CanSIA
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September 26, 2019

The Honourable Gordon Wilson
Minister of Environment

Minister Wilson:

I am writing on behalf of the Canadian Solar Industries Association (CanSIA) regarding the Sustainable Prosperity Act consultation.

CanSIA commends the Province for establishing the Environmental Goals and Sustainable Prosperities Act (EGSPA) in 2007 – one of the most progressive pieces of legislation in the country.

CanSIA is supportive of the legislative change from EGSPA to the Sustainable Prosperity Act as the proposed new legislation addresses a variety of important issues in addition to environmental targets.

Over the last ten years under EGSPA, Nova Scotia has done great work in expanding its energy efficiency efforts, developing the renewable electricity sector, and significantly reducing GHG emissions associated with our electricity grid.

EGSPA set 2020 targets for both GHG emissions (10% below 1990 levels by 2020) and renewables (40% by 2020). The Province should be commended for successfully achieving their GHG reduction target in 2014. Nova Scotia continues to aggressively reduce its GHGs as the province is now at 18% below 1990 levels.[1] The 40% renewable energy target will be achieved by 2020 as a result of additional hydro power provided by the Maritime Link through Newfoundland and Labrador.

These are important milestones, but more benefits can be achieved from further reducing our reliance on fossil fuel generation and imported energy. Establishing more aggressive targets will ensure Nova Scotia's contribution to Canada's national emissions reductions committed under the Paris Agreement.

If Nova Scotia is going to tackle the climate crisis, an ambitious plan is required — one that includes measurable goals to take action while creating green jobs across the province.

Having the Province set clear GHG reduction and renewable energy targets in legislation is important for a variety of reasons as it:

[1] *Nova Scotia's Cap and Trade Program Regulatory Framework*, 2019, 4.

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- Provides stability and guidance to government, utilities and industry to determine if they are on track to meet the set targets
- Provides employers and investors with market certainty, enabling them to invest in human capital and labour force development
- Nurtures supply-chains
- Helps build the local economy by serving as a job creation tool for small and medium-sized businesses
- Serves to guide the utility in terms of grid planning for small and medium-sized businesses, employers and investors
- Contributes towards cost-effective solar
- Enables customers to access solar PV as way to manage rising electricity costs.

A number of American states have committed to aggressive GHG reduction and renewable energy targets. These include:

- Colorado - 100% renewables by 2040
- California - 100% zero-carbon electricity by 2045
- New York – 100% renewables by 2050; GHG emission reductions to 85% below 1990 levels by 2050 and offset the remaining 15% with measures such as planting forests and capturing carbon for storage underground
- Hawaii – 100% clean energy by 2045
- New Mexico – 100% carbon free by 2045
- Maine – 80% renewables by 2030; 100% renewables by 2050.

In addition, 200 large international commercial and industrial companies have committed to 100% renewable energy by 2050 at the latest. This sector accounts for approximately two-thirds of the world's end-of-use of electricity.[2] Switching this demand to renewables is transforming the global energy market and accelerating the transition to a clean economy. Some of these major companies include Apple, Microsoft, Walmart, Starbucks, IKEA, General Motors and TD.

A recent report produced for CanSIA in April 2019, projected up to 1170 jobs within the Nova Scotia residential solar sector by 2030.[3] This represents a significant economic development opportunity not just within HRM, but in rural communities across the province. Setting new GHG reduction and

[2] RE100. Retrieved from http://there100.org/re100.
[3] CanSIA. *Nova Scotia Residential Solar Market Outlook and Labour Force Study*. April 2019.

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renewable energy targets is crucial in building momentum to grow the solar industry across Nova Scotia.

Solar is now economically viable with generally lower costs than other forms of electricity generation. Evidence of these trends are demonstrated in Lazard's annual Levelized Cost of Energy Analysis which shows a continued decline in the cost of generating electricity from solar and solar plus storage.[4] The cost of utility-scale solar PV installations have decreased by more than 88% over the past nine years to approximately $43/MWh (USD) in 2018.[5]

Within Canada, the Province of Alberta announced in February 2019 three new utility-scale solar electricity facilities totalling 94 MW that will supply the Government of Alberta with 55% of their annual electricity needs. The average contract pricing will be $48.5/MWh (CAD). This is less than the average historical wholesale power pool price paid to natural gas-fired electricity in the province between the years 2008 – 2018.[6]

Setting New 2030 Targets for GHGs, Renewables and Provincial Operations

The Province announced in 2019 as part of its Cap and Trade Program a plan to reduce GHG emissions to 45%-50% below 2005 levels. As a member of the New England Governors and Atlantic Canadian Premiers', there was a collective commitment made in 2015 for regional reductions of 35% to 45% below 1990 levels by 2030. Although an important aspirational measure, this target was not legislated or enforced. Nova Scotia's business-as-usual case for emissions is stated at 46% below 2005 levels, which is about 36% below 1990 levels.[7]

RECOMMENDATION: ***That the Province legislate a 2030 GHG target under the Sustainable Prosperity Act of 50% below 1990 levels.***

Representing about 37% below 2017 levels, this new target would be the most ambitious climate mitigation goal in Canada, placing Nova Scotia back in a leadership position when it comes to action on

[4] Lazard, *Levelized Cost of Energy and Levelized Cost of Storage 2018*. November 2018. Retrieved from http://www.lazard.com/perspective/levelized-cost-of-energy-and-levelized-cost-of-storage-2018/
[5] Community Generation Working Group. *Distribution System Inquiry – AUC Proceeding 24116*, July 17, 2019.
[6] PV Magazine. *Bifacial takes all in Alberta large-scale PV auction, final price cheaper than gas*. Feb. 18, 2019. Retrieved from https://www.pv-magazine.com/2019/02/18/bifacial-takes-all-in-alberta-large-scale-pv-auction-final-price-cheaper-than-gas/
[7] Nova Scotia Business-as-usual Climate Projections. Retrieved from https://climatechange.novascotia.ca/proposed-cap-and-trade-program

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climate change. This target is also in line with keeping global warming below the Paris Agreement's target of 1.5 degrees Celsius.[8]

The Province has not set a new renewable energy target for 2030. As mentioned previously, the province will achieve at least 40% renewables by 2020 through the Maritime Link. While this new hydro source can contribute to a clean, affordable and reliable energy supply, locally sourced renewables can provide a greater benefit to the province through local job creation and strengthening the grid and, as a result, should be prioritized. Significant additional renewables could be achieved by 2030 through increased deployment of wind and solar.

RECOMMENDATION: ***That the Province legislate a 2030 renewable energy target under the Sustainable Prosperity Act of at least 50% from local sources, with a solar set-aside representing at least 5% of total electricity production.***

By setting a 50% target as a floor rather than a ceiling sends an important signal to industry and represents a starting point that the Province can build upon as more renewables are deployed. Solar "set-asides" or "carve-outs" are common in several American states including Maryland, Massachusetts and Minnesota.

Another area where the Province can demonstrate leadership is powering their own operations through renewable energy sources. This would mirror the Federal Government's commitment to power their own operations through 100% renewables by 2025.

CanSIA was extremely supportive of a recent Federal-Provincial agreement that will help the federal government reach its goal of using 100% clean electricity in all federally-owned facilities in Nova Scotia by 2025. It is estimated that projects will need to generate about 100,000 MWh of new renewable electricity - enough to power about 10,000 homes annually. This will result in massive job creation in both the solar and wind energy sectors across the province and will make a substantial contribution towards achieving 2030 provincial GHG and renewable energy targets. To build on this momentum and to create additional jobs in the solar and wind energy sectors, CanSIA recommends the Province undertake a similar strategy to ensure their operations are powered with renewable sources by 2030.

[8] Ecology Action Centre. *Nova Scotia Environmental Goals and Sustainable Prosperity Act: Economic Costs and Benefits for Proposed Goals*. September 2019. 4.

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RECOMMENDATION: ***That the Province legislate under the Sustainable Prosperity Act, that 100% of Provincial operations be powered by renewable energy sources by 2030.***

Achieving these three legislated goals has the potential to positively transform the provincial economy over the next decade. To make these targets a reality, it is critical that the province consult with the local solar and wind industries as well as other key stakeholders across the province.

CanSIA welcomes the opportunity to work with the Province in achieving 2030 targets as set out in the new Sustainable Prosperity Act.

Sincerely,

Lyle Goldberg
Policy and Regulatory Affairs Manager – Nova Scotia
Canadian Solar Industries Association

cc: The Honourable Stephen McNeil, Premier of Nova Scotia
The Honourable Derek Mombourquette, Minister of Energy and Mines
Frances Martin, Deputy Minister of Environment
Simon d'Entremont, Deputy Minister of Energy and Mines