Government of Canada Response to the Fifth Report of the Standing Committee on Natural Resources Entitled "A Study of Methane Reduction Plans: Emissions Reduction Fund Onshore Program Review"

The House of Commons Standing Committee on Natural Resources undertook a study on the Onshore Program of the Emissions Reduction Fund (ERF), following an audit of the program by the Commissioner of the Environment and Sustainable Development. The motion was to study the development and implementation of the program, and make recommendations to strengthen both the Onshore Program and other future programs or initiatives that seek to reduce methane emissions in the oil and gas sector.

The Government of Canada thanks both the members of the Standing Committee and all the witnesses who appeared before it for sharing their perspectives and testimony on the importance of methane emission reductions in general and on the ERF Onshore Program in particular. The Government concurs with the committee's overall assessment that methane poses a grave risk to the global climate and that Canada must work to reduce methane emissions as much as possible, as quickly as possible. The Government supports all of the committee's recommendations and addresses them in the government response as follows below. The Government also notes the supplementary opinions and recommendations flagged by the Conservative Party of Canada and the New Democratic Party, some of which overlap with the committee's overall recommendations, and has addressed them to the extent possible in the following response.

<u>RECOMMENDATION 1:</u> That the Government of Canada publish additional data about the Emissions Reduction Fund Onshore Program, including:

- Identifying what portion of emissions reductions achieved in the first two intakes of the program exceeded what would otherwise been required by regulations; and
- Releasing more detailed information about the projects, costs, and emission reductions achieved by the program.

Government Response:

The Government of Canada supports this recommendation and remains committed to gathering and publishing comprehensive, accurate data about projects funded by the ERF Onshore Program, as projects are completed, including the portion of the anticipated total emission reductions that are additional to what would have been required by regulations.

The ERF Onshore Program was launched in fall 2020 as a COVID-19 measure intended to reduce methane emissions and retain jobs in the oil and gas sector during a period of economic downturn. The program provides funding to support the deployment of clean

technologies and infrastructure to reduce methane emissions from upstream conventional, shale and tight oil and gas operations, primarily in the form of repayable contributions. Based on the ERF Onshore Program's internal greenhouse gas (GHG) quantification methodologies, the total GHG reductions for all intakes is anticipated to be four megatonnes (Mt) of carbon dioxide equivalent (CO₂e) in the first 12 months following project completion using \$183 million (or 27%) of the total \$675-million funding envelope. More reductions will result over the lifespan of each project and, as detailed below, a portion of the total emission reductions from each of the three intake periods will be additional to what would have been required by regulations; this finding will be quantified by a third-party GHG verifier. The Government remains committed to providing transparent data on GHG reductions achieved by the program on an ongoing basis as projects are completed and proponents submit progress reports as outlined below.

Additionality in Intakes 1 and 2: Nearly all expected emission reductions under Intakes 1 and 2 of the ERF Onshore Program come from projects that fully eliminate the intentional routine venting and flaring of methane from sources in conventional oil and gas operations. Recognizing that Canada's methane regulations do not yet require a complete elimination of intentional routine venting and flaring of methane, any projects that fully eliminate such emission sources will achieve reductions that, at least in part, exceed what is required by the regulations.

Thirty-eight projects were funded under Intake 1 and are projected to achieve total emission reductions of 2 Mt CO₂e in the first 12 months following project completion, with 96% of these reductions coming from projects that fully eliminate methane emissions. Of the 53 projects funded under Intake 2, 99% of the total anticipated emissions reductions of 1.5 Mt CO₂e in the first 12 months following project completion are from projects that fully eliminate methane emissions.

Additionality in Intake 3: As the Minister of Natural Resources referenced during committee appearances, Natural Resources Canada (NRCan) refocused the ERF Onshore Program for the third intake period and implemented more stringent eligibility requirements, such that only projects that fully eliminate methane emissions and surpass regulatory requirements were considered. While Intake 3 projects are being finalized, each project is forecasted to exceed regulatory requirements and they are anticipated to achieve total emission reductions of 391 kilotonnes CO₂e in the first 12 months following project completion. Contribution agreements for ERF Intake 3 projects are in the negotiation phase.

Quantification of Additional Emission Reductions: Further to the program's reporting requirements (see below), NRCan will commission an ISO Standard-certified (14064-1, 2, 3 or equivalent) GHG verifier to quantify the portion of the program's total GHG reductions that are additional to regulatory requirements. This analysis is expected to be completed and the results published on the departmental website in summer 2023.

Project Costs: After funding for all program intakes is allocated, and accounting for the administrative costs associated with the program, approximately \$460 million is expected to remain and go back into the Government's fiscal framework. Of the \$183 million allocated to date, \$151 million is fully repayable. As per the program's conditions, up to 25% of funding can be non-repayable. If maximum contributions are made under ERF's Intake 3 for projects recommended for approval, the program is expected to disburse \$32 million in non-repayable funding, which represents 17% of funding allocated to all projects.

Detailed Information: As part of the ERF Onshore Program's reporting requirements, companies are obligated to provide detailed information to NRCan upon project completion, including information regarding direct and indirect jobs associated with the project, employment diversity, and project outcomes.

Proponents from the first two intake periods have until March 31, 2023 to complete projects. As some of the information may be proprietary, NRCan will aggregate the data at the program level and publish a comprehensive summary of the interim results achieved through the program on the departmental website by summer 2023. This information will be further updated pending completion of Intake 3 projects after March 2024.

Further, a key aspect of the program is the requirement for companies to install meters to continuously track the volumes of gas conserved by the projects. Proponents must report that volumetric data annually, starting 12 months after project completion, for a period of five years. This reporting requirement—the first of its kind in Canada—supports the call for increased program transparency and accountability as noted in the supplementary opinions in the report, as it will enable the validation of the emission reductions achieved from each project.

Companies funded under the first two intake periods of the program are required to provide their first of five annual reports of volumetric data to NRCan no later than April 2024 (12 months of data plus a one-month grace period for compiling the report). On an annual basis, NRCan intends to report publicly on the metered data provided by companies.

<u>RECOMMENDATION 2:</u> That, as the Government of Canada works to identify and eliminate "inefficient fossil fuel subsidies" by 2023, it should phase out programs for the oil and gas sector that subsidize compliance with existing or pending regulations.

Government Response:

The Government supports this recommendation.

In 2009, Group of Twenty (G20) leaders committed to "phase out and rationalize over the medium term inefficient fossil fuel subsidies while providing targeted support for the

poorest." The statement adds that "this reform will not apply to our support for clean energy, renewables, and technologies that dramatically reduce greenhouse gas emissions."

At the North American Leaders' Summit on June 29, 2016, Canada, the United States, and Mexico, publicly committed to phase out inefficient fossil fuel subsidies by 2025; a commitment that was later adopted by Group of Seven (G7) leaders. In the December 2021 mandate letters, Canada committed to accelerating the timing of this commitment to 2023.

The Government of Canada has already made important progress. Nine tax measures providing preferential tax treatment to the fossil fuel sector have been or are in the process of being rationalized or phased out, including:

- Phase-out of the accelerated capital cost allowance for oil sands (announced in Budget 2007; completed in 2015)
- Reduction in the deduction rates for intangible capital expenses in oil sands projects to align with rates in conventional oil and gas sector (announced in Budget 2011; completed in 2016)
- Phase-out of the Atlantic Investment Tax Credit for investments in the oil and gas and mining sectors (announced in Budget 2012; completed in 2017)
- Reduction in the deduction rate for pre-production intangible mine development expenses to align with the rate for the oil and gas sector (announced in Budget 2013; completed in 2018)
- Phase-out of the accelerated capital cost allowance for mining (announced in Budget 2013; completed in 2021)
- Allowing the accelerated capital cost allowance for liquefied natural gas facilities to expire as scheduled in 2025 (announced in Budget 2016)
- Rationalization of the tax treatment of expenses for successful oil and gas exploratory drilling (announced in Budget 2017; completed by 2021)
- Phase-out of the tax preference that allows small oil and gas companies to reclassify certain development expenses as more favorably treated exploration expenses (announced in Budget 2017; completed in 2020)
- Phase-out of flow-through shares for oil, gas, and coal activities (proposed in Budget 2022; to be completed in 2023).

In June 2018, the Government of Canada announced that it would undertake a peer review through the G20 process with Argentina. As part of this process, Canada is developing a

report listing federal fossil fuel subsidies including a description of the subsidies, annual costs and analysis of the subsidies. An international expert review panel will be set up that includes Argentina and will be chaired by the Organization for Economic Cooperation and Development (OECD). The report will be submitted to the review panel and published once the peer review is finalized. The peer review process will increase transparency on Canada's actions to fulfil the G20 commitment and further reaffirm the Government's commitment to climate action.

In March 2019, the Minister of Environment and Climate Change (ECCC) launched a consultation on the Government's draft framework to review measures outside the tax system. The consultation was completed in two parts in order to ensure that ECCC heard from a wide range of stakeholders and all Canadians. The first part was done through targeted consultation with stakeholders, including representatives from environmental non-governmental organizations, industry associations, Indigenous peoples, and the academic community. The second was a public consultation open to all Canadians.

Incorporating feedback received during the 2019 consultations, the Government of Canada is developing an updated framework for identifying existing inefficient fossil fuel subsidies, which can also inform the design and development of new programming going forward.

<u>RECOMMENDATION 3:</u> That the Government of Canada work with provinces and territories and industry to improve the monitoring of emissions in the oil and gas sector, including by:

- Expanding requirements that apply to the metering of intentional emissions; and
- Mandating additional efforts to survey and fix unintentional emissions.

Government Response:

The Government supports this recommendation. In fact, as noted in the response to Recommendation 1, ongoing emissions monitoring and reporting is already a key component of the ERF Onshore Program. ERF-funded companies are required to install continuous metering to accurately measure and report the volumes of previously vented and flared gas that will be conserved through funded projects. Using this accurate data, NRCan will report annually beginning in 2023 on the GHG reductions achieved by the program.

More broadly, ECCC is actively working with provinces in the development and implementation of regulatory measures to reduce methane emissions from the oil and gas sector, including improvements to monitoring emissions. Canada has equivalency agreements with the provinces of Alberta, British Columbia, and Saskatchewan.

Equivalency agreements enable provinces to design methane regulations that best suit their respective jurisdictions as long as they meet the equivalency test. The test requires that a jurisdiction have a regime in place that achieves equivalent GHG emission outcomes with equivalent penalty regimes and provide for a citizen's right to complain. Each agreement also includes specific provisions regarding the sharing of information between the federal and provincial governments. These agreements cover over 90% of all oil and gas methane emissions in Canada and are in effect for a maximum of five years or until 2024–2025.

Provinces are advancing new programs such as the Baseline and Reduction Opportunity Assessment Program to obtain detailed inventories of methane-emitting devices and equipment and provide data to assess potential projects and offset credit systems. The \$10-million program, funded through the Technology Innovation and Emissions Reduction Fund, supports provincial efforts to meet Alberta's 2025 methane reduction target and demonstrates global leadership in low-emission conventional oil and natural gas production.

NRCan and ECCC are investing in research efforts supporting policy development and implementation of methane policy. NRCan commissioned GHGSat to demonstrate the company's hybrid satellite-aircraft system in support of advancing emerging clean technologies. ECCC worked with Innovation, Science and Economic Development Canada to use GHGSat's technology in Innovative Solutions Canada's Testing Stream for Satellite Wide-Area Surveillance of Greenhouse Gas Emissions.

Both departments have invested in Carleton University's Energy and Emissions Research Lab, testing an aerial survey of oil and gas sites with a laser-based monitoring tool that could transform the ways in which the oil and gas sectors measure and mitigate their emissions. This technology can detect and quantify methane sources with extremely high accuracy.

Through the Canada–Alberta Oil Sands Monitoring Program, ECCC has conducted field research in the oil sands region together with academic institutions, industry and Indigenous partners to further understand emissions from the oil and gas sector. The program makes public yearly work plans and provides annual reports while regularly publishing information and scientific papers.

Canada has also worked to continuously improve emissions information regarding the oil and gas sector. Important methodological improvements were recently implemented in the National Inventory Report to revise the calculation of fugitive methane emissions from upstream oil and gas activities. The enhanced methods use Canadian-specific studies including those that empirically measure emissions, facilitate the adoption of new scientific data, and better capture the impact of improvements in technologies and industry practices on emissions.

Canada's Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector) mandate action to reduce releases of both methane and volatile organic compounds to the atmosphere. The regulations set operating and maintenance standards that require that industry regularly inspect their equipment to avoid unintentional emissions, including an inspection program requiring that industry scan their systems three times each year for leaks or operating problems. Any leaks detected are also mandated to be repaired. Provincial regulations in British Columbia, Alberta and Saskatchewan have also each incorporated leak detection and repair programs.

ECCC is actively developing and engaging on approaches to further reduce oil and gas methane emissions by at least 75% from 2012 levels by 2030. It expects to move forward with the publication of draft regulations in early 2023. Methods such as continuous monitoring systems, aerial surveillance, and high-resolution satellite instruments show promise toward allowing more complete monitoring and faster reaction to address unexpected failures, and are undergoing assessment in the context of the enhanced regulatory approach.

CONCLUSION

The Government of Canada recognizes that methane abatement in the oil and gas sector is a key component to a net-zero future and thanks the Standing Committee, as well as all witnesses who appeared before it, for calling attention to the urgent need to reduce methane emissions "as much as possible, as quickly as possible." The recommendations outlined in the final report align with the Government's domestic and international commitments to reduce methane by strengthening methane regulations, improving the monitoring of emissions in the oil and gas sector, and phasing out inefficient fossil fuel subsidies. The Government is committed to the transparency and effectiveness of its programs and policies, and is looking forward to publishing accurate data, starting in 2023, on the methane emission reductions achieved by projects funded through the ERF Onshore Program.