

### ***OPENING STATEMENT***

International research has shown that successful development of renewable energy sources anywhere in the world is dependent on sound policies enhanced by appropriate regulatory and other supporting market mechanisms. Policy drives innovation. The Yukon government's policy development supporting intermittent and renewable energy deployment and integration is underway but still in its infancy. A micro-generation program is in effect and an Independent Power Producer Policy is expected to be completed in late 2018.

#### *Background*

Yukon's electrical supply network is made up of one main islanded grid (not connected to any other North American power grids) and five smaller community grids not connected to the main Yukon grid. The main grid, although mainly served by legacy hydro plants, now requires increasing amounts of fossil fuel (LNG and diesel) generation to meet winter peak loads. The Yukon Bureau of Statistics is forecasting a rate of population growth of about 1.4% per year from 2016 to 2030 (Information sheet No. 66 issued February 2017). With a new mining load planned to commence in 2019 (plus other advancing mining projects) and the spin-off economic development that will result there will be further increases in LNG and diesel electricity generation on the main grid absent new renewable energy supplies. The five small community grids presently rely almost entirely of diesel generators.

The Yukon Chamber of Commerce and its Energy Committee has studied the Yukon's energy situation and analyzed the requirement for fossil fuels. This extensive work has led to the development and adoption by the Yukon Chamber of Commerce of two policies: ***Yukon Domestic (in Territory) Energy Production Policy*** and ***Carbon Pricing Policy***. Both resolutions address, among other things, the use of renewable energy to displace fossil fuels and identify various potential energy sources, including intermittent sources such as wind, which provides most of its energy in winter, and solar. The reduction of fossil fuel use for space heating and transportation will trend to increase the use pattern of electricity, particularly in winter, leading to the need for additional electrical generation over time.

Furthermore, the use of intermittent or seasonal energy sources, including run-of-river hydro, wind and solar, for a significant portion of our electrical energy supply will require both short-term and longer-term energy storage and possibly other innovative solutions. We therefore believe that it is important to support development and innovation in energy storage technologies.

The private sector and the Yukon business community can help provide required innovative but practical and cost-effective solutions but will require an encouraging policy environment. Government regulations, often outdated, must align with such policies. The private sector will also benefit from clear incentives in order to invest with confidence, i.e. that rates of return correspond to the benefits of delivering practical renewable energy solutions. The private sector should not bear an inordinate amount of risk. The creation and implementation of a renewable energy policy is the first step; a regulatory

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framework, combined with financing models, must be established to achieve the long-term public benefits expected by the implementation of renewable energy policies.

## *Conclusion*

Yukon has renewable resources that can be developed as complementary sources of electrical energy supply to Yukon's existing main and community electrical grids. The private sector and the business community can be significant contributors to the development of the innovations required to utilize these sources cost effectively.

This proposed policy will complement and support Yukon Chamber of Commerce's existing ***Yukon Domestic (in Territory) energy Production Policy*** and ***Carbon Pricing Policy***.

## ***THE CHAMBER RECOMMENDS***

THE CHAMBER RECOMMENDS that the Yukon Government:

1. Develops policies that support the involvement of the business community in the development of innovative technologies, approaches and projects using renewable energy. Projects could include the deployment, integration and storage of intermittent and seasonal energy supplies into the existing main power grid and the community power grids;
2. Updates the regulatory framework(s) to align with the proposed renewable energy policies; and
3. Supports these policies with financing models that reduce the risk to the business community to a level that enables their participation in these efforts.

Resolution adopted: 18/05/2018