WWF Canada’s renewable energy projects in the Arctic

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Abstract: Nunavut relies on diesel for 100% of its energy needs—heating, electricity, and transportation. The reliance on diesel has provided a stable source of energy, but at a high cost. Shipping and storing enough diesel for a year’s worth of energy is logistically difficult, risks severe environmental consequences in the event of a spill, and is expensive. WWF Canada’s position as the only national ENGO with a full-time presence in Nunavut gives us a unique ability to engage on environmental initiatives in a way that works for communities. WWF has a two-pronged approach to its work: high level research projects that investigate barriers to renewable energy and aim at changing policy; and real-world projects that meet community needs for energy and protect the environment. Dr. Lenio will present WWF’s work on barriers to renewable energy projects, and high-level pre-feasibility studies on how renewable energy can be incorporated into Nunavut’s 25 remote microgrids. She will also share progress on current green energy projects WWF is assisting with in Rankin Inlet and Gjoa Haven.

Bio: Dr. Martha Lenio leads WWF Canada’s habitat-friendly renewable energy work in the Arctic. She has been working in the renewable energy industry in a variety of ways for over 15 years. Dr. Lenio has a BASc in Mechanical Engineering from the University of Waterloo, and a PhD in Photovoltaic Engineering from the University of New South Wales. She has worked in sustainable building design (Enermodal Engineering), PV R&D (REC and Sunpreme), solar consulting (Mars Green Consulting), education (University of New South Wales), and is involved in a number of renewable energy non profits and boards (Lake of Bays Renewable Energy Co-op, Climate Action Waterloo Region, the Arctic Renewables Society).