ONTARIO ENERGY ASSOCIATION

Electricity Energy Efficiency Programming Post 2024

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To shape our energy future for a stronger Ontario.

Ontario Energy Association

ABOUT

The Ontario Energy Association (OEA) is the credible and trusted voice of the energy sector. We earn our reputation by being an integral and influential part of energy policy development and decision making in Ontario. We represent Ontario's energy leaders that span the full diversity of the energy industry.

OEA takes a grassroots approach to policy development by combining thorough evidence based research with executive interviews and member polling. This unique approach ensures our policies are not only grounded in rigorous research, but represent the views of the majority of our members. This sound policy foundation allows us to advocate directly with government decision makers to tackle issues of strategic importance to our members.

Together, we are working to build a stronger energy future for Ontario.

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INTRODUCTION

The Ontario Energy Association (OEA) is pleased to have this opportunity to provide our comments to the Ministry of Energy on the future of Ontario's electricity energy efficiency programs (also known as Conservation and Demand Management or (CDM)). We understand that the Ministry is seeking input from the public ahead of the end of existing programs in 2024 and launch of new programs in 2025.

The OEA believes that electricity energy efficiency and demand response delivered through CDM is a key resource for maintaining a reliable, affordable, and sustainable electricity system in Ontario. As electricity demand is forecasted to grow across the province and existing resources retire or enter refurbishment, the value of CDM to the system increases as a low-cost, non-emitting resource that can respond to changing system needs, and support broader economic development and decarbonization objectives.

CDM is one of the most economic methods of reducing energy demand especially if done through increased efficiency requirements as consumers and industry adopt non-emitting principles and policies. The OEA would like to see:

- Government prioritize and incorporate CDM implementation within future integrated and coordinated planning scenarios for both energy and capacity,
- More CDM funding that is consistent, long-term, and stable that can help put into place the resources and programs that will enable it to be a success,
- A "beneficiary pays" approach for determining the funding for various streams of CDM projects,
- Codes and Safety standards that reflect safe and modern building needs for home battery storage technologies,
- Incorporation of energy efficiency and expected electrification needs (i.e. EV's) into ancillary codes such as the Ontario Building Code (OBC) to help drive down Ontario's and Canada's energy costs, and
- Value stacking to unlock the maximum economic potential of equipment and increase technology and program uptake given that the same resource/technology can often provide multiple value streams for different stakeholders.

Please find below OEA's responses to selected questions and opportunities for feedback in the Electricity Energy Efficiency Programming Post 2024 consultation document.

I. OBJECTIVES AND TARGETS, DEFINITION, AND FUNDING SOURCE

A. OBJECTIVES AND TARGETS

The primary objectives of the current 2021-24 CDM Framework include:

- **Helping to cost-effectively meet local, regional, and/or system-wide electricity needs.**
- **Helping electricity consumers who are most in need to receive electricity-saving measures, such as small business, commercial, institutional, industrial, low-income, and First Nation customers.**

Within the current CDM Framework, typical targets include energy savings (in TWh) and peak demand reductions (in MW).

Through the Mid-Term Review stakeholder engagements, the IESO heard an increasing interest in decarbonization and electrification opportunities, and distributed energy resources (DERs). Further, energy costs can be a significant burden on households, in particular those with lower incomes.

1. **How sufficient are the current primary objectives and targets for addressing evolving system and customer needs?**

   The IESO's core mandate is system planning and operation of the bulk system, and they are busy with ongoing multiple high-profile initiatives (MRP, LT-RFP, MT-RFP, DER Market Vision, other procurements).

   Delivering programs directly to distribution system customers is the strength of Ontario's local distribution companies (LDCs). We believe there is an opportunity to empower LDCs to help customers further reduce system needs and emission through CDM. This would entail a collaborative framework between LDCs, IESO and other stakeholders and coordination with DSM to develop and deliver existing and new bulk, regional and local programming. These opportunities include:

   - Tapping into LDCs capabilities that are currently underutilized,
   - Ontario's LDCs can leverage their customer relationships to help the IESO fill these gaps prior to a new 2025 framework,
   - LDC delivery of cost-effective programs to assist in alleviating energy and capacity shortfalls forecast for 2025 and beyond, and
   - Leverage of third-party innovation and experience.

   Income eligible programs are also a proactive and proven solution to alleviate the burden of energy costs on lower income households. These could include deeper retrofits, targeted multi-family or social house offerings, new social housing programs, as well as enhanced energy affordability programs.

   LDC-led CDM programs should be targeted to address regional and/or local electricity system constraints and should be distinct from, and coordinated with, province-wide CDM and DSM programs, as well as coordinated with any local/regional natural gas IRP ETEE programs available.

2. **Should additional objectives or targets be considered when developing electricity energy efficiency programming? For example, objectives and/or targets relating to beneficial electrification (replacing fossil fuel use with electricity in a way that reduces overall emissions and energy costs), overall grid efficiency including demand flexibility (reducing, increasing or shifting customer load), electricity bill reduction, etc.**

   OEA would like to see a bigger role for DERs in the primary objectives of, or within, the CDM Framework by allowing for a strategy that will enable DERs to address both local and system-

based needs. The technical capacity exists, but DERs in Ontario are currently limited by underdeveloped programs and lack of investment certainty.

The OEA believes there is significant potential for DERs which are growing in importance and should play a key role in the clean energy transformation in Ontario as we all work together to address the evolving system and customer needs simultaneously. DERs offer flexibility and ancillary services that not only aid in decarbonization, but in keeping electricity affordable for households.

B. DEFINITION

The current definition for electricity energy efficiency programming under the 2021-2024 CDM Framework is as follows:

The IESO shall consider CDM to be inclusive of activities aimed at reducing peak electricity demand and/or electricity consumption from the electricity system. Examples of CDM include energy efficiency replacements whereby similar output is achieved with less electricity, and behind-the-meter consumer generation.

However, for the purposes of the CDM programs, the IESO shall consider CDM to exclude:

- **Those measures promoted through a different program or initiative undertaken by the Government of Ontario or the IESO; and**
- **Behind-the-meter consumer generation that uses fossil fuels purchased from or otherwise supplied by a third party as a primary fuel source.**

3. **Does this CDM definition appropriately capture DER, and demand response (DR), and other opportunities arising from new technologies and business models that enable greater customer choice to achieve more electricity savings within CDM? If not, what changes should be made recognizing there may be other revenue options and models that may become available to DERs (e.g., local and wholesale electricity markets) outside of CDM?**

   OEA recognizes the definition of CDM can be broad.

   When considering a long-term model for the collaborative delivery of CDM it is important to establish a definition of CDM that is inclusive of proven measures and activities that provide results and captures the needs of both consumers and the electricity system while considering the energy transition and the need for efficient electrification. The definition should not be so prescriptive that it limits the ability to evolve with new opportunities and technologies.

   We believe the definition of CDM should be inclusive of measures and activities aimed at reducing peak electricity demand and/or electricity consumption from the electricity system. These measures should include support for more efficient solutions related to additional load or existing load, and include the following types of activities:

   - Energy efficiency
   - Demand response
   - Energy conservation
   - Behind the meter technology (that does not use fossil fuel) and reduces on-site electricity consumption from the grid

The OEA believes that the proposed definition of CDM does not, and should not, preclude the inclusion of Distributed Energy Resources as an effective measure to support any of the outcomes or activities listed above, as circumstances may warrant.

4. **Should the definition consider additional elements such as beneficial electrification?**

C. FUNDING SOURCE

5. **Currently, funding from electricity ratepayers through the Global Adjustment (GA) can support electricity energy efficiency programs that target local and/or regional needs and which also demonstrate cost effectiveness at the system-wide level. How do we determine the extent to which local and/or regional programs are to be funded by all electricity ratepayers (i.e., through the GA)?**

   The OEA supports a "beneficiary pays" approach for determining the funding of the various streams of CDM projects. Under this model, IESO CDM programs with primarily provincial benefits meeting bulk system needs should be funded via Global Adjustment (GA). IESO programs deployed by utilities for local needs should be split between rate-payers and GA based on the proportion of benefits received in each stream accordingly. CDM programming developed exclusively by LDCs in support of local needs only should be funded by rate-payers, subject to OEB approval.

   The OEA also proposes that any targeted CDM activity that addresses regional and/or local electricity system constraints should be distinct from, and coordinated with, province-wide CDM and DSM programs, as well as coordinated with any local/regional natural gas programs as appropriate. Alignment between DSM and CDM would help to maximize the uptake of energy conservation measures ensure customer clarity regarding the variety of programs and help to enhance customer service and option selection.

6. **Currently, DER and DR activities can be funded through the GA if they meet the CDM definition. Beneficial electrification is not an eligible CDM activity. Should beneficial electrification be an eligible CDM activity; and if so, what funding source is most appropriate (e.g., electricity ratepayer, natural gas ratepayer, taxpayer)?**

   The OEA believes funding should be allocated consistent with the beneficiary pays principle.

II. RESPONSIVENESS TO SYSTEM NEEDS

7. **Would a more enduring commitment to energy efficiency programming and funding produce better outcomes? What could this look like?**

   The OEA believes that by removing regulatory barriers, providing *long-term* funding, ensuring the program cycles last for substantially longer periods (i.e. 10 years+) and integrating CDM into planning, will help to ensure better enduring outcomes are attained.

   Continuity of conservation programming and funding is paramount to the decision-making of market actors and is a key determinant of the success (or failure) of energy conservation programming. Long-term funding that is consistent with long-term objectives will also strengthen coordination between DSM and CDM.

A clear definition of the scope and objectives of CDM and DSM respectively provides the OEB, IESO, the electricity and gas sectors greater certainty for planning purposes thereby freeing up resources to focus on program development and engaging the market to maximum effect. Any definition of CDM should be flexible enough to consider technologies, customer and system needs as they continue to evolve.

Predictability and stability encourage prioritization and investment of time and capital in energy efficiency projects. A long-term commitment to conservation programs will send the right signals to the market and demonstrate the continued belief in energy conservation's key role as the lowest-cost resource to help Ontario achieve its energy policy objectives. Such a commitment will give consumers, the energy conservation industry, and the workforce confidence to make informed decisions on energy efficiency activities that require investment.

8. **In the context of the energy transition and growing electrification needs, how can electricity energy efficiency programs be better integrated into electricity distribution and transmission system planning as well as resource procurements?**

Ultimately utilities seek an enduring path forward, one that is intuitive and clear. The start-stop nature of the current slate of programming, the limited timeframes, and the extreme regulatory burden in seeking cost-recovery from the OEB are disincentives for LDCs to participate in CDM programming. By removing regulatory barriers, providing long-term funding, ensuring the program cycles last substantially longer periods while integrating CDM into planning models can help ensure the success for CDM outcomes.

9. **What additional tools could be used to develop energy efficiency programming budgets and targets? Examples of existing available tools include:**

    - **Achievable Potential Studies, which evaluate how much electricity energy efficiency is possible from a technical, economic, and market potential basis.**
    - **Annual Planning Outlooks, which provide a long-term view of electricity demand needs in Ontario and indicates the relative economic value of CDM. This report is updated on an annual basis.**
    - **Annual Acquisition Reports, which specify the mechanisms to provide a flexible and cost-effective approach for competitively securing electricity resources necessary to meet demand.**

An update to the IESO's cost effective tools that allow utilities to assess local program cost effectiveness using customized avoided cost inputs could be used to meet programming and budget goals. Regional achievable potential studies and/or access to funding to assess cost-effective opportunities for non-wires alternatives to defer distribution system investments would assist LDCs in deploying the most cost effective and impactful local and regional CDM programs. And we believe assessments of local programs available publicly to other utilities would facilitate knowledge sharing and adoption of successful programs.

10. **How can electricity energy efficiency programs be better integrated or coordinated with other policy initiatives such as procurements (e.g., of DER resources), pricing schemes, building codes and energy efficiency standards, to help manage electricity demand and reduce GHG emissions?**

Fundamentally, energy efficiency is hobbled if the building envelope itself within which it is deployed is not optimized for efficiency. For example, reducing heating costs is not simply about the efficiency of the HVAC and/or heat pump, but also the rate of speed at which heat loss

happens because of poor construction, leaky windows, and substandard codes. Energy efficiency and CDM is most likely to succeed when the building envelope itself has been optimized for efficiency in energy consumption. For the existing building stock, it may mean continued retrofit support. For new-builds the best way to ensure integration with energy efficiency programs is to ensure that building codes continue to increase the efficiency threshold.

Building distributed system operator (DSO) capabilities at electricity utilities can also serve as the hub through which non-centralized resources, including DERs, can be managed and integrated to reduce peak demand at the local and bulk system levels, particularly as distributed resources and CDM reach greater levels of penetration over time.

11. **What are examples from other jurisdictions where demand flexibility and targeted energy efficiency have helped optimize the use of the existing grid in constrained areas or where the grid is under-utilized? For example, aggregated demand response program, DER and non-wires alternatives, energy storage, locational value and electricity pricing options, etc.**

Ontario can capitalize on an opportunity to allow DERs to address both local and system needs. We believe that to develop a robust DER market, resources require that incentives be coordinated with value creation by stacking value across the energy delivery supply chain (i.e., generation, transmission, and distribution). An active market with the necessary revenue certainty and varied and complementary opportunities for participation is likely to draw in DER proponents in greater numbers producing benefits for all of Ontario's ratepayers. This requires a need for close coordination between market operator, LDCs, regulators, DER aggregators, and customers to account for the numerous points and times in the grid where DERs can offer value, while also avoiding conflicting commitments. And where a DER program already exists in market such as HER+ which offers stacked incentives of up to $5,000 to support the installation of solar photovoltaic panels, further stacking CDM funding and integrating program requirements into a unified program makes the most sense for both customers and the industry at large. This would ensure that all activities within Ontario work together effectively and that customers enjoy the best, seamless customer experience.

III. IMPROVING CUSTOMER EXPERIENCE

A. Needs:

12. **What additional support is needed to get customers to undertake more energy efficiency?**

More education and customer engagement from LDCs to support customers, particularly for large customers, is needed. Energy efficiency, deep retrofits, and reducing GHGs require trusted advisors who are also dedicated to simplifying the customer journey. LDCs are well positioned to achieve this.

OEA also believes that a centralized resource place could be helpful to maximize the stacked value of programs, and/or their assets, and could increase broader participation in energy efficiency programs. A centralized resource via an online portal, would:

- define rebate eligibility and verification engines,
- provide new technologies and products currently available in Ontario and the bundling of installation services, as applicable, and

- provide estimates regarding the potential range of resulting efficiency, economic, and carbon savings, if installed.

The OEA believes this could be helpful to increase program adoption and should be available to all customers interested in energy efficiency and in streamlined program enrollment.

Codes and standards also need to be modernized to allow a path towards decarbonization and are increasingly becoming a barrier to the adoption of clean technologies in the energy sector. For example, a recent challenge has been identified in Canadian Electrical Safety Code (ESC) regarding the adoption of battery technologies within the residential home envelope. The ESC does not allow for the installation of battery technology within a home. Furthermore, the Ontario Electrical Safety Code allows it but with additional costs, losing financial viability. Home batteries are viewed as an integral part of meeting Ontario's future energy needs but will be difficult to adopt at scale unless Codes and Standards reflect modern safety certification of such technologies in a timely manner.

13. What should the government consider when communicating the benefits and motivations behind energy efficiency programs to encourage participation and improve public awareness? Examples of benefits are cost savings, comfort, enhanced customer choice, etc.

A clear outcome sought is to enhance the customer experience and reducing complications or potential for customer confusion. Programs should offer broad opportunities for collaboration and potential stacking with other industry partners as they may present themselves with an objective to simplify or enhance the customer experience.

To this end, improved awareness is also needed to encourage participation in programs and maximize potential. Increased funding and support for educational outreach campaigns on the benefits of decarbonization, economic benefits and enhanced reliability and resiliency through CDM is a win-win.

Consumer awareness of CDM and DSM programming can be increased with the support of government campaigns. Messaging should include the benefits of CDM and DSM and point customers to where they can obtain more information.

14. Are there best practices from other jurisdictions on improving customer engagement in energy efficiency particularly for the hard-to-reach segments?

Ontario's gas and electricity LDCs have had much success in delivering CDM outcomes in the past. In their experience, best practices that drive customer engagement requires direct customer interaction, strong marketing campaigns, streamlined and simple to understand processes, and dedicated resources.

15. How can we make better use of technology to achieve our electricity energy efficiency goals?

Controls, smart technologies, smart grids, etc. and better use of data will provide many opportunities and can be further leveraged to uncover new opportunities via programs and smart fuel switching to help achieve high potential for energy efficiency goals.

Building DSO capabilities at electric utilities can also serve as the hub through which non-centralized resources, including DERs, can be managed and integrated to reduce peak demand at the local and bulk system levels, particularly as distributed resources and CDM reach greater levels of penetration over time.

B. Coordinated Delivery

16. What opportunities should Ontario consider, to improve the coordination of electricity and natural gas energy efficiency frameworks, program delivery, and oversight?

At a broad level, enhanced planning and coordination between the electricity and gas sectors will produce enhanced total energy and carbon reduction outcomes for the province. In particular, decarbonisation will impact both sectors in inter-related manners. Energy consumption, fuel sources, technology and programs rules will shift, and relative changes in consumption in one sector may have ancillary impacts on the other. Coordination in the growth and sustainment of decarbonization policies will certainly require consideration of each sector respective CDM/DSM options. Coordination should also consider system efficiency, reliability, resiliency, and cost as a part of the decision-making process.

OEA is of the view that when there is an existing program in the market, any new CDM or DSM funding targeting the same activity should be stacked rather than used to establish a competing program. This coordinated model includes stacked funding and incentives, attribution based on funding, a one-window customer platform, and integrated marketing. The branding architecture features a single program brand to avoid customer confusion and includes all partner brands, giving full credit to all contributors. Through this customer-centric approach, this model ensures the best customer experience that yields significant energy saving and GHG emission reduction results.

17. What common performance metrics could be used to design, track, and evaluate coordinated energy efficiency activities (e.g., cost benefit tests, emissions reduction goals)?

Evaluation, Measurement and Verification (EMV) are an integral part of any CDM program design and delivery. EMV should be calibrated to ensure appropriateness for the CDM options chosen, which includes deciding where deemed versus verified savings/impacts will be utilized. Tests such as the Total Resource Cost (TRC) can also help determine where and when it makes the most economic sense to deploy a particular class of program or technology. It is anticipated that the IESO, in conjunction with LDCs and other program partners will develop and deploy appropriate evaluation tests and an EMV framework as a part of the post-2024 CDM suit of programs.

18. Are there examples from other jurisdiction where natural gas and electricity energy efficiency program planning and delivery are integrated?

IV. GENERAL

19. The IESO's Mid-Term review of the 2021-2024 CDM Framework, including programming, was released in December 2022. Please share any further feedback on any of the existing programming, including opportunities for improvement or lessons learned from other jurisdictions.

LDCs have the willingness, knowledge, and capacity to move fast in filling existing program gaps and customers are looking to LDCs for deliver CDM. There is an opportunity to empower LDCs to help customers realize their strength in reducing systems needs, emissions, and their own costs.

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Let's unravel complex energy challenges, together.