

CanSIA's 2019 Ontario Budget Submission

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Introduction

The Canadian Solar Industries Association (CanSIA) has worked since 1992 as a national trade association to strengthen the Canadian solar industry, ensuring it is a professional, ethical and efficient industry. CanSIA's vision is for solar electricity to be a mainstream energy source and an integral part of Canada's diversified electricity mix. CanSIA is targeting the solar energy industry to be sustainable, with no direct subsidies, and operating in a supportive and stable policy and regulatory environment.

The association's overarching goal is to ensure the industry has the capacity to provide innovative solar energy solutions in Canada and internationally. As such, CanSIA works to facilitate and promote responsible and sustainable growth of solar projects in Canada. The association works on behalf of manufacturers, installers, project developers, engineers, consultants, and a variety of other companies that directly contribute to solar projects in Canada.

Here in Ontario, as an industry, we see the opportunity to effectively deploy solar to:

- 1) Lower electricity bills for Ontarians,
- 2) Protect and create local jobs; and,
- 3) Empower consumers through choice.

CanSIA's vision for solar in Ontario is an affordable source of energy, made so through red-tape reductions, not through incentives and subsidies. Through effective regulations – including private sector driven net-metering – Ontarians could create and consume their own energy, thus spurring local job creation in the skilled trades, while putting the power back in the hands municipalities.

We want to work collaboratively with the Ontario Government to create a more robust and streamlined regulatory framework that will reduce red tape and unlock the power of private equity. As such, this will enhance customer choice while passing savings onto Ontario's consumers.

We see *Budget 2019* as a clear opportunity for this government to make regulatory changes that will empower Ontario home and business owners to make a choice on a cheaper, safer and reliable form of energy. As one example, the previous government put in place bureaucratic



regulations around small-scale solar projects on land that created arbitrary rules and were costly for property owners, especially those located in rural Ontario. These regulations took the power out of the hands of land owners and municipalities and put it into the hands of the Province, creating a costly top-down approach, that is not in the interest of Ontarians. This government has the opportunity to make changes that put more power back in the hands of municipalities, giving them the authority over the siting for both small- and large-scale solar projects.

Crucial Steps Already Taken by the Government of Ontario

In November 2018, the Government of Ontario released the *Made-In-Ontario Environment Plan*, which CanSIA has commended. CanSIA strongly supports the government's plan, which will help drive significant investment in the province's clean technology sector. The plan supports and maintains Ontario's renewable energy cost-competitiveness, creating jobs in the skilled trades. CanSIA knows that solar energy is a core part of this plan, encouraging Ontario businesses to invest in clean technology to stay competitive, while reducing their emissions and energy bills.

The Government's decision to parallel the recently announced federal changes to tax policy and depreciation for clean energy equipment was a significant step by this government to enable businesses to defer income to later years, supporting investments in technologies that produce clean energy.

The creation of the *Ontario Carbon Trust* is another important initiative in the plan supported by CanSIA. The *Trust* incentivizes private sector investment in solar energy, battery storage, electric vehicle charging infrastructure and other clean technology solutions. The benefits of the government's plan will span far beyond just the businesses investing in solar, they will extend throughout our entire economy, while creating good jobs in the skilled trades.

Next Steps in Reducing Red-Tape and Lowering Costs for Ontarians

CanSIA has identified key red tape and regulatory barriers put in place by the previous government that, if removed, will lower the costs of solar to consumers, generators and in reality, the entire system, through a more robust system that reduces red tape, enables customer choice and unlocks the power of private equity.



Net Metering Regulations – Third Party Ownership

Context: The current net metering regulation, O. Reg 541/05, does not clearly indicate or establish guidelines for third-party ownership business models. This has made it extremely difficult for private equity companies to invest in the Ontario marketplace due to the high level of uncertainty, and thus associated risks pertaining to the net metering regulation.

Third-party ownership models are well established in most of the United States, and has led to a reduction in solar energy costs while simultaneously providing greater access to all American homeowners and small business owners who wish to better manage their energy and lower their electricity bills by using solar energy.

Issue: To take advantage of solar energy, a family or business owner is required to self-finance the upfront costs to purchase a solar energy system, or enter into a complex leasing contract arrangement. The current net metering regulation makes solar technology a very exclusive energy option and doesn't allow the majority of Ontarians to participate in the benefits of solar energy to help them lower their electricity bills.

Recommendation: Enhance the current net metering regulations to enable third-party ownership.

Benefit to Ontario: Enabling third-party ownership gives families, farmers and small business owners of all income levels, the opportunity to benefit from solar energy with no upfront investment from themselves, ultimately allowing them to save money on their electricity bills. Clear third-party ownership regulations will encourage the solar industry to create innovative business models, such as bi-lateral power purchase agreements, capital financing, lease-to-own, and other models which drives economic efficiencies, transfers the risk of the system operations and performance to the supplier, and provides customers with greater choice in how they manage and control their energy.

Community Choice Aggregation (e.g., Virtual Net Metering)

Context: Virtual Net Metering (VNM) can take many forms. One popular approach offers customers of all types and sizes with a no upfront investment solution to purchase solar electricity credits without the need to install a solar system on their home, building or property.



For example, this no cost, all-inclusive opportunity would enable a family that rents an apartment or a small business owner that doesn't have a suitable roof for solar to "own" or "subscribe" into a solar VNM project located somewhere else on the grid and reap the benefits of a lower electricity bill. Of note, VNM customer opportunities are increasingly popular in the US which tends to have more private equity driven and transparent electricity markets.

Issue: Although VNM is economically viable, current regulations in Ontario prevent VNM solutions from being implemented.

Recommendation: Implement virtual net metering regulations. Subsequently, target the location of these projects in areas where municipalities approve of them and where they provide the greatest value to the grid and ratepayers.

Furthermore, to implement a VNM billing settlement, changes or upgrades to Local Distribution Company (LDC) IT and billing systems and infrastructure will likely be required. Conveniently, most LDC billing systems are expected to be updated soon and covered through the an LDC's standard OEB rate applications. This provides an excellent opportunity to upgrade billing systems in a cost-effective manner in order to enable VNM bill settlement.

Benefit to Ontario: VNM allows Ontarians of every income level and type, to lower their electricity bills by participating in solar VNM projects that don't have to be located on their home, building or property, and does not require an upfront investment. Furthermore, these projects can be located where municipalities want them and where they provide the most benefit to the grid.

Like net metering regulations that enable third-party ownership, VNM projects attract capital from the private market reducing or eliminating the need for the Province to make generation investments. This reduces the risk to not only Ontario tax payers and ratepayers, but also to VNM customers who do not need to worry about financing, operations or system performance.

One Percent Net Metering Limit

Context: Section 6.7.2 of the *Ontario Distribution Code* permits LDCs to restrict net metered solar energy to one percent (1%) of the distributors peak demand. The code was established using no known criteria by the Ontario Energy Board (OEB) in 2005. Therefore, this is an



arbitrary limit not based on current industry best practices. Solar technology, including invertor and energy storage technology, has advanced greatly providing sophisticated safety, control, monitoring, and other grid stabilizing features. These features, in combination with improved grid system capabilities, allows for net metering limits well beyond the one percent limit in Ontario.

Issue: CanSIA estimates that the net metering limit is fast approaching. Once this limit is reached, customers looking to lower their electricity bills and gain a level of energy independence using solar electricity will be shut out of the grid and thousands of jobs will be lost.

Recommendation: The OEB, as directed by the Ministry of Energy, Northern Development and Mines, should review Section 6.7.2 of the Ontario Distribution Code in consultation with the solar industry and other relevant stakeholders and increase the net metering limit of an LDC's peak demand based on established criteria and industry best practices. Furthermore, distributed generation grid penetration levels should be transparent and made available to the public.

Benefit to Ontario: Today's electricity consumers want energy options to help them control and manage their energy bills and thus they should have a right to connect to the publicly funded grid through net metering. This recommendations will empower more consumers to generate their own electricity to lower their electricity bills, help further stabilize the grid system, leverage private equity to fund and assume risk of generation assets, and protect and create a growing number of local industry jobs across Ontario.

Small-Scale Ground-Mount Siting Restrictions Regulation

Context: The previous government recently amended the O. Reg. 274/18: Siting Restrictions for Renewable Energy Facilities, which came into force on July 1, 2018, making the permitting of small-scale solar projects on land very bureaucratic, arbitrary and costly for property owners, particularly those located in rural Ontario. This regulation took power out of the hands of land owners and municipalities and it into the hands of the Province, instituting a top-down approach.



Furthermore, under O. Reg. 274/18, LDCs are required to collect information about the smallscale ground-mounted solar projects and confirm that these projects comply with siting restrictions. This review is outside the normal scope of expertise for LDCs, whose core business focuses on electricity infrastructure. It is unclear at this time what processes the LDCs will implement to review this information and what the implications may be for reviewing and approving these submissions. Traditionally, small-scale ground-mounted solar projects, up to 500 kW AC, are subject to the Environmental Activity and Sector Registry (EASR) which is a cost and time efficient, proponent driven self-declaration process.

Issue: The newly enacted small-scale ground-mount solar restrictions are bureaucratic and costly. Specifically;

- Solar on residential land, including rural residential, is absolutely prohibited.
- There is an absolute 15-meter setback from commercial property boundaries.
- Solar is prohibited on agricultural land, even small-scale up to 10 kW solar projects.
- A professional surveyor is required for ground mount solar above 10 kW to confirm property boundary setbacks.
- A professional planner is required for ground mount solar above 10 kW to confirm property zoning.

Recommended Solution: The regulations should enact the following changes, specifically;

- The regulation around residential prohibition, the 15-meter setback from the commercial property boundary and preventing up to 10 kW small-scale solar facilities on agricultural land – should not impose restrictions, thus leaving it up to municipalities to develop their own zoning bylaws in line with the needs and desires of the community.
- The professional surveyor requirement for ground mount solar above 10 kW should be removed. Property boundary setbacks should be included in the EASR self-declaration.
- The professional planner requirement for ground mount solar above 10 kW should be removed. Property zoning should be included in the EASR selfdeclaration.

Benefit to Ontario: The EASR, a cost and time efficient, proponent driven self-declaration process, should be the single window regulatory approval process for smaller ground-mounted



solar facilities above 10 kW. Siting solar on residential properties, property boundary setbacks and agricultural land restrictions are best administered at the municipal level, consistent with this Government's mandate to ensure that municipalities regain planning authority over the siting of renewable projects, including both small-scale and large-scale solar projects.

LDC Processes, Costs and Timelines for Customer Connections

Context: There are over 60 Local Distribution Companies (LDCs) in Ontario with diverse customer requirements for solar energy and energy storage connection processes, timelines and costs. Despite timing requirements provided in the Distribution System Code, the time from a Connection Impact Assessment (CIA) application to a customer connection varies significantly across LDCs and projects. As the benefits of solar technology increase and the costs associated with it continue to decline, public interest will grow for this consumer-friendly technology. These consumers require predictability and consistency to further drive down costs and increase certainty to the benefit of customers.

Issue: The processes, timelines and costs requirements for connecting solar energy and energy storage systems to the grid, vary widely across LDCs and projects. Costs for impact assessments, thresholds for requiring and paying for Supervisory Control And Data Acquisition (SCADA) and other protection equipment like a transfer trip, along with other interconnection costs, are but a few examples of service and physical infrastructure costs that vary widely across the province. Currently, LDCs determine the price that customers must pay without any meaningful or effective oversight.

Recommended Solution: Given that the OEB's Advisory Committee on Innovation (ACI) report calls out the need for greater consistency in LDC connections and costs, it is logical to initiate an engagement with LDCs to lead the development of a best practices document. The Ministry of Energy, Northern Development and Mines or the OEB should lead, in cooperation with the solar industry, LDCs and other relevant stakeholders, an initiative to establish a voluntary "Industry Best Practices for Customer Connections". CanSIA sees a voluntary best practices approach, focused on processes, timelines and costs, as the precursor to enhanced standardization in the near future.

Furthermore, CanSIA recommends that LDCs be required to put out to tender these types of connection related services and equipment requirements, in addition to other infrastructure



upgrades, to allow the open market and utilities to compete as opposed to having only the monopolistic LDCs determine the cost. As such, LDCs can provide clear specifications to ensure the safety, security, and reliability of their grid system while providing all bidders with transparent information regarding the project requirements.

Benefit to Ontario: A voluntary "Industry Best Practices for Customer Connections" is an important step towards greater standardization and reduces uncertainty, timelines and costs to the customer and ultimately to all ratepayers.

Furthermore, requiring LDCs to put out to tender the connection related services and equipment requirements will increase competition, lower costs to customers, lower costs to all ratepayers, and improve customer service.

Conclusion

Now is the time to move forward. As a province we can look to the West to see an example of a system in Saskatchewan, that is providing SaskPower customers with choice through the creation of the Power Generation Partner Program (PGPP). The PGPP allows customers to develop generation projects, including solar, to sell electricity to SaskPower. There are plans in place to announce an updated net-metering program where customers can generate renewable electricity to offset their own power use.

Ontario has already taken major steps forward with the Environment Plan in supporting businesses that invest in clean technology and lower energy bills. Ontario's solar industry continues to urge the government to go further – cutting the red tape that is preventing individual homeowners from accessing third-party financing to install solar on their rooftops. With no subsidy from government, these changes empower families and homeowners to lower their energy bills and will create thousands of new jobs in the skilled trades.

