

Committee Report

To: Warden Mitch Twolan

Members of the Planning and Development Committee

From: Kara Van Myall

Director of Planning and Development

Date: July 9, 2020

Re: Bruce Innovates Steering Committee Appointment

Staff Recommendation:

That the Planning and Development Committee appoint two members to the Bruce Innovates Steering Committee.

Background:

With the onset of the Covid-19 Pandemic and looking for ways to stimulate and grow the economy, all levels of government are looking at sectors for development and ways to diversify their economies. Hydrogen is one of those sectors. It is increasingly being discussed and planned for as part of a complete energy system now and for the future. Countries around the world are including hydrogen into their zero-emission targets. Ontario and Canada are moving forward as well.

The Ministry of Natural Resources Canada has already been advancing a hydrogen framework (often referred to as a roadmap) for some time. The consultative process to develop this framework was advanced in early 2019 by H2GO, a Canadian Hydrogen firm, leading to the release of the report "Developing a sustainable approach to hydrogen deployment in Canada" (attached) at the Clean Energy Ministerial in Vancouver in May of last year. Recent economic consultative workshops facilitated through the Province have highlighted the potential of hydrogen has as an integral sector to support and include in its Long-Term Energy Plan.

Other Provinces are following suit as they plan for a fossil free future. In fact, in a recent article titled, "Ottawa, Alberta develop new hydrogen strategies" in the Globe and Mail, (attached) makes reference to a "comprehensive hydrogen strategy" for the future by the Government of Canada. Also of note, is Alberta's move to strike a regional taskforce named -"Alberta's Industrial Heartland Hydrogen Task Force", which brings together the Region's Mayors, Industry, Energy Leaders, Academic Experts And More", to advance the hydrogen opportunity as a strategy to turnover their Province's future economic, environmental and social conditions for the better.

Locally, and for further context on the alignment between hydrogen and Bruce County, through its' "5-year Find Yourself in Bruce - Economic Development Strategy", advancing the energy sector and taking, among other strengths, full advantage of what Bruce Power's Major Component Replacement project offered, was highlighted as an action item. As such, Project Innovate was initiated and a strategy was adopted by the Planning and Development Committee (PDC) in July of 2018. This strategy enacted a goal to form an "Innovative Energy Supercluster" and a vision to "build a diverse collaborative network that advances the region as a global leader and national centre in energy production, research and <a href="next-advances-next-

Later that year, at the October 18th PDC, Matthew Fairlie, Hydrogen Business Council (HBC), Sam Suppiah, Canadian Nuclear Laboratories (CNL) and Ron Oberth, Organization of Canadian Nuclear Industries (OCNI) presented "Energy Innovation in Bruce County". During their presentation, Fairlie, Suppiah and Oberth, noted that with its numerous game-changing power-to-fuel applications, Hydrogen is that next generation technological opportunity for the Bruce region. The message presented was for Bruce County to take advantage of its unique positioning, fostering solutions to use off-peak nuclear and renewable electricity, along and with the potential for hydrogen storage, as a way to impact local, provincial, and national economies favorably - becoming a leader in advancing the next industrial revolution, the clean tech evolution. It was clear that this was in line the Project Innovate strategy to advance the region as an "Energy Supercluster" and noted the County's role as facilitator to advance foundational hydrogen infrastructure.

Following Fairlie, Suppiah and Oberth's presentation, County Council formed a partnership with Saugeen First Nation via a "Memorandum of Understanding" to jointly advance a common goal for the Bruce Region - and facilitate the advancement of foundational hydrogen infrastructure. To concrete this partnership and devise a mechanism to advance this work, the Bruce Innovates Steering Committee was formed.

Bruce Innovates Steering Committee Role and Function:

The Bruce Innovates Steering Committee acknowledges that a significant opportunity exists for Bruce County to produce clean hydrogen from off-peak nuclear and renewable electricity generation sources, and in doing so, position the region to not only contribute to, but also benefit from, the transition to a lower-carbon economy. To take advantage of this opportunity, Bruce County and Saugeen First Nation (SFN), formed a Founding Partnership to launch the "Bruce Innovates: Foundational Hydrogen Infrastructure Project".

The Committee is guided by the vision to "illustrate, by deploying transformational technologies such as hydrogen production, that Bruce County intends to become the clean energy capital of Canada and establish a leading region for collaboration and training in clean technology development and energy innovation". Currently, committee members include the following:

Founding Members:

Warden, Bruce County - Mitch Twolan Chief, Saugeen First Nation - Lester Anoquot Director Planning and Development, Bruce County - Kara Van Myall Legal Representative - Mark Rodger, Lawyer with Borden, Ladner, Gervais (BLG) Industry Representative - Jason Van Geel, 7GFUEL Ron Oberth, Organization of Canadian Nuclear Industries (OCNI)

Additional Committee Support:
Kim Brown, Bruce Power
David Haberman, Subject Matter Expert
Paul McCleave, Subject Matter Expert
Jill Roote, Manager of Economic Development, Bruce County

At the core of what the Bruce Innovates Steering Committee proposes to accomplish is to oversee the development, management and oversight of the Bruce Innovates mandate - the establishment of facilitating the region as a leader in the collaboration and training in clean technology and energy innovation. As represented in the Bruce Innovates - Foundational Hydrogen Infrastructure Project, this is a 10 plus year project that includes simultaneously advancing a foundational plan to open a pathway to commercial deployment along with smaller demonstration projects. The partnering of these two broad-level pieces requires government facilitation that will lead to industry development.

The Steering Committee is guided through the "Bruce Innovates Steering Committee Terms of Reference" (attached).

Conclusion:

Hydrogen is starting to take on a greater role in the current economic framework for two pivotal reasons. One is the environment and the requirement for all levels of government to stay proactive on instilling regulations and controls to ensure a future that no longer relies on fossil fuels. The second is the pandemic and the need to find ways to stimulate the economy. Both the Province and Canada are looking at hydrogen as a potential component to move the economy to a growth position.

In light of the recent media around hydrogen, the pilot project opportunity with commercial partners and the successful funding from Federation of Canadian Municipalities (FCM) to proceed with the foundational work, not to mention the increased notoriety of the project, it has become increasingly clear that additional members of the Planning and Development Committee should be added to the Steering Committee. Doing so will provide additional leadership, guidance, and a greater understanding of all the intricacies of the project when commercial partners require competitive non-disclosure agreements.

Additional discussions to form a Regional Hydrogen Taskforce, similar to Alberta, could also be a consideration that could be brought back to Committee, in light of the heightened role hydrogen is playing in the economic recovery post pandemic. It is an opportune time for Bruce County and Saugeen First Nation to lead the way on the eventual hydrogen economic pathway locally and internationally.

Financial/Staffing/Legal/IT Considerations:

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

Interdepartmental Consultation:

Link to Strategic Goals and Elements:

Goal #6 Explore alternate options to improve efficiency, service:

C. Look for economy of scale or shared services among our departments and our communities

Goal #7 Stimulate and reward innovation and economic development

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Approved by:

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