





3 August 2016

Dear Honourable Minister of Natural Resources, Jim Carr, and Honourable Minister of Environment and Climate Change, Catherine McKenna:

RE: A bold national action plan for energy efficient buildings

As a collaboration of leading energy and building professionals, associations, non-government organizations, and businesses, our work now represents the future of the built environment in Canada. Many of the initiatives we are currently undertaking represent the leading edge on the path to a resilient and ultra energy-efficient/low carbon building sector. However, our efforts require broad level support and significant scaling up in order to fully realize Canada's transition to a clean energy economy. We applaud the commitment and world class leadership your government has shown on climate initiatives, and we call on the federal government to continue on this path by developing strong action and new policy for the buildings sector.

In Canada, the total energy consumption of homes and buildings accounts for nearly a quarter of our national GHG emissions.¹ In order for Canada to achieve its 2030 climate target under the Paris Agreement and its longer-term decarbonization goals, we must significantly reduce emissions of existing buildings and ensure that new buildings are designed for ultra low emissions. We believe that the buildings sector offers, to policy makers, some of the lowest cost, most rapidly achievable GHG reductions. Furthermore, investing in the efficiency of Canada's building stock creates substantial co-benefits, including improved energy productivity and competitiveness, green jobs, and improvements to the quality of the places Canadians live and work. A study conducted for NRCan in 2014 shows high energy efficiency programs would return five to eight dollars for every one dollar invested. The study estimated that \$1.9 billion to \$8.5 billion spent on energy efficiency programs across Canada could result in annual GDP and job growth potential at between \$19 billion and \$48 billion, and between 100,000 and 300,000 jobs, respectively. This in turn would increase federal and provincial income tax revenue by \$2.7 billion and \$2.0 billion respectively.²

We know that all levels of government plus companies, organizations, and individuals need to come together to ensure that Canada can realize these significant multiple benefits while meeting its climate change objectives. Uniting stakeholders with a national vision of an ultra-energy efficient/low carbon buildings sector is an opportunity to coordinate and celebrate cross-jurisdictional collaboration and to demonstrate such actions are good for the economy.

We believe the recommendations below are the key policies and programs needed to show the world that Canada is a forward-thinking, energy-conscientious country. We recommend the federal government implement the following measures as quickly as possible.

1. Set an ambitious goal of improving Canada's buildings sector

Establishing a clear vision for the future of ultra energy efficient/low carbon buildings by declaring a national target signals the government's intentions and sets the tone that will guide private and public investments necessary for market transformation, including research and development and training. A clear objective for

¹ Canadian Council of Academies, 2015. *Technology and Policy Options for a Low-Emission Energy System in Canada*. p. 81.

² Acadia Center, 2014. Energy Efficiency: Engine of Economic Growth in Canada, p.6.

ultra energy efficient/low carbon homes and buildings to support our collective 2030 emissions reductions goal and sets us on path to a low-carbon economy. We recommend:

- 1.1. A national plan that sets the stage for deep energy retrofits (energy reductions of 25 to 50 per cent) of 30 per cent of the building stock by 2030,
- 1.2. All new construction to be nearly zero energy by 2030.

2. Create impetus to act with accessible information on energy use and reporting

Having reliable, comparable data for energy and water use in homes and buildings is crucial to targeting energy reduction opportunities and motivating owners and occupants towards more efficient use. An informed and skilled workforce is critical. We recommend a national plan that:

- 2.1. Supports universal benchmarking and home energy labelling across the country to expand market access to, and awareness of, building energy performance data. This includes continuing and enhancing federal support for national tools such as Energy Star Portfolio Manager, the EnerGuide Rating System, Energy Star for Homes and the R-2000 program. New tools designed to reliably achieve ultra low emissions, such as Passive House, should be considered for similar support and incorporation into national standards.
- 2.2. Facilitating universal access for homeowners, building operators, and authorized third parties to secure, convenient, and consistent online utility consumption data.
- 2.3. Provides support for education and training of professionals and trades involved in retrofit and new construction projects.

3. Protect consumers and provide industry with certainty through the progressive application of codes and standards

Improved energy efficiency standards for new and existing buildings, and for the appliances and equipment used in buildings, are key to reducing the carbon emissions from Canada's homes and buildings. We recommend a national plan that includes:

- 3.1. Updating national model building codes to achieve nearly zero energy new construction by 2030, and working with provinces to facilitate adoption of building codes.
- 3.2. Developing or adapting national energy codes for major renovations of existing buildings.
- 3.3. Committing to long-term and continuous improvement of energy and water use performance standards for equipment and appliances, with appropriate consultation and notice for industry, and with consideration to harmonizing standards with the leading jurisdictions in North America.

4. Incentivize private investment in energy efficiency and carbon reduction through strategic use of public funds

Financial incentives are a proven tool for accelerating investment in energy efficiency, both for new construction and retrofits. However, public funds alone will not be enough to achieve the deep energy reductions required from the buildings sector. Programs will require strong leveraging of public dollars in order to help mobilize private investment and maximize impact. In our view, projects with the highest carbon abatement potential should be prioritized. A price on carbon will also support the business case. A national plan should include:

- 4.1. Providing strategic financial support, or supporting other levels of government, to incentivize and remove barriers to deep retrofits. For example, consumer rebates, supply chain incentives, and financing options, including on-bill financing and property-assessed financing (e.g. Property Assessed Clean Energy/Local Improvement Charges). Consider facilitating homeowner and building owner access to financing tools and energy audits by creating 'one-stop-shop' outfits.
- 4.2. Pursuing opportunities to leverage private capital through innovative mechanisms such as revolving loan funds, loan guarantees or other credit enhancements. Consider creating a national green bank to administer such financing, or supporting other jurisdictions to do so.

4.3. Reforming tax policy to stimulate investment in efficiency. For example, tax credits and federal changes to deductibility rules can be used to stimulate retrofitting.

5. Lead by example and use public sector investments in public buildings to accelerate demand and innovation

The federal government owns or occupies over 27 million square meters of floor space, providing opportunities to model the pathway to deep emissions reductions across a range of building types and regions. Public projects that showcase nearly zero energy design at little or no incremental cost should be identified and prioritized. Leading by example also sends a clear sign of commitment to the overall vision. A national plan should include:

- 5.1. Requiring benchmarking and disclosure of public building performance.
- 5.2. Requiring new publicly-owned buildings to be built to nearly zero energy, effective in 2017.
- 5.3. Upgrade public buildings through deep energy retrofits (>30% energy reduction) at a rate that reduces total federal building emissions by 30% by 2030.

Canada has an important opportunity to transform the built environment and transition to a low-carbon future, while enhancing the performance and liveability of Canadian homes and businesses. To truly have a chance to meet our Paris commitments, individuals and companies need support to implement energy efficient practices at work and at home. We encourage the federal government to take advantage of this opportunity by taking strong action in the building sector. We must collectively act now, and we must collectively be bold and ambitious.

Sincerely,

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