

Amendments to Emissions Performance Standards in Ontario

Pembina Institute comments and recommendations

Submitted to: Ontario Ministry of the Environment, Conservation and Parks
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Regarding: Ontario Emissions Performance Standards (EPS) program regulatory
amendments for the 2023-2030 period (ERO 019-5769)

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Summary

- Ontario's revised EPS falls short of meeting the federal benchmark criteria, and must be strengthened to set up the various economic sectors to achieve net-zero emissions by 2050 (2035 for electricity). A key step is to implement a stringency factor decline rate of at least 4%.
- For the electricity sector, the 310 tCO₂e/GWh performance standard is a step in the right direction. However, the sector should be fully exposed to the carbon price by either setting a zero tCO₂e/GWh performance standard, or by removing the electricity sector from EPS as it is not emissions-intensive or trade-exposed. Mechanisms such as recycling the carbon price revenues could be implemented to manage any initial cost impacts on rate payers.
- To further increase program transparency and credibility, an independent review body should be established to periodically assess the EPS program's performance, and actual carbon credit trade prices and facility performance data should be publicly reported.

Context

Ontario's EPS program was deemed to meet the federal benchmark criteria for industrial carbon pricing systems for the 2019-2022 period and came into effect in 2022 to replace the federal government's Output-Based Pricing System (OBPS). In August 2021, this benchmark was updated by the federal government for the 2023-2030 period,¹ requiring all provinces to submit

¹ Environment and Climate Change Canada, *Update to the Pan-Canadian Approach to Carbon Pollution Pricing 2023-2030* (2021). <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/carbon-pollution-pricing-federal-benchmark-information/federal-benchmark-2023-2030.html>

details for how they would meet the benchmark, or else need to implement the federal OBPS. The OBPS itself is not aligned with net-zero yet and is currently being updated to align with the same federal benchmark criteria.

In April 2022, Ontario released its principles for a revised EPS, and in August, released its proposed amendments to the EPS. The Pembina Institute recognizes some improvements in the revised EPS, including a lower benchmark for the electricity sector and the commitment to release data publicly. However, the proposed EPS amendments falls short of aligning to the federal benchmark and does not provide a clear path to a net-zero grid.

Other provinces are undergoing similar reviews. In July 2022, the Government of Alberta sought feedback on its review of the Technology and Emissions Innovation Regulation (TIER) program. Despite being stronger than the revised EPS, Clean Prosperity expects TIER to fail the equivalency assessment due to insufficiently tightening stringency.²

General comments

The Pembina Institute appreciates the opportunity to provide comments on the Ontario government's proposed amendments to the Emissions Performance Standards (EPS) program. The Pembina Institute participated in the development of the EPS³ and continue to advocate for strong policies that support a clean energy economy in Ontario. As implemented, the EPS provides a diluted carbon pricing signal to heavy industrial greenhouse gas (GHG) emitters, creating policy uncertainty and compromising Ontario's emissions reduction, investment, and innovation potential.

A stringent and credible EPS is paramount to creating policy certainty for Ontario businesses and industries. An EPS that is aligned with a net-zero pathway can bring long-term economic benefits and support innovations like carbon capture, utilization, and storage (CCUS); green steel; and clean cement, which need to be rapidly deployed in Canada and globally. Similar to our comments to the Alberta's TIER review,⁴ we recommend the Ontario EPS be amended in line with the following principles to provide policy certainty and unlock low-carbon prosperity:

- Maintain the incentive to reduce GHG emissions, aiming to achieve net-zero by 2050 (2035 for electricity sector)

² Grant Bishop and Michael Bernstein, *Tightening TIER for Alberta's decarbonization* (Clean Prosperity, 2022), 3. https://cleanprosperity.ca/wp-content/uploads/2022/09/Tightening_TIER_for_Albertas_Decarbonization.pdf

³ Robin Edger and Isabelle Turcotte, *Pembina Institute comment on Ontario's Industrial Emission Performance Standards* (Pembina Institute, 2019). <https://www.pembina.org/reports/ontario-industrial-emission-performance-standards-submission.pdf>

⁴ Scott MacDougall, *Pembina Institute Input to Government of Alberta's 2022 TIER Review* (Pembina Institute, 2022). <https://www.pembina.org/reports/input-to-alberta-2022-tier-review.pdf>

- Be targeted by applying protection only to sectors that are truly emissions-intensive and trade-exposed
- Be transparent, with support for emissions-intensive trade-exposed (EITE) sectors supported by available data
- Be consistent across sectors and firms
- Be temporary, understanding that support should be phased out as other jurisdictions implement equivalent GHG-reduction policies
- Be simple to implement, administer, and comply with.

The EPS must be strengthened by declining the stringency factor for all facilities and sectors by at least 4% per year to maintain a credible carbon price and achieve real emission reductions. We recommend that the Ontario government strengthen its 2030 climate targets by committing to achieving a net-zero electricity grid by 2035 and achieving net-zero by 2050. This would bring Ontario in line with the federal government’s overarching climate targets, forthcoming national Clean Electricity Regulations, and increased net-zero commitments in the business community in Ontario and beyond. Companies and investors need policy certainty and clarity to make critical decisions that align with their decarbonization targets.

This submission only addresses specific areas outlined in Ontario’s EPS proposed amendments and is not comprehensive.

Program component feedback and recommendations

Carbon price

Ontario’s proposal to align the price of excess emission units (EEUs) to the minimum federal carbon price is a good step and is required for the EPS to meet the federal benchmark criteria. However, the price of emission performance units (EPUs) traded on the carbon market also needs to maintain the minimum federal price signal. These prices are typically below the price of EEUs and depend on the supply and demand of EPUs.

To ensure these prices, **it is critical that the free allocations granted to each sector is minimal** and just sufficient to protect competitiveness and prevent carbon leakage. As other jurisdictions — which include other provinces — also move to adopt carbon prices, the likelihood of leakage will decrease.

There have been no public assessments of EPS’s marginal carbon prices across industrial sectors to date. However, in the context of the 2030 Emissions Reduction Plan and other policy trends, and without any change in the EPS proposed amendments to performance standards apart from the electricity sector, the stringency factor applied to EPS’s performance standards

will need to decline more rapidly to match the rate of actual emissions reduction or risk distorting the effective carbon price.

Registration and cessation of coverage

Developing new or adjusting existing performance standards

As we wrote in 2019,⁵ using only sector-wide standards is more efficient than facility-specific standards. We continue to advocate for a sector-wide approach, which provides a more consistent and credible price signal based on the product.

Electricity generation and cogeneration

Fossil fuel electricity generation performance standard

Lowering the fossil fuel electricity generation performance standard to 310 tCO₂e/GWh is a step towards effective carbon pricing for electricity sector, **but the standard must decline to zero by 2030 at the latest**. Ideally, because electricity is neither emissions-intensive out of necessity nor truly trade-exposed, it should be **subject to full carbon pricing**.

Consistency between industrial carbon pricing and other policies is important for policy certainty and reducing administrative burden to companies. With the Clean Electricity Regulations setting a net-zero grid target for 2035 and the OBPS benchmark for new gas facilities declining to zero by 2030, a static EPS performance standard at 310 tCO₂e/GWh sends a contradictory signal to generators. A performance standard not aligned with zero may indicate it is still economic to build new unabated gas assets. Doing so creates significant risk; unabated assets will become stranded, incurring a burden on Ontarians in the future. What's more, over 30 Ontario municipalities have already told their provincial government that they want a gas phase-out by 2030.⁶

Despite Ontario's relatively clean grid, there is currently a risk that companies will meet electricity demand with new gas assets. With the price of solar, wind, and battery technologies competitive with or cheaper than gas assets, and the opportunities from demand response and energy efficiency, there are already clear alternatives to building new emitting assets. It is important for the EPS performance standard to reflect these opportunities by declining to zero by 2030. Such an approach would still recognize the emission reductions already made in the electricity sector while accelerating more reductions.

⁵ Pembina Institute comment on Ontario's Industrial Emission Performance Standards.

⁶ Bryan Purcell, *IESO study on gas phaseout misses the point* (The Atmospheric Fund, 2021). <https://taf.ca/ieso-study-on-gas-phaseout-misses-the-point/>

Furthermore, the 2021 OBPS review excluded a review of the electricity benchmark. Instead, the federal government indicated it will be reviewed in parallel with the development of the Clean Electricity Standard (now called the Clean Electricity Regulations).⁷ It will be likewise important for the OBPS to shift to a zero benchmark by 2030 or to remove the electricity sector from output-based systems.

New gas facilities regulated by the OBPS already have a declining benchmark that will decline to zero in 2030 (five years earlier than the CER goal). The EPS is not currently aligned with this decline. Notably, Alberta is undergoing a similar review of the TIER system, where they have indicated that TIER will need to align to the net-zero 2035 commitment.

A better approach is to remove the electricity sector from the EPS entirely. Electricity is neither emissions-intensive out of necessity nor truly trade-exposed.⁸ Across provincial borders and with the U.S., grid constraints (e.g., capacity for electricity transmission) limit the scale of electricity imports that could upset competitiveness. Moreover, the U.S. has set a zero-carbon grid by 2035 goal as well.⁹

A standard of zero or removing electricity from the EPS would be more effective at preserving the full carbon price signal to generators and consumers. To alleviate potential additional costs passed on to consumers through either of these approaches, a cost rebate program similar to the federal government's Climate Action Incentive payments could be established.

A net-zero electricity grid is affordable, clean, and can support more industries to decarbonize. A predictable carbon pricing systems aligned with the federal net-zero 2035 commitment — one that clearly indicates no new unabated gas plants can be built and does not provide inefficient subsidies to fossil fuel generation — will provide the electricity regulator, utilities, generators, and consumers with long-term planning certainty and promote cost-efficient outcomes.

⁷ Environment and Climate Change Canada, *Review of the OBPS Regulations: Consultation Paper* (2021), 8. <https://www.canada.ca/content/dam/eccc/documents/pdf/reports/OBPS%20consultation%20-%20Report%20EN.pdf>

⁸ Binu Jeyakumar and Jason R. Wang, *Pembina Institute Response to the Clean Electricity Standard Discussion Paper* (Pembina Institute, 2022), 10. <https://www.pembina.org/reports/clean-electricity-standard-submission-april-2022.pdf>

⁹ The White House, *Fact Sheet: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies* (2021). <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>

Cogeneration performance standard

A tightening rate of at least 4% should be applied to all performance standards so they reach zero free allocations by 2050, except the electricity performance standard, which should decline to zero by 2030 or be removed from the EPS.

Stringency factors

A sufficient stringency factor is critical to an output-based system's overall effectiveness. The Pembina Institute agrees with the principle that the volume of compliance obligations should continue to outweigh the supply of non-EEU compliance mechanisms, which will help to maintain a marginal carbon price at the regulated price. However, **the stringency factors should also be aligned to a net-zero economy in 2050.**

Ontario must adopt a decline rate of at least 4% for all facility and sector-wide performance standards to align the EPS with Canada's and many companies' commitments, avoid an excess of EPU's in the market, and maintain the EPS's credibility. We agree that the decline rate should also be applied to fixed process emissions, since CCUS will reduce those emissions.

The OBPS review proposed a 2% decline rate ("tightening rate") to maintain sufficient stringency.¹⁰ While this proposal itself is not net-zero aligned, Ontario's proposed one-time 2.4% and subsequent 1.5% declines would fail to meet the OBPS approach. Clean Prosperity recently commissioned a report that found that if emission reductions follow the federal 2030 Emission Reduction Plan, Alberta's proposed 2% decline rate will result in a large excess of compliance credits on the market.¹¹ They instead proposed a 5% decline rate. Clearly, Ontario's proposed 1.4% decline rate is too low and creates carbon price uncertainty.

A declining stringency factor applied to all sectors will fairly encourage all facilities, whether old, new, retrofit or expanded, to reduce emissions with the vigour needed to reach Canada's climate goals. Old facilities with a higher emissions intensity, and where reductions may be achievable at a lower marginal cost, will not be disproportionately shielded by Ontario applying facility-specific performance standards.

¹⁰ Government of Canada, *Review of the OBPS Regulations: Consultation paper* (2021), 14. <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system/2022-review-consultation.html>

¹¹ *Tightening TIER for Alberta's decarbonization*, 3.

Compliance

To further ensure EPU are used to encourage real emission reductions across sectors, they should expire within five years. A five-year expiration would align with the federal OBPS compliance units' expiry limit and typical approaches in compliance carbon markets.¹²

A credit use limit should also be applied at a sector or product level based on whether the sector's emissions are achieving actual emission intensity reductions. Such an assessment could be based on Canada's National Inventory Report submission to the UNFCCC. When the trend is off-track, the credit limit should decrease by 20% for the subsequent year (and increase by 20% if it is on track).

Other administrative and technical changes

Carbon capture, utilization, and storage

It is essential for a net-zero 2050 aligned stringency factor decline rate to support the deployment of CCUS. CCUS provides an opportunity to reduce emissions from industrial processes that may otherwise be difficult, like in cement production. The implementation of CCUS technologies will bring reductions for both non-process and process emissions at a rate faster than the proposed stringency factor decline rate. If stringency factors are not tightened to reflect the impact of CCUS, there may be a fast growth in EPU and fast decline in compliance obligations that will weaken the marginal carbon price and compromise the EPS's equivalency with the federal benchmark. Furthermore, such a dynamic could threaten the viability of CCUS through a negative feedback loop: EPU producers would lose their incentive to reduce emissions and further CCUS development could become stifled.

Carbon leakage and related competitiveness assessment

Carbon leakage has typically been overstated and is becoming less important as global policy and business trends towards decarbonization continue to accelerate and strengthen. In the U.S., the Inflation Reduction Act (IRA) has enacted a fee on emissions above allowable thresholds of around C\$50/tCO₂e in 2024, rising to near \$80 in 2026. The world's largest oil and gas producers (OGCI) committed to reduce methane emissions to near-zero by 2025. The IRA also brings a suite of policies that encourage a deep decarbonization of the American electricity grid, advancing the U.S. towards their own 2035 net-zero electricity goal.

¹² Veridium, *Carbon Credit Markets 101* (2018). <https://medium.com/veridium-labs/carbon-credit-markets-101-bc986eedabfa>

Even between 2015-2020, 31% of Canada's exports were to U.S. states with carbon pricing.¹⁵ As Ontario's trading partners raise explicit or indirect carbon prices on their products, the risk of carbon leakage will decrease. To protect Canadian industries' competitiveness locally against imports, Canada can administer a nation-wide mechanism like a Carbon Border Adjustment (CBA). The U.S. and EU are also considering implementing CBAs. As detailed above, electricity is already neither emissions-intensive out of necessity nor trade-exposed, warranting its removal from the EPS, which will also reduce the administrative burden on the EPS program and electricity facilities.

Public reporting

The Pembina Institute welcomes efforts to provide access to EPS program data, which can help provide carbon market transparency and support the credibility of the system to meaningfully reduce emissions. However, **public reporting can be strengthened through disclosing actual trade prices for EPU's and including program performance data at the facility level.**

Ontario can further increase carbon price certainty, transparency and investability, and better enable complementary policies like carbon contracts for difference, by frequently reporting the actual trade prices of EPU's. EPU price transparency helps equip investors with decision-relevant information and helps to easily demonstrate that the EPS meets the federal benchmark. The EU ETS and California ARB credit prices are examples of systems that report traded carbon credit prices.

Additionally, facility-level reporting of EPS performance (compliance obligations, GHG emissions covered, GHG emissions *not* covered, EEU/EPU activity, facility compliance status) will enable independent assessments of the EPS's credibility in historical and future compliance periods. Where necessary, facilities can retain the ability to make a request that facility-level information be kept confidential for sensitive reasons, as is possible under Alberta's TIER and the federal OBPS programs.

Lastly, Ontario should establish an independent authority to periodically review the EPS for credit market performance, evaluating its design similarly to this process. It should also publicly make recommendations for aligning the EPS to other policies such as the federal Oil and Gas Emissions Cap, Clean Electricity Regulations, Clean Fuel Regulations, and CCUS Investment Tax Credit. An independent body assessing the system would alleviate uncertainty over federal interactions with Ontario and strengthen investor confidence in the province.

¹⁵ Canadian Institute for Climate Choices, *2020 Expert Assessment of Carbon Pricing Systems* (2021), 60. https://publications.gc.ca/collections/collection_2021/eccc/En4-434-2021-eng.pdf