

NRCan, Renewable & Electrical Energy Division

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Transmitted to: shawn.mccallum@canada.ca and michael.paunescu@canada.ca

19 June, 2017

Dear Mr McCallum and Mr Paunescu,

**RE: Feedback from CanSIA on the design of NRCan's "Reducing the Reliance on Diesel Fuel
for Electricity in Canada's Remote Communities Program" (RRD)**

This letter provides feedback from the Canadian Solar Industries Association (CanSIA) in follow-up to your discussion with industry experts and stakeholders on 6 June, 2017 with regard to the development of Natural Resources Canada (NRCan)'s \$220 million Reducing the Reliance on Diesel Fuel for Electricity in Canada's Remote Communities Program" (RRD) announced in Budget 2017. We understand that the program is intended to reduce the reliance on diesel fuel of a number of the approximately 200 Northern and remote communities by supporting clean, renewable energy infrastructure in communities not currently connected to the electrical grid nor to the piped natural gas network that are permanent settlements with at least 10 dwellings.

Feedback is presented in alignment with the guiding questions presented in the slide deck NRCan (June 2017) "Reducing the Reliance on Diesel Fuel for Electricity in Canada's Remote Communities".

Q1a) What Renewable Energy Technologies would most benefit from the program?

Solar electricity generation and heating would benefit from this program. Eligible costs for support should include auxiliary equipment (i.e. storage, controls, micro-grid) and electric vehicle charging infrastructure that enable increased levels of diesel displacement than would be the case in their absence.

Q1b) Would setting a minimum/maximum size for project or application be helpful?

CanSIA does not believe that a minimum/maximum size for project or application would be appropriate given the diversity of the communities that will participate in the program. Community need will define optimal solutions. However, NRCAN may find value in establishing a minimum threshold for expected lifetime diesel displaced by the project and a maximum threshold for the administrative diesel displacement cost (i.e. amount of program funding requested per expected lifetime diesel displacement) of a project. This would ensure that projects proposed are impactful and cost-effective.

Q2 What eligible recipients or proponents should be eligible to apply for the program?

CanSIA recommends that any combination of legal entities incorporated in Canada, Indigenous and non-Indigenous Communities, Independent Power Producers and local electric utilities should be able to be both an applicant to the program, recipient of funding from the program and/or be minority, majority or exclusive owner of the resultant assets. By designing the program in this way, it will ensure the broadest possible participation from Communities by not excluding those without capital or the technical expertise to develop projects without partnership with other entities. We understand that local economic benefits are desired and that a financial stake for the local Community in the project can ensure greater success. However, mandated equity ownership increases the cost of capital and restricts participation from communities with limited capital. Alternative approaches to the realization of financial benefit for the Community should be permitted in instances that equity participation is either not possible or desired.

Q3a) What types of RET projects should be eligible to apply?

Remote and Northern Communities frequently require multiple generation technologies combined with batteries and micro-grids to maximize diesel displacement and make best use of the resources available locally.

For this reason, CanSIA recommends that multiple hybrid and integrated solutions be permitted and that alignment between Indigenous and Northern Affairs Canada diesel generator replacement timelines and funding is ensured to maximize the diesel displacement that can be achieved as renewable and non-renewable investments are made.

Aggregation of these projects can help to reduce costs through economies-of-scale, risk hedging and lowering costs of capital. For this reason, CanSIA recommends that the number of projects per proponent is not limited and that instead, those projects are evaluated individually based on their merits alongside all others proposed.

Q3b) What would the lead time for these projects be?

Many simple solar and/or storage and micro-grids projects could be complete by the end of the following construction season. More complex projects with greater levels of hybridization and integration may take longer.

Q4 How should the federal incentive be structured?

Upfront capital cost incentives early in the development process will enable the greatest participation from Communities as the financial hurdles can most easily be overcome. However, this approach will also result in the greatest amount of risk that projects do not perform as expected. A short-term performance incentive (i.e. 3 – 5 years) will result in the need for a price (i.e. \$/kWh) that is higher than is the actual cost and could lead to misunderstanding and criticism from public commentators. Furthermore, in projects that deploy storage and micro-grids, performance incentives (i.e. on a per kWh basis) will make less sense.

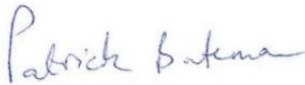
For these reasons, CanSIA recommends that a capital cost incentive at project milestones is adopted and that they be tied in part to the expected level of diesel displacement that the project is modelled to achieve and is demonstrated to achieve in its first several years of operation. It is critical that the funding profile does not force construction and logistics to take place in non-optimal times i.e. be flexible with deadlines for milestones to account for realities of building infrastructure in the North.

CanSIA also recommends that NRCan align with offerings from the Canadian Infrastructure Bank so that Proponents can access low cost finance to leverage more private sector investment and maximize the bang-for-the-buck achieved with the \$220 million.

Finally, CanSIA recommends that application evaluation criteria provide priority points for projects that meet a specified level of community benefit. This enables community benefit to be structured in a variety of ways that may suit the unique situation in the community while ensuring that the best projects success and not the most lucrative.

Thank you for your consideration. Please do not hesitate to contact me would you have any comments or queries.

Best regards,



Patrick Bateman

Director of Policy & Market Development

Canadian Solar Industries Association (CanSIA)