

CLEAN ENERGY DEPLOYMENT IN INDIGENOUS COMMUNITIES

It is imperative that Canada's Indigenous Peoples share the economic and social benefits of the nation's transition to a low-carbon future. The Green Budget Coalition encourages Indigenous and Northern Affairs Canada, with the support of other Ministries including Natural Resources Canada and Environment and Climate Change Canada, to prioritize the deployment of renewable energy in northern and remote Indigenous communities that currently depend on expensive and polluting diesel electricity generation. This would be in alignment with the *Leaders' Statement on a North American Climate, Clean Energy, and Environment Partnership*, and the federal government's stated commitments to taking action on climate change and improving the economic and social wellbeing of Canada's Indigenous communities. The opportunities are significant, especially in the face of a federal price on carbon and fluctuating import prices and long-term availability of diesel fuel.

Reducing diesel-dependence in these communities results in a number of benefits, including improved air quality, increased energy security, job creation, Indigenous entrepreneurship and equity participation in clean energy projects, cost savings which can then be directed to other economic development opportunities, and a reduction in greenhouse gas emissions.

The Green Budget Coalition is therefore supportive of the recent submission from the Assembly of First Nations (AFN) to the Clean Tech working group of the Pan-Canadian Framework on Climate Change, which called for **'A Trifecta of First Nations Greenhouse Gas Reduction Targeted - Sustainable Infrastructure-Oriented Funds'** in the range of \$1.4 billion - \$2.3 billion over 10 years. The proposed funds would be utilized to reduce diesel in 140 Indigenous Northern & remote off-grid communities by 50% using a suite of tools including infrastructure investments. This AFN recommendation is consistent with the GBC's previous recommendations for a targeted renewable energy fund for Northern and remote communities, paired with residential and commercial energy efficiency incentives.

Spotlight on Arctic Indigenous Communities

Indigenous communities in the Arctic face unique challenges due mainly to differences in weather conditions and governance structures.

At WWF-Canada's Arctic Renewable Energy Summit in Iqaluit (Sept 15-17, 2016), the Waterloo Institute of Sustainable Energy presented the findings of a recent

study that identified the Nunavut communities of Iqaluit, Sanikiluaq, Rankin Inlet, Arviat and Baker Lake as among those communities where hybridized electricity, including wind and solar energy, is projected to be less expensive than using diesel alone

For instance, in Arviat close to 60 percent renewable energy penetration will result in a cost reduction of approximately \$2.5-million over 10 years (approximately 10 percent savings, in terms of overall costs) and an almost 40 percent reduction in diesel use. In Sanikiluaq, wind and solar energy could provide 50 percent of the community's energy needs and lead to a 35 percent reduction in diesel use, resulting in a projection of close to \$2 million in savings over 10 years (taking into account the cost of maintenance, transportation and installation of new renewable energy technologies).

The Summit also highlighted Alaska's success in deploying community-scale renewable energy systems via the creation of a Renewable Energy Grant Fund. This fund, since its creation by the Government of Alaska in 2008, has appropriated \$259 million USD for 287 qualifying projects. In 2015, 54 projects displaced an estimated 22 million gallons of diesel fuel worth \$61 million USD. The amount of displaced diesel is anticipated to increase to 30 million gallons in 2016 as new projects are completed.³⁸

Based on the Alaskan experience, the GBC recommends the Government of Canada create a Canadian Arctic Renewable Energy Fund (AREF) of \$840 million CAD over 14 years, or \$60 million CAD per year. Such a fund will enable a 40% reduction in diesel consumption from the electricity generation sector in 117 Arctic indigenous communities by 2030.

The Arctic Renewable Energy Fund should support:

- Reconnaissance and feasibility studies
- Design and construction projects covering a wide range of technologies, including, most significantly, high penetration wind-solar-battery integration
- Funding (grants, loans and loan guarantees) for capital expenditures of wind-solar-battery integration up to 50% of the existing load.
- Funding for human and local capacity building. Training local people to ensure newly deployed renewable energy systems are maintained and remain operational is crucially important.

³⁸ Renewable Energy Atlas of Alaska, Alaska Energy Authority. April 2016.

Providing funded training opportunities will enhance direct benefits to communities through the creation of local employment opportunities.

The AREF fund will enable investment into renewable and clean energy, which will not only help northern remote indigenous communities mitigate climate change but also save millions of dollars which can be redirected towards other economic development opportunities.

Investment Required

For 2017/18: \$60 million

For ongoing: \$60 million/year over 13 years

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