



1550 Kingston Road, Suite 219  
Pickering, Ontario L1V 1C3  
Telephone: (905) 839-0073  
[www.oci-aic.org](http://www.oci-aic.org)

December 16, 2015

Melissa Ollevier  
Senior Policy Advisor  
Ministry of the Environment and Climate Change  
77 Wellesley Street West  
Floor 10, Ferguson Block  
Toronto, Ontario  
M7A 2T5  
**e-mail: melissa.ollevier@ontario.ca**

**RE: EBR 012-5666**

*Any approach to combatting climate change in the most effective and efficient way for Ontarians and that allows Ontario to “win” on the global environmental leadership stage must recognize the value and advantages of leveraging Ontario’s world class endowment in nuclear energy, science, and technology.*

Dear Ms. Ollevier:

The Organization of Canadian Nuclear Industries (OCI) welcomes the Ontario Government’s initiative to place “climate change” at the top of the province’s agenda.

OCI is a trade association representing 180 leading Canadian private sector companies, located mainly in Ontario, that design and manufacture precision equipment and systems for nuclear power plants in Canada and offshore. Our Ontario nuclear suppliers employ more than 10,000 highly skilled engineers and manufacturing trades people who support the safe and reliable operation of Ontario’s nuclear power plants. The overall Canadian nuclear industry directly employs more than 30,000 people in Canada with more than 22,000 of these quality and sustainable jobs in Ontario – where the nuclear utilities and the large and smaller equipment manufacturers often form the economic backbone of their host communities.

OCI supports Ontario’s Cap and Trade program that will put a price on carbon emissions while encouraging energy consumers to seek low carbon ways to meet their energy needs. Nuclear energy was the primary instrument that allowed Ontario to retire its fleet of coal fired generating stations and become one of the lowest GHG intensity electricity systems in the world. We applaud the Government’s recent announcement on the agreement with Bruce Power for the refurbishment and life extension of six reactors at the Bruce Site. We also look forward to an announcement on the Darlington refurbishment in early 2016. We believe that the long term operation of Ontario’s refurbished nuclear fleet combined with possible future additions to the nuclear fleet will be able to enable the electrification of up to 80% of energy consumption in Ontario that is currently based on fossil fuels. This “electrification strategy” will be the fundamental enabler of achieving the 2050 targets.

Ontario’s 18 operating CANDU nuclear power plants provided 62% of Ontario’s total electrical energy use in 2014 – by far the largest portion of Ontario’s carbon-free electricity generation. Increasing production of reliable, clean and low cost electricity from the province’s nuclear units enabled the shutdown of all of Ontario’s coal units by 2014. The stable nuclear generation base has also enabled Ontario to bring intermittent renewable sources like wind and solar onto the grid without major impacts on system reliability and average power cost.

OCI in partnership with the Power Workers Union and SNC-Lavalin-Candu engaged Marc Brouillette of Strategic Policy Economics (Strapolec) to review the November 2015 Cap and Trade Program Design Options consultation paper and to assist us in formulating constructive nuclear industry inputs to the final program design. We believe that the 76 detailed recommendations in the attached report deserve consideration by the Ministry of the Environment and Climate Change (MOECC) in its implementation of Ontario's Cap and Trade Program that will put a limit on Ontario's greenhouse gas (GHG) pollution. The five main sections and sub-sections of the report correlate with the 13 Program Design Options in the Cap and Trade Program consultation paper.

I would like to emphasize eight key findings/recommendations in my cover letter:

1. Ontario has a very different generation mix than Quebec, Manitoba and California. Our nuclear generation assets should be leveraged to help Ontario achieve its GHG emission targets while supporting and creating new sustainable jobs in the province (Strapolec Report Section 3.2 and Recommendations #7 and #8)
2. Nuclear must be included in 'Clean Technology' envelope in allocating the clean tech development funding. Some funding should encourage nuclear innovations (such as the deployment of Small Modular Reactors (SMR's) for resource extraction or in remote communities that rely on high GHG diesel fuels (*Recommendation #69*). Some funding could leverage venture capital investments in SMRs (*Recommendation #68*);
3. Revisit the Long Term Energy Plan (LTEP) and broaden its scope to address not only electricity but also natural gas and other fossil fuels in a manner that is integrated with an emissions reduction plan (*Recommendation #35*). The transparent updated long term energy plan should consider the role of natural gas in non-electrical applications to reduce the costs of electricity for rate payers (*Recommendation #36*).
4. Accelerate the application of carbon pricing that encourages wider use of Ontario's clean electricity in heating and transportation (*Recommendation #23*). Setting a carbon price for natural gas usage in homes through the OEB will increase demand for electric home heating (*Recommendation #24*). Increasing the transparency of electricity pricing at the margin would ensure more prudent GHG-driven power dispatching (*Recommendations #21 and #25*)
5. Leverage surplus base load generation by encouraging wider use electricity in homes and industries. Ontario should provide incentives for electrifying home energy use and create demand for potentially global leading innovations in this area (*Recommendation #29*).
6. Curtail new electricity generation procurements until an evaluation of Pickering life extension is completed. The IESO should delay procurement of additional CHP projects (*Recommendation #40*) or wind /solar projects (*Recommendation #37*). This will help to reduce the cost of electricity thereby encouraging more rapid electrification (*Recommendation #24*). Ontario should avoid incurring emissions through US energy consumption by not exporting power when gas plants are at the margin (*Recommendation #17*)
7. Support import/export options that would maximize innovations to best leverage Ontario's low GHG baseload generation capability (*Recommendations #57 to #62*). Ontario should accelerate implementation of the Cap and Trade Program and work with the large industrial GHG emitters in developing low cost GHG mitigation solutions (*Recommendations #14 and #15*);
8. Support an Independent Academic/Industry council that would evaluate use of carbon pricing proceeds for all energy innovations – including possible use of SMR's in off grid applications. (*Recommendations #66 to #69*).

## **Report Author and Data Sources**

Marc Brouillette, founder of Strategic Policy Economics, is a respected analyst and economic consultant who has worked in several well-known consulting firms before forming Strapolec Inc in 2012. Marc was supported by a strong team of analysts and model developers. The Strapolec report provides a full list of the reference documents and other sources from which the fact-based and analytical conclusions /recommendations are drawn.

Marc Brouillette and I would be pleased to meet with the MOECC staff to discuss and expand on the recommendations in the attached report.

Yours sincerely



Ron Oberth  
President and CEO

### **Attachment:**

- 1) *Ontario's Proposed Cap and Trade Design Options – Consultation Feedback EBR 012-5666*  
*Marc Brouillette (December 15, 2015)*

The full report is also available at:

<http://www.oci-aic.org/>