Viceregal Patron: Her Excellency the Right Honourable Julie Payette C.C., C.M.M., C.O.M., C.Q., C.D., Governor General of Canada Patronne vice-royale: Son Excellence la très honorable Julie Payette C.C., C.M.M., C.O.M., C.Q., C.D., Gouverneure générale du Canada

New Federal Climate Action Plan – A Great Start, But Needs Stronger Emphasis on Building Reuse

January 21, 2021

The federal government's much-awaited green plan – A Healthy Environment and A Healthy Economy: Canada's Strengthened Climate Plan to Create Jobs and Support People, Communities and the Planet – was released on December 11th. While the Plan outlines substantial funding to improve building energy performance and emphasizes greening the building material supply chain, it could do more to quickly increase building reuse and slow demolition. Capitalizing on the embodied energy and materials in existing buildings needs to be recognized as an indispensable tool for reaching Canada's 2030 climate emergency targets. A new National Trust report - Making Reuse the New Normal: Accelerating the Reuse and Retrofit of Canada's Built Environment – outlines the climate action advantages of building reuse and itemizes current barriers.

Here are some of the aspects of the federal plan that the National Trust will be exploring further and bring to the attention of federal officials in the coming months:

- Look Beyond Operating Emissions and Capitalize on the Avoided Carbon/Embodied Energy of Existing Buildings -The Plan emphases reducing the operating energy of buildings which account for 13% of Canada's greenhouse gas emissions (11). But a further emphasis should be on building reuse over "green" new construction. The greenest building is the one already standing, because its reuse capitalizes on resources already expended and avoids the carbon generated by new construction, including the processing and transportation of new materials. The House of Commons Environment Committee Report, <u>Better Building for a Low-Carbon Future</u> (2018) recommended that "the federal government take steps to recognize the value of embedded carbon in existing construction."
- <u>Greening the Building Supply Chain</u> The federal plan outlines the need to develop a "robust, low-emissions building materials supply chain to ensure Canadian, locally-sourced products are available"(14). Arguably, the greenest solution of all would be to follow the 5 Rs (Refuse, Reduce, Reuse, Repair, Recycle... and only then Replace) and not use new materials at all. Canada needs a stronger building reuse supply chain of ideas to help building owners and users "reinvent," not demolish, existing structures.
- <u>Keep Two Billion Trees in Wilderness Areas</u> A key action of the federal plan involves planting 2 billion trees (54). There is the opportunity to double the impact, however, by reusing existing buildings and not cutting down two billion mature trees a carbon sink remains intact and tremendous ecology disruption is avoided. Canada landfills an estimated 1,391,300 tonnes of wood CRD waste each year, a large percentage of it precious old-growth lumber from demolished older homes and buildings.

- Smart Retrofits Needed The Plan states the federal government will, "Continue to work with provincial and territorial governments to develop a new model "retrofit" code for existing buildings by 2022, with the goal... to have this code in place by 2025" (14). Ill-considered retrofits may do more long-term damage than good to existing buildings. Retrofit codes need to build on the heritage conservation principle of minimal intervention and building-specific solutions to achieve stronger carbon emission avoidance and maximize lifecycle benefits.
- <u>Building Reuse</u> and the <u>True Green Jobs of Tomorrow</u> The Plan notes: "Investments in home and building retrofits will spark a wave of new jobs and careers. This means more local jobs in small and medium-sized businesses installing more energy efficient heating and cooling equipment and insulation, work for architects and engineers designing new net-zero buildings, and increased demand for energy auditors in communities across Canada" (11). The next wave of "green" worker/professional needs to be skilled in building reuse to ensure maximum carbon reduction impact. These jobs will contribute more to local economies than new construction which relies heavily on imported materials and technologies.

National Trust intern Shannon Bateman (Thunder Bay, ON) is collaborating with the Climate Heritage Network 's Working Group 3: Making the Case for Building Reuse as Greenhouse

Gas Mitigation Pathway to create climate heritage communications tools and materials for COP26 (Glasgow November 2021) and the general public. If you would like to be more involved in these and other National Trust climate heritage action efforts, please contact Chris Wiebe cwiebe@nationaltrustcanada.ca