



Corporation of the County of Bruce Planning and Development

Committee Report

To: Warden Mitch Twolan

Members of the Planning and Development Committee

From: Kara Van Myall

Director of Planning and Development

Date: December 20, 2018

Re: Delegation Request - Minister of Environment and Climate Change

Recommendation:

That the Committee endorse the letter to Minister McKenna requesting "A Meeting Regarding Energy Advancement in Bruce County".

Background:

At the October 18th Planning and Development Committee, Matthew Fairlie, representative of the Hydrogen Business Council (HBC) with the support of Sam Suppiah of the Canadian Nuclear Laboratories (CNL) and Ron Oberth of the Organization of Canadian Nuclear Industries (OCNI) presented a paper titled "Energy Innovation in Bruce County". The presentation illustrated how Bruce County is well positioned to capitalize on the opportunity to become the "Hydrogen Capital of Canada".

In addition, it was acknowledged that hydrogen has numerous game-changing power-to-fuel applications that could lead the transition away from fossil fuels across multiple sectors. This 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. Some of the preliminary identified benefits of doing so include GHG reduction, job creation, environmental and human health improvements, as well as the production of clean electricity. 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.

At the November Planning and Development Committee, Bruce County Council endorsed a business plan for the "Bruce Centre of Excellence" to foster collaboration between energy and environmental sectors and government and academia partners, in the support of business innovation and skilled workforce development. Hydrogen technologies has the potential to be the first project undertaken by the "Bruce Centre of Excellence".

Following the delegation, staff met with the Hydrogen Business Council and area stakeholders to understand how to advance this initiative. The project will require a three-phased approached. These phases include:

Bruce County Hydrogen Project

Phase 1 - Discovery

- 1. Develop partnerships with energy and technology companies
- 2. Plan and Design the business plan to support Phase 2 / 3
- 3. Advance the necessary pilots to support Phase 2 / 3
- 4. Design the facilities to support Phase 2 / 3

Phase 2 - Small Scale Market Entry

- 1. Planning and detailed design of Phase 3
- 2. Small scale Infrastructure development and commercial readiness testing

Phase 3 - Full Scale Deployment

- 1. Hydrogen Facility and pipeline construction
- 2. Expansion of deployment infrastruture
- 3. Realize market potential and fully utilize opportunities
- 4. Export advancements to other Provinces, Canada, International

The first priority of Phase 1 is to secure the necessary funding to support research, pilot projects and to design a complete plan for the next two phases. While the Hydrogen Business Council and area stakeholders were advancing a Provincial program through the Centres of Excellence to gain the necessary funding to start phase 1, that option was recently canceled by the Provincial government. There is no indication that alternative programs or funding sources will be available in the near future.

In a recent announcement, Minister McKenna indicated that Ontario energy projects not currently supported by the Province because of discontinued programs would be eligible for federal support. The letter to Minister McKenna (attached) seeks to establish a meeting with the Minister, Bruce County and its partners; HBC, CNL and OCNI.

The goal of the meeting with Minister McKenna is two-fold. One, to illustrate that Bruce County is ideally positioned to demonstrate leadership in hydrogen technologies, large scale energy storage and provide the necessary catalyst for transformational change in

decarbonizing the economy. Two, to request financial support through existing Federal Climate Change initiatives in order to realize this important project.

Financial/Staffing/Legal/IT Considerations:

There are no financial, staffing, legal or IT considerations associated with this report.

Interdepartmental Consultation:

None at this time

Link to Strategic Goals and Elements:

Goal #7

Stimulate and reward innovation and economic development

F. Try small and then go BIG - act on ideas and take calculated risks

G. Assignment to seek out like-minded partners for retail, agriculture and industrial development

Written by: Jill Roote, Manager of Economic Development, Planning and Development

Approved by:

Marianne Nero

Acting Chief Administrative Officer