

April 13, 2017

The Honourable Catherine McKenna
Minister of Environment and Climate Change
Transmitted electronically to: catherine.mckenna@canada.ca

Dear Minister McKenna,

RE: Maximizing Jobs, Investment and Emissions Displacement from 100% Renewable by 2025 Commitment

The Canadian Solar Industries Association (CanSIA)¹ and the Canadian Wind Energy Association (CanWEA)² applaud the Federal Government's commitment to becoming powered 100% by renewable electricity by 2025. Recognizing that the Federal Government will now be considering potential mechanisms to enable the implementation of this ambitious but achievable commitment, CanSIA and CanWEA commissioned Power Advisory LLC, a leading North American management consulting firm that specializes in electricity sector matters and solutions, to undertake an assessment of potential policy and procurement options for meeting this commitment. Their final report is enclosed for your reference. The remainder of this letter presents some of the key findings and our recommendations for your reference.

- In committing to 100% renewable electricity by 2025, the Federal Government joins the growing ranks of governments and corporations setting a public goal to procure 100% of their electricity from renewable sources of energy by a specified year. Other Canadian entities who have made this commitment include the Government of Alberta, TD Bank Group and the City of Vancouver. There are more than eighty-eight corporations from around the world listed in the "RE100" initiative including household names such as Apple, Ikea and Coca Cola³. In the United States, twenty-five cities have also now made the commitment⁴.
- The way in which commitments to 100% renewable electricity are interpreted vary from entity to entity. In some instances, the renewable electricity is direct from a renewable generator (i.e. "bundled"), while in others the consumer can purchase the electricity from a non-renewable generator and the equivalent amount of "renewable attributes" from another (i.e. "unbundled"). The definition of the commitment could mean that the entity nets their supply and demand over a period of time (i.e. may consume fossil fuels in real-time but compensates to ensure that renewable energy sources meets equal to or greater than 100% of their demand averaged over a year) or that they literally consume only

¹ CanSIA is the national trade association that represents the solar energy industry throughout Canada and has, since 1992, worked to develop a strong, efficient, ethical and professional Canadian solar energy industry with capacity to provide innovative solar energy solutions and to play a major role in the global transition to a sustainable, clean energy future.

² CanWEA is the national association of companies participating in Canada's wind energy market. Our 250+ members are companies involved in the development, ownership and operation of wind energy projects, manufacturers of wind turbines and their components, and a broad range of service providers to the wind energy industry.

³ RE100 is a collaborative, global initiative of influential businesses committed to 100% renewable electricity, working to massively increase demand for - and delivery of - renewable energy. See: www.there100.org

⁴ Sierra Club (March 21, 2017) "25th US City commits to 100% Renewable Energy"

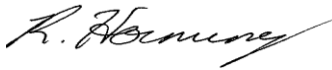
renewable electricity by matching their supply and demand exactly in real-time. These details affect costs, amount of emissions displaced and resultant economic development such as job creation and investment.

- ***CanSIA and CanWEA recommend the commitment be interpreted by the Federal Government such that by 2025: i) the amount of renewable electricity and/or attributes procured by the Federal Government equals or exceeds the amount of electricity consumed on an annual basis; and that ii) the supply is procured only from non-incumbent generation facilities. These two interpretations will maximize emissions displacement, job creation and private sector investment while managing costs.***
- The success of Alberta's Climate Leadership Plan is arguably the single largest factor in determining Canada's progress toward our national 30% by 2030 greenhouse gas emission reduction target. In addition, Alberta is also the only Canadian jurisdiction with a retail electricity market structure that permits bi-lateral power purchase agreements with utility-scale independent power producers which are the most direct and effective means for an electricity consumer to go 100% renewable. ***For these reasons, CanSIA and CanWEA recommend that the Federal Government prioritize the creation and execution of a schedule for the competitive procurement of renewable electricity from new generation facilities in Alberta to provide the equivalent of the bulk of their electricity need and maximize the resulting greenhouse gas emission reductions. Aligning this procurement schedule with the province's Renewable Electricity Program (REP) and other initiatives will be critical and for this reason should be established and communicated as quickly as possible.***
- Electricity customers are permitted to generate renewable electricity at a small-scale to meet their own needs in every jurisdiction across Canada. The facilities are visible and help to raise awareness and instill pride in those who pass by them on a regular basis. As the Federal Government develops the strategy to meet this commitment, ***CanSIA and CanWEA also recommend that a feasibility assessment is undertaken and investments made to maximize the use of on-site and near-site renewable electricity generation across their building stock over time subject to siting considerations.***
- There are structural and regulatory challenges for a major power consumer to go 100% Renewable in every Canadian electricity market by contracting directly with a renewable generator (except Alberta). ***For this reason, CanSIA and CanWEA recommend that the Federal Government initiate as soon as possible a dialogue with provinces with respect to market changes required to implement this federal commitment so that when the Federal Government leads by example, others may follow your lead.*** There is a need to start those discussions promptly because in order to meet the 2025 target, some of the electricity would need to be procured by 2019. If discussions in certain provincial jurisdictions are unsuccessful, the Federal Government could then opt to contract with generators in other provincial jurisdictions that have the necessary electricity market structure to supply the needed contracts and enable the Federal Government to become 100% renewably powered.
- By meeting the commitment of 100% renewable electricity from new generation facilities, the nine Federal Sustainable Development Strategy real property departments (DND, PSPC, AAFC, TC, DFO, PC, NRCan, ECCC and CBSA) alone could give rise to more than 2 TWh of new zero-carbon electricity

produced annually in Canada. This would represent approximately 700 MW of wind energy capacity, 1,600 MW of solar energy capacity, or an equivalent mix from both sources. It would displace significant greenhouse gas emissions (GHG), create thousands of full-time equivalent jobs and attract more than \$2.3 billion of private sector capital investment at the provincial and territorial level across Canada.

We will be following up with a request to meet with you to discuss these recommendations and the contents of the enclosed report and thank you for your consideration.

Best regards,



Robert Hornung
President
Canadian Wind Energy Association



John Gorman
President & CEO
Canadian Solar Industries Association

*cc: The Right Honourable Justin Trudeau, Prime Minister
The Honourable Jim Carr, Minister of Natural Resources
The Honourable Scott Brison, President of the Treasury Board
The Honourable Judy Foote, Minister of Public Services and Procurement*

Enclosed: Power Advisory LLC (2017) "100% Renewable Electricity for Federal Buildings by 2025: Assessment of Policy & Procurement Options for Solar and Wind Energy"

