

Feedback Received and IESO Response

Local Achievable Potential Study Public Webinar: Draft Findings – August 21, 2025

The IESO hosted a public webinar on August 21, 2025 for the Toronto region to share the draft findings in the Local Achievable Potential Study (LAPS). During the webinar, the IESO provided an overview of the scope and methodology of the LAPS, and presented the draft findings for technical, economic, and achievable potential for energy savings from incremental energy efficiency and demand response programming, as well as behind-the-meter distributed energy resources. The presentation material, recorded webinar, and data are available on the Toronto [engagement webpage](#).

The IESO appreciates the input received, which will be considered by the IESO and its consultant to inform the final Local Achievable Potential Study. Feedback was received from the following parties and the full submission can be viewed on the [engagement webpage](#):

- [City of Toronto](#)
- [David Smith](#)
- [Eden Energy Equipment](#)
- [Environmental Defence Canada](#)
- [Enwave](#)
- [Ontario Clean Air Alliance - Information Requests](#)
- [Ontario Clean Air Alliance - V2G Letter](#)
- [Pollution Probe](#)
- [SCAN!](#)
- [Toronto East End Climate Collective](#)
- [Toronto East Residents for Renewable Energy](#)

The section below summarizes feedback received related to the LAPS draft findings to be considered in the Final LAPS Report.

Note on Feedback Summary and IESO Response

The IESO appreciates the feedback received from stakeholders and communities. Please note that the information and responses provided by the IESO herein are for information and discussion purposes only and are not binding on the IESO. This document does not constitute, nor should it be construed to constitute, legal advice or a guarantee, representation or warranty on behalf of the IESO.

The table set out below respond to the feedback received and are organized by theme.

Feedback Themes	IESO Response
LAPS should look at front-of-meter resources, including offshore wind.	The potential for front-of-meter wind, solar, and storage resources to contribute to meeting regional needs is explored in the Toronto IRRP process, and outside of the electricity Demand Side Management (eDSM) focused Local Achievable Potential Study (LAPS). The LAPS is focused on energy efficiency, Demand Response, and behind-the-meter distributed energy resources (DER) reflecting the particular complexity of modelling these customer-sited resources relative to front-of-meter resources. More information on evaluation of front-of-meter resources as planning solutions was shared during the July 10 and September 25 Toronto regional planning engagement webinars and will be included in the final Toronto Integrated Regional Resource Report (IRRP) and appendices. As part of the regional planning process, offshore wind generation is not considered to address regional electricity needs due to the provincial moratorium on offshore wind development in Ontario. The Ministry of Energy and Mines provide policy direction on this matter.

LAPS should include consideration of district energy systems to manage demand growth from heating electrification.	The factors that influence the achievable potential of District Energy Systems (DES) are exceptionally locationally specific, consequently these systems are challenging to credibly model in larger geographic-scale achievable potential studies. The IESO has engaged Enwave and City of Toronto staff to better understand the opportunities for new/expanded DES in Toronto and the potential impact on forecasted demand. More broadly, the Ministry of Energy and Mines has released the province's Integrated Energy Plan ('Energy for Generations ') that includes direction to the IESO to identify opportunities for new and existing DES. The IESO will continue to engage with energy services providers and municipalities to understand potential for DES where the density supports such opportunities, such as in the Port Lands area, and to understand opportunities for DES to support the province's forecasted electricity system needs
The LAPS customer participation assumptions are too conservative.	The IESO has directed its consultant, ICF, to revise customer participation curves to better reflect the historic success of eDSM programming, strong local support, and continued investment in program marketing while remaining defensible based on the ICF's expertise and extensive program delivery experience. The changes will be reflected in the final achievable potential results included in the Toronto IRRP report and detailed in the final Toronto LAPS report posted on the engagement page. Please note that increases to achievable potential as a result of the updated customer participation assumptions will be

	partially offset by corrections to minor modelling errors discovered during deeper QA/QC of the draft results.
The LAPS solar PV - BESS attachment rates assumptions are too conservative.	The IESO has directed ICF to review the most recent available public data on Solar PV – BESS attachment rates and revise upwards while retaining defensibility. The impact of the updated attachment rates will be captured in the final LAPS results.
The LAPS should explicitly consider local health, climate, and local economic benefits in its economic analysis.	Electricity DSM programs in Ontario are required to meet industry-standard cost-effectiveness tests that ensure that programs deliver greater benefits than costs to the ratepayers funding them. Aligning the LAPS economic analysis with these tests, specifically the Program Administrator Cost test, help ensure that there is a clear pathway to pursue additional eDSM potential identified through the study.
The LAPS economic analysis should consider distribution avoided costs.	The IESO has worked with Toronto Hydro to ensure that defensible avoided system costs are included in the study's cost effectiveness evaluation, including distribution system costs that are an integral part of specific transmission projects. Discussion with Toronto Hydro and ICF has indicated that 1.) It is not feasible to credibly estimate a generalized avoided distribution cost for the entire region as these benefits can vary widely across the same distribution system based on differences in forecasted demand and existing/planned distribution infrastructure 2.) Related, inclusion of a generalized distribution avoided cost in the LAPS economic analysis would almost certainly result in over-estimating regional achievable potential (as the

	analysis would include benefits that are not actually applicable to the entire region).
The IESO should publish more detailed information on methods and assumptions and granular results.	Since the August 21 webinar, the IESO has published a variety of supplementary information to provide more details on methods, assumptions, and draft results for stakeholder review. The final LAPS report will feature additional information and the publication of measure-level technical, economic, and achievable potential results.
Request for more info on steps for the production of the Solar PV achievable potential.	The IESO has directed ICF to elaborate on the steps used to produce the estimates of Solar PV potential (and the impacts of the respective steps) in the final LAPS report.
The analysis of energy storage achievable economic potential should consider additional benefits through “value stacking” (e.g. ancillary services, distribution avoided costs).	The current analysis considers generation capacity benefits, energy benefits, and locational capacity benefits related to specific identified wires deferral opportunities. Caution must be exercised in assuming access to additional benefits/revenues from other services such as: • Enabling aggregations of small BESS to provide additional services also entails significant additional costs for DER aggregation management services and to satisfy metering and telemetry requirements. • The potential saturation of the ancillary services markets given the size of these markets, the current fleet of resources providing ancillary services, and the confirmed resources connecting to the grid (including 3,000 MW+ of utility-scale BESS procured by the IESO in recent years).

	• The timeline for implementation of additional wholesale market participation models for DER aggregations is still to be confirmed.
A comparison of draft LAPS results to other Achievable Potential Studies.	While caution must be exercised in comparing results across potential studies with different scenarios and input assumptions, comparison of ICF's LAPS draft results with results from the most recent provincial EE and DER potential studies confirms the LAPS draft estimates of achievable potential are of similar magnitude. The Toronto planning region represents approximately 20% of provincial load. Scaling the provincial achievable potential results from Guidehouse's 2022 Energy Efficiency potential study produces 672 MW vs. 578 MW from the draft LAPS results in 2042 (the final year of the provincial EE study). Similarly, scaling the provincial achievable results for included behind-the-meter Distributed Energy Resources (DER) and Demand Response (DR) measures from Dunskey's 2022 DER potential study results (under the BAU+ scenario) produces 349 MW vs. the 396 MW from the draft LAPS results in 2032 (the final year of the provincial DER study). Please note that while Guidehouse's 2022 EE potential study presents results for the Toronto transmission zone, these results are not directly comparable to the draft results of the Toronto LAPS as the Toronto transmission zone captures a much larger area than the Toronto planning region (i.e. much of the Greater Toronto Area vs. the City of Toronto). Regarding studies produced by other parties, as a general practice, the IESO does not comment on analysis produced by other parties. In comparing the results of the LAPS with

	analysis produced by other parties it is important to consider that: 1. Reflecting current policy and the implementation mechanisms available to the IESO, the LAPS is intended to provide a credible estimate of the peak demand savings that could be acquired through voluntary customer participation in cost-effective eDSM incentive programs. Estimated potential will naturally be lower than analysis that assumes mandatory customer installation of solar PV (or other eDSM actions), ignores cost considerations, etc. 2. "Nameplate" capacity values are not relevant for planning purposes as they do not represent energy production during the peak periods that drive needs (e.g. 100 MW or 1000 MW of solar PV will both have very limited impact on meeting energy needs on winter evenings) 3. The LAPS results do not include potential from front-of-meter generation and storage resources, or district energy systems.
The LAPS should consider of Vehicle-to-Grid/Building measures.	The IESO has provided a detailed explanation of why V2G/B is not considered a viable non-wires option in the memo posted on the Toronto IRRP engagement page. The IESO acknowledges the variety of V2G/B research and demonstration activity taking place across North America and internationally, including projects supported by the IESO's Grid Innovation Fund. However, as detailed in the memo, given the current status of the technology and programs, the IESO does not have confidence that V2G/B could be credibly modelled in the LAPS, and more fundamentally, does not have confidence that a program of

	meaningful scale could be delivered cost-effectively in the near future. Participants have noted recent announcements about companies in France and the UK offering customers free EV charging in exchange for Vehicle-to-Building dispatch rights. It is important to acknowledge that these companies are energy retailers (they are not responsible for grid planning and reliability), their offerings are each limited to a single vehicle model neither of which are available in Canada, and the announcement of a commercial offering does not confirm actual customer willingness to participate, performance as a grid resource, or program costs. US utility Duke Energy announced a similar offering in 2022; however, since the announcement, the program has been deferred due to lack of customer interest and technical integration challenges. As V2G/B technology matures, barriers are addressed, and pilots produce more data, the IESO expects that V2G/B measures will be included in future potential studies.
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