Local Achievable Potential Study Webinar – August 21, 2025

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To promote transparency, feedback submitted will be posted on this engagement webpage unless otherwise requested by the sender.

Following the Toronto Local Achievable Potential Study (L-APS) webinar held on August 21, 2025, the Independent Electricity System Operator (IESO) is seeking feedback on the draft findings. A copy of the presentations as well as a recording of the session can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca by September 18, 2025.

Topic	Feedback
What feedback do you have on the L-APS draft findings?	Environmental Defence Canada finds that the draft Local Achievable Potential Study (L-APS) for Toronto significantly underestimates the role of efficiency, demand response, storage, and rooftop solar in meeting the city's future electricity needs. While the modeling framework is detailed, the findings are analytically shallow, strategically

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	misaligned, and inconsistent with the City of Toronto's **TransformTO net-zero by 2040** mandate. Independent analysis using the **SolarTO dataset and Statistics Without Borders** shows that rooftop solar alone could generate **4.9 TWh per year** by 2035 if just half of suitable rooftops were used—covering 15–25% of Toronto's additional electricity needs and more than doubling the output of the Portlands Energy Centre. Yet the draft L-APS presents far more conservative projections and relegates these resources to the margins. Similarly, battery storage and demand response are modeled but undervalued due to restrictive cost-effectiveness assumptions, despite their proven scalability and declining costs. By systematically downplaying these local, distributed, and affordable solutions, the L-APS risks locking Toronto into unnecessary gas reliance. A revised study must elevate rooftop solar, storage, efficiency, and demand response from side options to **central pillars** of Toronto's electricity future, ensuring alignment with TransformTO, affordability goals, and public health.
Is there additional information that should be considered before L-APS findings are finalized?	Yes. The L-APS must explain why it deviates from independent analysis of Toronto's **rooftop solar and storage potential**, particularly the SolarTO dataset and Statistics Without Borders analysis and analysis done for the Ontario Clean Air Alliance. These findings show that rooftop solar could provide **4.9 TWh per year by 2035 or more** —covering 15–25% of Toronto's additional needs—yet this scale of opportunity is not reflected in the draft study. Without this inclusion, the results significantly understate the city's local renewable capacity. The study should also account for the **cost and performance trajectory of heat pumps, storage, and demand response programs**, which are already proving

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	competitive in peer jurisdictions. The current modeling relies on conservative adoption and cost-effectiveness assumptions that discount technologies central to Toronto's net-zero transition. Finally, the L-APS must explicitly evaluate alignment with **TransformTO's 2040 net-zero mandate**, including the planned phaseout of fossil gas, equity and workforce considerations, and public health impacts. Without this information, the findings risk reinforcing outdated supply-side priorities rather than providing a credible pathway to meet Toronto's climate, affordability, and reliability goals
Are there specific modelling methodology or assumption topics that you would like to see discussed in the final public report?	The final report must openly discuss and revise key assumptions that currently downplay the role of local, distributed clean energy solutions. Specifically, efficiency and demand-side measures should be modeled as **primary resources**, not marginal add-ons. Rooftop solar should be assessed at its **full technical potential** using the SolarTO dataset. Demand response, EV integration, and district energy must also be modeled for their ability to cut peak demand and reduce the need for new supply-side generation. The report should also model how a variety of programs and incentives could bridge the gap between the technical and economic potential, and the achievable potential of DERs in particular. The modelling should also show how offshore wind in the Great Lakes feed Toronto's demand for electricity. Policy constraints should only be applied at the point that the achievable potential diverges from the economic potential or all technically viable technologies, and the analysis should also identify any barriers that stand in the way of achieving all the economic and technological potential. Equally important, the modelling must reflect **realistic heat pump economics**—including avoided gas

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	connection fees, cooling savings, and fan energy use—which show heat pumps to be cost-competitive or cheaper than gas even without carbon pricing. Current assumptions ignore these factors, misleading stakeholders on affordability. The study should also publish **sensitivity analyses** on costs, adoption rates, and electrification scenarios to reflect rapidly changing market conditions for heat pumps, solar, and storage. Finally, the report should explicitly factor in the **health and climate costs of gas generation**, particularly from the Portlands Energy Centre. These externalities have major implications for both affordability and public health yet are missing from the draft. Addressing these assumptions is central to producing an accurate and credible plan that aligns with Toronto's net-zero by 2040 mandate.
How can the IESO best communicate with communities and stakeholders on actioning the additional electricity demand-side management opportunities identified in the study?	The IESO should adopt a **transparent, community-centered approach** to communicating about demand-side management (DSM) opportunities. This includes publishing clear and accessible data, such as **neighborhood-level dashboards**, and explaining programs in plain language with a focus on affordability, health, and climate benefits. Communities need to see how efficiency, rooftop solar, storage, and demand response translate into lower bills, cleaner air, and good local jobs. Regular consultations with municipalities, utilities, and community groups are essential to co-design programs that reflect diverse needs and priorities. Partnerships with trusted local organizations can strengthen outreach, particularly in equity-deserving communities and among renters, while also embedding **workforce and equity opportunities** into program design. Finally, the IESO should commit to **open data sharing and ongoing reporting**. Making rooftop solar potential

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	(via SolarTO), demand response targets, and adoption progress public will build accountability and trust. By centering communities in both communication and program design, the IESO can ensure DSM opportunities are not abstract models but real, actionable tools for a fair, affordable, and climate-aligned electricity future.

General Comments/Feedback

Environmental Defence Canada rejects the current draft Local Achievable Potential Study (L-APS) as inadequate. As written, the study underestimates the potential of efficiency, rooftop solar, storage, demand response, district energy, and electrification, while continuing to embed fossil gas as a core supply resource. This approach is incompatible with Toronto's **TransformTO net-zero by 2040** target and risks locking residents into higher costs, harmful health impacts, and missed opportunities for local job creation.

Toronto has the tools to meet its additional 2035 energy and peak needs entirely through clean, distributed solutions—without additional gas or nuclear generation. Independent analysis using the **SolarTO dataset and Statistics Without Borders** confirms that rooftop solar alone could provide 4.9 TWh per year, enough to replace the Portlands Energy Centre and cover up to a quarter of projected demand growth. When combined with efficiency, storage, demand response, and district energy, Toronto can meet 100% of its additional needs affordably and reliably.

The L-APS must therefore be restarted with a clear mandate to align with TransformTO, embed equity and workforce considerations, and transparently account for both costs and health impacts. Critically, the IESO should also identify how to close the gap between "economic potential" and "achievable potential," ensuring that cost-effective resources are not left on the table due to program design barriers. Only a revised, transparent, and ambitious process can provide Toronto with a credible, climate-aligned pathway.