

### Written Submission for the Pre-Budget Consultations for Budget 2025

### **By: The Atmospheric Fund**

#### List of Recommendations:

- Recommendation 1: Invest \$1 billion over four years to support equitable and accessible at-home charging for electric vehicles.
- Recommendation 2: Design the Canada Greener Homes Affordability Program to maximize impact by requiring provincial program administrators to stack federal funding with local programs.
- Recommendation 3: Increase and add a dedicated stream of \$310 million for residential Distributed Energy Resources to the Canada Greener Homes Affordability Program, including load flexibility and distributed generation technologies.

#### Introduction

The Atmospheric Fund (TAF) is a non-profit climate agency serving the Greater Toronto and Hamilton Area (GTHA). We appreciate the opportunity to provide our urban climate perspective on Canada's 2025 budget. As Canada advances its efforts to reduce carbon emissions and achieve net-zero targets, Canadians are grappling with housing shortages, affordability challenges, and increasingly severe weather events. To address these pressing issues, we propose a practical, comprehensive modernization of Canada's housing stock. Every Canadian should be able to charge an electric vehicle where they live. All federal and provincial support for energy-saving retrofits should be easy to access. Every roof, where feasible, should be generating solar power paired with battery storage. Our recommendations will help ensure that both existing and new homes are low-carbon, high-performance, equipped to take on the challenges of our time. These priorities will stimulate local economic development and job creation, improve peoples' health, and achieve spinoff community benefits.

### Recommendation 1: Invest \$1 billion over four years to support equitable and accessible at-home charging for electric vehicles.

Building on the successful federal Zero Emissions Vehicle Infrastructure Program, we recommend that the federal government dedicate an additional \$1 billion over four years for an electric vehicle (EV) charging infrastructure funding program for single-family homes and multi-unit residential buildings (MURBs). For the transition to EVs to be successful in Canada, as many people with cars as possible must have access to home charging, the most affordable and convenient choice for most EV drivers.

We also recommend a cap on funding for single-family homes (for example, a limit of one-third of the allocated budget for four years) to support a more equitable distribution, benefitting low-to-medium income households that are more likely to live in MURBs. The program should emulate the successful <u>CleanBC Go Electric program</u>, which provides rebates for Level 2 charging in single-family homes, and rebates for multi-family building owners that cover EV-ready plans, infrastructure, and installation costs, with larger rebates available for Indigenous communities. Such a federal program can complement provincial funding for participating provinces.

Unreliable and difficult-to-use charging stations are ubiquitous barriers to driving an EV. Natural Resources Canada will soon require ZEVIP funding recipients to disclose charger uptime performance for public chargers on an ongoing basis, a step in the right direction. We recommend extending uptime and maintenance reporting requirements to all funding related to public charging infrastructure, following <u>California's standards</u>. We also recommend aligning with the U.S. National Electric Vehicle Infrastructure Program by requiring all funded public chargers to accept payment by major credit and debit cards, without requiring a membership.

Many municipalities within the GTHA and British Columbia are implementing mandatory EV-ready requirements for newly constructed homes to accommodate future electricity needs. With affordability issues continuing to affect people in Canada, the federal government must step up and provide financial support to homeowners and renters, along with the matching provincial funding.

## Recommendation 2: Design the Canada Greener Homes Affordability Program to maximize impact by requiring provincial program administrators to stack federal

#### funding with local programs.

People in Canada, especially from low-income households, <u>are more likely to implement energy efficiency</u> upgrades when they have convenient and accessible policy and program support. Home retrofit support should be equally easy to access in every province, however, applying for incentives is often unduly complex. For example, Ontario low-income households in single-family dwellings have access to five different retrofit support programs offered by four different program administrators.

The best example of a streamlined program is the CleanBC Better Homes Energy Savings Program, which combines the Low Carbon Economy Fund and Oil to Heat Pump Affordability program and tops it up with provincial and utility funding. Partnering with provinces to develop similar single window programs (incorporating all existing federal programs) that support local implementation will ensure that both homeowners and renters across Canada have better access to the resources they need, and encourages provinces to top up funding.

For greater emissions reductions and household savings on energy bills, we recommend the CGHAP include electric heat pumps, envelope improvements, and renewable energy and storage. Electrifying building heat is <u>the most cost-effective way</u> to achieve net-zero emissions in line with Canada's climate targets, and can result in significant home energy cost savings. Energy efficiency and renewable energy and storage also create spinoff benefits for homeowners such as health and comfort and climate resilience.

# Recommendation 3: Increase and add a dedicated stream of \$310 million for residential Distributed Energy Resources to the Canada Greener Homes Affordability Program, including load flexibility and distributed generation technologies.

We recommend allocating \$95 million for smart thermostats and grid-enabled water heaters and \$215 million towards solar and storage systems, for a total of \$310 million. The dedicated stream should be an add-on to the existing CGHAP budget, with matching funding from the provinces. Distributed Energy Resources (DERs) like these are proven technologies that can meet a substantial portion of Canada's growing electricity capacity needs. Support for these smart technologies will make use of the existing grid infrastructure, defer or reduce costly investments in transmission, distribution, and utility-scale generation, and ensure that all residents can participate in and benefit from the energy transition.

In 2022, Ontario's Independent Electricity System Operator (IESO) published a <u>study on the potential of DERs</u>, showing they have the economic potential to cost-effectively meet 100% of Ontario's incremental capacity needs over the next decade, with up to seven dollars in economic benefits for every dollar invested.

Such investments create myriad benefits for residents, communities, and provincial system operators and utilities. For example, solar PV <u>can supply affordable energy</u> to households and, when paired with batteries, can assist homeowners and renters during outages from extreme weather events and help manage peak demand on the grid.

Demand-side management is a critical enabler for electrification and affordability, so ensuring that electric

appliances are paired with smart technology is a win-win for residents and for the grid. <u>Research commissioned</u> by California and New York found that electrification paired with smart technologies could reduce the cost of distribution upgrades by over \$30 billion in each state through 2035. Load flexibility resources like smart

thermostats can <u>substantially improve grid efficiency</u> and affordability, giving local utilities and system operators the ability to manage peak demand and increase grid utilization.

A good example of a successful DER program is Ontario's Peak Perks, with <u>over 100,000 participating homes</u> and demand reductions of up to 90 megawatts during peak events. Federal incentives for smart thermostats will enable more residents to participate in these successful voluntary demand response programs, saving money, and balancing the grid.

### Conclusion

With growing pressures on housing, affordability, and the climate, the Government of Canada must focus Budget 2025 on the highest impact, most efficient priorities. Incentives for energy efficiency, electric heat pumps, renewable energy, and smart technologies will pay back to people living in Canada through utility cost savings, quality homes, and a clean and reliable electricity grid. We appreciate the opportunity to provide recommendations on Canada's budget for 2025 and look forward to continued collaboration for a cleaner energy future for Canada.