

An aerial photograph of a large pipeline, likely for oil or gas, stretching through a dense forest. The pipeline is covered in a dark, textured material, possibly gravel or a protective layer. The surrounding area is lush with green trees and vegetation. A white curved graphic element frames the top and right sides of the image.

Submission to Environment and Climate Change Canada's Consultation on Non-Tax Fossil Fuel Subsidies

REPORT



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International Institute for Sustainable Development

The International Institute for Sustainable Development (IISD) is an independent think tank championing sustainable solutions to 21st-century problems. Our mission is to promote human development and environmental sustainability. We do this through research, analysis and knowledge products that support sound policy-making. Our big-picture view allows us to address the root causes of some of the greatest challenges facing our planet today: ecological destruction, social exclusion, unfair laws and economic rules, a changing climate. IISD's staff of over 120 people, plus over 50 associates and 100 consultants, come from across the globe and from many disciplines. Our work affects lives in nearly 100 countries. Part scientist, part strategist—IISD delivers the knowledge to act.

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The IISD Global Subsidies Initiative (GSI) supports international processes, national governments and civil society organizations to align subsidies with sustainable development. GSI does this by promoting transparency on the nature and size of subsidies; evaluating the economic, social and environmental impacts of subsidies; and, where necessary, advising on how inefficient and wasteful subsidies can best be reformed. GSI is headquartered in Geneva, Switzerland, and works with partners located around the world. Its principal funders have included the governments of Denmark, Finland, New Zealand, Norway, Sweden, Switzerland and the United Kingdom, as well as the KR Foundation.

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Summary

Canada's commitment to undertake a peer review of fossil fuel subsidies with Argentina marks an important moment for federal social, economic and environmental policy. While Canada has made progress on fossil fuel subsidy reform in recent years, there is significant additional reform needed in order to meet our G7 commitment to phase out inefficient fossil fuel subsidies by 2025 and our emissions reduction commitments under the Paris Agreement by 2030. The G20 review process is a critical opportunity to scale up climate change action, maximize policy efficiency and ensure public funding is allocated to areas that matter most to Canadians.

In this written submission, the International Institute for Sustainable Development (IISD) responds to Environment and Climate Change Canada's (ECCC) draft assessment framework for non-tax measures. Overall, IISD finds that the draft assessment framework leaves room for the exclusion of measures that could be considered subsidies by international standards. IISD recommends positioning the assessment of non-tax measures to fully consider Canada's Paris Agreement commitments and to critically assess whether existing measures are truly economically efficient.

In summary, IISD recommends the following to ensure a thorough, effective G20 peer review:

- 1) Use the World Trade Organization (WTO) definition of "subsidies" and develop robust criteria for "inefficiency":
 - Remove references to "specificity" and "normality."
 - Evaluate whether existing subsidies are the most effective and efficient ways to achieve policy objectives, with consideration of economic, social and environmental costs.
 - Include all relevant policy developments that have occurred since April 2018.
- 2) Strive for maximum transparency:
 - Publicly release data on existing subsidies.
 - Communicate the process, evaluation methodology, and results of the self- and peer-review processes.
- 3) Engage the provinces and territories:
 - As federal subsidies have subnational impacts, invite the provinces and territories to take part in this federal review.
 - Suggest that the Government of Canada invite subnational jurisdictions to undertake their own voluntary subsidy reviews.
- 4) Reaffirm Canada's commitment to reform fossil fuel subsidies by 2025:
 - Coordinate with Finance Canada to ensure proper review of tax-related subsidies.
 - Follow timeline precedents of previous G20 peer reviews (i.e., 12–18 months).
 - Develop a detailed timeline and action plan of how Canada will carry out subsidy reform up to 2025.

With the 2025 subsidy phase-out deadline rapidly approaching, and with the urgency of the current environmental crisis, the time to act is now.



About This Note

In March 2019, Environment and Climate Change Canada (ECCC) opened a consultation on a draft assessment framework to evaluate Canada's non-tax fossil fuel subsidies. IISD was invited to partake in a targeted stakeholder roundtable discussion in Ottawa with other environmental organizations on June 11, 2019, led by Michael Horgan of Bennett Jones LLP. At the discussion, IISD provided in-depth feedback on ECCC's draft assessment framework. This submission is intended to complement feedback provided at the roundtable discussion by providing a thorough written assessment of the draft framework and additional recommendations for completion of the G20 peer review.

About IISD

The International Institute for Sustainable Development (IISD) is an independent think tank championing sustainable solutions to 21st-century problems. Our mission is to promote human development and environmental sustainability. We do this through research, analysis and knowledge products that support sound policy-making.

IISD has considerable expertise in fossil fuel subsidies and is also home to the Global Subsidies Initiative (GSI). GSI supports international processes, national governments and civil society organizations to align subsidies with sustainable development. We promote transparency on the nature and size of energy subsidies; evaluate the economic, social and environmental impacts of energy subsidies; and advise on how inefficient and wasteful subsidies can best be reformed.



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Part 1. Setting the Stage for Canada's G20 Peer Review

Stepping up Canada's International Commitments

Canada has committed to reforming fossil fuel subsidies in multiple international forums. As part of the G20, the government committed to reforming “inefficient fossil fuel subsidies” in 2009 (G20, 2009). In 2016, G7 countries committed to a deadline of 2025 to phase out fossil fuel subsidies (G7, 2016). That same year, Canada became signatory to the Paris Agreement. Canada also committed to eliminating environmentally harmful subsidies by 2020 (Aichi Target 3) under the Convention on Biological Diversity (United Nations, 1992). The government's adoption of Agenda 2030, under Sustainable Development Goal (SDG) 12, includes a responsibility to rationalize inefficient fossil fuel subsidies (United Nations, 2019).

A lot has changed since Canada initially committed to subsidy reform 10 years ago. Last year, the Intergovernmental Panel on Climate Change (IPCC, 2018) released a report showing the devastating impacts of global warming of 1.5°C and detailing the extensive consequences of only achieving the less ambitious 2°C Paris target. The report admonishes fossil fuel subsidies for their role in climate change.

More recently, the House of Commons declared a national climate emergency, acknowledging the need for “making deeper reductions in line with the Agreement's objective of holding global warming below two degrees Celsius and pursuing efforts to keep global warming below 1.5 degrees Celsius” (Parliament of Canada, 2019).

It is in the urgent context of the climate emergency that the G20 peer review is taking place. Thoroughly and rapidly addressing fossil fuel subsidies should be a central component of Canada's climate policy, among other measures to reduce emissions. Research demonstrates that fossil fuel subsidy reform could reduce global fossil fuel emissions by up to 4 per cent by 2030 (Jewell et al., 2018). A 2010 assessment by IISD found that eliminating Canada's fossil fuel subsidies could reduce 12 per cent of national emissions (Sawyer & Stiebert, 2010). Reforming fossil fuel subsidies also provides opportunities to maximize economic efficiency of public policies.

As discussed at the in-person consultation with Michael Horgan, Canada has an international responsibility to meet its emission reduction targets as part of the Paris Agreement. Our Nationally Determined Contribution commits us to reducing greenhouse gas emissions by 30 per cent below 2005 levels by 2030 (Government of Canada, 2017). In the current policy context, Canada is not on track to meet this commitment (Climate Transparency, 2018).

Given that 2030 is rapidly approaching, not to mention the 2025 deadline for G7 subsidy reform, now is a critical window for real action.

The Need for Reform: Canada's current fossil fuel subsidies

Canada produces some of the highest greenhouse gas emissions per capita in the world (Climate Transparency, 2018). Our economy is extremely greenhouse gas-intensive, from individual carbon footprints to the size of Canada's oil and gas industry. Meanwhile, fossil fuel subsidies incent further emissions while undermining positive policies such as carbon pricing and removing funding for other priority policy areas such as healthcare, education and just transition.



Global fossil fuel subsidies accounted for over USD 500 billion of government spending in 2018, including over USD 400 billion for consumption subsidies and at least USD 100 billion in producer subsidies (Laan, 2010; Matsumara & Adam, 2019). Despite efforts for reform, subsidies remain high, partly due to increased world energy prices.

As a G20 country, Canada's subsidies are outsized compared to other countries. Fiscal support to fossil fuel production is the highest per unit of GDP in the G7, yet Canada does not publish specific reports documenting these supports (Gerasimchuk et al., 2018). A recent "subsidy scorecard" released by the Overseas Development Institute, Oil Change International, IISD and the Natural Resources Defense Council points to Canada's lack of transparency (Gerasimchuk et al., 2018). In April 2019, the Commissioner of the Environment and Sustainable Development, Julie Gelfand, released her report highlighting Canada's slow progress and lack of transparency on fossil fuel subsidies, raising strong concerns about our ability to meet the 2025 G7 commitment (Office of the Auditor General of Canada, 2019).

In 2018, IISD produced the report *Public Cash for Oil and Gas*, documenting Canada's current federal fossil fuel subsidies (Touchette & Gass, 2018). We found a number of non-tax subsidies that provide millions of public dollars to support fossil fuel producers each year. These include components of Natural Resources Canada's Energy Innovation Program, funding provided through Sustainable Development Technology Canada, and other direct budgetary transfers. Tax exemptions for the oil and gas sector provided through Finance Canada accounted for several hundred million public dollars between 2016 and 2018. A full breakdown can be seen in Annex 1.

We recognize that the federal government has taken commendable steps toward reforming fossil fuel subsidies in recent years. Since 2011, Canada has reformed several tax provisions that provided preferential support to the fossil fuel industry. The government committed to discontinuing public finance for coal mining and phased out the Atlantic Investment Tax Credit. Changes were also made regarding what expenses are eligible to be claimed as Canadian development expenses and Canadian exploration expenses.

Despite these positive policy changes, Canada's fossil fuel subsidies remain significant. This is why the government's commitment to completing a peer review of its subsidies with Argentina is a crucial opportunity. It is also imperative that the review process be completed in a timely manner, given the short timeline to the G20 2025 and Paris Agreement 2030 commitment dates. We hope the review will build support and chart a path for effective subsidy reform at the national level.

A robust G20 peer review will support Canada in its responsibility to the international community, but also toward its own citizens. A recent poll by Ekos Research Associates found that 67 per cent of Canadians disagree that fossil fuel companies should receive subsidies, and 96 per cent believe that the federal government should disclose the amounts of subsidies being provided (Environmental Defence, 2018).

Canadians want action on fossil fuel subsidies and climate change. The G20 peer-review process is a critical moment for Canada to create transparency for public finance support for fossil fuel production and use, properly evaluate all fossil fuel subsidies and create a roadmap for reform that supports a transition to a sustainable, low-carbon economy.



Part 2. Review of Environment and Climate Change Canada's Draft Assessment Framework

In this section, we respond specifically to the three consultation questions listed in the assessment framework discussion document. To preface this response, IISD strongly suggests that Canada's formal peer-review documents should consider the issue of fossil fuel subsidy reform in the context of Canada's international climate change commitments under the Paris Agreement. The global context of climate change, and the government's duty to ensure policies are fiscally, socially and environmentally responsible, should form the basis from which a review is undertaken and from which criteria for the assessment are established.

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?

We recommend that ECCC use the World Trade Organization's (WTO) definition of subsidies, as described in Article 1.1 of the *Agreement on Subsidies and Countervailing Measures (ASCM)*,¹ and that ECCC not develop an alternative definition. The final list of subsidies evaluated under the review should also reflect those included in the inventory of supports for fossil fuels as compiled by the Organisation for Economic Co-operation and Development (OECD, 2018). IISD asks that ECCC address the following issues in the current definition and criteria as listed in the discussion document:

Specificity

ECCC's current definition for "fossil fuel subsidy" borrows from the WTO definition of subsidies, which is a good start: "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" (ECCC, 2019, p. 6).

However, ECCC has added an element of specificity, through the phrasing "specifically supports the production or consumption of fossil fuels." In the discussion document, ECCC outlines "specificity" as measures that are either solely available to the fossil fuel sector or broadly targeted measures whose outcomes weigh "largely in favour of fossil fuels" (2019, p. 7). IISD believes that ECCC's use of the word "specifically" will add unnecessary confusion to the process of identifying subsidies for evaluation.

¹ From Article 1: Definition of a Subsidy:

"1.1 For the purpose of this Agreement, a subsidy shall be deemed to exist if:

(a)(1) there is a financial contribution by a government or any public body within the territory of a Member (referred to in this Agreement as "government"), i.e. where:

(i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g. loan guarantees);

(ii) government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits);

(iii) a government provides goods or services other than general infrastructure, or purchases goods;

(iv) a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments;" (WTO, n.d.).



Specificity to production and consumption is not part of the WTO subsidy definition. Although the WTO's ASCM does have articles related to specificity (Article 1.2 & Article 2²), they are only meant to apply in a legal sense related to trade within the WTO context. Briefly, Article 1.2 serves to identify "specificity" as part of assessing subsidies that WTO members can challenge under trade rules. Therefore, specificity (and Articles 1.2 and 2) should not be used outside of the WTO context, especially as trade has little or no importance for consideration in the G20 peer review.

We recommend that Canada *not* apply specificity for the G20 peer review. The goal of the peer review should be to understand whether existing subsidies are efficient and effective public policy. IISD is concerned that the specificity language in the ECCC definition will cause non-specific policy measures to be excluded from the review process, including many consumer subsidies and support for technologies or programs that reduce greenhouse gas emissions within the oil and gas industry. **For the purposes of this review, IISD recommends removing the phrase "*that specifically supports the production or consumption of fossil fuels.*"**

For example, a subsidy (by WTO definition) that supports energy efficiency or greenhouse gas mitigation in the fossil fuel sector is still a subsidy and should be subject to transparency and review as part of the self- and peer-review processes. Whether or not such subsidies are "efficient" is a separate issue, but by WTO definition it should still be considered a subsidy even if it does not explicitly support fossil fuel production or consumption. Under the current ECCC definition, these subsidies may be excluded from the review.

Similarly, several producer support measures in Canada apply to both the oil and gas and mining sectors (for example, Canadian development expenses and Canadian exploration expenses). With a specificity approach, IISD is concerned that existing subsidies will not be considered if they are deemed to apply to multiple sectors. All subsidies available for fossil fuel producers should be examined, whether or not they are unique to fossil fuel extraction.

Normality

IISD also has issue with the proposed use of "normality," which we view as unnecessarily restrictive. ECCC has outlined that if a measure "aligns with the Government's general approach to treatment of industry, it should not be considered a fossil fuel subsidy" (p. 7). Our position is that subsidies constitute preferential treatment, which can occur either within a single industry or across a whole sector.

Use of "normality" will undermine the ability of the review to contribute to efficient and effective policy development across the Canadian economy. It may cause subsidies to be overlooked if they provide support for fossil fuels either indirectly or as part of broader measures (e.g., funding programs where fossil fuel producers are occasional beneficiaries). The normality principle does not align with international best practices and does not form part of the WTO subsidy definition. The text in the "Normality" section of the discussion document is vague and does not outline a clear methodology of what is "normal treatment" of industry (and whether this treatment is justified given the current environmental crisis), what constitutes a deviation from the benchmark or what constitutes a preferential exemption.

IISD notes that the subsidy identification process (as outlined in Figure 1 in the discussion document) will provide an opportunity for the exclusion of certain subsidies from thorough evaluation, whereas these subsidies could be included in the evaluation if the process followed a broader scope more consistent with WTO definitions (for example, the subsidies included in Annex 1). Even if the evaluation later finds these subsidies to be "efficient," the subsidies should at least be included in an inventory in the interest of transparency.

² In the ASCM, specificity is referred to in Article 1.2, with the provisions provided in Article 2. The full text is available at https://www.wto.org/english/docs_e/legal_e/24-scm_01_e.htm



Given the above, IISD recommends that ECCC remove reference to “normality” as part of the review process.

To conclude, the WTO definition from Article 1.1 is straightforward and has been used in previous G20 peer reviews. It is an international standard that has been tested through jurisprudence and is the standard definition used by many third-party subsidy reports, including those published by IISD's GSI.

The WTO definition was also chosen as part of the recommended methodology to report against SDG indicator 12.c.1 on fossil fuel subsidies. For further explanation as to why the WTO definition should be used, we recommend that ECCC (and by extension, Finance Canada) refer to the guidance document *Measuring Fossil Fuel Subsidies in the Context of the Sustainable Development Goals* (Wooders, Zinecker, & Steenblik, 2019)

Using the WTO definition without unique qualifiers will ensure that all relevant policies are examined in this review and ensure that the review supports transparency for Canadians and the international community.

Question 2: Is the criteria proposed to assess “inefficiency” clear and practical? If not, what are your suggestions for improving them?

ECCC's criteria for “inefficiency” are not clear or practical as currently outlined in the discussion document. IISD's view is that fossil fuel subsidies distort markets for cleaner energy options and lead to “wasteful consumption,” as they incentivize fossil fuel production or use and contribute to climate change and environmental degradation.

In the discussion document, ECCC has listed the following factors to consider: “effectiveness, simplicity, equity considerations, fiscal implications, provincial impacts, administrative, compliance and legislative costs” (p. 9). None of these factors is thoroughly defined in the discussion document, nor is an explicit methodology provided that would be used to determine inefficiency.

We recommend that ECCC develop more explicit criteria for “inefficiency” that is influenced by Canada's responsibility and international commitments under the Paris Agreement, in addition to factors listed above. In doing so, ECCC should consider the impact that fossil fuel subsidies have on Canada's ability to meet our Paris Agreement goals, as well as the consequences of distorting the market and disadvantaging renewable sources of energy. In short, an evaluation of whether a measure is “inefficient” should include an assessment of whether the measure contributes to or undermines Canada's greenhouse gas emission reduction objectives and transition to a low-carbon economy.

We ask ECCC to set a high standard for what subsidies are considered efficient. The clearest possible way to determine “inefficient” is to ask whether an existing subsidy is the best, least costly option to achieve stated policy objectives. If a subsidy does not clearly pass this test, it should be labelled inefficient.

We suggest developing a thorough methodology for the subsidy review that incorporates the following general approach:

- 1) **Determine whether there is a less costly way to achieve the policy objective than the subsidy in question.** In evaluating costs, ECCC should consider economic, social and environmental costs, and consider these costs over the short-to-long term. During this evaluation, contribution to climate change must be considered costly.

Subsidies under evaluation should be compared against other policies that achieve the same objectives. For example, subsidies that exist to incentivize producers to reduce greenhouse gas emissions should be compared



against regulations that require the cost of emission reductions to be borne by producers. Similarly, fossil fuel subsidies that exist to provide affordable fossil fuel-based energy access to remote consumers should be evaluated against alternative policies that support affordable clean energy.

If it is not possible to replace existing subsidies with alternative policy tools, there may still be potential to make an existing subsidy policy more efficient by optimizing the policy itself. This might include changing subsidy provisions based on current social, economic and environmental priorities, or through better targeting. Other countries that have undergone peer reviews as part of the G20 or the Asia-Pacific Economic Cooperation have taken this approach to improve policy efficiency when evaluating their own fossil fuel subsidies.

- 2) **Ensure policy objectives do not include objectives such as lowering the cost of fossil fuel production, increasing revenues for fossil fuel producers or lowering the price paid by consumers for fossil fuels.** Policy objectives that fall into these categories risk undermining the ultimate goal of the G20 peer review, and of Canada's Paris Agreement commitments, which is to reduce harmful environmental outcomes such as greenhouse gas emissions. If subsidies are evaluated against such policy objectives, they may be labelled as "efficient" during the review, despite their potential contribution to Canada's greenhouse gas emissions. There are exceptions, for example ensuring energy access to remote communities where no other options are available, but the case for such subsidies must be clearly made, and the rationale explicitly and transparently stated.

Ultimately, each subsidy should be thoroughly evaluated not only as to whether it delivers against social, environmental and economic policy objectives, but also that it is the *most efficient and only policy option* to do so. In other words, for a subsidy to be labelled efficient, ECCC should ensure that there are no other sustainable options to achieve these goals and provide demonstrable evidence to support this conclusion.

Subsidies determined to be efficient should also be subject to reform, including development of a time limit on these subsidies that supports a longer-term shift to lower-carbon energy. For consumer subsidies that currently serve the important social goal of providing affordable energy access, in the medium-to-long term, it will be necessary to ensure that communities are able to access affordable low-carbon energy.

We encourage Canada to evaluate *all* fossil fuel subsidies and their policy alignment and efficiency (in both the short and long terms). We hope ECCC (and by extension Finance Canada) will take this opportunity to do a thorough review of all existing fossil fuel subsidies. By doing so, the Government of Canada can identify opportunities to maximize the efficiency of these policies.

Question 3: Are there are other considerations not currently in the framework that should be included?

In addition to the concerns outlined above, IISD noted the following in our assessment of the discussion document:

Transparency

The Annex of the discussion document illustrates ECCC's preliminary results of a review of non-tax measures up to April 2018. ECCC identified 36 potential subsidies, but ultimately labelled only four as fossil fuel subsidies and concluded that none were inefficient.

IISD commends ECCC for taking a broad initial look at potential subsidies across numerous federal programs and departments. However, the fact that only four measures were determined to be fossil fuel subsidies, and that none



were labelled as “inefficient,” underscores complications with the approach ECCC is using compared to what would be considered a subsidy under basic WTO approaches (such as the list of subsidies IISD identifies in *Public Cash for Oil and Gas*, listed in Annex 1).

ECCC did not include a breakdown of level of fiscal support in each of these programs. In addition, the Annex did not outline ECCC’s methodology for determining whether individual measures were “inefficient fossil fuel subsidies.” Omission of this information decreases the level of transparency on these determinations. It is not clear based on the information provided why only four measures were determined to be fossil fuel subsidies and why none were determined to be inefficient. More specifically:

- **Technology and research development programs:** IISD requests more transparency on the breakdown of funding amounts and recipients of programs that ECCC has determined to be “efficient.” We posit that individual awards to fossil fuel producers under these programs should be considered as potential subsidies and should be evaluated accordingly. Furthermore, we recommend that ECCC analyze the cost-per-tonne of greenhouse gas emission reductions in order to determine whether these funding allocations are the most efficient way to achieve policy objectives.
- **Regional development programs:** The discussion document does not illustrate what specific fossil fuel projects have benefited from these programs or the methodology used to evaluate the “efficiency” of each funding allocation.
- **Environmental protection programs:** In general, IISD is supportive of the polluter-pays principle. Environmental clean-up costs and liabilities related to fossil fuel production should be covered by the private sector as part of the cost of doing business. If government covers these costs for industry, they should be considered subsidies and evaluated as such. However, the discussion document fails to include a thorough assessment of these programs because they “do not directly provide funds to companies or businesses engaged in fossil fuel production” (p. 12). IISD recommends that ECCC examine these programs more closely, including whether there are better ways to protect public environmental goods (such as mandating industry to cover environmental liabilities).
- **Government ownership of certain assets:** The discussion document does not provide adequate details on which assets were evaluated or how. Even if the asset is profitable, we recommend that ECCC evaluate whether these assets could be managed by the private sector at a lower cost.
- **General program support:** IISD requests more information on how these measures were evaluated and whether fossil fuel producers may benefit from them. The current text does not provide adequate justification for government to cover certain costs, as opposed to the private sector.

We encourage a more thorough assessment of each of these 36 measures (as well as additional measures identified in IISD’s own reports), with full transparency on the methodology and rationales being used. The review should also include new policy developments that have occurred since April 2018 to provide as timely a review as possible.

Canada’s commitment to achieving the SDGs should also be noted as an imperative for transparency. The G20 peer review is a key activity that will help Canada develop and extend its fossil fuel inventory and ultimately feed into Canada’s reporting for SDG indicator 12.c.1.³ UN Environment recently released a methodology for reporting against this indicator, which provides considerable guidance on definition, scoping and data sources to assist with transparency on fossil fuel subsidies (Wooders et al., 2019).

³ Under SDG indicator 12.c.1, Canada is expected to report “Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels” (United Nations, 2019).



Unclear coordination with Finance Canada on tax-related subsidies

While we recognize that the assessment framework is directed at non-tax measures, there is little in the assessment framework that describes how ECCC will work in tandem with Finance Canada for the purposes of this review. Currently, while we understand that Finance Canada is undertaking its own process for review of tax measures, it has not opened similar consultations on tax-related subsidies and has not, as of yet, been transparent on which tax measures are being evaluated (or how). Given that the ECCC non-tax subsidy review is only one part of the G20 review, we recommend that ECCC coordinate with Finance Canada and push for full disclosure and evaluation of *all* federal fossil fuel subsidies.

Time frame

The framework does not currently outline a time frame for completion of the G20 peer review. In discussion with various Government of Canada representatives, it was stated that the review process could take up to 2–3 years. It should be noted that other G20 countries have completed their self- and peer reviews within a timeline of 12–18 months. Given this, IISD recommends committing to an efficient and transparent timeline to complete the review, working with Finance Canada to ensure alignment and clearly communicating progress to the Canadian public.

Lack of participation from provinces

IISD recognizes that the G20 review is federal in scope and that ECCC is mandated to conduct a review of federal non-tax measures. That said, the WTO definition of subsidies would include subnational policies in its scope. In Canada, many producer and consumer-oriented subsidies occur at the subnational level. In addition, federal-level subsidies (and their reform) will also have subnational impacts. We encourage the federal government to use the opportunity of this G20 peer review to engage and encourage provinces and territories to participate in this review and to complete voluntary reviews of their own fossil fuel subsidies.



Part 3. Recommendations

IISD recommends the following to ensure a thorough, effective G20 peer review.

1) Use the WTO definition of “subsidies” and develop robust criteria for “inefficiency”

We recommend that ECCC use the WTO definition of subsidies as described in Article 1.1 of the ASCM, and that ECCC not develop an alternative definition. ECCC should exclude the “specificity” and “normality” criteria that are currently outlined in the discussion document.

ECCC should supplement the subsidy definition with an evaluation of whether existing subsidies are truly the most efficient ways to achieve policy objectives, including Canada’s commitments under the Paris Agreement to reduce greenhouse gas emissions. Ultimately, the scope of this review should include all federal non-tax policies that directly or indirectly incentivize fossil fuel production and consumption.

An evaluation of fossil fuel subsidies under this review should:

- 1) Determine whether there is a less costly way to achieve the policy objective, taking into consideration economic, social and environmental costs. If no other option is available, the evaluation should consider how to make the existing subsidy policy more efficient.
- 2) Ensure policy objectives do not include lowering the cost of fossil fuel production, raising the revenues of fossil fuel producers or lowering the price paid by consumers for fossil fuels, with very limited and well-rationalized exceptions (e.g., energy access for remote communities).

We recommend that ECCC review our 2018 report *Public Cash for Oil and Gas* for a listing of federal fossil fuel subsidies our researchers identified using the WTO/OECD approaches as a starting point. This includes:

- **Subsidies for affordable energy:** IISD recognizes that providing affordable energy access to Canada’s remote and northern communities is an absolute necessity. We acknowledge the historical role subsidies have played in this regard and the necessary role that they may have going forward. However, a thorough assessment should be done to determine whether policies that subsidize fossil fuel consumption are the only viable option. IISD supports evaluating the opportunity costs of existing subsidies and developing alternative policies that support clean energy options in remote communities, while maintaining affordable access.
- **Programs to support environmental outcomes:** ECCC must carry out a thorough analysis of subsidies provided to support emission reductions or other positive environmental outcomes in the oil and gas sector. This should include an evaluation of whether these funds provide adequate value for money as compared to other options. Furthermore, just because a program provides a positive environmental outcome does not mean it is not a fossil fuel subsidy, and subsidy inventories should certainly include these measures as part of overall transparency on Canadian fossil fuel subsidies.
- **Trans Mountain Pipeline:** We request clarity and transparency of the government’s financial and regulatory involvement in this project, including assessing whether this involvement constitutes a subsidy now or is likely to do so in the future. As noted by the Commissioner for Environment and Sustainable Development in its recent report, full transparency regarding the government’s purchase of the Trans Mountain Pipeline is required.



We ask that ECCC thoroughly evaluate these subsidies in the review, in addition to all relevant policy developments that have occurred since April 2018.

We also refer ECCC and Finance Canada to IISD's *A Guidebook to Reviews of Fossil Fuel Subsidies* (Gerasimchuk et al., 2017), which documents best practices for self- and peer fossil fuel subsidy reviews. IISD-GSI offers its own assistance to government officials in this regard and would be happy to continue to provide inputs into the process.

In addition, we ask ECCC to **coordinate with Finance Canada to ensure a thorough evaluation of tax-related subsidies**. Tax and non-tax measures are inextricably linked, interacting with each other in the marketplace. If the G20 review is to be effective, consideration of the full subsidy regime is needed.

2) Strive for maximum transparency

Full transparency on fossil fuel subsidies should be a key goal of Canada's peer review. The Government of Canada should fully address the comments raised in April 2019 by the Commissioner of the Environment and Sustainable Development. This includes providing further information on existing subsidies to the public and conducting a full evaluation of these subsidies.

We ask ECCC to publicly release data on existing production and consumption subsidies. This should include a breakdown of funding awarded under broadly targeted industry programs where fossil fuel producers have been recipients.

IISD also recommends publicly releasing the process and results of the self- and peer-review process, including documentation on what measures are being evaluated and how.

Lastly, we ask ECCC to encourage Finance Canada to hold a similar consultation on tax-related measures.

3) Engage the provinces and territories

IISD notes that the G20 commitment and peer-review process does not restrict countries to addressing only national policies. Subsidies from different levels of government are part of the same puzzle: federal fossil fuel subsidies affect provincial and territorial policy, and federal and subnational subsidies interact in the national market. While we recognize that the G20 review process is federal in scope, a full picture of subsidies at both the subnational and national levels is needed. This review provides a critical opportunity to engage the provinces in subsidy review and reform.

We encourage Canada to invite the provinces and territories to take part in this federal review of fossil fuel subsidies and also suggest that the Government of Canada invite these subnational jurisdictions to undertake in their own voluntary reviews of fossil fuel subsidies at the subnational level.

IISD has completed several fossil fuel subsidy inventories at the subnational level, including in Quebec, Alberta and Nunavut (see Annex 2), which could support this work.



4) Reaffirm Canada's commitment to reforming fossil fuel subsidies by 2025

Fossil fuel subsidy reform is a vital step if we are to meet our 2030 emission reduction targets under the Paris Agreement. Furthermore, given the short timeline to Canada's G7 2025 phase-out goal, it is imperative that the review process take place in a timely manner.

We ask Canada to follow timeline precedents as set by previous G20 peer reviews. Typically, other G20 peer-review processes have taken 12–18 months to complete. Developing Canada's peer review in a similar time frame will ensure there is adequate time to phase out inefficient subsidies before the 2025 deadline. A slower review process could limit the ability of Canada to act meaningfully in the short and medium terms.

We also recommend ECCC coordinate with Finance Canada to ensure accountability to meet this timeline and to provide transparency on the review's progress to the Canadian public.

In addition, the review should include a detailed timeline of how Canada will carry out subsidy reform up to 2025 and beyond. The G20 review process is an opportunity not only to substantively evaluate fossil fuel subsidies, but to develop a roadmap for effective reform. Ideally, the review should also include a plan of action to maximize efficiency for all fossil fuel subsidies, including any that are determined to be "efficient." This could include policy actions beyond 2025.



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Annex 1. Federal Fossil Subsidies (as of Fall 2018) as Identified by IISD

The following subsidies were quantified by IISD in our 2018 report *Public Cash for Oil and Gas* (Touchette & Gass, 2018).

Table 1. Oil and gas, and coal mining tax provisions (in CAD)

Tax provision	Annual tax deduction rate	Estimated value 2016–2018 ^a	Income Tax Act (A) or Regulations (R) subsection
Canadian exploration expense deduction claims	100%	Not quantified by government	(A) § 66.1 (2)
Canadian development expense deduction claims	30%	Not quantified by government	(A) § 66.2(2)
Oil and gas property expense deduction claims	10%	Not quantified by government	(A) § 66.4(2)
Foreign resource expense deduction claims	10–30%	Not quantified by government	(A) § 66.21(4)
Flow-through shares	Up to 100%	265,000,000 ^b	(A) § 66(15)
Accelerated capital cost allowance – Liquefied natural gas, eligible liquefaction equipment	30%	Not quantified by government	(R) § 1100(1)(yb)
Accelerated capital cost allowance – Liquefied natural gas, related buildings	10%	Not quantified by government	(R) § 1100(1)(a.3)(ii)

^a Values are in fiscal years (FYs), e.g., FY 2017/18 ran from April 1, 2017 to March 31, 2018. A time period from 2016–2018 includes two FYs, not three. Most of these tax provisions are not reported on or quantified by Finance Canada.

^b Flow-through shares are available to investors in the oil and gas, mining and renewable energy sectors. Finance Canada does not disaggregate the tax expenditures related to flow-through shares by sectors (Finance Canada, 2018).

Table 2. Energy Innovation Program – Clean energy technology component, carbon capture, use and storage stream (in CAD)

Recipient	Project	Amount	Period*
Inventys Thermal Technologies Inc.	VeloxoTherm™ CO ₂ Capture Process Demonstration	2,600,000	2017/2018
Carbon Upcycling Technologies Inc.	Carbon Nanoplatelet (CNP) Production from Exhaust CO ₂ Emissions	600,000	2017/2018
Carbon Engineering Ltd.	Air-to-Fuels Development, Feasibility, and pre-FEED Study for First Commercial-Scale Demonstration Plant	1,500,000	2017/2018
Quantiam Technologies Inc.	CO ₂ Conversion to Methanol	500,000	2017/2018
Total		5,200,000	2017/2018

*Values are in FYs, e.g., FY 2017/18 ran from April 1, 2017 to March 31, 2018.



Table 3. Energy Innovation Program – Oil and gas clean technology component (in CAD)

Recipient	Project	Amount	Period*
<ul style="list-style-type: none"> InnoTech Alberta Ministry of Economic Development and Trade, Government of Alberta Canada's Oil Sands Innovation Alliance (COSIA) Shepard Energy Centre 	Alberta Carbon Conversion Technology Centre	9,800,000	2017/2018
<ul style="list-style-type: none"> MEG Energy Corp. Western Research Institute (WRI) 	Enhanced Modified VAPour EXtraction R&D Operation	9,933,000	2017/2018
<ul style="list-style-type: none"> Suncor Energy Oil Sands Limited Partnership 	Combined Direct Contact Steam Generation and Non-Aqueous Extraction Demonstration Project	7,800,000	2017/2018
<ul style="list-style-type: none"> Proton Technologies Canada Inc. 	FEED Study for HYGENERATOR – wellbore deployed hydrogen production tool	375,000	2016/2017
<ul style="list-style-type: none"> CMC Research Institutes BC Research Inc. University of British Columbia 	Pilot Facility for Scale Up and Testing Carbon Capture and Conversion Technologies	950,000	2016/2017
<ul style="list-style-type: none"> Field Upgrading Ltd. Ceramatec Inc. Advisory Committee: <ul style="list-style-type: none"> Sterling Fuels Representatives from major oil and gas companies 	Clean Seas Feasibility Study and Front End Engineering Design (FEED) Project	3,560,000	2016/2017
<ul style="list-style-type: none"> Cenovus FCCL Ltd. ConocoPhillips Canada 	Solvent Driven Extraction Process	7,500,000	2017/2018
<ul style="list-style-type: none"> Husky Oil Operations Ltd. Alberta Sulphur Research Ltd. (ASRL) BP Canada Energy 	Hydrogen-Donor Diluent Reduction (HDR)	9,400,000	2017/2018
Total		49,318,000	2016–2018

*Values are in FYs, e.g., FY 2017/18 ran from April 1, 2017 to March 31, 2018. A time period from 2016–2018 includes two FYs, not three.



Table 4. Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative (in CAD)

Recipient	Project	Amount	Period*
EBI Énergie Inc.	1 natural gas refuelling station	1,000,000	2017/2018
EBI Énergie Inc.	1 natural gas refuelling station	1,000,000	2017/2018
EBI Énergie Inc.	1 natural gas refuelling station	1,000,000	2017/2018
Enbridge Gas Distribution Inc.	1 natural gas refuelling station	502,000	2017/2018
Union Energy Solutions	1 natural gas refuelling station	1,000,000	2017/2018
Clean Energy Compression Corporation	1 natural gas refuelling station	1,000,000	2017/2018
Union Energy Solutions	1 natural gas refuelling station	1,000,000	2017/2018
Hydrogenics Corporation Incorporated	2 hydrogen refuelling stations in Ontario and Quebec	2,000,000	2017/2018
HTEC Hydrogen Technology and Energy	1 hydrogen refuelling station in British Columbia	1,000,000	2017/2018
Total		9,502,000	2017/2018

*Values are in FYs, e.g., FY 2017/18 ran from April 1, 2017 to March 31, 2018.

Table 5. Sustainable Development Technology Canada, Priority Technology Area: Unconventional oil and gas projects (in CAD)

Recipient	Project	Amount	Period*
<ul style="list-style-type: none"> • Acceleware Ltd. • GE Global Research 	RF XL Heating for In Situ Bitumen Production	5,000,000	2016/2017
<ul style="list-style-type: none"> • Agar Canada Corp. Ltd. • Luxmux Technology Corp. • NDT Ultrasonics 	Online Water Measurement Analysis	500,000	2016/2017
<ul style="list-style-type: none"> • Calscan Energy Ltd. • Cenovus Energy Inc. • Husky Energy Inc. • Repsol Oil & Gas Canada Inc. • SAFCell Inc. 	Near Zero Emission Well Control System	970,970	2016/2017
<ul style="list-style-type: none"> • Forward Water Technologies • Imaginea Energy • Terrapure Environmental 	Mobile Pilot-Scale Forward Osmosis Wastewater Treatment Unit	500,000	2016/2017
<ul style="list-style-type: none"> • Fossil Water Corp. • Exterran Corp. 	Modular Treatment of Flowback & Produced Water	475,000	2016/2017
<ul style="list-style-type: none"> • Ground Effects Environmental Services Inc. 	Develop a new process to reuse water in oilfield operations and reduce the demand for fresh water	500,000	2017/2018



<ul style="list-style-type: none"> • Purlucid Treatment Solutions Inc. • A.H. Lundberg Systems • Connacher Oil and Gas • David Bromley Engineering Ltd. • IBM 	Low-energy water treatment for steam-assisted heavy oil recovery	3,225,000	2016/2017
<ul style="list-style-type: none"> • Saltworks Technologies Inc. • Enerplus Corp. 	EOR Produced Water Recycling	500,000	2016/2017
<ul style="list-style-type: none"> • waterStrider Treatment Inc. 	Develop a new process to treat water recovered during oil and gas production	500,000	2017/2018
<ul style="list-style-type: none"> • Nsolv Corp. 	Scale-up of B.E.S.T. pilot project	13,000,000	2017/2018
<ul style="list-style-type: none"> • Smart Pipe Company Canada Inc. • Enbridge 	Application of Smartpipe® technology to larger-diameter pipelines used by oil sands producers	2,363,709	2017/2018
Total		24,534,679	2016–2018

*Values are in FYs, e.g., FY 2017/18 ran from April 1, 2017 to March 31, 2018. A time period from 2016–2018 includes two FYs, not three.

Table 6. Other budgetary transfers (in CAD)

Recipient	Project	Amount	Period*
Government of Alberta	One-time payment: Supporting Jobs in the Resource Sector	30,000,000	2017/2018
Programs-based	Petroleum Technology Research Centre (PTRC)**	3,370,000	2016/2017
Total		33,370,000	2017/2018

*Values are in FYs, e.g., FY 2017/18 ran from April 1, 2017 to March 31, 2018.

**The estimates reported were retrieved from the OECD (2018) database on Fossil Fuel Support for Canada. The Petroleum Technology Research Centre no longer includes its audited financial statements in its Annual Report and did not respond to an email request to share the statements (https://ptrc.ca/+pub/image/AO_Annual%20Report_2015-16%20Final.pdf).



Table 7. Energy Innovation Program – Clean Energy Technology Innovation component, methane and volatile organic compounds emissions projects (in CAD)*

Recipient	Project	Amount	Period**
<ul style="list-style-type: none"> • Clearstone Engineering Ltd. • GreenPath Energy Ltd. • Carleton University 	Greenhouse Gas Inventory System for the Upstream Oil and Gas Industry	730,000	2017/2018
<ul style="list-style-type: none"> • Clearstone Engineering Ltd 	A Tool for Design and Analysis of Vapour Collection and Control Systems	430,000	2017/2018
<ul style="list-style-type: none"> • Alberta Energy Regulator (AER) • Government of Alberta <p>Collaborators:</p> <ul style="list-style-type: none"> • Clearstone Engineering 	Harmonized Methane Emission Platform	1,270,000	2017/2018
<ul style="list-style-type: none"> • University of British Columbia, Earth, Ocean and Atmospheric Sciences • University of Calgary • Geoscience BC 	Field Assessment of Subsurface Migration, Groundwater Impacts and Fate of Fugitive Methane from Energy Resource Development in a Northeastern British Columbia Setting	1,616,717	2017/2018
<ul style="list-style-type: none"> • Petroleum Technology Alliance Canada (PTAC) • University of Calgary • Encana • GE Canada • Cap Op Energy • Process Ecology • LCO Technologies • Husky Energy • St. Francis Xavier University • Calscan Solutions 	Advanced Methane Detection, Analytics and Mitigation Project	668,000	2017/2018
<ul style="list-style-type: none"> • Petroleum Technology Alliance Canada (PTAC) • Encana • mAIRSure (Sensit Technologies) 	Area Methane Detection Using Work Trucks	300,000	2017/2018
<ul style="list-style-type: none"> • University of Calgary • Ventus Geospatial • Boreal Laser 	Mobile Methane Sensing Analytics for Emissions Reduction	300,000	2017/2018
Total		5,796,917	2017/2018

* Research and Development (R&D) subsidies are included in this report for transparency purposes. However, we recognize that methane emission management can also be treated as a public service. The amount allocated to these projects is not included in the total presented in this report for this reason.

**Values are in FYs, e.g., FY 2017/18 ran from April 1, 2017 to March 31, 2018.



Annex 2. Additional Reading

The following annotated bibliography provides a sampling of recent research conducted by IISD and its partners about fossil fuel subsidies.

IISD-Authored Guides on Conducting Reviews of Fossil Fuel Subsidies

Gerasimchuk, I., Wooders, P., Merrill, L., Sanchez, L., & Kitson, L. (2017). *A guidebook to reviews of fossil fuel subsidies: From self-reports to peer learning*. Retrieved from <https://www.iisd.org/library/guidebook-reviews-fossil-fuel-subsidies>

This guidebook supports countries that intend to undertake self- or peer review of fossil fuel subsidies. The guidebook takes readers through a step-by-step approach to identifying and defining fossil fuel subsidies, evaluating the scope of a review, measuring and evaluating subsidies and identifying the next steps toward the reform of subsidies. Practical annexes are included that explain international commitments on fossil fuel subsidies, templates for identifying and reporting fossil fuel subsidies, and principles to follow for a review process.

Jones, D., & Steenblik, R. (2010). *Subsidy estimation: A survey of current practice*. Retrieved from <https://www.iisd.org/library/subsidy-estimation-survey-current-practice>

As a first step toward developing internationally agreed-upon subsidy estimation methods and best practice, IISD's GSI compiled a manual drawing together various methodologies used to calculate subsidy values. The manual takes as its starting point the definition of subsidy in the WTO's Agreement on Subsidies and Countervailing Measures and provides methodologies for each type of subsidy covered by the definition.

Relevant IISD-Authored Publications on Canada's Fossil Fuel Subsidies

National

IISD. (2019, April 2). IISD reaction to Canadian Environment Commissioner's 2019 spring reports. Retrieved from <https://www.iisd.org/blog/reaction-environment-commissioner>

In this response to Commissioner Gelfand's report, IISD underscores the importance of using the WTO definition for fossil fuel subsidy evaluation and reform, and calls for increased transparency from ECCC and Finance Canada.

IISD. (2019). Statement on Canada's federal budget 2019. Retrieved from <https://www.iisd.org/media/statement-canadas-federal-budget-2019>

In this response to the 2019 federal budget, IISD commends the government for movement on the peer-review process with Argentina.

Touchette, Y., & Gass, P. (2018). *Public cash for oil and gas: Mapping federal fiscal support for fossil fuels*. Retrieved from <https://www.iisd.org/library/public-cash-oil-and-gas-mapping-federal-fiscal-support-fossil-fuels>

IISD's most recent inventory of federal fossil fuel subsidies in Canada demonstrates that, although Canada has made some progress on subsidies, a number of tax exemptions and direct transfer programs continue to provide significant fiscal support for fossil fuel production. The top-line message of the report is that subsidies that were quantified are down substantially from IISD's previous report due to a combination of a) fossil fuel subsidy reform through government policy, b) a decline in global oil prices and c) companies deferring tax benefits to future years.



Environmental Defence. (2018). #StopFundingFossils: New poll shows Canadians want to end public subsidies for oil and gas companies. Retrieved from <https://environmentaldefence.ca/report/stopfundingfossils/>

Climate Action Network, Environmental Defence, Équiterre, IISD and Oil Change International commissioned Ekos Research Associates Inc. to undertake a study of public attitudes toward fossil fuel subsidies. The polling showed that a large majority of Canadians (67 per cent) are opposed to the use of public money to subsidize oil and gas companies, and that Canadians want transparency on how much public money is supporting fossil fuel companies.

Gerasimchuk, I., Whitley, S., Beaton, C., Bridle, R., Doukas, A., Di Paola, M. M., & Touchette, Y. (2018). *Stories from G20 countries: Shifting public money out of fossil fuels*. Retrieved from <https://www.iisd.org/library/stories-g20-countries-shifting-public-money-out-fossil-fuels>

This working paper brings together examples, including from Canada, illustrating how reforms can be enabled and implemented to align the flows of public money with the Paris Agreement and Sustainable Development Goals. It concludes with recommendations to the G20 countries for learning from each other's efforts at undertaking reforms while protecting vulnerable groups and ensuring a just transition.

Touchette, Y. (2015). *G20 subsidies to oil, gas and coal production: Canada*. Retrieved from <https://www.iisd.org/library/g20-subsidies-oil-gas-and-coal-production-canada>

This report calculated CAD 3.3 billion of public money provided to oil and gas producers through fossil fuel subsidies, including tax exemptions and direct transfers. Since publication, Canada has reformed a number of subsidies, including the Atlantic Investment Tax Credit.

Subnational

Environmental Defence, IISD, Climate Action Network & Oil Change International. (2019). *Doubling down with taxpayer dollars: Fossil fuel subsidies from the Alberta Government*. Retrieved from https://d36rd3gki5z3d3.cloudfront.net/wp-content/uploads/2019/02/EDC_IISD_AlbertaFFSReportFINAL.pdf?x82974

In collaboration with our partners, IISD found that fiscal supports from Alberta taxpayers for oil, gas and coal production and consumption averaged at least CAD 1.6 billion per year between FYs 2015/16 and 2017/18, including over CAD 2 billion in FY 2017/18 alone. Without reform, the level of public money flowing to the industry may continue to grow.

Équiterre. (2018). *Les subventions du gouvernement à la consommation et au développement d'hydrocarbures au Québec*. Retrieved from <https://equiterre.org/publication/nouveau-rapport-subventions-aux-hydrocarbures-au-quebec>

In Quebec, provincial fossil fuel subsidies account for over CAD 300 million per year. They are primarily in the form of consumer subsidies such as fuel-tax relief, but also include budgetary transfers and one-time direct investments that directly support the use of fossil fuels in Quebec.

Touchette, Y., Gass, P., & Echeverría, D. (2017). *Costing energy and fossil fuel subsidies in Nunavut: A mapping exercise*. Retrieved from <https://www.iisd.org/library/costing-energy-fossil-fuel-subsidies-nunavut-mapping-exercise>

Subsidies to offset the astronomical price of fossil-fuel-based energy cost the Government of Nunavut more than CAD 60 million annually, CAD 36.5 million of which goes toward diesel-based electricity generation. This report shows the extent to which diesel subsidies mask how economically beneficial renewable energy can be.



Gass, P., Touchette, Y., & Gerasimchuk, I. (2016). *Meeting Canada's subsidy phase-out goal: What it means in Ontario*. Retrieved from <https://www.iisd.org/library/meeting-canadas-subsidy-phase-out-goal-what-it-means-ontario>

This commentary highlights some of the prominent subsidies in place in Ontario that give preferential tax treatment to the use of fossil fuels and examines how Ontario stacks up against other provinces. IISD found foregone revenue of roughly CAD 628 million per year, including tax exemptions for aviation fuel, railway diesel and coloured fuel.

Gass, P., Touchette, Y., & Gerasimchuk, I. (2016). *Meeting Canada's subsidy phase-out goal: What it means in Saskatchewan*. Retrieved from <https://www.iisd.org/library/meeting-canadas-subsidy-phase-out-goal-what-it-means-saskatchewan>

This commentary takes a very preliminary look at consumer fossil fuel subsidies in Saskatchewan. Our initial research identifies roughly CAD 182 million in 2015 in the form of financial supports for the consumption of fossil fuels.

Gagnon-Lebrun, F., & Touchette, Y. (2016). *Meeting Canada's subsidy phase-out goal: What it means in Quebec*. Retrieved from <https://www.iisd.org/library/meeting-canadas-subsidy-phase-out-goal-what-it-means-quebec>

This commentary takes a very preliminary look at consumer fossil fuel subsidies in Quebec. Our initial research identifies roughly CAD 270 million in 2015 in the form of financial supports for the consumption of fossil fuels.

Sawyer, D., & Stiebert, S. (2010). *Fossil fuels – At what cost? Government support for upstream oil activities in three Canadian provinces: Alberta, Saskatchewan, and Newfoundland and Labrador*. Retrieved from <https://www.iisd.org/library/fossil-fuels-what-cost-government-support-upstream-oil-activities-three-canadian-provinces>

Using the WTO subsidy definition, IISD conducted the first detailed analysis of fossil fuel subsidies of its kind in Canada and identified the financial, economic and environmental trade-offs implied by 63 identified subsidies at the federal and provincial levels.

Other Relevant Fossil Fuel Subsidy Reports Published by IISD and/or Partners

Gerasimchuk, I., Touchette, Y., Whitley, S., Chen, H., Doukas, A., Genscu, I., & Worrall, L. (2018). *G7 fossil fuel subsidy scorecard: Tracking the phase-out of fiscal support and public finance for oil, gas and coal*. Retrieved from <https://www.odi.org/publications/11131-g7-fossil-fuel-subsidy-scorecard>

With less than seven years to meet their 2025 phase-out deadline, this report found that G7 governments continue to provide substantial support to the production and use of oil, gas and coal. Of these, Canada is the largest supporter of fossil fuels per unit of GDP in the G7.

Gerasimchuk, I., Bassi, A., Dominguez Ordonez, C., Doukas, A., Merrill, L., & Whitley, S. (2017). *Zombie energy: Climate benefits of ending subsidies to fossil fuel production*. Retrieved from <https://www.iisd.org/library/zombie-energy-climate-benefits-ending-subsidies-fossil-fuel-production>

This working paper explains how different production subsidies currently unlock “zombie energy” from fossil fuel deposits that would not be commercially viable to produce without government support. It also presents new modelling of the global removal of certain subsidies to fossil fuel production.



IISD. (2016). *Gender and fossil fuel subsidy reform: Current status of research*. Retrieved from <https://www.iisd.org/sites/default/files/publications/gender-fossil-fuel-subsidy-reform-current-status-research.pdf>

This report sets out the global context of energy subsidies, energy access and gender empowerment. It then reviews literature on gender, energy access, fossil fuel subsidies and mitigation measures related to subsidy reform, such as cash transfers. The review concludes that subsidy reform is a significant opportunity for Sustainable Energy for All and that poorly performing subsidies do not benefit impoverished women.

Bast, E., Doukas, A., Pickard, S., van der Burg, L., & Whitley, S. (2015). *Empty promises: G20 subsidies to oil, gas and coal production*. Retrieved from <https://www.odi.org/publications/10058-empty-promises-g20-subsidies-oil-gas-and-coal-production>

This report documents the scale and structure of fossil fuel production subsidies in the G20 countries. It finds that, by providing subsidies for fossil fuel production, the G20 countries direct large volumes of finance into high-carbon assets and divert investment from economic low-carbon alternatives such as solar, wind and hydro-power. The scale of G20 fossil fuel production subsidies calls into question the commitment of governments to an ambitious deal on climate change.

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