



March 29, 2019

Vicky La
Senior Policy Coordinator
Ministry of the Environment, Conservation and Parks
Climate Change and Resiliency Division
Financial Instruments Branch Policy Unit
77 Wellesley Street West
Toronto ON M7A 2T5

Re: Ontario's proposed Emissions Performance Standard (EPS)

Dear Ms. La,

On behalf of Enwave Energy Corporation ('Enwave') I would like to provide the following feedback to Ontario's Industrial Emission Performance Standards ('EPS) regulatory proposal ('Proposal').

Enwave Energy Corporation is an industry leader that provides innovative, sustainable energy solutions. A private corporation owned by Brookfield Infrastructure Partners and its institutional partners, Enwave has assets in Toronto, Chicago, New Orleans, Houston, Las Vegas, Los Angeles, Seattle, Portland, Windsor, London and Charlottetown. In each community, Enwave operates intelligent thermal energy systems that generate, store and share energy across the district.

We are the largest core-competency district energy company in North America, providing innovative and sustainable energy services to many communities. Our customers are residential, commercial, institutional and industrial users, many of which are critical infrastructure providing services to cities, the province and the country. Through local energy networks, district energy relieves the demands on the larger provincial grid's generation and transmission system while simultaneously reducing greenhouse gas emissions and improving local energy resilience in a cost competitive manner to the consumer.

The hallmark of our operations in Ontario is Enwave's world-renowned Deep Lake Water Cooling ('DLWC') system. DLWC is a unique, sustainable cooling system that began operation in 2004 and now provides cooling to over 70 buildings in downtown Toronto, including the Queen's Park campus, allowing them to remove or reduce reliance on electrical chillers.





The main premise for this submission is to ensure that the EPS, once finalized, reflects the government's broader support for continuous growth of district energy in Ontario as part of its approach to a low-carbon economy. This support was first articulated in the Made-in-Ontario Environment Plan:

“Encourage the use of heat pumps for space and water heating where it makes sense, as well as innovative community-based systems like district energy.”

The following recommendations are listed by section, per the Proposal.

Program Scope

The proposal indicates that at a minimum, Ontario will regulate the same sectors to be covered by the federal output-based pricing system, but is considering including other additional sectors, such as thermal energy supply. In a subsequent presentation to emitters, it was noted that that should additional sectors be included, the starting emissions year would be 2020.

Enwave strongly recommends that Ontario includes thermal energy supply in the EPS, but also that it includes the sector from the inception of the EPS program in 2019.

The Proposal itself makes the rationale for this action clear; if the sector is not included it will incur fuel charges under Part 1 of the federal legislation (pending the Ontario constitutional challenge to the federal legislation). The fuel charge acts as a disincentive for both existing and new connections to district energy systems, at a time when district energy should be encouraged due to its ability to lower greenhouse gases (GHGs), increase resiliency and support long-term sustainability.

The recommendation for thermal energy supply to be included in 2019 speaks to the need for certainty for the sector. Knowing when exactly the regulatory obligations will commence – instead of waiting on possible amendments in the future – allows the sector to plan accordingly. This not only applies to our commercial sector customers but to those in the MUSH sector (municipalities, universities, schools, and hospitals) as well.

Emissions Threshold and Opt-In Provision

Enwave agrees with the proposal's consideration of allowing smaller facilities with emissions between 10,000 and the mandatory participant threshold to voluntarily opt-in to the program starting in 2019. Similar to the need to include thermal energy supply in the program in 2019, opting in for smaller facilities provides greater certainty for the sector going forward, as well as provides greater value for connecting to a district energy system and lessen the exposure to increased compliance costs.

Competitiveness and Carbon Leakage Assessment

The Proposal considers certain definitions and methodologies to assess a sector's emissions intensity (EI) and trade exposure (TE) rating – High, Medium, or Low. The EITE rating (and emission type) will then determine the sector's stringency factor from 2019 to 2022.



Enwave recommends that the thermal energy supply sector is categorized as High, thereby applying an annual sliding 2 per cent stringency factor (i.e. 98% in 2019, 96% in 2020, 94% in 2021, 92% in 2022). In order for the sector to be classified as High, Enwave recommends that the EPS incorporates additional competitiveness considerations beyond what is included in the Proposal.

The proposed formulas and thresholds to determine the risk of competitiveness impacts measure 'trade exposure' through the lens of exports and imports; this formula does not adequately apply to Enwave. District energy and its ability to aggregate the thermal energy requirements of many buildings can be in competition with less efficient, more GHG-intensive options such as single-building boilers. The latter may not require the same level of capital investment in the beginning, making the temptation to simply use a single-building boiler greater than connecting to district energy despite its long-term capital savings, economies of scale, greater resiliency and low-carbon potential.

This should be seen as a type of potential 'carbon leakage' that will lead to fewer emission reductions for the built sector as opposed to district energy, which can generate large-scale emission reductions that cannot be achieved by single buildings or homes.

Echoing the point made under the previous section, it would run counter to the intent of the EPS to discourage a low-carbon solution such as district energy by enforcing measures that ultimately send a negative price signal to the customer; this can be avoided by assigning it a High rating as it pertains to cost competitiveness and carbon leakage.

Conclusion

Insofar as the proposed EPS is meant to serve as tool to reduce emissions from large emitters, it can also be a mechanism to encourage growth of technologies or services further emission reductions and greater resiliency for Ontario's built sector. The recommendations made within this submission are guided by this statement; it also aligns with the broad direction provided by government in the Made-in-Ontario Plan in its support of district energy as part of the solution to reducing GHGs.

On behalf of Enwave, I appreciate the opportunity to participate in this consultation regarding the proposed Emissions Performance Standard.

Sincerely,

A handwritten signature in blue ink, appearing to read "CC", is placed below the "Sincerely," text.

Carlyle Coutinho
President & COO
Enwave Energy Corporation