funds that include some screening for environmental, social and government issues. According to TD Securities, net inflows into Canadian ESG exchange-traded funds (ETFs) reached \$740 million as of June, more than five times the amount in all of 2019.⁷ In the GlobeScan survey, a smaller subset of 300 respondents who own equities either directly or indirectly were asked about ESG investing.

Some 76% agreed investments in environmentally friendly technologies like renewable energy offer very good financial returns.

Meanwhile, 59% said they believe that companies that have a purpose of making a positive difference in society are more profitable than others.

Indigenous access to sustainable finance

While diversity and inclusion is a core tenant in ESG standards, access to private capital can limit financing of clean energy and other development projects in Northern and remote Indigenous communities in Canada. A January 2021 discussion paper by the First Nations Major Projects Coalition⁸ looks at the need to align ESG standards with the rights and interests of Indigenous peoples. Another Indigenous-led organization, Indigenous Clean Energy, is advancing Indigenous development and employment in community-based clean energy projects in Canada.⁹

Information remains a barrier to individual investors

Half (50%) of Canadian shareholders surveyed feel they need more information to be able to effectively make climate-friendly investments.

Eighty per cent of Canadians said they want to learn more about how companies are trying to be more socially and environmentally responsible.

⁷ Cited in Divya Balji, "Investors in Canada Turn to Sustainable Investing Amid Protests," *Bloomberg*, June 19, 2020. https://www.bloomberg.com/news/articles/2020-06-19/social-upheaval-is-putting-the-s-in-esg-for-canadian-investors

⁸ Mark Podlasly, Max Lindley-Peart and Suzanne von der Porten, *Indigenous Sustainable Investment: Discussing Opportunities in ESG*, prepared for The First Nations Major Project Coalition (2021) https://static1.squarespace.com/static/5fb6c54cff80bc6dfe29ad2c/t/6009dc280d5f7c464a330584/161125892 9977/FNMPC_ESG_Primer_2021_Final.pdf

⁹ Indigenous Clean Energy. https://indigenouscleanenergy.com/

The information that would benefit individual investors in making sustainable investment decisions is likely similar to the informational needs of institutional investors, which are discussed below.

Key findings: Institutional investors

At the same time, institutional money managers are increasingly demanding greater disclosure of climate-related risks and opportunities in a manner that allows them to use the data in their investment decisions. Finance industry experts interviewed by the Pembina Institute for this report said the attention to ESG concerns has moved from niche organizations such as the pension funds of religious orders and universities to mainstream asset owners and managers.

Asset managers such as BlackRock, JPMorgan Chase & Co., Quebec's Caisse de Depot et Placement, and Canada Pension Plan Investment Board have adopted climate-related and other ESG investment policies. They range from aggressive targets to reduce the carbon intensity of their portfolios to more modest support for better disclosure regimes and corporate climate-change strategies.

At present, however, many of the financial experts interviewed for this research felt that these efforts are restrained by an out-of-date financial industry architecture in which key concepts such as "sustainability" are inconsistently defined, and corporate disclosure is a patchwork of different approaches.

The need to define "sustainable" finance

In 2018 the government of Canada created an expert advisory panel on sustainable finance chaired by Tiff Macklem, who has since become Governor of the Bank of Canada. The panel defined sustainable finance as "Capital flows (as reflected in lending and investment), risk management activities (such as insurance and risk assessment), and financial processes (including disclosures, valuations, 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 conditions for sustainable economic growth are to meet the needs of the present without compromising the future."¹⁰ In its June 2019 report, the panel provided a series of recommendations aimed

¹⁰ Government of Canada, *Final Report of the Expert Panel on Sustainable Finance* (2019), 2. https://www.canada.ca/en/environment-climate-change/services/climate-change/expert-panel-sustainable-finance.html

at making sustainable finance practices and principles "business-as-usual in financial services, and embedded in everyday business decisions, products and services."¹¹

One of the panel's main conclusions — endorsed by business and NGO representatives interviewed by Pembina Institute for this report — is the need for a broader understanding and acceptance of the principles of sustainable investment. An embrace of sustainability principles would help unlock financial benefits for a qualifying company or project, including access to the growing market in green bonds and ESG equity funds, as well as tax breaks from government.

Establishing a classification — known in financial circles as a "taxonomy" — for investing in projects or technologies that create verifiable climate outcomes is key. A taxonomy of this nature is an essential tool to match environmentally conscious investors with companies and entrepreneurs pursuing climate-friendly strategies and technologies.

One of the Expert Panel's recommendations was that, in addition to a sustainable or "green" taxonomy for investment, Canada consider establishing a "transition taxonomy."¹² In response to this recommendation the CSA Group (formerly the Canadian Standards Association) has been working on a definition of "transition financing."¹³

Why the distinction? While "green financing" applies to investment in non-emitting technologies like renewable energy or zero-emission vehicles, "transition financing" would help fund emissions reduction efforts in large, high-emitting industries (like fertilizer, chemicals, trucking, oil and gas, cement, and steel) that are going to be harder to decarbonize.

This is where things get complicated. As the Pembina Institute interview results indicate, there are different perspectives right now in Canada on financial incentives that could accrue to GHG-intensive industries that invest in emission reduction technologies. Should housing retrofits, green buildings and renewable electricity be the only type of investments that qualify for sustainable finance? If decarbonization of Canada's more energy-intensive natural resource sector qualifies, what are the

¹¹ Final Report of the Expert Panel on Sustainable Finance, iv.

¹² Final Report of the Expert Panel on Sustainable Finance, 28.

¹³ CSA Group, "Defining Transition Finance in Canada," news release, February 21, 2020. https://www.csagroup.org/news/defining-transition-finance-in-canada/

conditions that would need to be applied to ensure outcomes align with a goal of netzero emissions?

Investing in clean energy during the pandemic

Even before the COVID-19 pandemic, the trend toward increased investment in funds that screen for environmental, social and governance (ESG) factors was evident. In a survey of 800 institutional investors by RBC Capital Markets, 84% said ESG-integrated funds perform as well or better than funds that do not screen for ESG factors.

Meanwhile, since the pandemic, some companies in the clean energy sector have seen dramatic increases in share prices. NextEra Energy, the Florida-based renewable power giant, briefly eclipsed ExxonMobil Corp. in October 2020 as the world's largest publicly traded energy company. The most notable example, however, is Tesla. Trading on the NASDAQ exchange, the electric-vehicle and battery maker had a share price of US\$839.81 on Feb. 1, 2021, up about 900% from the beginning of the year. Its market capitalization — which measures the value of its shareholder equity — stood at nearly US\$800 billion, more than two times the combined market value of General Motors, Ford Motor Company and Toyota Motor Corp. Chinese EV maker NIO Inc. has increased fifteenfold since January 2020.

While correlation does not imply causation, this does suggest that, notwithstanding broader economic disruption and uncertainty, mainstream investors are now making key bets on the energy transition pathways that are going to be able to meet growing consumer interest and demand for products and services that reduce GHG emissions.

The need to disclose climate-related risk

Another key element of a robust framework for sustainable finance identified in the Pembina Institute interviews is corporate reporting on the climate-related risks and opportunities faced by companies today.

Assessing risk is one of the core actions that investors undertake before making a financial decision. And typically, higher-risk ventures must promise higher rewards to attract investment. As a result, perceptions of risk play a significant role in the availability and cost of capital for industrial sectors, which in turn drives their potential for growth.

In 2016, the International Financial Stability Board, which represents central banks from the Group of 20 nations, commissioned the Task Force on Climate-related

Financial Disclosures (TCFD), established by then-Bank of England Governor (and former Bank of Canada Governor) Mark Carney.¹⁴

The TCFD released a framework for reporting on climate-related risk and opportunity that included standards for governance, strategy, risk management, metrics and GHG targets, as well as scenario planning to assess longer-term trends.¹⁵

The assumption was that such disclosures, if done comprehensively and in a manner that allows benchmarking within and among industries, would facilitate the flow of private capital into climate-related investments. However, financial industry experts told Pembina Institute that inadequate and inconsistent reporting in Canada remains a barrier to mobilizing capital that would contribute to a sustainable recovery from the pandemic.

One specific challenge identified is the balkanized nature of Canadian capital markets. While the federal government regulates key parts of the financial industry such as national banks and insurance companies, provincial securities commissions set the rules for disclosures to investors from publicly listed corporations.

The Canadian Securities Administrators, an umbrella organization of provincial regulators, has encouraged provinces to adopt principles of the TCFD.¹⁶ However, the Ontario Securities Commission — which oversees the Toronto Stock Exchange (the ninth largest in the world), and is accountable to the Ontario legislature — has not acted on that recommendation. The Canadian Securities Administrators has noted companies are required to report climate-related risks that would materially impact their operations.

In its 2019 report, Canada's Expert Panel on Sustainable Finance recommended the federal government support implementation of the TCFD recommendations in order to make the disclosure of climate risks more mainstream and transparent. In September 2020, the federal government announced its intention to establish a new public-private Sustainable Finance Action Council to follow up on the Expert Panel's recommendation. To be established in early 2021, the council will have a mandate to develop a well-

¹⁴ Task Force on Climate related Financial Disclosures. https://www.fsb-tcfd.org/

¹⁵ Task Force on Climate-related Financial Disclosures, *Recommendations from the Task Force on Climate-related Financial Disclosures* (2017). https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf

¹⁶ Canadian Securities Administrators, *Reporting on Climate Change-related Risks*, CSA Staff Notice 51-358, August 1, 2019. https://www.osc.gov.on.ca/documents/en/Securities-Category5/csa_20190801_51-358_reporting-of-climate-change-related-risks.pdf

functioning sustainable finance market, making recommendations to attract and scale sustainable finance in Canada, including enhancing climate disclosures, ensuring access to useful data on sustainability and climate risks, and developing standards for investments to be identified as sustainable.¹⁷

In the meantime, new federal legislation has been introduced (Bill C-12, referred to as the Canadian Net Zero Emissions Accountability Act) that will mirror, at a government level, some of the reporting requirements of the TCFD. It will require the government to set targets and develop plans to meet its net-zero goal and establish an independent advisory body to engage Canadians on these plans and targets. And the Minister of Finance is required to prepare an annual report on the steps the government has taken to manage financial risks and opportunities related to climate change.¹⁸

Increasing the sense of urgency and opportunity on reporting on climate risk, U.S. President Joe Biden has promised to also embrace a goal of net-zero emissions and to implement policies requiring American investors to move toward standardized, reliable, and mandatory disclosure on climate risk.

¹⁷ Government of Canada, "Update on the 2020-21 Debt Management Strategy." https://www.budget.gc.ca/fes-eea/2020/report-rapport/anx2-en.html

¹⁸ Government of Canada, *Bill C-12: An Act respecting transparency and accountability in Canada's efforts to achieve net-zero greenhouse gas emissions by the year* 2050. https://parl.ca/DocumentViewer/en/43-2/bill/C-12/first-reading

Key takeaways

Creating a credible architecture for sustainable finance in Canada is a necessary but not sufficient condition for mobilizing the capital required for a low-carbon transition. Investors and corporations also need to have confidence that managing climate risk, and accelerating the transition to clean energy, is not a partisan construct that will be revisited every election cycle. Rather, is an imperative driven by scientific evidence of the systemic risk — social, economic, and environmental — posed by climate change.

The GlobeScan public opinion survey found that half (50%) of Canadian shareholders feel they need more information to be able to effectively make climate-friendly investments. This was also reflected in the Pembina Institute interviews with representatives from business, financial institutions and non-profit organizations, who suggested that clarity and confidence in regulatory frameworks and climate-related policies are critical to driving innovation and decision-making in the financial sector.

Taken together, a meaningful price on carbon, leadership from Canada's new Sustainable Finance Action Council, a workable framework for corporate climaterelated disclosure, and clarity on Canadian financial taxonomies for green and transition finance will help unlock the private investment needed to transform Canada from an emissions-intensive economy to a net-zero one.

These actions — which in some cases are overdue — can make Canada a leader in the effort to harness the power of capital markets to achieve environmental and social goals. They will also allow Canadian investors to manage the risks associated with climate change and take full advantage of the economic opportunities that will accompany the transition to a net-zero economy.

Recommendations from the Pembina Institute for further progress on sustainable finance in Canada can be found at the end of this report.

Sustainable finance for a safe climate Research and analysis



About our research

Canada has decided to rebuild from the pandemic in a way that also meets our international climate commitments to decarbonize and diversify our economy by midcentury. This requires big and bold investments across sectors, including electrification, transportation, buildings, renewables in remote communities, and industrial emissions reduction. It also requires a plan to support the future and livelihood of workers and their communities in the transition to a low-carbon global economy.

Within this context, this research examines how sustainable finance can be mobilized as a part of Canada's economic recovery strategy in order to build social and economic equity, implement Canada's climate plan, and achieve decarbonization goals by midcentury.

The Pembina Institute partnered with GlobeScan to glean and expand upon results from their 2020 survey of 1,000 Canadians conducted during the first peak of COVID-19, between March and July 2020.¹⁹ Results from this GlobeScan survey have been paired with insights gained from nearly 20 interviews conducted by Pembina Institute staff with experts on sustainable finance across Canada in the non-profit, industry and finance sectors. This research reviews these findings in depth.

For the purpose of this report, sustainable finance is defined as capital flows, financial processes and risk management activities "that assimilate environmental and social factors as a means of promoting sustainable economic growth and the long-term stability of the financial system."²⁰

Canada's pre-pandemic sustainable finance trajectory

Before the coronavirus pandemic, sustainable finance was already gaining in relevance and interest in Canada among stakeholders in finance and government. The emerging field of 'sustainable finance' is focused on channelling financial sector expertise and

¹⁹ GlobeScan, "Healthy & Sustainable Living: A Global Consumer Insights Project."

https://globescan.com/wp-content/uploads/2020/06/Healthy-Sustainable-Living-2020-Brochure.pdf

²⁰ Government of Canada, *Final Report of the Expert Panel on Sustainable Finance* (2019), 2. https://www.canada.ca/en/environment-climate-change/services/climate-change/expert-panelsustainable-finance.html

resources towards the challenges and opportunities posed by climate change. It can also include other goals such as poverty alleviation and social equity. Interest has spread from a niche group of highly specialized experts to the mainstream. Investors, particularly institutional investors,²¹ are increasingly taking environmental, social and governance (ESG) factors into consideration in their analysis. The amount of financial assets in Canada that is being managed by investors who incorporate such ESG factors²² into their decisions has increased more than sevenfold between 2006 and 2019, to include almost two-thirds of the total investment industry (Figure 1).²³

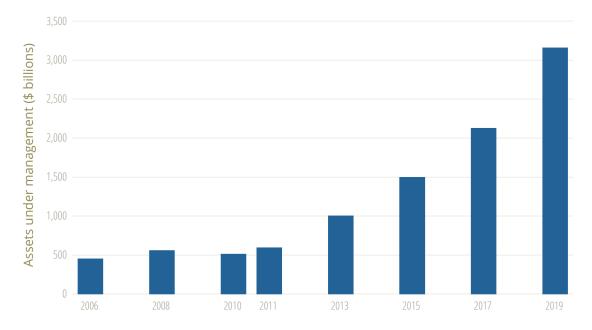


Figure 1. Canadian ESG assets under management

Data source: Responsible Investment Association²⁴

²¹ Institutional investors are organizations (ex: banks, pension plans, insurance companies) that invest. Retail investors are members of the public who invest. According to GlobeScan's Healthy & Sustainable Living survey, 30% of Canadians own shares, either directly or indirectly. *Sources:* Cambridge Dictionary, https://dictionary.cambridge.org

²² *ESG assets* are defined as synonymous with the Responsible Investment Association's (RIA) term *responsible investment (RI) assets:* assets that align with one or multiple responsible investment strategies. The RIA lists seven RI strategies, grouped into *inclusionary strategies* (e.g. positive screening, ESG integration), *impact strategies* (e.g. impact investing) and *exclusionary strategies* (e.g. negative screening). *Source:* Responsible Investment Association, *2020 Canadian Responsible Investment Trends Report* (2020), 7-8. https://www.riacanada.ca/research/2020-canadian-ri-trends-report/

²³ 2020 Canadian Responsible Investment Trends Report, 4.

²⁴ Adapted from "Canadian Responsible Investment Assets (billions)" in 2020 Canadian Responsible Investment Trends Report, 4.

This has been accompanied by an increasing view of ESG factors as having impact on investors' risk and returns — as opposed to a merely ethical consideration. Climate change is also increasingly viewed as a high-level trend, with broad social and economic impacts.

Finance industry experts interviewed by the Pembina Institute said there has been particularly significant growth in sustainable finance in recent years, driven by factors including new regulations and guidance in the financial sector and changing attitudes and investment profiles, particularly among millennials. According to TD Securities Inc., net inflows into Canadian exchange-traded-funds focused on ESG hit \$200 million in 2018, following insignificant inflows in the years prior.²⁵ Table 1, below, summarizes some of the key regulations, frameworks and developments that have shaped sustainable finance.

Research by Canadian Business and the Responsible Investment Association, meanwhile, indicates that millennials, those born between roughly 1980 and 2000, represent the largest Canadian workforce demographic²⁶ and are 65% more likely than baby boomers to take ESG factors into account in their investments.^{27,28}

The Sustainable Finance Action Council

In response to growing interest in ESG investing and the recommendations of the Expert Panel on Sustainable Finance, the federal government has recently committed to establishing a public-private Sustainable Finance Action Council to advise on critical market infrastructure needed to attract and scale up sustainable finance in Canada, and on standards for investments to be identified as sustainable.

²⁵ Cited in Divja Balaji, "Sustainable investing surges in Canada amid pandemic, protests," *BNN Bloomberg*, June 19, 2020. https://www.bnnbloomberg.ca/sustainable-investing-surges-in-canada-amid-pandemic-protests-1.1453425

²⁶ Graham Scott, "Millennials are now the biggest generation in the Canadian workforce," *Canadian Business*, June 3, 2015. https://www.canadianbusiness.com/innovation/the-millennial-majority-workforce/

²⁷ Responsible Investment Association, *Millennials, Women, and the Future of Responsible Investing* (2016), 1. https://www.riacanada.ca/research/millennials-women-and-the-future-of-responsible-investing/

²⁸ According to the RIA, millennials are more likely than Baby Boomers to view companies with strong environmental and social practices as being safer and better investments and are also more likely to exit investments due to "objectionable corporate activity". *Source: Millennials, Women and the Future of Responsible Investing,* 3.

Table 1. Key regulations, frameworks and developments shaping sustainable finance

Development	Year	Description
The Paris Agreement	2015	Agreed to at COP 21 in Paris, the Paris Agreement brought all nations together for a common purpose of addressing climate change and adapting thereto. The Paris Agreement seeks to limit the rise of global temperatures to within 2 degrees Celsius above pre-industrial levels and to work towards further limitation of 1.5 degrees Celsius.
Task Force on Climate Related Financial Disclosures (TCFD)	2017	The Financial Stability Board's TCFD put together consistent and voluntary climate-related financial risk disclosures that can be used by firms for purposes of disclosure. The TCFD released its final recommendations report in 2017. As of 2020, large numbers of Canadian organizations, from finance firms such as Addenda Capital to the federal government, have publicly declared support for the TCFD and TCFD recommendations.
Canada's Expert Panel on Sustainable Finance	2018	The Expert Panel on Sustainable Finance, appointed by the Minister of Finance and the Minister of Environment and Climate Change in April 2018, was tasked with examining challenges and opportunities for Canada within sustainable finance and coming up with a set of recommendations. The panel's final report was released in 2019.
Large Employer Emergency Financing Facility (LEEFF)	2020	LEEFF is one part of Canada's economic response to COVID-19. It provides short-term assistance in the form of loans to large Canadian employers affected by COVID-19. One condition on borrowers is that they produce an annual climate-related financial disclosure report, in line with the recommendations of the TCFD.
Sustainable Finance Action Council	2020	The Government of Canada's 2020 Fall Economic Statement announced the provision of \$7.3 million over three years for a Sustainable Finance Action Council to be created by Environment and Climate Change Canada and the Department of Finance Canada. It would be aimed at "developing a well-functioning sustainable finance market in Canada." It is set to launch in early 2021.
Climate Accountability Act	2020	The Act requires an emissions reductions plan for targets set in 2030, 2035, 2040 and 2045. It also requires the Minister of Finance to produce an annual report on measures taken around the financial risks and opportunities posed by climate change.

0	2021- 2022	The federal government will issue its first green bond in 2021-22. This will "help finance historic investments in green infrastructure and other green initiatives."
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Sources: Multiple^{29,}

Canada Development Investment Corporation, "Large Employer Emergency Financing Facility Factsheet." https://www.cdev.gc.ca/leeff-factsheet/

Canada Development Investment Corporation, "Large Employer Emergency Financing Facility (LEEFF): Frequently Asked Questions (FAQ)". https://www.cdev.gc.ca/leeff-faq/

Government of Canada, *Economic and Fiscal Snapshot 2020* (2020), 147. https://www.canada.ca/content/dam/fin/publications/efs-peb/homepage/EFS2020-eng.pdf

Government of Canada, *Supporting Canadians and Fighting COVID-19: Fall Economic Statement 2020* (2020), 91. https://www.budget.gc.ca/fes-eea/2020/home-accueil-en.html

Government of Canada, A Healthy Environment and a Healthy Economy: Canada's strengthened climate plan to create jobs and support people, communities and the planet (2020), 51.

https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climate-plan/healthy_environment_healthy_economy_plan.pdf

Government of Canada, *Bill C-12: An Act respecting transparency and accountability in Canada's efforts to achieve net-zero greenhouse gas emissions by the year 2050.* https://parl.ca/DocumentViewer/en/43-2/bill/C-12/first-reading

²⁹ United Nations Framework Convention on Climate Change, "What is the Paris Agreement?" https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement

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Task Force on Climate-Related Financial Disclosures, "Support the TCFD." https://www.fsb-tcfd.org/support-tcfd/

Toronto Finance International, "Industry Resources." https://tfi.ca/policy-research/expert-panel-onsustainable-finance-final-report

Final Report of the Expert Panel on Sustainable Finance, iii.

Setting the stage for sustainable finance in Canada

Canada's Expert Panel on Sustainable Finance, appointed by the Minister of Finance and the Minister of Environment and Climate Change in April 2018, was tasked with examining challenges and opportunities within sustainable finance and coming up with a set of recommendations.³⁰ The panel was chaired by Tiff Macklem, who has since been appointed Governor of the Bank of Canada. In June 2019, the group issued a report with 15 recommendations focused on spurring the essential market activities, behaviors and structures needed to bring sustainable finance into the mainstream.

Progress on recommendations in 2020 was limited, according to experts interviewed by the Pembina Institute. In January 2020, the Responsible Investment Association (RIA) noted that the task force recommendations were not addressed in the mandate letters delivered to the federal ministers after the 2019 election, which set out ministerial priorities as assigned by Prime Minister Justin Trudeau. Nevertheless, there were indications the federal government was intending to move forward prior to the COVID pandemic. In January 2020, the Minister of Environment and Climate Change and the Minister of Natural Resources communicated with the RIA to demonstrate their focus on Expert Panel recommendations.³¹ The federal budget, originally slated for March 2020³², was expected to draw heavily from a February 2020 report by the House of Commons Standing Committee on Finance,³³ which was viewed as indicating government priorities.³⁴ The first recommendation in the committee's report was that the federal government "[a]dopt the recommendations of the Expert Panel on Sustainable Finance that are within federal jurisdiction and support other jurisdictions and the private sector to do the same."³⁵ In September 2020, the federal government committed to creating the Sustainable Finance Action Council.

https://home.kpmg/ca/en/home/insights/2020/03/2020-federal-budget-tax-changes-on-the-table.html

³⁰ Final Report of the Expert Panel on Sustainable Finance, iii.

³¹ "Federal Government Confirms it is Reviewing the Recommendations of Canada's Expert Panel on Sustainable Finance."

³² Advisor's Edge, "Federal budget delayed as House of Commons shuts down for five weeks," March 13, 2020. https://www.advisor.ca/news/economic/federal-budget-delayed-as-house-of-commons-shuts-down-for-five-weeks/

³³ KPMG, "2020 Federal Budget - Tax Changes on the Table," March 11, 2020.

³⁴ Jolson Lim, "Commons committee's top ask for budget is for feds to advance sustainable finance," March 3, 2020. https://ipolitics.ca/2020/03/03/commons-committees-top-ask-for-budget-is-for-feds-to-advance-sustainable-finance/

³⁵ Standing Committee on Finance, *Canadian Ideas: Leveraging Our Strengths* (February 2020), viiii. https://www.ourcommons.ca/Content/Committee/431/FINA/Reports/RP10665205/finarp01/finarp01-e.pdf

Impact of COVID-19

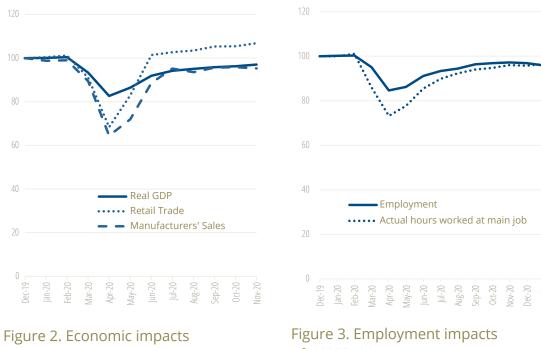
Impacts on Canadians and Canada's economy

The coronavirus pandemic has had wide-reaching impacts on Canada's economy and the health and well-being of Canadians. Government ordered shutdowns threw people out of work and shuttered businesses, while Canadians curtailed travel and entertainment activities. As of February 2021, Canada had experienced over 750,000 cases and over 20,000 deaths.³⁶ According to GlobeScan's Healthy & Sustainable Living Survey, 42% of Canadians saw their family incomes affected by the pandemic.

Figures 2 and 3 illustrate the impact of the virus on various economic and employment metrics. The overall pattern is one of decline from the onset of the pandemic to a trough in April 2020 and slow recovery thereafter. Between December 2019 and April 2020, GDP declined 17%, total employment 15% and retail trade 32%. The unemployment rate, meanwhile, more than doubled — from 5.7% to 13%, with the loss of nearly 3 million jobs.³⁷

³⁶ Government of Canada, "Coronavirus disease (COVID-19)." https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19.html

³⁷ Statistics Canada, "Table 14-10-0287-01: Labour force characteristics, monthly, seasonally adjusted and trend-cycle, last 5 months (December 2019 to January 2021)," February 2021. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410028701



of COVID-19

Indices; Dec 2019=100 Data source: Statistics Canada³⁸

of COVID-19

Indices; Dec 2019=100 Data source: Statistics Canada³⁹

With policy interventions and emergency funding introduced in 2020, there was an improvement in the economy. About 2.1 million of the 2.9 million lost jobs had been recovered as of January 2021,⁴⁰ and gross domestic product was at 97% of its pre-

³⁸ Statistics Canada, "Table 36-10-0434-01: Gross domestic product (GDP) at basic prices, by industry, monthly (x 1,000,000) (December 2019 to November 2020)," February 2021. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610043401

[&]quot;Table 20-10-0008-01: Retail trade sales by province and territory (x 1,000) (December 2019 to November 2020)," February 2021. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2010000801

[&]quot;Table 16-10-0047-01: Manufacturers' sales, inventories, orders and inventory to sales ratios, by industry (dollars unless otherwise noted) (x 1,000) (December 2019 to November 2020)," February 2021. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1610004701

³⁹ "Table 14-10-0287-01: Labour force characteristics, monthly, seasonally adjusted and trend-cycle, last 5 months (December 2019 to January 2021)," February 2021.

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410028701

[&]quot;Table 14-10-0289-01: Actual hours worked at main job by industry, monthly, seasonally adjusted, last 5 months (x 1,000) (December 2019 to January 2021)," February 2021. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410028901

⁴⁰ Employment, as measured by total actual hours worked at a main job, across all industries, has shown a similar trend, having reached 97% of its pre-pandemic level as of January 2021. Nevertheless, the decline in

pandemic level by November 2020.^{41,42} Although the economy is recovering and vaccines have been developed — with Canada having secured access to candidates by companies including Pfizer, Moderna and AstraZeneca⁴³ — there remains uncertainty around the possible future trajectory of the pandemic and the social and economic disruption it could engender.

Impacts on Canada's sustainable finance trajectory and clean energy transition

The coronavirus pandemic has had a mixed impact on sustainable finance and clean investments in Canada. In certain cases, the economic uncertainty from COVID-19 has resulted in corporate retrenchment from planned investments.⁴⁴ In March 2020, for example, Suncor announced a downward adjustment to its capital program of about 26%, with the Cogeneration Facility at Base Plant and Forty Mile Wind project delayed for up to two years.⁴⁵ One institutional investor interviewed said companies in their portfolio were increasingly focused on just remaining financially solvent. As the road to economic recovery remains uncertain, it is unclear when investments in clean technologies will be prioritized again by individual companies. In the meantime, governments in Canada, and in the U.S. under the new Biden administration, are signalling a commitment to measures and policies that can tackle job creation, economy recovery and climate change.

While the corporate sector was pulling back its capital investments in clean technology, ESG funds continued to perform well. In the first three quarters of 2020, about 60% of

this indicator was sharper, and the recovery slower over time. *Source:* "Table 14-10-0289-01: Actual hours worked at main job by industry, monthly, seasonally adjusted, last 5 months (x 1,000) (December 2019 to January 2021)".

⁴¹ "Table 36-10-0434-01: Gross domestic product (GDP) at basic prices, by industry, monthly (x 1,000,000) (December 2019 to November 2020)"

⁴² "Table 14-10-0287-01: Labour force characteristics, monthly, seasonally adjusted and trend-cycle, last 5 months (December 2019 to January 2021)"

⁴³ Government of Canada, "Canada to receive early access to Moderna COVID-19 vaccine," media release, December 15, 2020. https://www.canada.ca/en/public-services-procurement/news/2020/12/canada-toreceive-early-access-to-moderna-covid-19-vaccine.html

⁴⁴ Lynn Côté, *The Impact of COVID-19 on the Cleantech Sector* (EDC Economics, 2020), 1. https://www.edc.ca/cleantech

⁴⁵ Suncor, "Suncor Energy provides a corporate update including revised 2020 capital program, operating costs and production outlook," *GlobeNewswire*, March 23, 2020. https://www.globenewswire.com/news-release/2020/03/24/2005172/0/en/Suncor-Energy-provides-a-corporate-update-including-revised-2020-capital-program-operating-costs-and-production-outlook.html

sustainable investments outperformed peers in their categories (Figure 4). This has been accompanied by a significant uptick in interest in ESG investment. According to TD Securities, for example, net inflows into Canadian ESG ETFs as of mid-2020 have reached \$740 million, already significantly outstripping flows in 2019 (\$142 million) (Figure 5). Morningstar, meanwhile, has tracked the launch of 30 new sustainable products in the first three quarters of 2020, outstripping the number of new products in all of 2019.⁴⁶

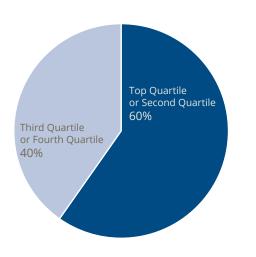


Figure 4. Performance of sustainable investments relative to peers Q1-Q3 2020 Data source: Morningstar Research⁴⁷

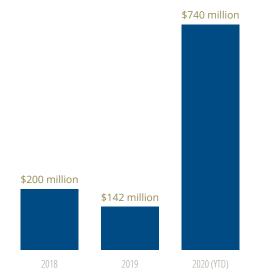


Figure 5. Net inflows to Canadian ESG exchange traded funds

Data source: TD Securities Inc. in Bloomberg BNN⁴⁸

Interviewees emphasized the importance of COVID-19 in driving the increase in interest in sustainable finance in the first half of 2020. The pandemic is viewed as having exposed flaws in the current economic system and placed even more importance on the need for systemic change. Attention to worker rights, benefits, and treatment by employers has also been heightened. Unsurprisingly, interviewees noted increased interest in the 'social' aspects of ESG. This represents an opportunity, as sustainable finance is positioned to strengthen the link between investing in emissions reduction

⁴⁶ Ian Tam, *Sustainable Investing Landscape for Canadian Fund Investors:* Q3 2020 (Morningstar, 2020) 1-2. https://www.morningstar.com/content/dam/marketing/shared/pdfs/Research/Sustainable-Investing-Landscape-for-Canadian-Fund-Investors-Q3-2020.pdf

⁴⁷ Ian Tam, *Canada's Resilient Sustainable Fund Space* (Morningstar, 2020).

https://www.morningstar.ca/ca/news/206464/canadas-resilient-sustainable-fund-space.aspx

⁴⁸ "Sustainable investing surges in Canada amid pandemic, protests."

and investing in job creation, social and economic equality and economic prosperity. The focus of this paper, however, will be on the 'environmental' aspect of ESG.

Clean investments and COVID-19 support programs

The coronavirus pandemic has resulted in significant injections of capital into the Canadian economy. The federal and provincial/territorial governments have provided \$593.5 billion in direct and indirect support as of November 2020.⁴⁹

Between the onset of the COVID-19 crisis and February 2021, Canada (including the federal government, provinces and territories) has committed about C\$46.7 billion to the support of various energy types, according to Energy Policy Tracker, an international monitoring group.⁵⁰ Of this, more than half, about C\$25.7 billion, has been classified as either *fossil conditional* — support for fossil fuels with climate targets or requirements for pollution reduction — or *clean energy*.⁵¹ Table 2 provides an overview of some of the key clean investments made by the federal government since the onset of COVID-19.

⁴⁹ Supporting Canadians and Fighting COVID-19: Fall Economic Statement 2020, 3.

⁵⁰ Energy Policy Tracker, "Canada." https://www.energypolicytracker.org/country/canada/

US\$34.8 billion converted to C\$46.7 billion using Bank of Canada exchange rates for 2020. *Source:* Bank of Canada, "Annual Exchange Rates." https://www.bankofcanada.ca/rates/exchange/annual-average-exchange-rates/

⁵¹ Energy Policy Tracker, "Canada."

Energy Policy Tracker, "Methodology." https://www.energypolicytracker.org/methodology/ US\$19.1 billion converted to C\$25.7 billion.

Investment	Description	Amount (C\$ millions)
Public transit investments	In February 2021, \$14.9 billion in public transit project investments over eight years was announced. This included \$3 billion annually in permanent funding as of 2026-27 for Canadian communities. This investment will support the use of zero-emission vehicles (ZEVs) and ZEV infrastructure, active transportation projects and transit solutions for Indigenous, rural and remote communities.	\$14,900
Canada Investment Bank: Infrastructure plan to create jobs and grow the economy	 The federal government announced \$10 billion for five major infrastructure projects via the Canada Infrastructure Bank. The commitment includes: \$2.5 billion for clean power \$2 billion for large-scale building retrofits and \$1.5 billion for adoption of zero emission buses and charging infrastructure 	\$6,000
Strategic Innovation Fund — Net Zero Accelerator Program	Canada's 2020 federal climate plan, <i>A Healthy Environment and a Healthy Economy</i> , pledged \$3 billion over five years for a new Strategic Innovation Fund — Net Zero Accelerator to "expedite decarbonization projects with large emitters, scale-up clean technology and accelerate Canada's industrial transformation across all sectors." Focus areas are: a) Clean technology solution adoption and development in every industrial sector; b) Clean technology development in the aerospace and automobile manufacturing sectors; c) Development of a battery innovation and industrial ecosystem.	\$3,000
Home energy retrofit funding	Canada's 2020 Fall Economic Statement proposed \$2.6 billion over seven years, as of 2020-21 to increase home energy efficiency. This funding would provide up to 700,000 grants for energy-efficient home improvements, up to 1 million free EnerGuide energy assessments, and support to recruit and train EnerGuide energy auditors.	\$2,600
Orphan and inactive well cleanup	Funding provided to provincial governments of Alberta, British Columbia and Saskatchewan, as well as the Alberta Orphan Well Association, for the cleanup of inactive and/or orphan oil and gas wells.	\$1,720

Table 2. Key federal clean investments in 2020 and 2021

Green and inclusive community buildings	Canada's 2020 federal climate plan pledged \$1.5 billion over three years for "green and inclusive community buildings through retrofits, repairs, upgrades and new builds." These would "support good jobs and local economic growth, contribute to climate objectives and serve disadvantaged populations." There would be a requirement of a minimum of 10% of the funding be allocated to projects for First Nations, Metis and Inuit communities.	\$1,500
Low-carbon and Zero- emissions Fuels Fund	Canada's 2020 federal climate plan pledged \$1.5 billion for a fund "to increase the production and use of low-carbon fuels in a manner that complements federal carbon pollution pricing, regulatory efforts and other federal programming."	\$1,500
Safe Restart Agreement — Public Transit Priority Area	The Safe Restart Agreement will deliver \$19 billion to help provinces/territories safely restart their economies and to increase Canada's resilience to potential future virus waves. The agreement included a funding stream for public transit. As part of the agreement, \$1 billion was committed to "help cities keep their transit systems running."	\$1,000
Smart renewable energy, grid modernization	Canada's 2020 federal climate plan pledged \$964 million over four years for smart renewable energy and grid modernization projects. This includes assistance for greater renewable power generation capacity as well as grid modernization technology deployment.	\$964
Emissions Reduction Fund (methane)	Funding provided for the creation of an Emissions Reduction Fund to decrease Canada's oil and gas sector emissions. The focus is on methane.	\$750
Top-up for Sustainable Development Technology Canada	Canada's 2020 federal climate plan pledged an additional \$750 million over five years to "support startups and to scale-up companies to enable pre-commercial clean technologies to successfully demonstrate feasibility" and to "support early commercialization efforts."	\$750
Investing in Canada Plan (green energy, public transit, active transportation)	The Investing in Canada Plan is intended to deliver more than \$180 billion over 12 years into infrastructure. There are five main streams: public transit, green infrastructure, social infrastructure, trade and transportation infrastructure, and rural and Northern communities infrastructure. According to the Energy Policy Tracker, the federal government, since the beginning of the pandemic, has invested \$330.9 million in public transit, \$31.9 million in active transportation (cycling or walking) and \$132.9 million in renewable green energy projects.	\$496

Clean power for rural, remote and Indigenous communities	Canada's 2020 federal climate plan pledged \$300 million over five years to "advance the Government's commitment to ensure that rural, remote and Indigenous communities that currently rely on diesel have the opportunity to be powered by clean, reliable energy by 2030."	\$300
Community Efficiency Financing Initiative (Phase 2)	This initiative assists municipalities and partners in the implementation of innovative and local financing programs. These programs help homeowners reduce greenhouse gas emissions through retrofits. The \$300 million program is funded by the Government of Canada as part of its \$950 million commitment to the Green Municipal Fund, which is delivered by the Federation of Canadian Municipalities. Phase 2 was announced in June 2020.	\$300
Battery electric vehicle production	The federal government has provided nearly \$300 million to retool the Ford of Canada Oakville Assembly Complex to produce battery electric vehicles. This investment has been matched by the Ontario government. The total investment will be \$1.8 billion.	\$295
Incentives for Zero- Emission Vehicles top- up	Canada's 2020 federal climate plan pledged \$287 million over two years, as of 2020-21, to top up the Incentives for Zero-Emission Vehicles (iZEV) program. The iZEV program provides rebates of up to \$5,000 on light-duty zero-emission vehicles.	\$287

Source: List from Energy Policy Tracker⁵²; investment descriptions from multiple sources⁵³

Pembina Institute, "Support for public transit is key to decarbonizing transportation," media release, February 11, 2021. https://www.pembina.org/media-release/support-public-transit-key-decarbonizingtransportation

Office of the Prime Minister, "More support for Canadians through the Safe Restart Agreement," media release, July 16, 2020. https://pm.gc.ca/en/news/news-releases/2020/07/16/more-support-canadians-through-safe-restart-agreement

Infrastructure Canada, "Safe Restart Agreement helps Canadian communities get back on their feet," media release, July 23, 2020. https://www.canada.ca/en/office-infrastructure/news/2020/07/safe-restart-agreement-helps-canadian-communities-get-back-on-their-feet.html

Office of the Prime Minister, "Prime Minister announces new support to protect Canadian jobs," media release, April 17, 2020. https://pm.gc.ca/en/news/news-releases/2020/04/17/prime-minister-announces-new-support-protect-canadian-jobs

Infrastructure Canada, "New initiative to help homeowners cut their energy bills and emissions and keep the local economy moving," media release, June 30, 2020. https://www.canada.ca/en/office-

⁵² As of December 2020. Energy Policy Tracker, "Canada."

⁵³ Office of the Prime Minister of Canada, "New public transit investments to build strong communities, fight climate change, and create new jobs across Canada," media release, February 10, 2021. https://pm.gc.ca/en/news/news-releases/2021/02/10/new-public-transit-investments-build-strong-communities-fight-climate

The need for private capital

While the economy has recovered some lost ground, a full recovery remains elusive. In its September 2020 Speech from the Throne and November Fall Economic Statement, the federal government has committed to make climate action and energy transition integral to plans for economic growth and equitable economic recovery. Similarly, the federal government described its December 2020 climate plan as "a key pillar" in its effort to reverse pandemic-related employment losses.⁵⁴ The necessary investments required for Canada to meet its climate objectives, however, are "unprecedented and well beyond the limits of the public balance sheet,"55 the Expert Panel on Sustainable Finance concluded. In a recent report, for example, the Queen's University-based Institute for Sustainable Finance (ISF) estimated that meeting Canada's 2030 decarbonization goals would require total investment of \$128 billion – or \$12.8 billion annually.⁵⁶ While this amount is reasonable, representing less than 1% of Canada's 2018 GDP⁵⁷, the ISF noted that the sum remains "too large for either the public or the private purse alone."⁵⁸ Meeting Canada's target of net-zero by 2050 will likely be significantly more expensive, due to larger abatement requirements and increasing marginal costs of abatement.⁵⁹ However, the country's financial system needs to see some major changes so that investors, whether individuals or institutions, have the information and incentives required to mobilize that private capital.

infrastructure/news/2020/06/new-initiative-to-help-homeowners-cut-their-energy-bills-and-emissionsand-keep-the-local-economy-moving.html

Government of Canada, "Investing in Canada Plan - Building a Better Canada." https://www.infrastructure.gc.ca/plan/about-invest-apropos-eng.html

Canada Infrastructure Bank, "Prime Minister announces infrastructure plan to create jobs and grow the economy" https://cib-bic.ca/en/the-canada-infrastructure-bank-announces-a-plan-to-create-jobs-and-grow-the-economy/

A Healthy Environment and a Healthy Economy, 12, 15, 21, 36-37, 40, 48.

Supporting Canadians and Fighting COVID-19: Fall Economic Statement 2020, 88.

Province of Ontario, "Historic Ford Canada Investment Transforming Ontario into Global Electric Vehicle Manufacturing Hub," media release, October 8, 2020. https://news.ontario.ca/en/release/58736/historic-ford-canada-investment-transforming-ontario-into-global-electric-vehicle-manufacturing-hub

⁵⁴ A Healthy Environment and a Healthy Economy, 8.

⁵⁵ Final Report of the Expert Panel on Sustainable Finance, 48.

⁵⁶ Simon Martin and Ryan Riordan, *Capital Mobilization Plan for a Canadian Low-Carbon Economy* (Institute for Sustainable Finance, 2020), 3,7. https://smith.queensu.ca/centres/isf/research/cmp.php

⁵⁷ Capital Mobilization Plan for a Canadian Low-Carbon Economy, 7.

⁵⁸ Capital Mobilization Plan for a Canadian Low-Carbon Economy, 22.

⁵⁹ Capital Mobilization Plan for a Canadian low-Carbon Economy, 2.

Overcoming barriers to investment

Equipping investors with the right information

Three in four Canadian shareholders (76%) generally view investments in environmentally friendly technologies as providing favorable returns, data from GlobeScan's Healthy & Sustainable Living Survey indicates. Nearly 60% of shareholders view companies that have a purpose of making a positive difference in society as providing superior profitability, and 56% are very likely to consider climate change in their investment decisions. Unfortunately, half of Canadian investors do not believe they have the information required to do so. Lack of information is among the most significant barriers to sustainable finance contributing to Canada's recovery from COVID-19. Investors want some commonly accepted definitions of what constitutes a sustainable finance project, and high-quality and consistent disclosure standards for the climate-related risks faced by companies.

Including Indigenous peoples in ESG standards

A January 2021 discussion paper by the First Nations Major Project Coalitions looks at how to make ESG standards more inclusive of Indigenous peoples in Canada.⁶⁰ Approaches include the use of new impact assessment tools designed to address Indigenous rights and interests, and the development of new Indigenous financing organizations. The National Aboriginal Trust Officers Association and the Shareholder Association for Research and Education have established a partnership called the Reconciliation and Responsible Investment Initiative, which works with Canadian institutional investors to promote responsible investment policies and practices that include reconciliation goals.⁶¹

⁶⁰ Mark Podlasly, Max Lindley-Peart and Suzanne von der Porten, *Indigenous Sustainable Investment: Discussing Opportunities in ESG*, prepared for The First Nations Major Project Coalition (2021) https://static1.squarespace.com/static/5fb6c54cff80bc6dfe29ad2c/t/6009dc280d5f7c464a330584/161125892 9977/FNMPC_ESG_Primer_2021_Final.pdf

⁶¹ The Reconciliation and Responsible Investment Initiative, Advancing Reconciliation in Canada: A Guide for Investors (2020). https://reconciliationandinvestment.ca/portfolio-item/guide-investors/

Creating a Canada-centric sustainable finance taxonomy

In order to drive capital into green and low-carbon investment, Canada needs a clear definition — known as a taxonomy — for what constitutes "sustainable finance."⁶² Such a taxonomy would provide project proponents with certainty about their ability to raise capital from ESG funds and green bond offerings, as well as qualifying for various tax breaks.

One international example of a sustainable finance taxonomy is the European Union's Taxonomy Regulation, which entered into force in July 2020.⁶³ The European taxonomy excludes fossil fuels from new investment support.⁶⁴ Some executives in Canada's financial and energy sector argue such a taxonomy is unsuited for this country, given our reliance on the resource sector.⁶⁵ They advocate for a taxonomy for "transitional finance" that would recognize the potential for emissions reductions in high-emitting sectors as well as the need to include traditional sectors of Canada's economy in the post-COVID-19 restructuring. For example, one interviewee registered the concern that, under certain taxonomy proposals, investments in technologies that reduce emissions could be eligible for sustainable finance funding when used in a low-emitting sector but not for the same technological application in higher-emitting ones. Several oilsands producers, for example, have made public commitments to reduce emissions from their operations. However, they will need access to reasonably priced capital to undertake the investments required to meet those goals.⁶⁶

The Expert Panel on Sustainable Finance recommended the convening of key stakeholders to "develop Canadian green and transition-oriented fixed income taxonomies."⁶⁷ CSA Group (formerly the Canadian Standards Association) has been leading the development of a proposed transition finance taxonomy, with a technical

⁶² In the context of sustainable finance, a taxonomy is a tool that assists investors in determining whether an economic activity can be considered sustainable. This definition is geared largely towards the 'Environmental' portion of 'ESG' factors. *Source:* Principles for Responsible Investment, "EU Sustainable Finance Taxonomy." https://www.unpri.org/policy/eu-sustainable-finance-taxonomy

⁶³ European Commission, "EU taxonomy for sustainable activities." https://ec.europa.eu/info/businesseconomy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en

⁶⁴ Nuclear Engineering International, "Nuclear not excluded from EU taxonomy regulation," December 19, 2019. https://www.neimagazine.com/news/newsnuclear-not-excluded-from-eu-taxonomy-regulation-7563323

⁶⁵ Sean Cleary, *Sustainable Finance Primer Series: Taxonomies* (Institute for Sustainable Finance, 2020), 2. https://smith.queensu.ca/centres/isf/pdfs/ISF-PrimerSeries-Taxonomies.pdf

⁶⁶ Final Report of the Expert Panel on Sustainable Finance, 40.

⁶⁷ Final Report of the Expert Panel on Sustainable Finance, 28.

committee that includes representatives from the financial sector, the natural resources sector, industry and government.⁶⁸ The committee has had to delay the issuance of an interim report as it seeks consensus. As it works towards a conclusion, CSA Group wants to ensure the resulting transition finance taxonomy is perceived as legitimate and contributing to a net-zero future. Feedback from Indigenous and resource-dependent communities and environmental NGOs on the CSA recommendations would help secure that outcome. The federal government should ensure CSA Group continues to have the resources necessary to continue its work in 2021 and provide opportunities for thorough and fact-based discussion with diverse stakeholders. Consensus on a taxonomy that is both suitable for Canada and internationally credible will take time.

Advancing climate-related disclosure requirements

Investors are also increasingly demanding that companies provide clear disclosure about the risks and opportunities they face as a result of climate change and the transition to a net-zero-emissions economy. Large investors such as pension funds and insurance companies routinely analyze risk factors for the companies in which they invest. Such calculations can affect the pricing and availability of capital for incumbent, high-carbon operations such as oilsands extraction, as well as for companies that are developing clean technology projects such as renewable power or networks of electricvehicle charging stations. Risks include the potential for more costly regulations in high-emitting industries; the prospect of new cleaner technology displacing highercarbon facilities; and physical threats that extreme weather and warming temperatures pose to infrastructure. Climate-related disclosure can help ensure the economy is more resilient to the growing impacts of climate change. This is especially important given that Canada is warming at a rate twice the global average.⁶⁹

In 2016, leaders from the Group of 20 nations instructed the international Financial Sustainability Board, which represents G20 central banks, to assess the relationship between climate change and the global financial sector. The board established the Task Force on Climate-related Financial Disclosures (TCFD), led by then-Bank of England Governor Mark Carney.⁷⁰

⁶⁸ CSA Group, "Defining Transition Finance in Canada." https://www.csagroup.org/news/defining-transition-finance-in-canada/

⁶⁹ Environment and Climate Change Canada, *Canada's Changing Climate Report 2019*, "Executive Summary." https://changingclimate.ca/CCCR2019/chapter/executive-summary/

⁷⁰ Government of Canada, *Interim Report of the Expert Panel on Sustainable Finance* (2018), 13. https://www.canada.ca/en/environment-climate-change/services/climate-change/expert-panel-sustainable-finance.html

The TCFD warned that climate change poses a systemic risk to the international economy, and that the threat would be better managed if major corporations voluntarily disclosed the long-term risks and opportunities they faced. It also recommended companies complete and publish scenario planning that would assess the longer-term impacts on their operations if the world succeeds in limiting the increase in average global temperatures to less than 2 degrees Celsius. As of September 2020, support for the TCFD had grown to over 1,440 organizations, representing a market capitalization of over \$12.6 trillion.⁷¹

Within Canada, sustainability reporting is on the rise, but the landscape remains fragmented. According to a 2019 report by Stakeholder Research Associates, for example, the percentage of TSX Composite Index companies reporting sustainability information increased from 42% in 2014 to 71% in 2019.⁷² The quality of the reporting, however, was mixed, with only 64% of reporting companies referencing an international standards or guidance framework.⁷³ Only 8% referenced or reported against the TCFD framework; the Global Reporting Initiative Standards (43%) and the United Nations Sustainable Development Goals (21%) were much more popular.^{74,75}

Inadequate and inconsistent reporting remains a significant barrier to mobilizing private capital to contribute to green recovery from the pandemic, financial experts told the Pembina Institute. This is in line with recent research from the TMX Group and CPA Canada, who found that the "proliferation of sustainability-related reporting

⁷¹ Task Force on Climate-Related Financial Disclosures, "Companies." https://www.fsb-tcfd.org/tcfdsupporters/

⁷² Kathrin Bohr, Charles Cho and Katharine Partridge, *Advancing Sustainability Reporting in Canada: 2019 Report on Progress* (Stakeholder Research Associates & Schulich School of Business, October 2019), 7. http://stakeholderresearch.com/wp-content/uploads/SRA_Advancing-Sustainability-Reporting-in-Canada_191003.pdf

⁷³ Advancing Sustainability Reporting in Canada: 2019 Report on Progress, 9.

⁷⁴ Advancing Sustainability Reporting in Canada: 2019 Report on Progress, 10.

⁷⁵ A study released in early 2020 examined climate-related disclosures among 40 larger companies listed on the TSX, of which 12 had provided public support for the TCFD. It examined alignment with TCFD Recommendations. 98% disclosed in at least one of the TCFD categories of governance, strategy, risk management, and metrics and targets. Disclosure in TCFD subcategories was less promising, with companies, on average, disclosing in less than half of the 11 total. Only 5% "described the resilience of the organization's strategy, considering different forward-looking climate-related scenarios..." The report noted the limited sample size and cautioned against drawing broad conclusions. *Source*: Chartered Professional Accountants Canada, *Study of Climate-related Disclosures by Canadian Public Companies: Summary Report* (2020), 2, 5, 11, 12, 13. https://www.cpacanada.ca/en/business-and-accountingresources/financial-and-non-financial-reporting/mdanda-and-other-financialreporting/publications/climate-related-disclosure-study-2019-summary

frameworks, questionnaires, rankings, and surveys" can lead to disclosure fatigue, especially among smaller-capitalization issuers.⁷⁶

The federal government has expressed support for the TCFD voluntary framework. In its 2019 budget, it encouraged phased adoption by federal Crown corporations as well as large Canadian firms. In addition, the Large Employer Emergency Financing Facility program, which provides short-term assistance in the form of loans to large Canadian employers affected by COVID-19, requires that borrowers produce an annual climate-related financial disclosure report, in line with the recommendations of the TCFD.⁷⁷ Further to this, Bill C-12 (commonly referred to as the Climate Accountability Act) requires the Minister of Finance to prepare an annual report on the steps the government has taken to manage financial risks and opportunities related to climate change.⁷⁸

However, Ottawa's role is limited. Provincial securities commissions regulate the financial markets, and would have the primary responsibility for implementing any mandatory disclosure regimes.

The Canadian Securities Administrators, an umbrella of provincial securities commissions, has advised issuers that they are currently required under securities law to disclose certain material risks related to environmental concerns, including climate-related financial risks. In a 2019 guidance document, the group noted the test for materiality is somewhat subjective, but includes information that would impact a "reasonable investor's decision whether or not to buy, sell, or hold securities of the issuer."⁷⁹ The national securities body also noted there is room for improvement with regard to climate-related risk disclosure. The Ontario government is currently considering calls to require mandatory disclosure of such risks in a manner consistent with international best practices.⁸⁰

⁷⁶ TMX Group and CPA Canada, *Climate-Related Reporting in the Energy Sector* (2019), 2. https://www.cpacanada.ca/-/media/site/operational/rg-research-guidance-and-support/docs/02254-rgclimate-related-reporting-energy-sector-roundtable.pdf

⁷⁷ "Large Employer Emergency Financing Facility Factsheet."

[&]quot;Large Employer Emergency Financing Facility (LEEFF): Frequently Asked Questions (FAQ)."

⁷⁸ Bill C-12: An Act respecting transparency and accountability in Canada's efforts to achieve net-zero greenhouse gas emissions by the year 2050.

⁷⁹ Canadian Securities Administrators, *Reporting on Climate Change-related Risks,* CSA Staff Notice 51-358 (2019), 7. https://www.osc.gov.on.ca/documents/en/Securities-Category5/csa_20190801_51-358_reporting-of-climate-change-related-risks.pdf

⁸⁰ Capital Markets Modernization Taskforce, *Consultation Report* (2020), 27. https://files.ontario.ca/books/mof-capital-markets-modernization-taskforce-report-en-2020-07-09.pdf

Ensuring strong and consistent climate policy

One of the issues that has been most challenging for sustainable financing has been the absence of certainty regarding policies that remove incentives to invest in high-carbon sectors and encourage capital to move into low-carbon alternatives. Both investors and corporate strategists need to have confidence that policies that impact financial sector decisions will survive an election cycle. One example given of an area in which clarity is especially important was around timing of the transition to a low-carbon economy. One interviewee noted that the idea of net-zero emissions by 2050 currently lacks sufficient planning and enforcement.

Recent developments may have more potential to drive change. These include the planned increase of the carbon price by \$15 per year as of 2023, to \$170 per tonne of carbon pollution in 2030⁸¹ and the Canadian Net-Zero Emissions Accountability Act, which will "legally bind the Government to a process to achieve net-zero emissions by 2050."⁸²

Leveraging public sector green stimulus investment

Interviewees often described public sector investment as an essential mechanism to guide relatively larger, but still limited, pools of private sector capital towards sustainable investment options. Skepticism was expressed on the potential for private capital alone to help Canada reach its 2050 de-carbonization goals in the absence of government "putting its hand on the scale."

Public sector investment tended to be viewed by interviewees as clearing roadblocks to greater progress towards sustainable finance. Public investment, for example, can provide interim financing to sustainable finance projects while the financial sector tackles the challenge of pricing and risk evaluation in the absence of historical experiences and data. Interviewees also viewed public sector investment as crucial to the continuum of incubation for sustainable finance projects — allowing markets to mature and projects to be integrated into more mainstream capital pipelines. It should be noted that Canada's recent climate plan included a pledge to "examine options to

⁸¹ A Healthy Environment and a Healthy Economy, 26.

⁸² Environment and Climate Change Canada, "Government of Canada charts course for clean growth by introducing bill to legislate net-zero emissions by 2050," media release, November 19, 2020. https://www.canada.ca/en/environment-climate-change/news/2020/11/government-of-canada-charts-course-for-clean-growth-by-introducing-bill-to-legislate-net-zero-emissions-by-2050.html

help large-scale technology projects leverage significant private capital investments in the scale-up and adoption of clean technologies."⁸³

Canada Infrastructure Bank

The Canada Infrastructure Bank was created as part of the Government of Canada's Investing in Canada Plan, and has been funded with \$35 billion. The Bank will seek to attract investment from the private sector and institutional investors for the creation of public-interest and revenue-generating infrastructure.

Interviewees identified infrastructure as showing potential for private sector capital flows. The Final Report of Canada's Expert Panel on Sustainable Finance recommended that Canada "align [its] infrastructure strategy with its long-term sustainable growth objectives and leverage private capital in its delivery."⁸⁴ Unfortunately, private sector investment in Canadian infrastructure has historically been limited. Major Canadian public pension funds, for example, have demonstrated a significant appetite for infrastructure investment, but have generally directed their investments to other countries.⁸⁵ Identified barriers to such investment have included a limited pipeline of suitable projects, restrictive investment regulations and insufficient guidelines for the promotion of private sector investment.⁸⁶ Canada's recent climate plan has been promising in this regard. The federal government has pledged to conduct the country's first national infrastructure assessment, beginning in 2021. This would "help identify needs and priorities in the built environment and undertake long-term planning towards a net-zero emissions future."⁸⁷

Canada Mortgage and Housing Corporation

The Canada Mortgage and Housing Corporation is a Crown corporation that assists in addressing the housing needs of Canadians. It also provides advice and research to the housing industry and the government, and supports investment in new energy efficient housing.

⁸³ A Healthy Environment and a Healthy Economy, 48.

⁸⁴ Final Report of the Expert Panel on Sustainable Finance, 48.

⁸⁵ Interim Report of the Expert Panel on Sustainable Finance, 22.

⁸⁶ Final Report of the Expert Panel on Sustainable Finance, 48.

⁸⁷ A Healthy Environment and a Healthy Economy, 14.

Government can also help guide private sector capital towards preferred clean technology investments through its taxation policy. Recently a group of companies and environmental organizations that included the Pembina Institute advocated that Canada adopt federal tax policy which, in combination with climate change policies, can match or exceed U.S. measures such as the Internal Revenue Code Section 45Q⁸⁸ and thereby attract private investment into carbon capture and direct air capture, utilization and storage.⁸⁹ Such a measure, in Canada, would also provide additional financial certainty for investors and project proponents. Similarly, the Final Report of the Expert Panel on Sustainable Finance has recommended that a (tax-based) financial incentive be created to encourage Canadians to invest in climate-conscious products through registered savings plans.⁹⁰ Finally, Canada's recent climate plan proposed to develop tax measures to encourage a "competitive investment environment for the commercialization of technologies" that would help with climate commitments.⁹¹

Carbon capture and storage and Section 45Q

In the U.S., the Internal Revenue Code (Section 45Q) provides tax credits for carbon sequestration on a per-ton basis. The Internal Revenue Service has reported that, as of 2014, 35 million tons worth of credits had been claimed.

Government can also set an example in its own operations, orienting its procurement towards cleaner investments and clean technology. Canada's recently updated Greening Government Strategy is a positive first step. Through the update, the Government of Canada's procurement of goods and services will be included in the strategy. Green procurement will include life cycle assessment principles and the adoption of clean technologies and green products and services. The updated strategy will align with net-zero by 2050.⁹²

⁸⁸ U.S. Department of Energy, *Internal Revenue Code Tax Fact Sheet* (2019), 1.

https://www.energy.gov/sites/prod/files/2019/10/f67/Internal%20Revenue%20Code%20Tax%20Fact%20She et.pdf

⁸⁹ Energy Future Forum, "Carbon Capture, Utilization and Storage - The Time is Now," *Public Policy Forum*, July 21, 2020. https://ppforum.ca/articles/carbon-capture-utilization-and-storage-the-time-is-now/

⁹⁰ This included a recommended taxable income deduction above 100% on eligible contributions to registered retail savings plans. *Source: Final Report of the Expert Panel on Sustainable Finance*, 9.

⁹¹ A Healthy Environment and a Healthy Economy, 48.

⁹² A Healthy Environment and a Healthy Economy, 58-59.

Sustainable finance for a safe climate Recommendations



Canada's financial system will need to evolve

Sustainable finance has been on the minds of a select group of investors for well over a decade. In the beginning, some in this group were regarded as well meaning, in seeking to support social and environmental progress, but not very influential. This has changed as sustainable finance moved from a niche concern to a focus of mainstream investors who are more concerned about long-term financial risks and asset values.

COVID-19 represents an unprecedented threat to the health of Canadians, demanding quick and decisive action. As investors remain interested in the environmental aspects of their investments, and become more interested in the social elements, and as Canadians in general are increasingly inclined to "build back better," Canada's financial system will need to evolve.

1. Maintain a sense of urgency

- Canada's new Sustainable Finance Action Council should quickly undertake the work required to facilitate private-sector participation in a greener and more equitable recovery.
- The federal government should continue to ensure that climate-related measures remain integral to Canada's long-term planning for economic recovery from the pandemic, and maintain its commitment to implement the recommendations from the Expert Panel on Sustainable Finance.
- In order to ensure its recommendations on a Canadian taxonomy for transition finance (as recommended by the 2019 Expert Panel on Sustainable Finance) is perceived as legitimate and contributing to a net-zero future, CSA Group should:
 - Ensure Indigenous and resource-dependent communities, as well as environmental NGOs and other potentially impacted stakeholders and decision-makers, have an opportunity to provide feedback.
 - Avoid overly restrictive criteria and ensure sufficient investments exist now and into the future to meet the criteria in the transition finance taxonomy.
- The federal government should also ensure CSA Group continues to have the resources necessary to continue its work in 2021, providing opportunities for thorough and fact-based discussions with diverse stakeholders.
- The federal government and provincial securities commissions should formally adopt TCFD disclosure requirements in time to support COVID-19 stimulus programs.

2. Leverage COVID-19 stimulus to advance sustainable finance

- The federal government and provincial securities commissions should formally adopt TCFD disclosure requirements. The federal government should continue the requirement that borrowers of the Large Employer Emergency Financing Facility program produce an annual climate-related financial disclosure report in line with recommendations of the TCFD. Opportunities at the federal, provincial and territorial level for similar requirements in other COVID-19 relief programs, as well as any ongoing support programs for the Canadian private sector, should be explored.
- The federal and provincial governments should continue to emphasize clean investments and a green recovery in stimulus spending. Clean technologies should likewise be prioritized over legacy solutions in procurement strategies by all levels of government.
- Green stimulus investments should increase the degree to which private sector capital is leveraged — through organizations including the Canada Infrastructure Bank and the Canada Mortgage and Housing Corporation and through government taxation policy.
- Aid should not be given to traditional polluting sectors unless it comes with green conditions for sustainability improvements.
- Finally, where misinformation and misperceptions around the risk and return profile of sustainable investments exists, education should be provided potentially through generating and disseminating objective research.

Taken together, a price on carbon emissions that will rise to \$170/tonne by 2030, leadership from the new Sustainable Finance Action Council, a more consistent and regulated framework for corporate climate-related disclosure, and clarity on Canadian financial taxonomies for green and transition investment would help unlock the private investment needed to transform Canada from an emissions-intensive economy to a netzero one.

It is time to act on a sustainable financing strategy that helps integrate the E, S (and G) in ESG by enabling private capital to flow to the technologies and projects that can maximize job creation, emissions reductions, and return on investment between now and 2030.