

2024 BUDGET RECOMMENDATIONS FOR THE GOVERNMENT OF ONTARIO

By: The Atmospheric Fund January 31, 2024

Grow the Conservation and Demand Management Program

 Recommendation 1: That the government dedicate an annual allocation of \$250 million over four years to enhance the Conservation and Demand Management (CDM) program.

As electricity demand grows and nuclear plants go offline for refurbishment in Ontario, the federal government is requiring low-carbon electricity through its Clean Electricity Regulations. Thus, Ontario is seeking to meet its long-term capacity needs through affordable and reliable means. Compared to carbon-intensive natural gas and expensive new nuclear generation, the most cost-effective solution is efficiency. As outlined in Minister Smith's April 2022 directive to the IESO, "energy efficiency programs can cost-effectively reduce demand and offset the need for additional supply, as economic growth and decarbonization efforts contribute to electricity demand growth across the province."

According to reports by <u>Efficiency Canada</u> and the <u>IESO</u>, Ontario is falling behind comparable jurisdictions in North America on energy efficiency, not only in spending but also in leveraging the corresponding savings. Leading American states mandate utilities to invest in all energy efficiency solutions that are lower cost than generation options. Requiring cost-effective energy efficiency over more expensive supply alternatives means a lower bill to operate an electricity system.

We recommend that Ontario prioritize energy efficiency and increase the budget for Conservation and Demand Management (CDM) to align with its achievable potential, as calculated in the IESO's 2022 Achievable Potential study. Conservation programs are funded through the rate base, limiting investments in efficiency initiatives that offer long-term benefits to ratepayers and the electricity system. Further, rate subsidies currently absorb \$7 billion in tax dollars annually, and rising. To address this budget pressure, we recommend allocating \$250 million annually from the tax base to supplement the CDM budget over the next four years.

Develop Conservation and Demand Management for New Construction

 Recommendation 2: That the government develop a CDM program for new construction and create incentives for energy efficiency.

TAF commends Ontario's commitment to building 1.5 million homes over the next 10 years. To ensure long-term affordability, the province needs to take urgent action to ensure these new homes are as energy efficient as possible. Based on the assumptions outlined in the IESO's <u>Pathways to Decarbonization Study</u>, the single biggest driver of incremental capacity and energy needs is increasing winter peak demand, resulting from the electrification of heating. Over the next 15 years, the IESO has projected that this increase in demand will primarily result from the use of electric heating in new homes and buildings. This highlights a major gap in programming – there is currently no CDM program for new construction.

Recognizing that heating loads in new homes and buildings are the biggest driver of mid-term energy and capacity needs, the next conservation framework should include programs to support thermal efficiency in new construction. The Auditor General's 2019 Energy Conservation Progress Report noted that historically \$6 benefits for every program dollar invested.

Key measures should include above-code levels of insulation and airtightness and ground-source heat pumps (GSHPs). While both air-source heat pumps (ASHPs) and GSHPs are highly efficient, the peak electrical load of a building heated with GSHP is approximately 58% lower than one heated with ASHPs. Considering that the most expensive component of a GSHP – the ground loop – has a 50+ year lifespan, the value proposition in avoided capacity, energy, and transmission costs is clear. With Ontario aiming to construct 1.5 million homes over the next decade, there is a one-time opportunity to make these homes as thermally efficient as possible.

Expand Support for Heat Pumps

 Recommendation 3: That the government provide an additional \$12 million over two years to the Clean Home Heating Initiative and create a matching program for commercial and multi-unit residential buildings.

In both urban and rural areas, energy affordability is a key concern. To meaningfully respond to these concerns, the provincial government needs to demonstrate that they can save Ontarians money on the path to net-zero. A <u>June 2023 report</u> from the Canadian Climate Institute showed that **clean electricity will contribute to more affordable energy**. According to their analysis, Canadians could spend 12% less on energy than they do today by switching from fossil fuels to clean electricity to power their homes, vehicles, and businesses. The efficiency of electric technologies, compared to fossil fuel-based ones, is key to achieving these savings.

The Clean Home Heating Initiative has demonstrated significant success in its initial rollout across six municipalities, where it currently serves a maximum of 1500 single-family homes. This success underscores the program's potential to help more homeowners save on energy bills and reduce greenhouse gas emissions at the same time. Given that fossil-fuel heating systems are the largest source of building sector emissions in Ontario, and with ongoing inflationary trends exacerbating household energy costs, transitioning Ontarians to electric heat pumps is more important than ever.

The Clean Home Heating Initiative, currently delivered by Enbridge, allows homeowners in select cities to leverage Ontario's electricity grid, promote energy conservation, and save on energy bills. We recommend allocating an additional \$12 million to establish a multi-residential stream, supporting the adoption of hybrid heat pump solutions in apartments and condos. Representing nearly one-third of Ontarians, multi-unit buildings in communities like Markham in York Region, and across the province generally are commonly excluded from most energy programs. The cost-effectiveness of hybrid heating is even greater in multi-unit buildings, and we estimate that a \$12 million program could reach over 5000 households. Expanding this program to the multi-unit building sector could help reduce energy loads and save ratepayers by enabling smart fuel switching. This would provide more Ontarians with the opportunity to save money every month while also reducing their household emissions.

Support EV Readiness in Ontario

Recommendation 4: That the government expand the Electric Vehicle (EV)
 ChargeON program to an annual budget of \$91 million over four years, with
 a funding stream for enhancing EV readiness in multi-unit residential
 buildings.

The need for better EV charging in Ontario will increase rapidly in the coming years due to the federal government's Zero-Emission Vehicle sales target that will ensure a growing supply of EVs available for purchase. Ontario's automotive industry is also investing in an electrified future, with the establishment of Canada's first full-scale EV manufacturing plant in Ingersoll and Ford's renovation of the Oakville Assembly Complex into a global hub for Battery Electric Vehicle (BEV) production. To continue attracting EV-related manufacturing jobs and investment, it is crucial for the Ontario Government to foster strong domestic demand for EVs. Meeting this growing consumer demand requires significant investment in charging infrastructure to ensure the consumer base is prepared for this once-in-a-generation transition, with access to charging where Ontarians live and work.

However, access to charging is one of the main barriers to widespread EV adoption in Ontario. We commend the Ontario Government for allocating \$91 million towards the

EV ChargeON Program as a great step to address this challenge. We recommend that the government complement this initial investment by expanding the program to include EV readiness in multi-unit residential buildings (MURBs). Although addressing charger location gaps in key travel corridors and smaller communities is important, it is also essential that chargers are installed in larger communities with high levels of EV demand and constrained access to home charging. This is particularly relevant in suburban communities with limited access to public transport and a stronger demand for EV charging options.

MURB residents <u>represent 31%</u> of Ontario's population, and in 2021, multi-unit building permits accounted for <u>73% of all units</u> built nationwide. A substantial proportion of this demographic will be transitioning to EVs in the coming years. While most EV owners prefer overnight home charging, which reduces the impact on Ontario's electricity grid, most MURB residents cannot charge at home. Installing charging in MURBs is significantly more costly than in single-family homes, especially when done on a case-by-case basis at resident request.

We propose a model for MURBs that builds on the success of an existing funding program in British Columbia. The <u>CleanBC Go Electric</u> EV-ready rebate program, launched in December 2020, supports MURBs by offering funding for both EV-ready planning by qualified consultants and funding for each EV-ready parking space. A similarly modelled program for Ontario would significantly reduce the barriers to charging.

Sincerely,

Bryan Purcell

VP of Policy & Programs
The Atmospheric Fund

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About the Atmospheric Fund

The Atmospheric Fund (TAF) is a regional climate agency that invests in low-carbon solutions for the Greater Toronto and Hamilton Area (GTHA) and helps scale them up for broad implementation. Please note that the views expressed in this submission do not necessarily represent those of the City of Toronto or other GTHA stakeholders. We are experienced leaders and collaborate with stakeholders in the private, public and non-profit sectors who have ideas

and opportunities for reducing carbon emissions. Supported by endowment funds, we advance the most promising concepts by investing, providing grants, influencing policies, and running programs. We're particularly interested in ideas that offer benefits in addition to carbon reduction such as improving people's health, creating local jobs, boosting urban resiliency, and contributing to a fair society.