

RENEWABLE ENERGY AND ENERGY EFFICIENCY

Renewable Energy

The Green Budget Coalition recommends that the Government of Canada renew funding of \$1 billion annually to Natural Resources Canada for the Clean Energy Fund to finance renewable energy demonstration projects, and to fund renewable energy research, deployment and transmission across the country.

Investment required:

For 2017/18: \$1 billion
Ongoing: \$1 billion/year for 4 years

Background and Rationale

In Budget 2016, the federal government committed to fund green infrastructure projects as part of an historic 10-year infrastructure investment plan. However, investment in modernizing Canada's electricity grid to get the most out of our country's resources and limit climate-altering carbon emissions remains lacking. By providing funding for clean electricity generation, interconnection of provincial electricity grids, energy storage, the electrification of end uses, and community-scale renewable energy projects, the government of Canada can grow the middle class, provide meaningful outcomes to benefit First Nation's communities, strengthen Canada's economy, and make significant progress toward achieving Canada's GHG emissions reduction targets.

In 2010 the Government of Canada committed \$12 million over five years to the PEI-based Wind Energy Institute of Canada to support research into renewable energy and the creation of a small wind farm³³. As the need for renewable energy solutions grows across the country in accordance with the increasingly ambitious emissions reductions targets called for by the Paris Agreement, independent, not-for-profit renewable energy research initiatives of this kind have a key role to play in driving Canada's clean energy transition.

The Government of Canada must seize the opportunity now to fund research organizations and initiatives across the country to make optimal use of Canada's diverse and abundant clean energy resources. These investments could support the study of solar power in the Alberta, energy storage in Saskatchewan, and geothermal energy in B.C., to cite only a few examples.

Investing in renewable energy at the local level would not only help reduce Canada's greenhouse gas emissions, but would also provide jobs and investment opportunities for Canadians in remote areas, and assist in the phase-out of

fossil fuel-based electricity generation. The Government of Canada can support community-scale renewable energy projects by expanding access to federal grants for demonstration projects. Previous investments by the federal government in this area have made a meaningful difference in communities like the Cowessess First Nation in Saskatchewan, where nearly half of the community's \$5.5 million wind generation and energy storage project was funded by Natural Resources Canada's Clean Energy Fund³⁴.

In instances where funds can be directed to off-grid communities, renewable energy can reduce GHG emissions by significantly reducing the need to regularly burn diesel for power. In instances where local projects can feed clean energy into the electricity grid, security of supply is enhanced, and participating communities may be eligible for economic returns from feed-in-tariffs or net-metering programs.

To complement small-scale renewable energy projects and leverage the growth of renewable energy in Canada, the federal government must also invest in enhancing interconnection of provincial electricity grids³⁵. A major obstacle to providing Canadians with low-cost, low-emissions energy is the present lack of infrastructure for transmitting surplus electricity to markets outside the province where it is generated. Allowing responsibly developed hydropower resources in B.C. and Manitoba to support a transition away from coal power in Alberta and Saskatchewan, for example, would accelerate the reduction of Canada's total GHG emissions, enhance economic productivity in the exporting provinces, and provide substantial public health and environmental benefits for hydroelectricity importers. Building and maintaining the infrastructure needed to support this exchange of electricity would create jobs, expand utilities' access to markets, and enhance the security and sustainability of Canada's energy supply.

33 The Guardian. August 20, 2010. <http://www.theguardian.pe.ca/News/Local/2010-08-20/article-1688066/12-million-project-will-study-the-storage-of-wind-power/1>

34 Natural Resources Canada. <http://www.nrcan.gc.ca/energy/funding/current-funding-programs/cef/4983>

35 Trottier Energy Futures Project. 2016. <http://www.davidsuzuki.org/publications/downloads/2016/Trottier-Energy-Futures-Project-March31.pdf>

Energy Efficiency

To support energy efficiency, the Green Budget Coalition recommends that the Government of Canada provide \$400 million per year for the next five years to re-establish an energy efficiency home retrofit program, similar to the ecoENERGY Retrofit program, starting with the north and low income housing.

Investment required:

For 2017/18: \$400 million
Ongoing: \$400 million/year for 5 years

Background and Rationale

Buildings account for 12 percent of Canada's total GHG emissions³⁶, largely due to the use of natural gas for heating and cooling, and the use of outdated and inefficient insulation materials.

The federal ecoENERGY Retrofit program, introduced in April 2007, provided homeowners and commercial landlords with grants of up to \$5,000 toward renovations targeted at improving the energy efficiency of their properties. The program was discontinued in 2012, well before its \$400 million budget was fully allocated³⁷. Re-establishing a similar program would create jobs, reduce GHG emissions, and put money back into the pockets of Canadians – both at the time of reimbursement for renovations, and for years to come as they reduce their energy consumption.

Contact

Steve Kux

Climate Change & Energy Policy Analyst
David Suzuki Foundation
skux@davidsuzuki.org

³⁶ Environment and Climate Change Canada. <https://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=F60DB708-1>

³⁷ Toronto Star. January 30, 2012. https://www.thestar.com/news/canada/2012/01/30/federal_government_pulls_plug_on_ecoenergy_retrofit_program.html