

Government of Canada Response to the Ninth Report Standing Committee on Environment and Sustainable Development: The Government of Canada's Planned Phase-Out of Fossil Fuel Subsidies and of Public Financing of the Fossil Fuel Sector

On 3 February 2022, the House of Commons Standing Committee on Environment and Sustainable Development (the Committee) adopted a motion to conduct a study of the government's commitments to accelerate Canada's G20 commitment to eliminate fossil fuel subsidies from 2025 to 2023 and to develop a plan to phase out public financing of the fossil fuel sector, including by federal Crown corporations. The Committee began its study on 29 March 2022 and heard from 37 witnesses from 27 organizations over five meetings concluding on 5 May 2022. The Committee received 19 briefs and agreed to incorporate into evidence the speaking notes of one witness who was unable to appear.

The Government of Canada thanks the members of the Standing Committee and all the witnesses who provided their testimony and perspectives. The Government concurs with the Committee's overall assessment that eliminating inefficient fossil fuel subsidies is necessary to achieve the country's climate change objectives; that the approach should ensure future support for the fossil fuel sector is aligned with the goals of the Paris Agreement; and that government policies and investments should give due consideration for workers and communities, the competitiveness of Canada's oil and gas sector, and the need to support clean energy and technology.

Since the Committee's study was presented to the House on 24 July 2023, the Honourable Steven Guilbeault, Minister of Environment and Climate Change, and the Honourable Chrystia Freeland, the Deputy Prime Minister and Minister of Finance, released the *Inefficient Fossil Fuel Subsidies: Government of Canada Self-Review Assessment Framework* and the *Inefficient Fossil Fuel Subsidies: Government of Canada Guidelines*, which were jointly developed by Environment and Climate Change Canada and the Department of Finance Canada. The Guidelines became effective on 24 July 2023 and apply to all federal departments and agencies.

Canada is the first G20 country to date to release a rigorous analytical guide that both fulfills our commitment and transparently implement the commitment. By eliminating inefficient fossil fuel subsidies, the Government of Canada is enabling greater support for clean technology, clean growth, and accelerated efforts to decarbonize key parts of the economy from oil and gas to hydrogen energy, which to play an important role in the Canadian economy.

The Government of Canada is also committed to phasing out public financing of the fossil fuel sector and is working to identify current public financing by 2024 and announce, by fall 2024, the implementation plan to phase out public financing of the fossil fuel sector, including by Crown corporations. Canada has already phased out

international financing to the fossil fuel sector (under the Clean Energy Transition, also referred to as the Glasgow Statement).

The Government supports the Committee's recommendations and addresses them in turn below. The Inefficient Fossil Fuel Subsidies Assessment Framework and Guidelines will prevent future fossil fuel subsidies that are misaligned with Canada's climate and energy priorities and allows continued investment in technologies and projects that could help meet Canada's climate commitments and further other government priorities, including reconciliation with Indigenous peoples. The Government is proceeding with work to identify current public financing and will announce, by fall 2024, the implementation plan to phase out public financing of the fossil fuel sector. Work to develop a plan to phase out domestic financing of the fossil fuel sector will give due consideration to policy coherence with the Assessment Framework and Guidelines, while accounting for potential economic and social impacts, as recommended by the Committee.

Recommendations to eliminate inefficient fossil fuel subsidies and phase out public financing of the fossil fuel sector

Recommendation #1: That the Government of Canada continue taking steps to eliminate subsidies and applicable public financing for the fossil fuel sector by the end of 2023, with careful attention to and mitigation of any potential social and economic impacts.

Recommendation #2: That the Government of Canada ensure that Canada's commitment to eliminate inefficient fossil fuel subsidies aligns with and provides policy coherence to Canada's domestic public financing policy.

Recommendation #8: That the Government of Canada, inclusive of Canadian Crown Corporations, publish, before the end of 2023, its plan to phase out public financing of the fossil fuel sector, and that the plan be ready for implementation.

Government response:

The Government of Canada supports Recommendations #1 and #2. It also supports Recommendation #8 with the exception of the timeline for implementation of the commitment to develop a plan to phase out public financing of the fossil fuel sector.

Addressing inefficient fossil fuel subsidies supports Canada's efforts to take action on climate change and transition to a low-carbon economy. Eliminating inefficient fossil fuel subsidies enables the Government of Canada to provide greater support for clean technology and work across the economy to reduce emissions.

On July 24, 2023, the Government of Canada announced the publication of the Inefficient Fossil Fuel Subsidies Self-Review Assessment Framework and Guidelines.

With this publication, Canada is delivering on the Government's G7 and G20 commitments to phase out inefficient fossil fuel subsidies. The Guidelines released alongside the Framework will be used by federal government departments and agencies to ensure all future programs and spending decisions are aligned with the Framework. This will avoid the potential creation of any new tax or non-tax measures that are inefficient fossil fuel subsidies. The Government will periodically review the Guidelines and update them to maintain alignment with Canada's climate and energy objectives such as net-zero emissions by 2050, and compliance with the Paris Agreement.

This work follows guidelines published in December 2022 on meeting the Statement on International Public Support for the Clean Energy Transition to end new direct public support for the international unabated fossil fuel energy sector. These policies will work in concert to align government programs directed at the fossil fuel sector with Canada's ambitious climate agenda.

The Government of Canada is also committed to phasing out domestic public financing of the fossil fuel sector, including by Crown corporations. An implementation plan to phase out public financing of the fossil fuel sector will be announced by fall 2024. This timeframe will ensure that it is designed with due consideration of relevant impacts, including potential social and economic impacts.

The Government's work will identify current public financing by 2024 and announce by fall 2024 the implementation plan to phase out public financing of the fossil fuel sector.

Recommendations on definitions and conditions for government subsidies and investment

Recommendation #4: That the Government of Canada take steps to ensure that public funds cannot be invested in any energy infrastructure that is at risk of becoming a "stranded asset" during the energy transition.

Recommendation #5: That the Government of Canada ensure that any subsidy it offers facilitates the transition towards a low-carbon future, and is consistent with Canada's 2026 emissions objective, 2030 emissions reduction goals and its 2050 net zero emissions goals.

Recommendation #6: That the Government of Canada adopt:

- a broad, internationally recognized definition of a fossil fuel subsidy; and
- a definition of "inefficient," in the context of fossil fuel subsidies.

Recommendation #7: That the Government of Canada develop a framework for decision-making related to supports for the oil and gas industry that is based on analysis and assessment of the most cost-effective way to achieve greenhouse gas reductions while considering the needs of workers and communities.

Recommendation #9: That the Government of Canada attach strict conditions to all funding programs to ensure government spending is aligned with Canada’s obligations under the Paris Agreement.

Government response:

The Government of Canada largely supports the above recommendations with respect to support for the fossil fuel sector and agrees that considering climate change in all government decision-making is essential. While the Inefficient Fossil Fuel Subsidies Assessment Framework and Guidelines only applies conditions, as suggested in Recommendations #4, #5, and #9, to the fossil fuel sector, additional tools, such as the Integrated Climate lens, are under development to ensure climate considerations are central to all government decision-making.

As part of the Inefficient Fossil Fuel Subsidies Assessment Framework and Guidelines announced on July 24, 2023, the Government of Canada has developed a definition for both “fossil fuel subsidy”, and “inefficient”. Canada is the first country to release a rigorous analytical framework that includes a definition of “inefficient”. This will ensure that all subsidies that disproportionately benefit the fossil fuel sector or support fossil fuel consumption meet strict conditions.

Under the Assessment Framework, a measure is deemed a “fossil fuel subsidy” if it meets two conditions:

- a) it disproportionately benefits the fossil fuel sector, solely supports fossil fuel activities, or supports fossil fuel consumption; and
- b) it is considered a subsidy, as set out in the Assessment Framework.

The Assessment Framework defines a subsidy by reference to the World Trade Organization’s (WTO) definition of a subsidy as set out in the Agreement on Subsidies and Countervailing Measures (ASCM), which broadly defines a subsidy as a financial contribution by a government or a form of income or price support that confers a benefit to the recipient. This only includes subsidies provided by the federal government and does not include measures that reflect a normal treatment (i.e., where the Government has a standard way that it treats all businesses and industries with respect to tariffs or duties).

All measures identified as “fossil fuel subsidies” are deemed “inefficient” unless they meet at least one of the following criteria:

1. Enable significant net greenhouse gas (GHG) emissions reductions in Canada or internationally in alignment with Article 6 of the Paris Agreement;
2. Support clean energy, clean technology or renewable energy;

3. Provide an essential energy service to a remote community;
4. Provide short-term support for emergency response;
5. Support Indigenous economic participation in fossil fuel activities; or
6. Support abated production processes, or projects that have a credible plan to achieve net-zero emissions by 2030.

In addition to the Assessment Framework, Guidelines were published to achieve two objectives related to Canada's G7 and G20 commitments to eliminate inefficient fossil fuel subsidies:

- 1) Avoid creating new measures that would be considered inefficient fossil fuel subsidies; and
- 2) Ensure existing policies and programs no longer support the fossil fuel sector unless it is aligned with the Assessment Framework.

These Guidelines now apply to all federal departments and agencies and will ensure all future subsidies provided to the fossil fuel sector meet at least one of the six criteria above.

The Assessment Framework builds on Canada's commitment under the 2021 Glasgow Statement to end new direct public support for the international unabated fossil fuel energy sector. When operationalizing the Assessment Framework and Guidelines, due diligence principles will be developed, taking into account the approach established in the Glasgow Statement Guidelines. This will include consideration of alignment with Canada's climate goals and the Paris Agreement, stranded asset risk, and credible alternatives analysis.

To enable the transition to net-zero emissions, it is important that decision-makers consider climate impacts in a rigorous, consistent, and measurable manner, including for programs that may not support the fossil fuel sector. Since November 2021, the Government of Canada has been undertaking a pilot project to test the Integrated Climate Lens among key departments to ensure that climate mitigation and adaptation considerations are integrated into key decisions, namely Memoranda to Cabinet, Treasury Board submissions and funding proposals. This includes estimating relevant proposals' impact on GHG emissions both in 2030 and 2050.

Recommendation on transparency and the peer review process

Recommendation #11: That the Government of Canada complete and publish its fossil fuel subsidy peer review with Argentina as quickly as possible.

Recommendation #12: That the Government of Canada make information about subsidies and supports to the fossil fuel sector transparently available, to allow for a more comprehensive inventory and analysis.

Government response:

The Government of Canada supports these recommendations and Canada is undertaking a peer review of its assessment of federal inefficient fossil fuel subsidies through the G20 process. The peer review process will increase transparency on Canada's actions to fulfil the G20 commitment and further reaffirm our commitment to climate action.

As part of the peer review with Argentina under the G20 process, Canada will prepare a self-review report which will be examined by an international peer review panel, which generally includes the partner country and potentially other countries and international organizations, including the Organisation for Economic Co-operation (OECD). While the timeline to complete the peer review process is difficult to estimate, particularly as Canada will need to establish the international panel to analyze the self-review report, the Government of Canada expects the process to be completed in 2024.

The Government of Canada recognizes the importance of transparency and public accountability. This is why Canada's self-review report and peer review process are integral to Canada's approach to the fulfillment of its G20 and G7 commitment to phase out inefficient fossil fuel subsidies. The self-review report will be made public once the peer review is finalized.

The purpose of the Inefficient Fossil Fuel Subsidies Assessment Framework announced in July 2023 is to provide a transparent methodology for assessing whether federal measures constitute inefficient fossil fuel subsidies, and for ensuring, through the Guidelines, that the Government does not create new inefficient fossil fuel subsidies. The Framework and Guidelines, therefore, provide clear and transparent direction to federal departments and agencies which are responsible for administering measures. As Canada is the first country to date to publish its Assessment Framework and Guidelines for defining inefficient fossil fuel subsidies, any interested party will be able to review new government spending that may be considered fossil fuel subsidies, and assess whether they are consistent with the Inefficient Fossil Fuel Subsidies Assessment Framework.

Recommendation 3: That the Government of Canada assess planned and proposed policy measures based on whether they support or hinder Canada's long-term economic growth and a smooth transition for workers and communities, especially in the face of the accelerating decarbonization in global markets.

Government response:

The Government of Canada supports this recommendation, and is focused on ensuring support for workers and communities in the shift to a low-carbon economy.

The Government of Canada is taking concrete federal action to encourage growth in a low-carbon economy and the creation of sustainable jobs. This includes over \$120 billion earmarked since 2016 to build a low-carbon economy; and over \$1.5 billion in investments for skills programming, including sustainable jobs.

The recently released interim Sustainable Jobs Plan outlines a broad array of current and planned actions to ensure Canada's workers and communities succeed in a net-zero emissions future, including a commitment to establish a federal framework to facilitate transparency, accountability, and engagement to guide effective federal action on sustainable jobs.

This framework, which would be operationalized through [Bill C-50](#), the *Canadian Sustainable Jobs Act*, introduced in the House of Commons on June 2023, would put in place key mechanisms to guide the development of planned and proposed policy measures to ensure they enable long-term economic growth and support workers and communities.

Notably, as outlined in Bill C-50, this framework would require the development of Sustainable Jobs Action Plans every five years, which would put in place measures to invest in the net-zero emissions economy and the labour force of the future. The bill would also require the Government to provide progress reports on Action Plan implementation every 2.5 years after the tabling of each successive Action Plan. The Action Plans and progress reports together would provide a mechanism to track the Government's progress and assess the effectiveness of the initiatives in supporting the creation of sustainable jobs and growth of the low carbon economy across the country. The Action Plans would be iterative in nature, enabling a regular adjustment to action to ensure the Government's approach remains responsive and relevant to the evolving low-carbon economy.

Furthermore, the bill would require the creation of a Sustainable Jobs Secretariat to enable policy and program coherence across federal entities on the Government's sustainable jobs approach and would also require the creation of a Sustainable Jobs Partnership Council, to provide independent advice to the Government on an annual basis.

Recommendation 10: That Natural Resources Canada ensure that, for onshore projects, the Emissions Reduction Fund only considers projects that fully eliminate methane emissions.

Government response:

The Government of Canada supports this recommendation. On December 21, 2021, the Honourable Jonathan Wilkinson, Minister of Natural Resources, announced that the Emissions Reduction Fund (ERF) Onshore Program would be refocused to better support the government's ambitious climate change goals.

The changes to the program reflected both the much-improved economic situation in Canada's oil and gas sector since 2020; lessons learned through the first two intakes of the program; an audit of the program prepared by the Commissioner of the Environment and Sustainable Development (CESD); supportive comments on the program from environmental non-governmental organizations; and supportive cooperation from the industry. As part of these changes, more stringent eligibility requirements were implemented, such that only projects that fully eliminate methane emissions and surpass regulatory requirements were considered.

Recommendation 13: That the Government of Canada support renewable energy innovation to demonstrate the potential for an affordable, clean energy transition.

Government response:

The Government of Canada supports the Committee's recommendation and recognizes the importance of an affordable, clean energy transition facilitated by renewable energy innovation. Getting to net-zero by 2050 will require innovation along the energy supply chain, including the mobilization of research, development and demonstration (RD&D). The International Energy Agency estimates that half of the emissions reductions needed globally for net-zero will come from technologies that are not yet ready for commercial deployment. The Canadian Climate Institute found this figure could be as high as two thirds for Canada. Deploying these technologies before 2050 will require innovation at an unprecedented scale and pace, meaning that the 2020s need to be the most significant decade not only for clean energy deployment but also for net-zero aligned innovation.

The Government of Canada has a proven track record of support for this kind of net-zero aligned innovation. Natural Resources Canada (NRCan) delivers targeted RD&D funding through Office of Energy Research and Development's flagship Energy Innovation Program (\$116.5 million per year). This program advances clean energy technologies that will help Canada meet its climate change targets while supporting the transition to a low-carbon economy. It funds RD&D and other related scientific activities within the federal labs, across Canada, and with international partners. To enable a clean energy transition that benefits all Canadians, Canada is also taking steps to ensure that emerging energy innovation policy and programming promotes inclusion, diversity, equity, and accessibility, supports sustainable jobs, facilitates action on Indigenous reconciliation, and promotes the participation of and benefits to groups who are underrepresented and have been historically marginalized.

NRCan's suite of energy innovation programs has supported over 300 projects in recent years. Data from 2021-22 demonstrated that projects had filed for 156 patents or licenses, informed the development of 39 codes, standards, or regulations, and produced 889 publications or reports. Further, these projects resulted in 1113 direct job-years annually (over 2000 direct and indirect), generated \$57M+ in follow-on investments and over \$17M in revenue. Previously funded technology demonstration projects reduced 2.2 Mt GHG annually and are on track to meet or surpass 2030 targets of 4.25Mt.

Recommendation 14: That the Government of Canada use its resources to prioritize support for identified, technologically viable decarbonization options, as well as scaled-up renewable electricity generation and new distribution and transmission technology.

Government response:

The Government of Canada supports this recommendation. In line with a commitment to achieve a net-zero electricity grid by 2035, the Government of Canada is working with Indigenous communities, provinces and territories, industry and utilities to advance clean electricity projects..

On August 10, 2023, Environment and Climate Change Canada made public the draft Clean Electricity Regulations (CER). The Government of Canada designed the CER to maximize the reduction of greenhouse gas emissions from the electricity sector while enabling Canadians to continue to have access to reliable and affordable power. The CER will set a technology-neutral emissions standard for the generation of electricity that is provided to the grid as of 2035.

The CER is a critical part of an overall approach to the clean electrification of the Canadian economy to ensure that Canada can achieve its economy-wide net-zero goals through increased electrification of vehicles, building heating and industrial processes. This approach is being supported by federal investments in clean electricity of over \$40 billion, including historic announcements in Budget 2023, as well as by the recently launched Canada Electricity Advisory Council.

For example, the Government of Canada proposed to introduce the Clean Electricity Investment Tax Credit, which will provide a 15% refundable tax credit for eligible investments in certain non-emitting electricity generation systems, abated natural gas-fired electricity generation, stationary electricity storage systems, and equipment for electricity transmission between provinces and territories. The proposed Clean Technology Manufacturing ITC will cover 30% of the cost of investments in new machinery and equipment used to manufacture or process key clean technologies, and extract, process, or recycle key critical minerals. In addition, the proposed Clean

Technology Investment Tax Credit, which was first announced in Budget 2022, with details provided in the *2022 Fall Economic Statement*, was expanded in Budget 2023 to include certain geothermal energy systems.

Budget 2023 also announced a clean electricity focus for the Canada Infrastructure Bank (CIB) which will invest at least \$20 billion to support the building of major clean electricity and clean growth infrastructure projects. These investments will position the CIB as the federal government's primary financing tool for supporting clean electricity generation, transmission, and storage projects.

The \$1.56 billion [Smart Renewables and Electrification Pathways Program \(SREPs\)](#) is supporting 128 smart renewable energy, grid modernization, and capacity projects, which will add over 2,700 megawatts of new renewable generation capacity to the electricity system and over 2,300 megawatt hours of energy storage capacity. Over half of supported projects have meaningful Indigenous ownership. In Budget 2023, Canada announced nearly \$3 billion over 13 years to support clean electricity projects, including recapitalizing funding for SREPs and renewing the demonstration stream of the Smart Grids Program.

The [Clean Energy for Indigenous, Rural and Remote Communities \(CERRC\) Program](#) is supporting 139 projects for deployment of renewable energy, capacity building for participation in the renewable energy sector, and related energy efficiency measures across Canada. Launched in 2018, CERRC aims to reduce diesel reliance for heat and power in Indigenous and remote communities.

The \$25 million Strategic Interties Predevelopment Program (SIPP) has been supporting inter-provincial electricity transmission project predevelopment activities for the Atlantic Loop to help clarify project costs, offer insight on system reliability and benefits, develop the knowledge base to support respective provincial regulatory processes, and identify relevant environmental and community engagement issues. The \$250 million Electricity Predevelopment Program (EPP) was also implemented, in support of predevelopment activities necessary to advance clean electricity infrastructure projects of regional and national significance.

The \$100 million [Smart Grid Program](#) promoted the modernization of grid infrastructure by funding 22 projects for the demonstration of promising, near-commercial smart grid technologies and the deployment of smart grid integrated systems across Canada, and secured renewal of funding for the demonstration stream based on the program's successes.

The \$200 million [Emerging Renewable Power Program \(ERPP\)](#) supported geothermal, tidal and bifacial solar energy projects; technologies not yet established commercially in Canada. Through its funding, ERPP expands the portfolio of commercially viable

renewable energy sources, allowing emerging renewables to play a larger role in Canada's electricity supply mix to reduce GHG emissions.

Budget 2022 provided \$120.7 million to support the conditions and enabling frameworks necessary for SMRs to be deployed. This funding supports the [Enabling Small Modular Reactors \(SMRs\) Program](#), which funds research and development (R&D) to support provinces and territories as they work to develop and deploy SMRs as part of their respective decarbonization and economic development plans.

In June 2023, the Government of Canada released a vision paper titled *Powering Canada Forward: Building a Clean, Affordable and Reliable Electricity System for Every Region of Canada*. This paper is the government's vision for transforming Canada's electricity sector, to decarbonize grids by 2035, keep electricity systems reliable and ensure household energy costs are affordable. The paper will inform how the federal government will accelerate work over the coming months with partners — including provinces, territories, Indigenous leaders, utilities, industry, private and financial sectors, unions, academics and civil society — and inform the development of Canada's first Clean Electricity Strategy to be released in 2024.

In May 2023, the Government of Canada also launched the Canada Electricity Advisory Council, an independent body of 19 experts who will provide the government with advice to help accelerate investments that promote sustainable, affordable and reliable electricity systems. The Council will prepare a report outlining its analysis and recommendations to the Minister at the end of its one-year term.

Canada is also member of several international fora to support access to, investment in, and use of clean energy and enabling technologies, such as the International Renewable Energy Agency (IRENA) and the International Energy Agency (IEA). Through IRENA, Canada participates in efforts to share policy, technology, resource and financial insights, and promote international cooperation on renewable energy development, as well advance policy priorities such as universal energy access and gender equity. As well, on November 4, 2021, at COP26, Canada and IRENA launched a new global, multi-stakeholder platform to transition remote communities to renewable energy. Canada's work in the IEA's Clean Energy Transitions Programme aims to accelerate clean energy transitions and increase energy access in major emerging economies through collaborative analytical work, technical cooperation, training, and capacity building, as well as strategic dialogues.

Recommendation 15: That the Government of Canada continue to emphasize carbon pricing and flexible regulations as the core of its emissions reduction policy, in order to minimize the costs required to achieve significant emissions reductions.

Government response:

The Government of Canada supports this recommendation.

Federal departments and agencies are responsible for considering a range of options for achieving policy objectives and the process of instrument choice is an important part of federal policy and regulatory processes. The Cabinet Directive on Regulation encourages departments to design regulations that are flexible and outcome-based, when appropriate.

An example is Canada's approach to pricing carbon pollution. Putting a price on pollution is widely recognized as the most efficient means to reduce greenhouse gas emissions. It is a flexible approach that accounts for the cost of carbon pollution in daily decisions without prescribing the specific actions that individuals and industries must take. It gives all provinces and territories the flexibility to design its own pricing system tailored to local needs, or to choose the federal system. The federal government sets minimum national stringency standards (the "benchmark") that all systems must meet to ensure they are comparable and effective in reducing GHG emissions. If a province decides not to price carbon pollution, or proposes a system that does not meet these standards, the federal system is applied.

Canadians and businesses understand that putting a price on carbon pollution spurs the development and adoption of new technologies, goods, and services that can help reduce their emissions cost-effectively. For this reason, experts consistently recommend carbon pollution pricing as an efficient, effective approach to reducing emissions.

Canada is growing its economic output while decreasing the amount of emissions associated with economic activities. Specifically, economy-wide emissions intensity (GHG emissions per GDP) has declined 37% since 1990, and by 23% since 2005, due in large part to key policies and measures, such as carbon pollution pricing, that led to fuel switching, increases in efficiency, the modernization of industrial processes, and structural changes in the economy.

The Clean Fuel Regulations (CFR) are another example of a flexible, market-based mechanism that reduces GHG emissions from gasoline and diesel used in transportation across the fuel lifecycle--from extraction through processing, distribution, and end-use. The CFR gives regulated industries the flexibility to choose the most cost-effective approaches to comply that work best for them. It takes a technology neutral approach, enabling credits to be generated from many different activities, ranging from investments in decarbonization projects such as CCUS, supplying low-carbon intensity fuels (e.g., biofuels), or supplying fuel or energy to advanced vehicle technologies such as electric vehicles. Regulated parties also have the option to purchase credits from the market. The CFR also includes various other flexible compliance mechanisms, which also help to contain costs while giving regulated parties more options to meet reduction requirements.

Recommendation 16: That the Government of Canada should make public investments in projects that are complementary to carbon pricing and to other regulatory policies aimed at reducing greenhouse gas emissions.

Government response:

The Government of Canada supports this recommendation. Investments in projects that are complementary to carbon pricing and to other regulatory measures are a cornerstone of Canada's climate plans. These investments help reduce emissions by addressing market barriers and accelerating the deployment of low carbon technologies in key economic sectors.

Public investments in GHG emissions reduction projects are facilitated via climate mitigation programming across various federal departments. Through interdepartmental governance mechanisms and ongoing collaboration, departments work together to ensure a coordinated approach and optimize GHG emissions reduction opportunities.

While some low-carbon solutions are becoming more cost-competitive, achieving Canada's 2030 emission reduction target and net-zero emissions by 2050 will require significant effort to accelerate both the development of technologies and their deployment. There is increasing global recognition that such technological transitions represent both an opportunity to drive down GHG emissions and also a chance to generate clean economic growth, with global clean technology activity projected to reach \$3.6 trillion by 2030, according to the Smart Prosperity Institute.

The future of Canada's clean technology industry and climate commitments rests on scaling up the adoption of commercially available clean solutions and readying emerging climate innovations, i.e., technologies that are still in early stages of development. The Government of Canada is committed to advancing key measures to simultaneously position the clean technology industry for success, drive emissions reduction, and spur net-zero focused innovation. For example, through the Strategic Innovation Fund's Net Zero Accelerator (SIF NZA), in July 2021, the Government of Canada funded Algoma Steel Inc. (\$200 million from SIF NZA, and \$220 million from Canada Infrastructure Bank) and ArcelorMittal Dofasco (\$400 million from SIF NZA) to retrofit their operations, convert their steel production processes, and phase out coal-fired steelmaking at their respective facilities. Together the two projects will reduce GHG emissions by up to 6 million tonnes of CO₂e per year. As well, In June 2019, GoC invested \$25 million, through SIF, in Carbon Engineering, a Squamish-based company developing technologies to extract carbon dioxide directly from the atmosphere and use it to produce clean synthetic fuels.

Recommendation 17: That the Government of Canada continue to ensure that the competitiveness of Canada's oil and gas sector is considered when it makes decisions

related to climate change measures, and that it continue to collaborate with other jurisdictions to address issues of global competitiveness.

Government response:

The Government of Canada supports this recommendation. The Government is committed to ensuring that Canada's transition to a low-carbon economy is achieved in a way that is fair and predictable for businesses and Canada's international competitiveness.

Net-zero emissions by 2050 scenario forecasts from the International Energy Agency project that global oil demand will decline by over 75% by 2050. Further, the Canada Energy Regulator's Global Net-zero Scenario published in June 2023, which assumes global climate action consistent with limiting warming to 1.5°C, estimated that Canadian crude oil production will be 76% lower in 2050 compared to 2022.

To remain competitive as the world continues to decarbonize, it is important that Canada's oil and natural gas sector reduce its emissions from production by deploying clean technologies while also exploring opportunities to transition to produce non-emitting products and services such as hydrogen to meet the world's low-carbon energy needs.

The Government of Canada has in place and has committed to implementing various climate change-related regulations, programs, and incentives to facilitate and motivate emissions reductions in the oil and gas industry (e.g., methane regulations, carbon pricing, capping oil and gas sector emissions, fiscal incentives). These instruments are critical to enabling Canada to meet its climate change and net zero commitments and are being advanced in a manner that seeks to maintain international competitiveness while decarbonizing.

The federal government is also working with provincial and territorial counterparts, industry, Indigenous Peoples, and other interested stakeholders to identify barriers and advance opportunities related to decarbonization in by Canada's oil and gas sector. This includes complementary action to reduce GHG emissions and further support innovation and deployment of key technologies, through programs and initiatives such as:

- The \$675 million Emissions Reduction Fund, which is helping Canadian onshore oil and gas companies invest in clean solutions to reduce methane emissions, while the \$42 million Offshore Deployment Program is supporting research, development, and demonstration projects that advance solutions to decarbonize the offshore oil and gas industry.

- The Net-Zero Accelerator, which will provide \$8 billion to large emitters (including oil and gas) to speed up decarbonization projects, scale-up clean technology and accelerate Canada’s industrial transformation across all sectors.
- Three new investment tax credits for clean hydrogen, carbon capture, utilization, and storage, and clean technologies to achieve net-zero and further support the decarbonisation of the oil and gas sector and refining sectors.
- The Clean Growth Program, a \$155 million investment in clean technology research, development, and demonstration projects in Canada’s energy, mining, and forestry sectors.
- The Canada Growth Fund, launched as part of Canada’s 2022 Fall Economic Statement, which will provide \$15 billion to catalyze substantial private sector investment in Canadian businesses and projects to help transform and grow Canada’s economy at speed and scale on the path to net-zero by reducing emissions, accelerating the deployment of key technologies, such as low-carbon hydrogen and CCUS, scaling clean growth in new and traditional sectors, capitalizing on Canada’s abundance of natural resources and strengthening critical supply chains.

The Government agrees that the transition to a lower-carbon energy system must consider the competitiveness of the oil and gas sector and its ability to attract investment to continue to improve its emissions performance. Technology innovation will be critical for this and to Canada’s ability to seize opportunities in new markets to supply a cleaner product. Accordingly, the Government continues to ensure that measures to reduce emissions in the oil and gas sector are designed to mitigate competitiveness challenges, while also limiting avoidable regulatory burden and inefficiency, as well as other potential barriers to investment.

Recommendation 18: That the Government of Canada ensure that all its policies and measures, including those related to support for the fossil fuel sector, are consistent with—and efficiently achieve—the country’s 2030 emissions reduction goals and its 2050 net zero emissions goals.

Recommendation 19: That the Government of Canada conduct modelling and costing of climate policy options early in policy development across all departments and agencies, and that it establish criteria for government spending on programs that include consideration of a project’s contribution to net zero emissions by 2050 relative to its cost.

The Government of Canada supports these recommendations. The *Canadian Net-Zero Emissions Accountability Act (the Act)*, which received royal assent in June 2021, provides a legislative framework that requires the setting of clear emissions reduction

targets and the establishment of plans to meet them, the first of these being the 2030 Emissions Reduction Plan (ERP).

The Act enshrines in legislation the Government of Canada's target of achieving net-zero greenhouse gas emissions by 2050. It also confirms that the national GHG emissions target for 2030 is Canada's nationally determined contribution for that year, communicated under the Paris Agreement. As well, the Act establishes a legally binding process to set interim five-year national emissions-reduction targets for the milestone years of 2035, 2040, and 2045. Each target must be set ten years in advance, with accompanying credible, science-based emissions reduction plans published at least five years before the beginning of the milestone year to which they relate. Each emissions reduction plan must also explain how it contributes to reaching net-zero in 2050. Additionally, the Government is required to engage key stakeholders and partners, such as provincial and territorial governments, Indigenous Peoples, and the Net-Zero Advisory Body (NZAB), among others, in setting these national targets and plans. When establishing or amending an emissions reduction plan, the Minister of Environment and Climate Change must do so in consultation with the other federal ministers having duties and functions relating to the measures that may be taken to achieve that target.

The [2030 ERP](#), published in March 2022, is the first of these emissions reduction plans. It provides a roadmap for how Canada can achieve its greenhouse gas emissions target of 40-45% below 2005 levels by 2030. The 2030 ERP included new measures and strategies across all sectors of the economy, reflecting the best available science. It also puts in place the building blocks to achieve net-zero emissions by 2050.

For each target, the Act requires a progress report to assess the ongoing implementation of the respective emissions reduction plan. Assessment reports will also be required for each milestone year, to indicate whether a target has been met and to assess the effectiveness of the measures and strategies described in the associated emissions reduction plan. The first progress report required under the Act, which will assess implementation of the 2030 ERP, must be published by the end of 2023.

The 2030 ERP included detailed modelling that reflected the most up-to-date assumptions of the key drivers that influence Canada's overall GHG emissions (e.g. economic growth, oil and gas prices and production, and updated historical GHG data) as well as the policies and actions that are included in the plan where there was sufficient information to include them in the projections. This analysis was undertaken using two ECCC models:

- E3MC – A modelling framework that combines Energy 2020 and a macroeconomic model working in tandem. Energy 2020 is a 10 province and 3-territory bottom-up energy technology simulation model. Bottom-up energy technology simulation models contain a detailed representation of technologies

and seek to minimize costs while achieving specific goals. The granularity of Energy 2020 allows for the analysis of a wide range of sectoral measures and targeted performance standards and regulations.

- EC-Pro – A 10 province and 3-territory multi-sector, multi-region, computable general equilibrium (CGE) model. A CGE model combines economic theory with real economic data in order to derive the impacts of policies or shocks on the economy. As a CGE model takes into account the inter-dependencies between different sectors, agents and markets in the economy, it can help shed light on the wider economic impact of policies and sometimes reveal their indirect or unintended effects.

These models are also used to develop Canada’s annual GHG emissions projections, which track Canada’s progress towards meeting its emissions objectives. These models are also used to assess the expected impacts of various policies, including regulatory measures, funding initiatives, and carbon pricing.

Furthermore, and as noted above, the December 2020 Strengthened Climate Plan committed the Government of Canada to develop a Climate Lens that could be applied to government decision-making in a rigorous, consistent, and measurable manner. Since November 2021, the Government of Canada has been undertaking a pilot project to test an Integrated Climate Lens among key departments to ensure that climate mitigation and adaptation considerations are integrated into key decisions, namely Memoranda to Cabinet, Treasury Board submissions and funding proposals. This includes estimating relevant proposals’ impact on GHG emissions both in 2030 and 2050.

Recommendation 20: That the Government of Canada consider carbon contracts for differences to ensure that companies that are eligible to produce credits for greenhouse gas emissions reductions have certainty of the value of those credits, regardless of future changes to the carbon price.

Government Response: The Government of Canada supports this recommendation to consider carbon contracts for difference.

The Government of Canada is supporting enhancing carbon price certainty in a number of ways. It has set the carbon pollution price trajectory out to 2030, currently \$65 and increasing by \$15 per year to \$170 in 2030. The updated minimum national stringency requirements (‘federal benchmark’) for carbon pollution pricing systems in Canada (2023-2030) also require carbon markets to maintain a strong price signal in line with the minimum national carbon pollution price across all covered emissions. The Government of Canada is also reinforcing the investment signals created by Canada’s carbon pollution pricing systems with other tools, such as contracts for difference.

The Canada Growth Fund is deploying financial instruments, including contracts for difference, to absorb certain risks and encourage private sector investment in low carbon technologies. In addition, as announced in Budget 2023, the Government is consulting on the development of a broad-based approach to carbon contracts for difference that aims to make carbon pricing even more predictable and support the investments needed to grow Canada's competitive clean economy and meet our climate goals.

Recommendation 21: That the Government of Canada increase support for scale-up of market-ready renewables and other low emissions solutions to the challenges of getting to net zero emissions.

Government response:

The Government of Canada supports this recommendation. Since 2015, the federal government has taken action to build Canada's clean economy and create good middle class jobs. This includes:

- Putting in place a federal carbon pricing system, which puts money back in the pockets of Canadians and gives businesses the flexibility to decide how best to reduce their emissions;
- \$15 billion for the Canada Growth Fund to incentivize private sector investment into projects and companies that will grow Canada's clean economy at speed and scale;
- \$8 billion for the Net Zero Accelerator to make large-scale investments in clean technologies;
- \$4.2 billion for the Low Carbon Economy Fund to support the installation of emission-reducing technologies for provinces and territories, businesses, Indigenous communities, and other organizations;
- \$3.8 billion for Canada's Critical Minerals Strategy, which will help make Canada a global supplier of choice for the critical minerals that are the bedrock of clean and digital technologies;
- \$3.9 billion to make zero-emission vehicles more affordable for Canadians and Canadian businesses, and to build new charging stations across Canada;
- \$1.5 billion for the Clean Fuels Fund to encourage investment in the production of clean fuels, including clean hydrogen and biofuels;
- \$33.5 billion for the Investing in Canada Infrastructure Program to support new investments in public transit; green infrastructure; community, culture and recreation infrastructure; and rural and northern communities;

- \$35 billion for the Canada Infrastructure Bank to attract private capital to major infrastructure projects and help build more infrastructure across the country; and,
- \$2.6 billion for the new Canada Innovation Corporation, which will support Canadian businesses in investing in research and development.

Budget 2022 announced a deepened role for the Canada Infrastructure Bank to invest in private sector-led infrastructure projects that accelerate Canada's efforts to reach net-zero. Building on this, Budget 2023 positioned the Canada Infrastructure Bank as the government's primary financing tool for supporting clean electricity projects. Budget 2023 announced that the Canada Infrastructure Bank will invest at least \$10 billion through its Clean Power priority area, and at least \$10 billion through its Green Infrastructure priority area. This will allow the Canada Infrastructure Bank to invest at least \$20 billion to support the building of major clean electricity and clean growth infrastructure projects.

Budget 2023 also announced transformational new clean economy investment tax credits, which will help support the clean technology manufacturing and clean energy production necessary for Canada's energy transition, while supporting good jobs for the middle class and ensuring more vibrant communities across Canada, including:

- Proposing to introduce a new 15% refundable Clean Electricity Investment Tax Credit.
- Proposing to introduce a new refundable Clean Technology Manufacturing Tax Credit to cover 30% of costs in new machinery and equipment used to manufacture or process clean technologies and extract, process or recycle critical minerals.
- Moving forward with the Clean Hydrogen Investment Tax Credit first introduced in the 2022 Fall Economic Statement to support between 15 and 40% of eligible projects' costs to produce clean hydrogen, right here at home.
- Expanding the Carbon Capture, Utilization, and Storage Investment Tax Credit to additional types of equipment.
- Proposing to expand eligibility for the Clean Technology Investment Tax Credit to include certain geothermal energy systems.

Through the Strategic Innovation Fund's Net Zero Accelerator (NZA) initiative, the Government of Canada has earmarked \$8 billion to support the decarbonization of domestic high emitters, to drive the green transformation of Canadian industry, and to help develop clean technologies and a Canadian battery ecosystem through two strategic investment paths:

- High-emitting sectors—Proposals that offer significant and short-term emission reductions within the next decade, helping Canada meet climate targets and likely contributing to broader economic, innovation, social or other types of benefits.
- Transformational ideas pathway—Proposals that may be in earlier stages of development but that have long-term potential to set high-emitting sectors on a transformative path to net zero by 2050 or sooner.