

Recommendations on principles to guide the implementation of an oil and gas cap

For: Net-Zero Advisory Body

Date: December 21, 2021

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Summary

Proposed principles	Relevant NZAB values and design principles
Setting the oil and gas cap	
Oil and gas emissions should not exceed 2019 emissions levels (191 Mt CO ₂ eq) from this point forward	Act early, and urgently Be bold and proactive
The scope of the cap (and targets) should extend to all facilities, include scopes 1 and 2 and all GHG covered in Canada's national inventory report	Be bold and proactive
Setting targets	
The 2025 and 2030 targets should be announced by June 2022	Act early, and urgently Be bold and proactive
2025 and 2030 targets should be science-based and determined in a transparent way, for every sector of the economy and accompanied by sectoral carbon budgets.	Act early, and urgently
The 2030 target should be at least as ambitious as Canada's emissions reduction target of 45% reduction based on 2005 levels	Act early, and urgently
The 2025 target should drive early reductions on the pathway to meeting the 2030 target	Act early, and urgently
Developing the policy pathway	
The regulatory pathway to meet the targets should be delivered in 2023	Act early, and urgently

The pathway should be developed in coordination with provinces, civil society, industry, and workers and in coordination with the implementation of just transition measures	Seize the upsides Put people first Motivate and empower Canadians Collaborate every step of the way
Revenues generated by the policy pathway should be allocated in priority to affected workers and communities and addressing liabilities	Put people first Motivate and empower Canadians
The pathway must ensure the cap, milestone targets and carbon budget are respected	Act early, and urgently
While the pathway should provide flexibility, offsets, of any kind, and out-of-sector trading should both be excluded	Act early, and urgently Recognize and respect regional differences and circumstances Don't get caught in the "net"
No public dollars should be invested in assets deemed at risk of being stranded	Beware of dead-ends

Context

- The Government of Canada committed to, “Make sure the oil and gas sector reduces emissions at a pace and scale needed to achieve net-zero by 2050, with 5-year targets to stay on track to achieving this shared goal. And driving down pollution starts with ensuring that pollution from the oil and gas sector doesn’t go up from current levels.”¹
- The platform also committed to "Set 2025 and 2030 milestones based on the advice of the Net-Zero Advisory Body to ensure reduction levels are ambitious and achievable and that the oil and gas sector makes a meaningful contribution to meeting the nation’s 2030 climate goals.”
- In November 2021, the Minister of Environment wrote to the NZAB to seek their "advice on key guiding principles to inform the development of quantitative 5-year targets.” The letter noted that "getting to net zero starts with ensuring that emissions from the sector do not increase” and requires a "people-centered approach to ensure a just transition.”

Considerations

- According to the latest available data (2019), **the oil and gas sector is the largest emitting sector in Canada with 26.2% of national emissions**, followed by transportation (25.5%), buildings (12.5%), heavy industry (10.5%), agriculture (10%), electricity (8.4%), and waste and other sources (7%).²

- **Since 2005, Canada’s baseline for its 2030 emissions reduction target of 45%, emissions from the oil and gas sector increased 20%.** The increase was largely driven by emissions from the oilsands, which increased 137%.
- **Over the same period, emissions have also increased, but at a lower rate, in four other sectors** (transportation (16%), buildings (8%), agriculture (1%) **and decreased in 3 sectors** (electricity (-48%), heavy industry (-12%), and waste and other (-10%).
- **Under the International Energy Agency’s (IEA) global pathway to net-zero by 2050 there are “no new oil and gas fields approved for development (...), with the focus for oil and gas producers switch(ing) entirely to output – and emissions reductions – from the operation of existing assets.” In the IEA scenario, oil production drops significantly from 98 MMb/d in 2019 to 72 MMb/d in 2030 and to 24 MMb/d in 2050, an annual average decline of more than 4%.³ BP’s global outlook envisions a similar 2050 production level.^{4,5}**
- **Under the most ambitious scenario in the Canadian Energy Regulator’s *Energy Futures 2021 report*, crude oil production rises 16% to a peak of 5.8 MMb/d in 2032, declining slowly to 2050. Natural gas demand and production peaks in 2040.⁶ Importantly, these figures do not reflect a global supply and demand scenario consistent with limiting warming to a 1.5-degree world.**

Recommendations

The Pembina Institute understands the cap as setting a maximum level of annual emissions from the oil and gas sector moving forward. The 2025 and 2030 milestone targets set the trajectory from the 2019 emissions level toward net-zero by 2050. Together the cap and the milestone targets ensure that emissions from the oil and gas sector do not increase beyond current levels and decrease in a trajectory that is consistent with reaching net-zero.

Below we provide key principles for setting the oil and gas cap, setting the 2025 and 2030 targets, and developing the regulatory pathway to ensure these targets are met or exceeded. We also offer additional considerations on the targets and the regulatory pathway. The summary includes a table showing which of the five design values and five design principles articulated by the Net-Zero Advisory Body is captured by each of the principles we propose in this submission.

Key principles for setting the oil and gas cap

1. **Oil and gas emissions should not exceed 2019 emissions levels (191 Mt CO₂ eq) from this point forward**
2. **The scope of the cap (and targets) should:**

- Extend to all facilities (upstream, midstream and downstream oil and gas facilities of every size including behind the fence power generation and inactive and orphaned facilities)
- Include scopes 1 and 2 and all GHGs included in Canada's National GHG Inventory (carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

Key principles for setting the 2025 and 2030 targets

1. Targets should be announced in June 2022

- To meet or exceed its 2030 target, **Canada needs swift and ambitious implementation of existing and new commitments on climate.** The Clean Fuel Standard serves as a cautionary tale for the development of policy moving forward, including the oil and gas cap. First introduced in Canada's national climate plan in 2016, the Clean Fuel Standard is still being amended and redrafted and its original reduction goal has been cut in half (from 30 to 15 Mt).

2. Targets should be science-based and determined in a transparent way along with carbon budgets

- Targets should be established for every sector of the economy and accompanied by sectoral carbon budgets following the establishment of the oil and gas cap and targets.

3. The 2030 target should be at least as ambitious as Canada's emissions reduction target of 45% based on 2005 levels

- Oil and gas emissions were at 160 Mt in 2005. In 2030, they should drop below 88 Mt.

4. The 2025 target should drive early reductions on the pathway to meeting the 2030 target

Additional considerations

- The federal government's GHG reduction target of 40-45% below 2005 levels by 2030 is a welcome increase in ambition compared to the previous reduction target of 30%. Yet, Canada's target remains lower than the global average decline of 45% on a 2010 baseline called for by the Intergovernmental Panel on Climate Change to limit global warming to 1.5 degrees Celsius. In view of Canada's historical contributions to emissions (having been a top 10 global emitter for decades), financial capacity (having benefitted economically from utilizing a big portion of the global carbon budget), and moral and legal responsibility to protect human rights that are threatened by climate change, **we encourage the government of Canada to increase its ambition.**

- Not all pathways to net-zero in 2050 will limit global warming to 1.5 degrees. Climate success is not about our annual emissions levels in 2050 but the cumulative emissions between now and then. Limiting global warming to 1.5 degrees in 2050 will require strong interim targets that increasingly bend the downward emissions curve and keep our cumulative emissions in check. Emissions reduction targets are necessary to determine the scale and scope of climate policies and the metrics we measure progress against. However, they are just the starting line. A carbon budget is another way to set a limit on greenhouse gas emissions. Rather than a target that states the relative amount of emissions that will be reduced, a budget states how much pollution can be emitted over a set period of time. Carbon budgets clearly show the cumulative pollution added to the atmosphere and, expressed as a limit rather than a target, make the consequences of failure more concrete. To provide more transparency and certainty in terms of Canada’s pathway to 2050, and every sector’s contribution on this pathway, **we encourage the government of Canada to set sectoral targets and carbon budgets for every sector of the economy.**
- Aligning the oil and gas 2030 target with Canada’s 2030 target anchors the conversation on decarbonizing of the oil and gas sector in the broader context of the conversation of decarbonizing the national economy. In doing so, we highlight that **each sector must contribute to Canada’s climate targets and failure to do so in one sector increases the burden on other sectors.**
- Because oil and gas sector emissions could be reduced at an accelerated rate when compared to other sectors (e.g. buildings) that may not be able to achieve 40-45% by 2030, **a more aggressive reduction target for oil and gas should be considered.**
- **Ambitious caps and regulations can drive innovation and investment.** Setting a firm and ambitious cap for the sector will send a clear policy signal that is critical to driving low carbon innovation and attracting the scale of investment that is required.
- **Targets should require additional reductions over and above the targets derived from current policies** to drive down reductions in the oil and gas sector (i.e. methane regulations, carbon pricing, the clean fuel standard) and reflect the reductions delivered by the differential between emissions associated with currently projected production and reductions associated with production levels under a 1.5-degree energy demand and supply scenario. As a result, **the federal government should plan for certain facilities to shut down** at different milestones over time and operationalize early plans to support communities and workers.

Key principles for developing the policy pathway to meet the 2025 and 2030 targets

The policy pathway should:

- 1. Be delivered in 2023**
- 2. Be developed in collaboration with provinces, civil society, industry and workers in coordination with the implementation of just transition measures and environmental liability management measures**
- 3. Prioritize allocation of revenue it generates to fund just transition measures and a program to eliminate environmental liabilities**
 - Revenue that is recycled back to the regulated entities should be explicitly directed to low carbon intensity production and disadvantage high carbon intensity production.
- 4. Ensure there is full accountability to respecting the cap, milestone targets and carbon budget**
- 5. Provide flexibility while excluding out-of-sector trading and offsets of any kind**
- 6. Not be accompanied by the investment of public dollars in assets at risk of being stranded**
 - Time-bound investment tax credits and performance tax credits limited to capital costs may be required to accelerate initial investments in decarbonization; however, the majority of these costs should be borne directly by the oil and gas industry.
 - Public dollars should only be directly invested in decarbonization options that are consistent with a 1.5 net-zero pathway for Canada.

Additional considerations

- If a cap-and-trade is pursued as the policy pathway to meet the 2025 and 2030 targets, we understand the term “cap” as corresponding to the total number of emissions allocated to the sector for a given compliance period (not to be confused with the cap as described above). As such, the total number of allowances within a compliance period corresponds to the carbon budget for that period. Hence, the total allowances for all compliance periods must be equal to or below the carbon budget developed for the oil and gas sector.
- The policy should be geared towards the transformation of the energy sector and the broader economy to be compatible with a 1.5-degree, net-zero trajectory. If oil and gas resources are to have a long-term economic future, this means decarbonizing existing operations and focusing on zero and net-zero products.

- The cap should be a true cap and under no circumstances should it be negated by the policy pathway used to implement it such as measures like the Alberta cost containment mechanism under the TIER system.
- The compliance mechanism should provide flexibility to encourage best performers and drive deep reductions while upholding the cap
- Negative emission credits may be generated by regulated entities under the cap as long as they are permanent and verified.
- Time bound investment tax credits and performance tax credits limited to capital costs may be needed to accelerate initial investment in decarbonization however the majority of these costs should be borne directly by the companies.
- Under no circumstances should exemptions be made, or revenue allocated, to regulated entities in order to maintain production levels.
- Should provinces be allowed to implement their own systems, the principles established at the federal level should override any conflict between the two systems and the implementation of needed measures to tackle emissions in the oil and gas sector should not be delayed.

¹ Liberal Party of Canada, “Forward for Everyone,” 2021. <https://liberal.ca/wp-content/uploads/sites/292/2021/09/Platform-Forward-For-Everyone.pdf>

² Government of Canada, *National Inventory Report* (2021), <https://unfccc.int/documents/271493>

³ International Energy Agency, *Net Zero by 2050: A Roadmap for the Global Energy Sector* (2021), 57. https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf

⁴ BP, “Statistical Review of World Energy.” <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>

⁵ BP, “BP Energy Outlook.” <https://www.bp.com/en/global/corporate/energy-economics/energy-outlook.html>

⁶ Canada Energy Regulator, *Canada’s Energy Future 2021*, 12, 14. <https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2021/canada-energy-futures-2021.pdf>