

December 21, 2018

Honorable Catherine McKenna, Minister Environment and Climate Change 107 Catherine Street Ottawa, ON K2P 0P4 Email: catherine.mckenna@parl.gc.ca

Re: Request for Meeting regarding Energy Innovation in Bruce County

Dear Minister McKenna,

Bruce County has been at the forefront of energy innovation for decades. The region has substantial clean energy resources and is home to the world's largest operating nuclear generating station. This positions the Huron-Bruce region to lead the alternative and clean energy transformation for Canada.

Recently, the Independent Electrical System Operator (IESO) identified Bruce County as a viable option for such exploration. One of the identified prospects was hydrogen production and storage. Bruce County and the surrounding region is endowed with underground geologic reservoirs that are capable of storing vast amounts of hydrogen. This fact offers globally significant energy storage potential and scalability. In fact, the integration of hydrogen storage in geologic reservoirs is envisioned by the Canadian Nuclear Laboratories (CNL) as a unique Canadian technological opportunity that could enable significant de-carbonization across multiple sectors not only in Canadian markets, but globally as well.

Hydrogen production and storage has numerous other game-changing power-to-fuel applications that could lead the transition away from fossil fuels across multiple sectors. Ontario has an abundance of surplus electricity which is underutilized on a regular basis. Collocating hydrogen production and storage adjacent to the Bruce Nuclear operating facility could have the potential for a technical solution to the electrical energy surpluses and a huge impact on rectifying the adverse effects of climate change.

As such, Bruce County, along with industry stakeholders, have been exploring the potential benefits that the development of hydrogen technologies could bring, not only to the area, but the Province and the Country as well. Some of the preliminary identified benefits include GHG reduction, job creation, environmental and human health improvements, as well as advancement of electrical grid efficiency. Hydrogen technologies could enable the electrification of next-generation energy services that could decarbonize across many sectors in the coming years such as transportation, industry, agriculture and heating. In the next decade, hydrogen technologies are estimated by the World Economic Forum to contribute "US\$2.5 trillion in revenue and



30 million jobs world-wide as a result of deployment across many sectors". It is important to note that these projects are well aligned with the Clean Energy Ministerial (CEM) Nuclear Innovation: Clean Energy Future Initiative, of which Canada is a lead country, and Mission Innovation Hydrogen Challenge, of which Canada is also a participant.

In order to advance this opportunity for Huron-Bruce region, Bruce County Council, the Hydrogen Business Council of Canada (HBC), the Organization of Canadian Nuclear Industries (OCNI) and CNL have formed a partnership with local industrial stakeholders to seek government funding to support the advancement of local hydrogen technology pilot projects and the demonstration of geological storage of hydrogen as a first stage of this development initiative.

Bruce County and local partners are ideally positioned to demonstrate leadership in hydrogen technologies, large-scale energy storage and provide the necessary catalyst for transformative change in decarbonizing the economy. We respectfully request a meeting with you at your earliest convenience to discuss how we can enable the Ministry's financial support so that these important projects can be realized.

On behalf of the Warden, Bruce County Council and our partners, we await the opportunity to meet with you in January. Please find attached the presentation that was recently made to County Council that further describes the opportunities.

Sincerely, County of Bruce

Mitch Twolan Warden, Bruce County

cc. Ben Lobb, MP Huron Bruce Lisa Thompson, MPP Huron Bruce