

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?	<p>The assumptions provided are reasonable in scale and timing. However, there are significant omissions in the policies assumed. The most significant omissions are 1) policies that support deployment of distributed energy resources (DERs), 2) adoption of housing and building retrofit codes, and 3) continuation of a moratorium on offshore wind. To omit these policies from the Pathway Study would give the Minister a distorted and limited view of decarbonization options. The trend worldwide is towards a smart grid centered around DERs and net zero, and giving LDCs more flexibility. In US states like Minnesota, community solar legislation has already led to over 900 MW of DERs. In Alberta there is a booming interest in virtual power purchase agreements that allow customers to share in lower cost renewable power. See below for recommendations.</p>

Topic	Feedback
Are there other considerations for the IESO?	<p>The following policies should be analyzed and modelled in the Pathways Study</p> <p>1) Policies to support DERs:> Current Ontario legislation and regulations severely limit the ability for LDCs and customers from investing in DERs. Policies that would allow and encourage 'multi-meter on-site net metering', Virtual Net Metering, LDC Green Tariffs, Solar Gardens, Virtual Power Purchase Agreements (VPPAs), community storage, etc. would give LDCs the flexibility to manage and deploy these resources to meet their demand needs without building expensive new infrastructure, give customers more choice, and meet climate goals. We recommend that in modelling DERs, the Pathway Study assume roll out of all of these policies before 2025. For example, adding Virtual Net Metering would increase the deployment and reduce the cost of both behind the meter and distribution embedded solar, significantly changing its value proposition and its Pathway contribution.</p> <p>2) Building and Housing retrofit codes:> The federal government will be publishing model energy codes for existing buildings and housing in 2023. These codes will be ramped up to net zero by 2030. The Pathway Study should assume that these codes will be added to the Ontario Building Code over the same period. This will mean that all retrofits of electrified homes and buildings will meet an increasing level of efficiency during the study period, increasing the "achievable" potential identified by Navigant.</p> <p>3) Offshore Wind:> Careful siting of offshore wind and the use of community ownership would increase support for this option as well as wind power potential in the province. We recommend limited inclusion of this option in the Pathway Study.</p>

Demand

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	The demand forecast assumptions seem reasonable, although we recommend that all electrification of heating is assumed to be with cold climate heat pumps. The updated conservation potential assumptions also seem reasonable although the impact of Ontario retrofit codes should be included (see above). Regarding DERs, it is not clear how “This incremental energy resource potential will be considered as an option that competes with other Potential Resource Options” It is not possible to provide proper feedback on DER assumptions without seeing the costs, performance and penetration assumptions of the DER Potential Study which will not be completed until July. Notwithstanding, we have provided feedback below on the Dunsky preliminary screening of DERs.

Topic	Feedback
Are there other considerations for the IESO?	A) FTM and BTM Distributed Solar:> The Dunsky screening scores these DERs at mid to high levels with only mid relevance to the DER potential study needs. With the changes to legislation and regulation that would allow virtual net metering, VPPAs and LDC green tariffs, all these criteria would move to high. The potential is huge, the cost lower, and the benefits many. B) FTM Wind:> Dunsky does not include FTM wind in the DER screening – just small-scale wind. This omits the potential for using VPPAs and LDC Green tariffs to use power from locally generated wind farms. FTM wind should therefore be included in DER assumptions. C) Biomass-Biogas/CHP:> Dunsky recommends that these options not be included in the DER potential study, but several municipalities are looking at using waste food and sewage to power city vehicles (as an alternative to electric vehicles) and generate electricity. Though not large, this potential should be included in the Pathway Study to show that it will have role in decarbonization.

Resources

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	The assumptions for main grid resources appear reasonable and comprehensive

Topic	Feedback
Are there additional data sources that we should consider	Click or tap here to enter text.
Are there other considerations for the IESO?	Click or tap here to enter text.

General Comments/Feedback

As we state above, while the proposed assumptions for the Pathway Study are reasonable in scale and timing, several important other policy options should be analyzed and modelled. These policies could greatly increase the deployment of DERs and retrofit levels, and reduce the overall cost of decarbonization. They would also reduce transmission losses and strain on the transmission system, while giving LDCs more flexibility to meet new demands, provide customer choices, and reduce costs. To only include policies that are currently planned and to only use simple technical screening of DERs would give the Minister a distorted and limited view of what could be achieved with strong policies that are already in use in many other jurisdictions.