Brief – Legal options for implementing a federal oil and gas emissions cap

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Summary

There are three main ways a federal oil and gas emissions cap could be implemented. The first is by establishing a sector-wide cap in policy or the Emissions Reductions Plan (ERP) and implementing it through existing regulatory and policy levers, such as the output-based pricing system (OBPS) under the Greenhouse Gas Pollution Pricing Act (GGPPA) (the “policy-based with no new measures” option). The second is by establishing a sector-wide cap in policy or the ERP, and introducing new regulatory measures, such as facility-specific emissions limits enacted through regulations under the Canadian Environmental Protection Act (CEPA) (the “policy-based plus hard limits” option). The third is by establishing and administering a Canada-wide oil and gas cap-and-trade system (the “cap-and-trade” option).

Benefits to the policy-based with no new measures option is that it would better avoid legal challenge, and it could be quickly implemented. A key disadvantage is it is uncertain whether the federal government would strengthen existing regulatory and policy measures to the degree needed in order to ensure oil and gas sector emissions stay within the cap.\(^1\) Also uncertain is whether the federal government could be legally held to account if a policy or ERP-based overarching cap were exceeded.

The policy-based plus hard limits option would have greater chance of driving down oil and gas sector emissions through the additionality of the hard caps. Moreover, there is precedent for establishing facility-specific emissions limits under CEPA, and the federal criminal law power over climate is well established, meaning hard caps implemented through CEPA regulations would likely withstand legal challenge. Main disadvantages are that while CEPA caps could require facilities to be net zero emissions by a prescribed date (e.g., 2050), they would likely be based on production or size, meaning proponents could propose new projects or expand existing ones. As a result, the cumulative emissions from the sector could exceed the policy-based cap in the lead-up to 2050, and higher than they would be under a cap-and-trade program. Also, as with the first option, it is uncertain whether the overarching sector-wide cap would be legally enforceable.

A main benefit of a cap-and-trade system is that the overarching cap would be set in regulations and therefore be a much stronger mechanism for ensuring that sector emissions stay within the cap. Also, market-based

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approaches like cap and trade provide flexibility while having the potential to significantly drive down emissions over the mid- to long-term. A main disadvantage is that cap and trade would likely take years to establish and begin reducing emissions, meaning that significant gains would only begin taking effect in the 2030s and 2040s, and it would be unlikely to make a meaningful contribution to meeting a 2030 cap. Also, while an airtight cap-and-trade system could be developed, the concept has been criticized for having too much potential for loopholes. Finally, cap and trade that focuses exclusively on one economic sector could be vulnerable to legal challenge as being outside of Parliament’s jurisdiction.

These options are not mutually exclusive: the federal government could rely on existing measures, or even new policy-based ones (such as the recently announced upcoming “best in class” guidance for new oil and gas facilities)\(^2\) to drive down emissions in the short term while developing and implementing an oil and gas emissions cap. For example, the OBPS could be “stacked” with facility-specific limits so that the OBPS applies when emissions are above the limit set in the OBPS regulations, and CEPA regulations could apply to a prescribed higher limit.

The reason why this brief does not offer the option of a regulation-based sector-wide cap for the “no new measures” and “new regulatory measures” options (only for cap and trade) is simple: there would be little or no added benefit. Either facility-specific limits or a cap-and-trade program would likely have to be implemented via regulations under CEPA, as doing so under the GGPPA would require considerable amendments to that Act (see the discussion of the limits of the GGPPA powers in the discussion of options two and three, below). CEPA provisions (and regulations) are binding on corporations and individuals, and it would be extremely unlikely that the government would make a regulation that could expose a cabinet minister to fines or other penalties for failure to comply (such as by ensuring that emissions remained under a cap). No other person could be held accountable for a sector-wide cap, meaning the only plausible option for a sector-wide cap under CEPA would be a non-binding one, or one established as part of a cap-and-trade program.

Options

1. **Policy-based with no new measures**

Arguably the easiest route for the federal government would be to establish an oil and gas emissions cap in policy (such as under the ERP) and rely on regulations, policies and programs already in place, under development or announced to ensure emissions stay within the cap. It is likely that officials are seriously considering simply increasing the carbon tax as the primary means of keeping emissions within the cap. However, it is unclear whether the government could increase the carbon tax for oil and gas facilities only, or whether a court would find that a sector-specific levy to be unconstitutional on the basis that it is a colourable attempt to improperly regulate a specific industry that falls under provincial authority. As a result, it is possible that this option would require increasing the carbon tax for all covered facilities.

**Advantages and disadvantages of the policy-based with no new measures option**

Benefits to the policy-based with no new measures option is that it would better avoid legal challenge, and it could be quickly implemented.

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A key disadvantage is it is unclear whether existing measures are sufficient to bring oil and gas sector emissions down to the degree needed in order to bring oil and gas sector emissions down to levels called for by environmental and climate groups (the Trottier Energy Institute recommends a 30% reduction by 2026 and 60% reduction by 2030), or whether the federal government would strengthen those measures sufficiently to do so. Also, legal enforceability of a policy or ERP-based cap is questionable. Generally, policies are not enforceable. The Canadian Net-Zero Emissions Accountability Act does not require the Minister to ensure that measures specified in climate plans are implemented, or that sectoral projections or targets be achieved. As a result, it is uncertain whether an oil and gas emissions cap established in the ERP would be legally binding on the federal government.

2. Policy-based cap with facility-specific limits in regulations

The second option is to establish a sector-wide cap in policy (such as the ERP) and introduce regulations that place limits on oil and gas facilities according to their subsector type. As the GGPPA is aimed at imposing charges on fuel or industrial emissions, it would need to be amended in order to enable facility-specific hard limits (i.e., that could not be exceeded by paying the levy). CEPA, on the other hand, already allows the Governor in Council to make regulations prescribing the quantity or concentration of the substance that may be released into the environment, including regulations that specify maximum quantities of a toxic substance that a facility can release, and regulations that target certain facilities or undertakings. The Supreme Court of Canada has upheld CEPA provisions as being valid exercises of the criminal law, and there already exist CEPA regulations that impose emissions limits on natural gas and coal-fired electricity generation facilities. As a result, CEPA would be the more appropriate enabling statute.

**How facility-specific limits under CEPA would work**

The existing CEPA regulations that impose emissions limits are intensity-based, meaning that they are based on gigawatt hours (GWh) of electricity produced. Similarly, regulations could be made under CEPA that place limits on types of oil and gas facilities and activities (e.g., bitumen and other crude oil extraction, processing and production) according to their intensity. While existing GHG emissions regulations only apply to CO$_2$, all main GHGs are listed as toxins under CEPA and so facility-specific emissions limits could apply to all those emissions.

The Regulations Limiting Carbon Dioxide Emissions from Natural Gas-fired Generation of Electricity define the types of electricity generation facilities and their threshold capacity and percentage of heat input to which the regulations apply. For example, the regulations apply to boiler units with a capacity of 25 MW or more that generate more than 30% of their heat input from natural gas in a calendar year, have a heat to electricity ratio of no more than 0.9, and from which electricity is distributed to the grid. Only specified boiler units and combustion engines that begin generating electricity after specified dates, as well as specified other units, are covered. “Unit” is defined as “an assembly comprised of a boiler or combustion engine and any other equipment that is physically connected to either, including duct burners and other combustion devices, heat

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3 *Supra* note 1.
4 *Canadian Environmental Protection Act*, SC 1999, c 33, ss 93(1), 330(1), 330(3.2).
6 SOR/2018-261, s 3.
7 *Ibid*, s 3(1).
8 *Ibid*, s 3(3).
recovery systems, steam turbines, generators and emission control devices and that operate together to generate electricity and, if applicable, produce useful thermal energy, from the combustion of natural gas."

The regulations prohibit “responsible persons” from emitting more than a prescribed amount of CO₂ emissions per GWh of energy produced. Responsible persons are defined as owners or operators of units. They also prescribed how the quantity of energy and CO₂ produced must be determined, require initial and annual performance tests, allow for exemptions in emergency circumstances, require regular reporting, and prescribe the contents of reports.

The Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations prohibits responsible persons from emitting more than 420 tonnes of CO₂ per GWh of electricity produced from coal-fired power stations. As with the natural gas-powered electricity generation facility regulations, these regulations also set out reporting requirements and quantification rules.

Other CEPA regulations that regulate the release of toxic substances also do so on the basis of intensity or performance standard.

Based on these examples, it is likely that CEPA regulations imposing facility-specific limits would be based on emissions intensity, following “best in class” approaches. They could also impose periodic (e.g., five year) descending limits beginning with the year the regulation comes into force and leading to zero (or net zero) emissions in 2050. For example, the regulations could prohibit liquefied natural gas (LNG) facilities from emitting more than 0.15 tonnes of CO₂ equivalent (tCO₂eq) per tonne of LNG starting in 2025, more than 0.9 tCO₂eq as of 2030, and so on.

It may be possible to design regulations that place absolute limits on emissions that can be released by types of facility, in addition to (or instead of) intensity or performance-based limits. For example, the regulations could place the per-tonne limit described above, as well as an overall limit of, say, 1 gigatonne of GHGs per LNG facility by a specified date, descending every five years also to zero (or net zero). Absolute facility-specific limits could have the advantage of prohibiting major emitters and restricting facilities from expanding. However, for that reason such restrictions could be vulnerable to a legal challenge if the court determined that absolute caps have the predominant effect of regulating production (see this paper on federal jurisdiction over climate for more on federal powers over emissions versus production).

There is a chance that regulations imposing facility-specific limits on oil and gas sector emissions could be found to be unconstitutional on the basis that they arbitrarily target only one economic sector. In Syncrude Canada Ltd. v. Canada (Attorney General), the Federal Court of Appeal upheld CEPA regulations that impose a minimum percentage of renewable fuel that must be included in diesel as a valid exercise of the criminal law

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9 Ibid, s 2.
10 Ibid, s 4.
11 Ibid, s 2.
13 SOR/2012-167, s 3(1).
14 E.g., the Asbestos Mines and Mills Release Regulations, SOR/90-341, which limit the concentration of “asbestos fibres per normal cubic centimetre” of gas released (s 3(1)); the Secondary Lead Smelter Release Regulations, SOR/91-155, which limits the amount of lead that smelters can release to a prescribed amount per cubic meter (s 3); and the Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations, SOR/2013-24, which prescribe the amount of certain emissions that prescribed vehicles can release per mile (s 20(1)).
power, holding that “it is uncontroverted that GHGs are harmful to both health and the environment and as such, constitute an evil that justifies the exercise of the criminal law power.” However, it was relevant to the Court of Appeal that the regulations applied to all diesel fuel consumers, not just oil and gas sector consumers. It held:

“... Syncrude stands no different than any other consumer of diesel fuel in Canada, whether a trucking company, a municipal transit authority or a contractor with a diesel fuel requirement. The RFRs are laws of general application, and not directed to the management of natural resources.”

Legal scholars Nathalie Chalifour and Martin Olszynski both argue that CEPA regulations that target oil and gas sector emissions would be a valid use of the criminal law power, although in the sources cited here they do not provide jurisdictional support to those claims. It is true that in the Syncrude case the Federal Court of Appeal also held that “[c]olourability is not lightly inferred,” and noted that the Supreme Court of Canada in Hydro-Québec “made it clear that colourability requires Parliament’s declared valid purpose to be a mere pretence for incursion into provincial jurisdiction,” which is “a high standard.” Given that oil and gas sector emissions represent a considerable share of Canada’s emissions portfolio and have continued to rise there is a strong argument that sector-specific regulations are required to ensure that oil and gas has an equitable share in emissions reductions and therefore would be valid. It is also true that current CEPA regulations target specific industries (the natural gas and coal-fired electricity generation facilities described above); however, these regulations have not been challenged in or upheld by a court. Therefore, the constitutionality of CEPA regulations imposing limits on oil and gas facilities is not guaranteed.

Finally, fines for contradicting CEPA regulations range from a maximum of $100,000 for a first offence and $200,000 for a second offence for individuals, from $250,000 for a first offence and $500,000 for subsequent offences for “small revenue” corporations, and up to $500,000 for a first offence and $1,000,000 for subsequent offences for larger corporations. These fines are established under the legislation, not regulations. Depending on the amount of a facility’s emissions and the federal carbon tax rate, it could be cheaper for some facilities to pay fines for exceeding limits set by CEPA regulations than to be covered by the OBPS. As a result, for facility-specific regulations to be effective, CEPA may need to be amended to allow for higher fines for violating the prescribed limits.

**Advantages and disadvantages of the policy-based cap with facility-specific limits in regulations**

A key advantage of the policy-based-plus-facility-specific-caps option over the no-new-measures option is that it would have greater chance of driving down oil and gas sector emissions through the additionality of the hard caps. Moreover, there is precedent for establishing facility-specific emissions caps under CEPA, and the federal criminal law power over climate is well established, meaning hard caps implemented through CEPA regulations

15 2016 FCA 160 at para 62 [Syncrude].
16 Ibid at para 80.
18 Syncrude, supra note 15 at paras 88-89.
19 CEPA, supra note 4, s 272.1.
would likely withstand legal challenge. Finally, while regulations establishing facility-specific emissions limits would take between six months to two years,\textsuperscript{20} that process would almost certainly take less time than it would to set up cap and trade, meaning that the regulations could begin driving down emissions sooner.

Main disadvantages are that while CEPA limits could require facilities to be net zero emissions by a prescribed date (e.g., 2050), they would likely be based on production or size. As a result, unless there was an absolute limit regardless of production (which would be on more shaky constitutional ground), facilities could continue to expand. Additionally, the regulations would not prevent new facilities from coming online. As a result, while facility-specific limits would help keep oil and gas sector emissions within the overarching cap, there would be no certainty that the cap would be respected in the lead-up to 2050. Also, as with the first option, it is uncertain whether the overarching sector-wide cap would be legally enforceable against the federal government.

3. Cap and trade

The third option is to establish and administer a national cap-and-trade system for the oil and gas sector. As with the second option (facility-specific caps set in regulations) the GGPPA would have to be amended in order to allow for such a program. Currently, Part 2 of the Act (which establishes the OBPS) does not contemplate auctioning or trading emissions, and neither do the regulation-making powers. Those powers, set out in section 192, are limited to matters related to the purposes of the OBPS, including things like which facilities are covered, which persons are responsible for facility emissions, emissions limits and pricing, and reporting. Since a cap-and-trade system is not contemplated in or provided for under the OBPS, it would be beyond the Governor in Council’s authority to enact regulations under the GGPPA establishing a cap-and-trade system.\textsuperscript{21} The GGPPA would need to be amended to establish such a system.

However, CEPA explicitly permits the Governor in Council to make regulations “respecting systems relating to tradeable units” of toxic substances (such as GHGs), including regulations respecting allowances and maximum limits.\textsuperscript{22} As a result, CEPA would be the most obvious statute under which to make cap-and-trade regulations. That said, the regulation-making powers under CEPA that would allow for a cap-and-trade system have not been tested in a court, meaning that an oil and gas cap-and-trade system could potentially be held to be unconstitutional.

As with CEPA regulations imposing facility-specific limits, a cap-and-trade system that focuses exclusively on the oil and gas sector could also be vulnerable to a challenge on the basis that it improperly singles out a sector that is primarily under provincial jurisdiction. Even if the court would accept criminal laws against single sectors, while legal experts like Joseph Castrilli argue that a cap-and-trade system falls within the criminal law power,\textsuperscript{23} it is possible that a court would reject that argument. The other main head of federal power to


\textsuperscript{22} CEPA, supra note 4, s 326.

support a cap-and-trade system is the trade and commerce power, but that power does not permit federal
claws that focus on single economic sectors.\textsuperscript{24} As a result, the constitutionality of a cap-and-trade system that
focuses exclusively on oil and gas could be vulnerable to legal challenge.

It should be noted that cap and trade would replace the carbon tax for oil and gas facilities, rather than occur
alongside it. As a result, as would be the case for CEPA regulations imposing facility-specific limits, CEPA should
be amended to increase the maximum fines for exceeding emissions allocations under a cap-and-trade system
so as to avoid non-compliance.

\textbf{Advantages and disadvantages of the cap-and-trade option}

A main benefit of a cap-and-trade system is that the cap would be set in regulations and therefore be binding.
In other words, the cap has the potential to be much more watertight than one that relies on facility-specific
limits (acknowledging that the system’s efficacy depends on details, such as the extent to which covered
facilities could rely on offsets). Also, market-based approaches like cap and trade provide flexibility while
having the potential to significantly drive down emissions over the mid- to long-term. For example, cap and
trade is credited with helping reduce California’s emissions down 5.3\% between 2013 and 2017,\textsuperscript{25} while the
European Commission claims that the European Union’s Emissions Trading System helped reduce emissions
from power generation and energy-intensive industries by 42.8\% over 16 years.\textsuperscript{26} Because the cap would be
absolute, a descending cap that resulted in zero (or net zero) emissions by 2050 backed by a system that did
not allow for loopholes would have the best chance at actually falling within that cap.

A main disadvantage is that cap and trade would likely take longer to establish and begin reducing emissions
due to the additional step of auctioning off or allotting allocations, meaning that significant gains may not
begin taking effect in time to make a meaningful contribution to meeting a 2030 cap. For example, Quebec
began consulting on its cap-and-trade regulation in 2009, which did not become operational until 2013.\textsuperscript{27} A
federal cap-and-trade system may not be active until 2026 or 2027. Also, while cap and trade remains
generally accepted as effective in principle, cap-and-trade systems have been criticized for rewarding polluters,
relying on dubious offsets, and contributing to environmental racism,\textsuperscript{28} and so careful attention to detail and
lessons learned from other jurisdictions would be crucial. Finally, given that cap and trade is an alternative
pricing mechanism to the carbon tax, it could face considerable industry and political pushback, including on
the basis of introducing more red tape and market upheaval.

\textsuperscript{24} \textit{General Motors of Canada Ltd. v City National Leasing}, 1989 CanLII 133 (SCC), [1989] 1 SCR 641; Kirkbi AG v. Ritvik Holdings Inc., 2005
SCC 65 (CanLII), [2005] 3 SCR 302 at para 17.

\textsuperscript{25} Center for Climate and Energy Solutions, “California Cap and Trade”: https://www.c2es.org/content/california-cap-and-
trade/#:\textasciitilde;\textasciitilde;text=California’s%20system%20is%20central,below%201990%20levels%20by%202050.

\textsuperscript{26} European Commission, “European Green Deal: Commission proposes transformation of EU economy and society to meet climate

\textsuperscript{27} Gouvernement du Québec, Québec cap-and-trade system for greenhouse gas emission allowances (C&T): Historical overview (2018):

\textsuperscript{28} See, e.g., Corporate Europe Observatory, “EU ETS: failing at the third attempt”: https://corporateeurope.org/en/2011/04/01/eu-ets-failing-third-attempt;
Alex Pfeifer-Rosenblum, “California’s Cap-and-Trade Program Has Proven Effective – Now Let’s Make it
Equitable,” Berkeley Public Policy Journal (10 April 2020): https://bppj.berkeley.edu/2020/04/10/californias-cap-and-trade-program-
has-proven-effective-now-lets-make-it-equitable/.