

Discussion Document for Canada's Assessment Framework of Inefficient Fossil Fuel Subsidies

Introduction

This document proposes a framework for considering whether programs in Canada constitute inefficient fossil fuel subsidies. As part of the Government of Canada's commitment to phase out inefficient fossil fuel subsidies by 2025, the Department of Environment and Climate Change Canada is seeking feedback on the framework, including its definitions of inefficient fossil fuel subsidies.

The Government believes that a clean environment and a strong economy go hand in hand – and that eliminating inefficient fossil fuel subsidies is an important step in the transition to a low-carbon economy.

In 2009, Canada and other Group of Twenty (G20) countries committed to phase out and rationalize inefficient fossil fuel subsidies, recognizing that these subsidies can encourage wasteful consumption, impede investment in clean energy sources, and undermine efforts to fight the threat of climate change. For its part, Canada went one step further and committed to rationalize inefficient fossil fuel subsidies by 2025.

In 2015, the Minister of Environment and Climate Change was tasked with fulfilling this commitment in her mandate letter and has been working on federal measures outside of the tax system.

Canada will continue to review measures that could be considered inefficient fossil fuel subsidies with a view to reforming them as necessary. As part of that work, Canada and Argentina recently committed to undergo peer reviews of inefficient fossil fuel subsidies under the G20 process. Peer reviews of inefficient fossil fuel subsidies can increase transparency, encourage international dialogue, and help develop best practices while moving toward a low carbon economy. This voluntary process will enable both countries to compare and improve knowledge, and push forward the global momentum to identify and reduce inefficient fossil fuel subsidies.

As part of the peer review process:

- Canada will develop a self-review report, which will include a list of federal fossil fuel subsidies, including the description of the subsidies, estimated annual costs, analysis of the subsidies and any potential plans to reform subsidies. The results of this consultation will also be used to inform the drafting of the self-review report. Discussions with experts will be held to help inform the development of Canada's self-review report, which will

form the basis upon which an international expert review panel will assess Canada. This report will be made public once the peer review is finalized.

- Canada will also establish an international expert review panel to analyze the self-review report. The Organisation of Economic Co-operation and Development has agreed to chair the panel, which is expected to include our partnering country, Argentina, as well as other countries and key stakeholders. The findings and recommendations of the international panel will be made public once the review is finalized.

This consultation seeks your opinion on the following questions:

- Is the definition of “fossil fuel subsidy” and its associated criteria clear and practical? If not, what are your suggestions for improving them?
- Are the criteria proposed to assess “inefficiency” clear and practical? If not, what are your suggestions for improving them?
- Are there other considerations not currently in the framework that should be included?

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Background

Canadian Action

In 2009, Canada and other Group of Twenty (G20) countries committed to phase out and rationalize inefficient fossil fuel subsidies, recognizing that these subsidies can encourage wasteful consumption, impede investment in clean energy sources, and undermine efforts to fight the threat of climate change. The G20 leaders further indicated that “this reform will not apply to our support for clean energy, renewables, and technologies that dramatically reduce greenhouse gas emissions”. For its part, Canada went one step further and committed to rationalize inefficient fossil fuel subsidies by 2025.

Fossil fuel subsidies in Canada may exist at the federal, provincial, or territorial level. However, the G20 commitment was made at the federal level and does not apply to provinces and territories. As such, this analysis is restricted to federal measures.

Since 2009, Canada has taken significant action to address its promise to phase out inefficient fossil fuel subsidies at the federal level. In November 2015, the Minister of Environment and Climate Change was tasked in her mandate letter to fulfil Canada’s G20 commitment and has been working on federal measures outside of the tax system.

To date, Canada has announced the phase-out and rationalization of eight tax preferences for the fossil fuel sector:

- Phase-out of the accelerated capital cost allowance for oil sands (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 (Budget 2011; completed in 2016)
- Phase-out of the Atlantic Investment Tax Credit for investments in the oil and gas and mining sectors (Budget 2012; completed in 2017)
- Reduction in the deduction rate for pre-production intangible mine development expenses to align with rate for the oil and gas sector (Budget 2013; completed in 2018)
- Phase-out of the accelerated capital cost allowance for mining (Budget 2013; to be completed in 2021)
- Allowing the accelerated capital cost allowance for liquefied natural gas facilities to expire as scheduled in 2025 (Budget 2016)
- Rationalize the tax treatment of expenses for successful oil and gas exploratory drilling (Budget 2017; to be completed by 2021)

- Phase out tax preference that allows small oil and gas companies to reclassify certain development expenses as more favorably treated exploration expenses (Budget 2017; to be completed in 2020)

This document discusses the review of inefficient non-tax fossil fuel subsidies led by the Minister of the Environment and Climate Change.

Defining Subsidies under the G20 Commitment

In the 2009 Leaders' Communiqué, G20 Leaders stated:

“Enhancing our energy efficiency can play an important, positive role in promoting energy security and fighting climate change. Inefficient fossil fuel subsidies encourage wasteful consumption, distort markets, impede investment in clean energy sources and undermine efforts to deal with climate change. The Organization for Economic Cooperation and Development (OECD) and the IEA have found that eliminating fossil fuel subsidies by 2020 would reduce global greenhouse gas emissions in 2050 by ten percent. Many countries are reducing fossil fuel subsidies while preventing adverse impact on the poorest. Building on these efforts and recognizing the challenges of populations suffering from energy poverty, we commit to:

- *Rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption. As we do that, we recognize the importance of providing those in need with essential energy services, including through the use of targeted cash transfers and other appropriate mechanisms. This reform will not apply to our support for clean energy, renewables, and technologies that dramatically reduce greenhouse gas emissions.”*

There is no single international definition of what constitutes a fossil fuel subsidy, or how to approach inefficiency with regard to a fossil fuel subsidy. Countries have the flexibility to interpret the G20 commitment with respect to their national circumstances. However, a number of international organizations use different definitions of the term subsidy, including:

- The World Trade Organization (WTO), in the Agreement on Subsidies and Countervailing Measures, states that a subsidy exists if “there is a financial contribution provided by a government or a public body within the territory of a Member [both directly or indirectly]...or any kind of income or price support where a benefit is thereby conferred”.
- The International Energy Agency (IEA) defines an energy subsidy as “any government action that lowers the cost of energy production, raises the revenues of energy producers, or lowers the price paid by consumers”.
- The Organization for Economic Co-operation and Development (OECD) uses a broad concept of “support” that encompasses direct budgetary transfers and tax expenditures that provide a benefit or preference for fossil fuel production or consumption, either in absolute terms or relative to other activities or products. However, for this work the

OECD has noted that the scope of “support” is deliberately broader than some conceptions of “subsidy”.

Some member states of the European Union have chosen the following as a working definition of fossil fuel subsidies, based on the approach of the International Energy Agency: “A fossil-fuel subsidy is any government measure or program with the objective or direct consequence of reducing below world-market prices, including all costs of transport, refining and distribution, the effective cost for fossil fuels paid by final consumers, or of reducing the costs or increasing the revenues of fossil-fuel producing companies”. Other non-EU G20 members, such as India and South Korea, have also adopted a similar definition.

No international organization has explicitly defined “inefficiency” in the context of the G20 commitment.

Environment and Climate Change Canada’s Definition

For the purpose of analyzing federal measures outside of the tax system, Environment and Climate Change Canada is proposing to use the following definition: ***non-tax fossil fuel subsidies are defined as federal non-tax programs that provide preferential treatment that specifically supports the production or consumption of fossil fuels.***

Fossil Fuels

For the purposes of this commitment, fossil fuels include coal, natural gas, crude oil, bitumen, natural gas liquids (e.g., pentanes, butane, propane) and the respective derivatives of these products (e.g., gasoline or diesel fuel from crude oil, bitumen, or petroleum coke). The fossil fuel sector includes firms that are relevant to both the upstream and downstream production and sale of fossil fuels, such as firms involved in the extraction, production, refining and marketing of fossil fuels.

Process to Identify Potential Fossil Fuel Subsidies

We propose to use an analytical framework (presented below) as an approach to assess whether support measures have characteristics that would be consistent with an “inefficient fossil fuel subsidy”. This framework includes a two-step process that would be applied to identify measures that could be considered 1) fossil fuel subsidies and 2) subsidies that are inefficient in the context of the G20 commitment.

Provision of Support

As a first step, measures that provide support to the fossil fuel sector should be identified. Taking the broadest approach to the G20 commitment (i.e., considering any measures that could support the production or consumption of fossil fuels) is proposed at this stage in order to ensure we have comprehensively addressed all measures that could be considered a fossil fuel subsidy.

Specificity

In the context of the G20 commitment, a measure should be considered a fossil fuel subsidy if it has an element of “specificity” to fossil fuel production or consumption. In this regard, specificity would mean that the measure is largely directed to this sector, as opposed to being a provision that is generally applicable to all or many sectors.

While a support measure may not be solely available to the fossil fuel sector, it may be that, in certain circumstances, the measure disproportionately benefits fossil fuel production and consumption. In other words, the *intent* may be to apply a support measure broadly to various sectors, but the *outcome* is such that the benefits weigh largely in favour of fossil fuels. Such measures merit further consideration and should be assessed using additional characteristics.

Normality

A measure that meets the “specificity” test would only be considered a fossil fuel subsidy if it provides a preference or benefit to those affected, relative to others. In other words, a measure could be specific to the fossil fuel sector, but if it aligns with the Government’s general approach to treatment of industry, it should not be considered a fossil fuel subsidy.

In order to identify whether a measure is preferential, a benchmark (or a normality reference point) against which deviations are assessed must be defined. In the context of the G20 commitment, a normality benchmark could be established by considering the treatment of other industries or businesses or individuals within Canada. Measures that provide treatment different than the benchmark may not be fossil fuel subsidies. They would be fossil fuel subsidies only if they provide a preference or benefit (i.e., taking into account specific features of the situation not adequately addressed by the benchmark).

Figure 1 - Flowchart Illustrating Identification of Fossil Fuel Subsidies

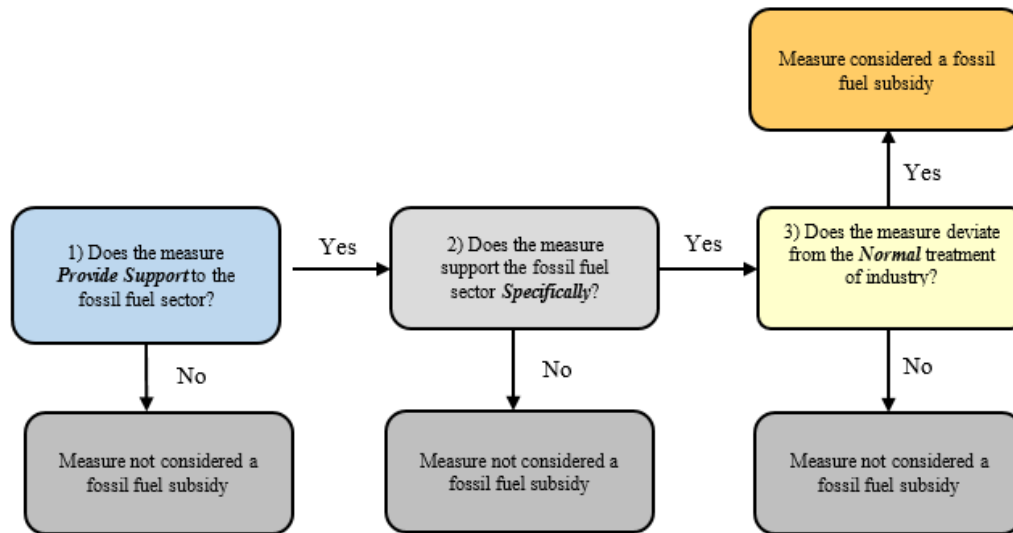


Figure 1 illustrates the process of the assessment, which comprises a phased approach to identify fossil fuel subsidies. The first step is to identify measures that provide support to the fossil fuel sector. Measures that do provide support should be assessed for their specificity. If a measure is considered to provide specific support to the fossil fuel sector, it should then be assessed using the normality principle. Measures that deviate from the normal treatment of industry would be considered a fossil fuel subsidy and should then be assessed for inefficiency.

Consultation Question 1

Is the definition of “fossil fuel subsidy” and its associated criteria clear and practical? If not, what are your suggestions for improving them?

Assessing Inefficiency

In assessing whether measures are inefficient, ECCC is proposing to take into account several criteria, such as the requirement for policy intervention and whether other measures could achieve the same objectives as well as the policy objectives the measure is achieving.

- The need for policy intervention.
 - This could also include consideration of alternative delivery mechanisms to achieve the same policy outcome(s).
- The policy objectives that the measure intends to achieve.
 - These include social, economic, and environmental objectives. A fossil fuel subsidy that is also achieving a social or economic objective may not necessarily be an inefficient one. This is consistent with the G20 commitment, which states that consideration should be given for providing targeted support for the poorest.

- Consideration should be given to whether alternatives to the measure could achieve the same objective(s) more effectively, more efficiently, and/or in a more equitable manner.
 - Whether or not the measure achieves its intended policy objectives.
 - Other relevant factors include effectiveness, simplicity, equity considerations, fiscal implications, provincial impacts, administrative, compliance and legislative costs.
- To assess whether a measure could be considered equitable, consideration should be given to how the benefits of the measure are distributed across different groups (income classes, genders, age groups, industries, regions, etc.)

Consultation Question 2

Is the criteria proposed to assess “inefficiency” clear and practical? If not, what are your suggestions for improving them?

Consultation Question 3

Are there other considerations not currently in the framework that should be included?

Annex - Preliminary Results of the Review

ECCC is leading the Government’s work on non-tax measures. ECCC established a working group in 2017 consisting of senior managers from federal departments and agencies which developed an assessment framework for federal measures. The working group looked at relevant federal programs or measures active since 2009, when the G20 commitment was initially made, up to April 2018, when the review was concluded.

ECCC’s review included measures from eleven federal departments, six regional development agencies and seven arm’s-length organizations. To identify relevant departments and agencies, ECCC reviewed reports by third-parties and international organizations, such as those by the Commissioner of the Environment and Sustainable Development, the OECD, and International Institute for Sustainable Development to better understand the scope of measures that have previously been found to be potential fossil fuel subsidies by other groups. Departments and agencies whose portfolio included those measures, or similar ones, were identified as relevant to the review. Table 1 provides the list of departments as well as agencies under the departments’ mandate surveyed during the preliminary review.

Table 1- List of Departments and Agencies Surveyed Under the Review

| Departments Surveyed During Review | Agencies, Crown Corporations or Organizations Surveyed Under Departments’ Purview |
|---|--|
| Agriculture and Agri-Food Canada | |
| Crown-Indigenous Relations and Northern Affairs Canada | · Indian Oil and Gas Canada |
| Department of Fisheries and Ocean | |
| Environment and Climate Change Canada | |
| Finance Canada | |
| Global Affairs Canada | · Canadian Commercial Corporation · Export Development Canada |
| Indigenous Services Canada | |
| Infrastructure Canada | |
| Innovation, Science and Economic Development Canada | · Atlantic Canada Opportunities Agency · Business Development Bank of Canada · Canadian Economic Development for Quebec Region · Canadian Northern Economic Development Agency · Federal Economic Development Agency for Southern Ontario · National Research Council · Natural Science and Engineering Research Council · Northern Ontario Development Program · Sustainable Development Technology Canada · Western Economic Diversification Canada |
| Natural Resources Canada | |
| Transport Canada | |

From the programs and measures operated by the departments, organizations and regional development agencies we worked with, 36 ongoing measures were identified for assessment as potential inefficient fossil fuel subsidies using the definitions proposed above. These measures accounted for an estimated \$700 million of federal spending in 2016-2017.

Of the measures assessed, preliminary results suggest four were fossil fuel subsidies. None were found to be inefficient, as they addressed access to affordable energy or targeted environmental outcomes, specifically related to reducing greenhouse gas emissions. Further details on the measures by program type are provided below, and Table 2 lists the 36 measures assessed. All results are preliminary and are based on the proposed assessment framework presented earlier in this document.

The measures assessed fall into six groups and measures in each group share similar characteristics and objectives. Those include:

1. Technology and research development programs
2. Regional development programs
3. Environmental protection programs
4. Government financing solutions
5. Government ownership of certain assets
6. General program support.

Technology and Research Development Programs

The Government of Canada has a number of programs that support technology development and research and development, including those related to clean energy. These programs have a variety of recipients, including academia, private sector, not-for-profit groups, innovators and SMEs, Indigenous groups and communities, and provinces / territories depending on their design.

Overall, we examined 12 clean energy technology development and research and development measures that were in place and for which funding decisions were made in the review timeframe. Many of these programs were not specific to the fossil fuel sector as they were available to all sectors of the economy. Therefore, the preliminary conclusion is that these programs are not fossil fuel subsidies under the assessment framework.

However, certain measures provide a benefit by supporting clean energy innovation in the fossil fuel sector, and the preliminary conclusion is that they are fossil fuel subsidies under the non-tax assessment framework. These measures were further assessed under the framework with respect to the “inefficiency” criteria and it was found that the programs aimed to reduce environmental impacts (specifically to reduce greenhouse gas emissions), advance technology innovation, development, and demonstration, or to improve energy efficiency. In the 2009 G20 Leaders’ Communique, where the commitment was first made, the G20 leaders specifically indicated that “This reform will not apply to our support for clean energy, renewables, and technologies that dramatically reduce greenhouse gas emissions”. Given this consideration and the guidelines in the non-tax assessment framework, the preliminary conclusion is that they are not inefficient.

Regional Development Programs

The federal government provides funding through various regional development agencies (RDAs) with the goal of enhancing and strengthening regional economies with regionally-tailored programs. RDAs are established to address key economic challenges in their regions by promoting innovation, economic diversification, skills development, sustainability and clean growth.

The review assessed eight measures funded by a number of federal agencies. RDAs offer a variety of programs as well as aiding local businesses in accessing programs offered by other departments. The funding from programs reviewed is typically via grants and repayable/non-repayable contributions.

Many of the agencies were set up to promote economic development via support measures for access to capital, capacity building, skills training, partnerships between stakeholders, and technology development and innovation.

While some fossil fuel projects have benefited from RDA funding, the funding and support provided by RDAs is not specific to the fossil fuel sector and is generally available to a wide range of recipients, including municipalities, not-for-profit organizations, academia, as well as companies and other stakeholders. As such, the preliminary conclusion is that they are not fossil fuel subsidies under the assessment framework.

Environmental Protection Programs

ECCC reviewed four programs at the federal level that protect the environment, but could potentially be considered to indirectly benefit the fossil fuel sector.

These programs provide funding for research, ongoing environmental monitoring in order to mitigate the potential impacts of environmental pollution incidents, including from spilled fossil fuel products, and support for emergency response during environmental emergencies.

While the fossil fuel sector receives indirect benefits from these programs, these programs do not directly provide funds to companies or businesses engaged in fossil fuel production, and they also provide an indirect benefit to a wide range of stakeholders, including communities, other industries, and the general public. As a result, the preliminary conclusion is that they are not fossil fuel subsidies. Furthermore, these programs are designed to protect public goods (e.g., Canada's waterways and natural environment), indicating a public policy rationale for government intervention.

Government Financing Solutions

Governments around the world provide financing to domestic businesses to support trade through a variety of arms-length agencies. In Canada, the two largest and most common purveyors of financing from the federal government are the Business Development Bank of Canada (BDC) and Export Development Canada (EDC).

Both EDC and BDC provide a number of financial products and services to Canadian business on commercial terms. Under the assessment framework, products provided on commercial terms

would not constitute a subsidy to the fossil fuel sector, as there is no additional benefit provided by the Government.

Both EDC and BDC services are widely available to the general economy and are not specific to the fossil fuel sector. In addition, both organizations operate at a profit, and in some cases return dividends to the government and neither agency requires budgetary outlays from the government to operate.

Government Ownership of Certain Assets

Governments often own assets, either in part or in whole, in a variety of economic sectors, including the fossil fuel sector.

The review examined three such assets owned or partially owned by the Government of Canada. The preliminary conclusion is that these are not subsidies, as their ongoing operations are typically profitable and therefore require no government spending.

General Program Support

The Government of Canada provides budgetary transfers and support via a wide range of general programs. The policy objectives of those examined in this review vary, from scientific work that can contribute to the exploration for natural resources, legislating customs tariff rates, policies to encourage the transition to lower-emission fuels (e.g., biofuels), measures to facilitate foreign government procurement of domestic goods and services, or support and services to remote and economically vulnerable communities.

A variety of stakeholders benefit from the general program support beyond industry, including academia, private and public researchers, not-for-profit groups, governments, and regulators.

Under the framework, general government support measures that do not provide support solely to the fossil fuel sector, whose primary policy objectives are to address environmental impact of fossil fuels, or that ensure remote communities have access to affordable energy are not in the scope of the G20 commitment. Of the seven general program support measures to which the assessment framework was applied, the preliminary conclusion is that none were inefficient fossil fuel subsidies.

Table 2- List of Measures Assessed to Identify Inefficient Fossil Fuel Subsidies

* Programs ending in 2018 to 2019 fiscal year

** Bolded programs found to be a fossil fuel subsidy in preliminary review. None were founded to be inefficient, and as such would not be within the scope of the G20 commitment.

| Department Responsible | Program Name | Type of Measure |
|--|---|---|
| Natural Resources Canada | Geo-Mapping for Energy and Minerals | General Program Support |
| Natural Resources Canada | Alternative Transportation Fuels | General Program Support |
| Crown-Indigenous Relations and Northern Affairs Canada | Northern Responsible Energy Approach for Community Heat and Electricity Program | General Program Support |
| Finance Canada | Duty Free Imports of Mobile Off-Shore Drilling Units | General Program Support |
| Indigenous Services Canada | Royalties collected by Indian Oil and Gas Canada | General Program Support |
| Indigenous Services Canada | Electricity Price Support for Indigenous Communities** | General Program Support |
| Natural Resources Canada | Electric Vehicle and Alternative Fuel Infrastructure Deployment** | General Program Support |
| Natural Resources Canada | Technology Development and Advancement: Energy, Mining, and Environment | Technology and research development programs |
| Natural Resources Canada | Program of Energy Research and Development | Technology and research development programs |
| Innovation, Science and Economic Development Canada | Strategic Innovation Fund | Technology and research development programs |
| Innovation, Science and Economic Development Canada | Sustainable Development Technology Fund | Technology and research development programs |
| Natural Resources Canada | Petroleum Technology Research Centre** | Technology and research development programs |
| Natural Resources Canada | Oil and Gas Clean Tech Program** (ended 2017-18) | Technology and research development programs |
| Innovation, Science and Economic Development Canada | Grants from the National Science and Engineering Research Council of Canada | Technology and research development programs |
| Natural Resources Canada | Oil Spill Response Science Program * | Technology and research development programs |

| | | |
|---|---|--|
| Natural Resources Canada | Energy Innovation Program* | Technology and research development programs |
| Natural Resources Canada | Energy Innovation Program - Clean Growth in the Natural Resource Sector | Technology and research development programs |
| National Research Council | Algal Carbon Conversion | Technology and research development programs |
| Natural Resources Canada | Geoscience for New Energy Supply | Technology and research development programs |
| Environment and Climate Change Canada | National Environmental Emergency Centre | Environmental Protection Programs |
| Environment and Climate Change Canada | Ecosystem and Environmental Assessments and Monitoring | Environmental Protection Programs |
| Transport Canada | Clear Seas for Responsible Shipping* | Environmental Protection Programs |
| Fisheries and Oceans Canada | Ocean Forecasting Program | Environmental Protection Programs |
| Innovation, Science and Economic Development Canada | Southern Ontario Prosperity Program | Regional Development Programs |
| Innovation, Science and Economic Development Canada | Western Diversification Program | Regional Development Programs |
| Innovation, Science and Economic Development Canada | Northern Ontario Development Program | Regional Development Programs |
| Innovation, Science and Economic Development Canada | Business Development Program | Regional Development Programs |
| Innovation, Science and Economic Development Canada | Atlantic Innovation Fund | Regional Development Programs |
| Innovation, Science and Economic Development Canada | Arctic Energy Fund | Regional Development Programs |
| Innovation, Science and Economic Development Canada | Western Innovation Initiative | Regional Development Programs |
| Innovation, Science and Economic Development Canada | Canadian Initiative for the Economic Diversification of Communities Reliant on Chrysotile | Regional Development Programs |

| | | |
|---|---|--|
| Innovation, Science and Economic Development Canada | Business Development Bank of Canada | Government Financing |
| Innovation, Science and Economic Development Canada | Export Development Canada | Government Financing |
| Indigenous Services Canada | Ownership of Norman Wells | Government ownership of certain assets |
| Finance Canada | Working Interest in Hibernia (8.5% share) | Government ownership of certain assets |
| Transport Canada | Ownership of Ridley Terminals | Government ownership of certain assets |