

KEY TAKEAWAYS FOR THE FINANCIAL SECTOR FROM CANADA'S 2030 EMISSIONS REDUCTIONS PLAN

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Attempting to avoid the worst physical impacts of climate change, many of Canada's largest financial institutions have set, or are considering, an ambitious target of net-zero financed carbon emissions by 2050, with significant cuts in financed emissions realized by 2030. The urgency of the low-carbon transition was underscored in the latest report by the United Nations Intergovernmental Panel on Climate Change 2022ⁱ which assessed mitigation progress and national pledges. The findings are concerning – holding warming to 1.5 degrees Celsius above pre-industrial levels, as agreed internationally, is nearly out of reach and is only achievable if global carbon emissions peak in 2025.

The tough task for financial institutions, in the immediate term, is assessing the risks and opportunities facing clients and issuers as they face the transition to a low-carbon future. The Federal Government's *2030 Emissions Reductions Plan*ⁱⁱ (*2030 Plan*) provides a road map and predictable policy environment to inform investment and lending decisions along the path to net zero.

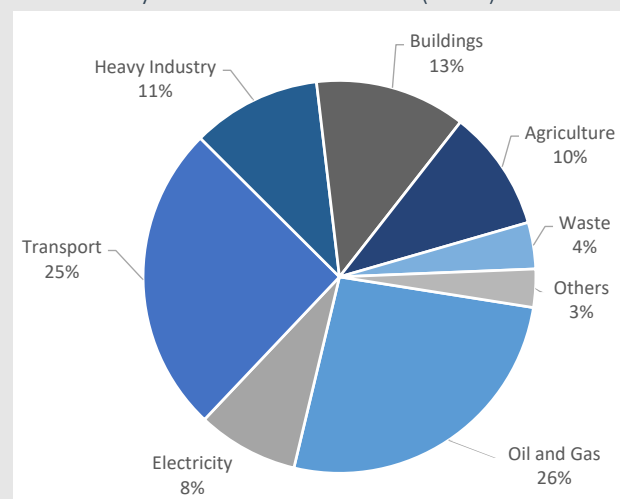
The *2030 Plan* is the first issued under the *Canadian Net-Zero Emissions Accountability Act* passed in 2021. A series of additional progress reports, targets and plans will follow, bringing more specificity to how the government will reach its target of net-zero emissions by 2050. The logic behind the *2030 Plan* is clear – it outlines Canada's highest greenhouse gas (GHG) emitting sectors (Figure 1) and the emissions reduction targets each need to achieve by 2030. The *2030 Plan* came with \$9 billion in funding and a slate of policy initiatives for implementing and incentivizing action. The 2022 Federal Budget followed on the heels of the *2030 Plan* and outlined an additional

C\$12 billion across four areas: reducing pollution, clean and resilient energy sector, protecting the environment and building the net-zero economy.

A clear sector-by-sector breakdown and prioritization provides clarity to industry, financiers and policymakers for the coming decade as the extent of the transformation facing these sectors is better understood. The overall target is to cut emissions from 2005 to 2030 by 40 percent- just eight years from now. This is the cumulation of specific targets across Canada's eight highest emissions sectors (Figure 2).

There are key takeaways financial sector stakeholders should consider as we anticipate accelerated changes to important sectors of our economy.

Figure 1: Breakdown of Canada's greenhouse gas emissions by sector and sub-sector (2019)

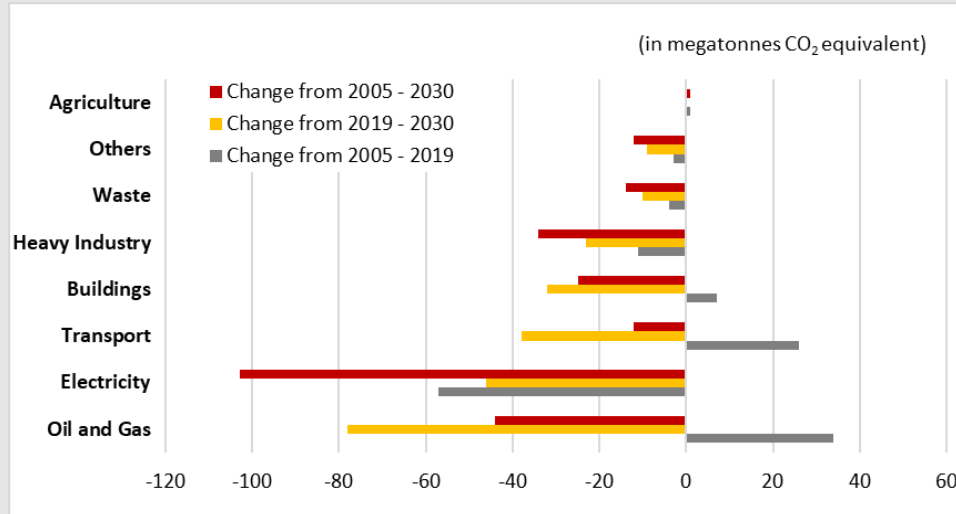


Source: Environment and Climate Change Canada

ⁱUnited Nations Intergovernmental Panel on Climate Change. 2022. *Sixth Assessment Report: Mitigation of Climate Change*.

ⁱⁱEnvironment and Climate Change Canada. 2022. *2030 Emissions Reduction Plan – Canada's Next Steps for Clean Air and a Strong Economy*.

Figure 2: Emissions change by sector and timeframe to achieve Canada's 2030 Emissions Reductions Targets



Source: Environment and Climate Change Canada

1. The main event: Oil and gas

Oil and gas are significantly important to Canada's GDP and energy security, yet operational emissions from this sector account for a quarter of national emissions. Over the last decade, these continued to increase unlike other high emissions industrial sectors, such as metals and cement, where steady decreases have been seen. The oil patch will have to execute a literal U-turn on emissions and cut 42 percent from 2019 levels in just eight years. The government did not include output limits in its *2030 Plan*, but, rather, focused on carbon-intensity limits which will necessitate rapid and significant investment in techniques to reduce emissions from extraction and production processes. The focus will be on reducing fugitive emissions of the potent greenhouse gas methane in upstream, as well as process improvements, efficiency improvements, electrification/fuel substitution, and the rapid scale-up of carbon capture, utilization and storage (CCUS) technology.

The April 2022 Federal Budget contained a refundable investment tax credit for businesses that incur eligible CCUS expenses, starting in 2022. The investment tax credit will be available to CCUS projects to the extent that they permanently store captured carbon emissions. The budget allocated C\$2.6 billion over five years starting in 2022-23, with an annual cost of about C\$1.5 billion annually until 2030.

The targets set out in the government's *2030 Plan* are significantly more ambitious than those previously set by the oil and gas sector itself, indicating the need for partnership and collaboration to close the gap. The Canadian oil and gas industry is recognized as a responsible source of energy in terms of high-quality operations and corporate governance but global markets are concerned about the carbon footprint of Canada's crude oil which is more than 30 percent higher than the global average. An overall cap on oil and gas output is expected in future government plans.

2. Dawn of green energy infrastructure: The low-carbon grid

Leveraging a decade of decarbonization momentum, Canada is likely to achieve its ambitious goal of reducing emissions from electricity generation by 77 percent by 2030 (Figure 2). Decarbonization of our energy system will be driven by enhanced nationwide actions such as completing the phase out of coal, the development and deployment of low-carbon energy sources (e.g., small modular reactors), grid modernization, and inter-provincial transmission lines.

A low-carbon grid is the foundation needed to power the country's economy with non-emitting energy sources. To support grid decarbonization, the *2030 Plan* announced significant funding to support home and building

upgrades and zero-emissions vehicle (ZEV) adoption – all of which rely on a green grid to succeed. Following the government's previous investments in electrifying industrial processes (for example, in projects with ArcelorMittal Dofasco, Alcoa Corporation and Rio Tinto Aluminum), the *2030 Plan* announced an investment in the Industrial Energy Management Program to future-proof industrial development.

3. Moving forward: Tackling transport

Personal and commercial transportation produce a quarter of all Canada's GHG emissions. The *2030 Plan* declares 20 percent of all passenger vehicle sales will be electric by 2026, rising to 60 percent by 2030 and reaching 100 percent by 2035 – up from about 5 percent today.

The federal government's mandate will increase sales of zero-emissions cars and trucks and change the landscape of the future Canadian transportation market. The government will spend C\$1.7 billion to extend existing incentives that offer credits to people who buy ZEVs. The government's aggressive targets will cause electricity consumption to rise (which the government wants to be zero emitting by 2035) and must be supported by the necessary infrastructure (such as new ZEV charging stations). Higher carbon pricing and volatile oil prices, under the shadow of the increasingly complex international energy crisis, could contribute to making electric vehicles the tacit choice.

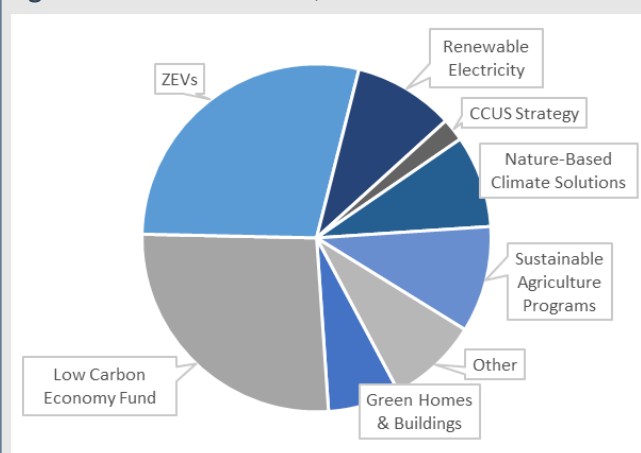
A significant emissions reduction target has been set for the commercial transportation sector that is comparable to the target set for the more technically advanced passenger transportation segment. This move is catalyzed by the increasing maturity of zero-emission medium and heavy-duty vehicles (MHDVs), such as hydrogen fuel cells and zero emission buses, as well as by Canada's technology leadership in this market segment. The *2030 Plan* sets a 35 percent sales target for ZEV MHDVs by 2030. The *2030 Plan* also announced incentives for refuelling infrastructure, purchase programs, truck retrofitting, demonstration projects, and public sector procurement commitment. The sales target and announced investments are clear signals to stimulate investment in the ZEV ecosystem, such as the hydrogen supply chain needed to support heavier, long-distance fleets.

4. A price on carbon is here to stay

Described in the *2030 Plan* as a cornerstone of the economy-wide strategy to reduce GHG emissions, the carbon tax rose to C\$50 per tonne of carbon dioxide equivalent in 2022, and the federal benchmark price will rise by C\$15 per year, increasing to C\$170 per tonne by 2030. To enhance long-term certainty, the government will explore measures to guarantee the future price of carbon by implementing carbon contracts, and it will explore legislative approaches to support a durable price on carbon pollution. Implementing these approaches will increase the capacity for investment in low-carbon projects, such as Carbon Capture, Utilisation and Storage (CCUS) and direct air capture, by boosting business certainty. Specifically, the revenue from capturing and storing carbon will be more stable and predictable if the federal government can guarantee its future price through contracts with investors. This will effectively mitigate risk arising from volatility and slow development of the global carbon market.

The domestic carbon pollution pricing system and complementary future carbon border adjustment schemes are considered potential tools to mitigate carbon leakage and support competitiveness for domestic industries, especially as other major economies implement carbon pricing. Both could add certainty to

Figure 3: Distribution of C\$9.1 billion investment



Source: Environment and Climate Change Canada

cash flows for major decarbonization projects, attracting both private sector investment and financial sector funding. This measure aims to remove uncertainty around the future benefits of investment in emission abatement and could be key to unlocking significant financing.

Governments agreed on the pillars and principles for a global carbon market at the 2021 UN Framework Convention on Climate Change Conference of the Parties in Glasgow, Scotland. Today, over 100 carbon trading and taxation schemes exist across global jurisdictions but these are expected to unify under a set of global standards and rules over the coming decade. Canada's clarity around carbon pricing is an asset in this context.

5. The “how” is as important as the “what”

The federal pledge to cut GHG emissions to reach 2030 targets will change the landscape of the oil and gas sector significantly, as well as other high emissions sectors. This could trigger social disruption, affecting households and communities across Canada working in high emissions sectors where the future is uncertain.

In response to this, the Government of Canada has committed over C\$2 billion to its Low Carbon Economy Fund which aims to leverage further climate action from provinces, territories and municipalities that face disruption. A new Indigenous Leadership Fund has been introduced to support clean energy and energy efficiency projects led by First Nations, Inuit, and Métis communities and organizations. Additionally, the government launched public consultations on proposed legislation to enable a “just transition” that supports displaced workers to thrive when moving towards a low-carbon future. These initiatives are essential and will bring significant benefits yet, given the wide range of people being affected, it will be challenging to align all the relevant stakeholders with the low-carbon transition.

6. Government cannot foot the bill alone

The *2030 Plan* came with C\$9.1 billion announced in new investment by the Federal Government to scale up the ZEV program, reduce the cost of retrofitting homes and buildings, empower communities to take climate action, expand renewables projects, invest in nature-based climate solutions, and support sustainable agriculture (Figure 3). Additional funding to the tune of C\$12 billion was outlined in the Federal Budget to support these initiatives and beyond. Effort will now shift to (1) ensuring all government policy and agencies align with planned emissions cuts, and (2) fostering innovation and collaboration between various levels of governments and industry. In addition, the government released its Green Bond Framework and a C\$5 billion issuance a week prior to its *2030 Plan* which helped signal expectations for standards and further foster development of the sustainable finance market in Canada.

Based on estimates from the Royal Bank of Canada, to reach net zero by 2050 (using currently available technologies), governments, businesses and communities would have to spend at least C\$60 billion a year, or C\$2 trillion in total. By comparison, the total sustainable finance-related capital commitments made by the big five Canadian banks either by 2030 or 2050 is C\$1.3 trillion, which leaves a C\$700 billion financing gap that needs to be filled to achieve net-zero emissions. Further private capital mobilization can define how far and how fast we can go with this new plan.

The *2030 Plan* aligns with several of the recommendations made by the Intergovernmental Panel on Climate Change (IPCC) in its latest report on climate change mitigation, and there therefore may be opportunities for Canada to export its technology and know-how into global markets. The IPCC report highlights the unavoidable role of CCUS to remove access carbon, possibly up to a decade's worth of emissions globally, if the 1.5 degree Celsius target is to be met. The IPCC report also points to the success of low-carbon energy such as wind, solar, hydroelectric and nuclear – all of which have a part to play in Canada's *2030 Plan*.