Feedback Form

Pathways to Decarbonization – February 24, 2022

Feedback Provided by:

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Following the February 24 engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the items discussed during the webinar. The webinar presentation and recording can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca by **March 16**. Please attach research studies or other materials for consideration by the IESO to support your submission.

If you wish to provide confidential feedback, please submit as a separate document, marked "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.

Policy

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	I'm focused on electrification of building heating which seems to me like an elephant in the room that no-one is noticing. The assumptions are far from comprehensive.

Topic	Feedback
Are there other considerations for the IESO?	Of course, you should take into account the cost of climate change, and the much higher net cost per tonne of decarbonization in other sectors with so much gas on the margin. If you don't, you'll be fired after the next provincial election.

Demand

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	The assumptions for regulations are realistic politically but inconsistent with climate goals. We need them to go to zero emissions faster (by what means is not yet clear) – there should be something like a "climate goals compatible scenario" which would reduce emissions from buildings by 60% by 2030.

Topic	Feedback
Are there other considerations for the IESO?	Building heating peaks are of a much higher intensity and duration than the current summer or winter peaks electricity planners are familiar with. I will attach a report with an extract (Appendix 1) on assessing heat demand together with Excel files to illustrate this. You have some exposure to this due to the summer air-conditioning driven peaks. But heating is four times cooling in Ontario – watch out!

Resources

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	The resource ignored with respect to heating is community energy planning leading to thermal networks with large scale thermal energy storage to handle the peaks. It's not the IESO's job to develop these, but the IESO should be cognizant of the impact on the electricity system if all heating currently by gas is assumed to be taken over by electricity and to question officials at all levels of government why they are not planning a more affordable road to zero emissions for citizens, institutions and business.

Topic	Feedback
Are there additional data sources that we should consider	Environment Canada hourly temperatures. Statistics Canada provincial gas and oil consumption for residential and commercial sectors.
Are there other considerations for the IESO?	The overall costs to society including building retrofits. You should not assume building owners will happily incur high costs of building improvement to cut heat loss down to the point that electric heating will cost little more than gas. They won't. There will be a "yellow-jackets" or "truck convoy" style rebellion. There are already rumblings of this in the UK. Check out this YouTube video (there are others like this): https://www.youtube.com/watch?v=GhAKMAcmJFg

General Comments/Feedback

The IESO needs to be more activist - not passively go along with the prevailing political totally inadequate response to climate change. As an organization well-staffed with highly intelligent and educated people with very relevant technical skills, the IESO should develop its own meta-view that addresses the challenge of climate change with urgent decarbonization, while minimizing the collateral damage in terns of costs imposed on citizens, institutions and businesses, not the least being the often impracticable improvements to existing buildings that would be required to reduce heat loss to the level that electric heating would cost little more than gas. I have attached a report that I have drafted on heating and cooling buildings, along with an extract on estimation of heat demand (with accompanying Excel files), which is not that hard, yet seems to be beyond many strident proponents of electrifying building heat.