



## **Planning and Development Committee Agenda**

**July 9, 2020**

**Electronic (Remote) Meeting**

- 1. Call to Order**
- 2. Roll Call**
- 3. Declaration of Pecuniary Interest**
- 4. Action Items**
  - a. Land Use Planning Role and Structure Review
  - b. Bruce Innovates Steering Committee Appointment
  - c. Rural Economic Development Program Funding Application
  - d. South Bruce Peninsula's Accommodation Feasibility Study
- 5. Information Items**
  - a. 2020 Economic Impact of Tourism Business Survey Update - June
  - b. July Communications in the Field
- 6. Act on Recommendations**

That in accordance with the Procedure By-law, staff be authorized and directed to give effect to the actions of the Planning and Development Committee in respect of all resolutions passed during the July 9, 2020 meeting.
- 7. Next Meeting**

August 13, 2020
- 8. Adjournment**



## 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:** Land Use Planning Role and Structure Review

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### Staff Recommendation:

That the Land Use Planning Role and Structure Review report be endorsed as a foundation to further advance the Land Use Planning Transformation; and

That the Modernization Funding for Land Use Service Delivery Review be used to update the Memoranda of Understanding for Local Planning Services and to undertake a Development Fees Review.

### Background:

In April of this year, Planning and Development Committee approved the recommendation “That the Modernization Funding for Land Use Service Delivery Review project include a review of the Land Use Divisions role and structure to support service delivery.” Further to that direction, Stantec Consulting was retained to undertake this project, and have provided their final report which is attached.

Stantec’s report seeks to review and make recommendations for enhancements relative to the Division’s role, structure and service delivery model to realize an improved, comprehensive delivery of planning services.

Key components of the project methodology were a) to review and document the current situation along with key results and documents produced through the Land Use Planning Transformation to date; b) to interview local municipality staff who are involved in the planning process; c) compare Bruce County with 4 other Counties, including interviews with comparator Counties’ Planning Directors/Managers.

It should be noted that the cooperation of local CAOs and their staff was pivotal in this work advancing as quickly as it did, despite logistical constraints posed by the COVID-19 pandemic.

## Stantec's Recommendations:

For ease of reference, Stantec's Recommendations are listed below:

<b>SERVICE DELIVERY AND DIVISIONAL STRUCTURE - DEVELOPMENT PLANNING</b>	
<b>No.</b>	<b>Recommendations</b>
1	<p>That the County continue to take a continuous improvement approach to seeking for and making improvements and adjustments to the existing Service Delivery model; ideas could include:</p> <ul style="list-style-type: none"><li>a) Developing standard terms of references for technical studies to accompany Complete Applications; with communication that discussing and obtaining agreement on tailored terms of reference to fit situational needs is encouraged.</li><li>b) Continue to monitor and report on the CityWorks digital application tracker for creating and sharing information on a public portal.</li><li>c) Work towards expanded and more regular office hours for County Planning Staff within all local municipality offices.</li><li>d) Continue to monitor the implementation of the recently updated "Delegation By-law" and the County's approach to streamlining application processing by delegating un-disputed applications to staff for certain application types. Identify additional opportunities for delegation of approvals to support additional areas of efficiency.</li></ul>
2	<p>That the County work with and assist local municipal staff, in delivery of some functions related to the Development Planning Application process to support streamlining the interface of service delivery between the local municipalities and the County. Specific function and roles should be agreed to and defined via updated Memorandums of Understanding.</p>

<b>SERVICE DELIVERY AND DIVISIONAL STRUCTURE - LONG-RANGE/POLICY PLANNING</b>	
<b>No.</b>	<b>Recommendations</b>
3	<p>Build capacity of all planners and technicians to support policy planning by providing opportunities to work part of their time on longer range policy type special projects (more on this in the Division Structure Section).</p>
4	<p>Reinforce and raise the profile and importance of policy planning; this can be done in a number of ways, for example, include long range policy planning initiatives/projects in annual Business Planning and annual reporting to County Council, and if possible, to local municipal Councils, including schedule objectives and monitoring of same.</p>
5	<p>Reinforce and clarify the process for communication between the County of Bruce and the Province on land use planning policy matters by:</p> <ul style="list-style-type: none"><li>a) Identifying the Manager as having responsibility for providing timely reports and advice to County Council on major Provincial policy initiatives or policy issues between the County and Province; such reports would provide, subject to Council approval and where appropriate, the County's position to the Province; and,</li><li>b) Identifying the Senior Policy Planners as having responsibility for consulting with appropriate Provincial staff as subject matter experts where needed to support County-specific policy development projects.</li></ul>

6	That the designation of two current senior planners to policy roles be maintained to drive the County's policy program going forward.
7	That the County explore opportunities related to integrating local official plan policies at the County level via 1) procurement of a legal opinion about the legislative basis for this approach, and; 2) engagement with local municipal stakeholders as part of the update process for the Memorandums of Agreements (MoAs).

<b>SERVICE DELIVERY AND DIVISIONAL STRUCTURE - DIVISIONAL STRUCTURE</b>	
<b>No.</b>	<b>Recommendations</b>
8	That the County undertake a review of existing Memorandum of Service Agreements with the objectives of clarifying respective roles and responsibilities, understanding the addressing of long-range policy and other similar planning initiatives (e.g. local Official Plans, Community Improvement Plans, etc.) and the financial basis on which such service model is delivered.
9	That the County consider enhancing the role of the Applications Technician to: <ul style="list-style-type: none"> <li>a) Play a stronger role with applicants, supporting them through the application process.</li> <li>b) Develop and empower them to undertake additional tasks in the processing of straightforward applications such as severances and minor variances.</li> <li>c) Provide technical support (land use analysis, data review, GIS, etc.) for long-range, land use planning projects in addition to the support being provided for development review.</li> </ul>
10	That the planner function be elevated to take on a greater role in application processing (with oversight and mentoring from the Senior Development Planner). Also, that a portion of planner time be devoted to support long-range and policy planning functions to support skill development, job variety, and ultimately support staff attraction and retention.

<b>SERVICE DELIVERY COSTS</b>	
<b>No.</b>	<b>Recommendations</b>
11	That the County consider a review of planning application fees, increasing them to levels adequate to cover a greater share of the County's application processing service costs. The aim should be full cost recovery, however, given the profile of applications this may not be possible.
12	That the County begin discussions with lower tier municipalities, through the recommended update to Memorandums of Understanding, to refine the current funding model and practices for longer-range and policy planning services undertaken by the County on their behalf. This could include charges paid by the lower tier to support County staff management of Official Plan or Zoning Bylaw updates on a cost recovery basis. Municipalities not interested in the County playing this role/providing this service would not be required to support this function.
13	That, if the County establishes a Development Charge, it includes soft costs for growth-related plans or studies, where appropriate.

<b>EDUCATION AND ENGAGEMENT</b>	
<b>No.</b>	<b>Recommendations</b>
14	That the County consider addressing knowledge gaps with annual reporting to County and Local Councils on the services offered to them in the previous year, including summaries of application volumes and types, work and status on long-range planning initiatives, and, special projects, with an explanation of the fees/costs and achievement of timelines of those services, initiatives and projects; explanation of the planner's role and responsibilities in providing these services, including the ethical considerations in relation to professional responsibility and to realizing the "public good".
15	That the County work to communicate how policy planning and special policy projects are contributing to the realization of land use planning vision, goals and objectives and thereby helping to shape and retain the unique character of Bruce County and its local municipalities.
16	That the County, in concert with the local municipalities, consider the creation of citizen application guides explaining development application process, why it's important and what to expect (e.g. time frames of the Planning Act) in response to the community push back regarding processing timelines.
17	That the County and local municipalities consider providing clarity on websites for the appropriate land use/development contact information, by application type or policy/special project.
18	That the County work with local municipalities to improve the annual business planning process by making it more interactive and a shared process. The idea of improving this process would be to better understand and organize for the County's, and the local municipalities', goals, plans, work projects and directions in relation to land use planning, thereby contributing to a realistic and integrated Land Use Planning Division business plan.

### Next Steps:

It is noted that another project funded by the Modernization Grant entitled Land Use Best Practices Service Delivery Review, led by StrategyCorp, has started and will produce recommendations for best practices for Official Plan policies and related measures to improve service delivery. The information in the Stantec report is expected to feed into and dovetail with a number of StrategyCorp's recommendations.

In the meantime, the main findings of Stantec's work can begin to be used as a basis to inform discussions to advance improvements to service delivery such as:

- updating the Memoranda of Understanding with local municipalities for planning services; and
- reviewing the fees for planning applications.

### **Financial/Staffing/Legal/IT Considerations:**

There are potential indirect financial, staffing, legal and IT considerations associated with this report.

### **Interdepartmental Consultation:**

The project was managed through the Office of the CAO.

### **Link to Strategic Goals and Elements:**

4. Find creative new ways to ways to involve all staff in our future  
Item C. Invest in expanding the knowledge and skills of our staff.
5. Eliminate our own red tape  
Item A. All work processes designed for the fewest steps and the easiest completion.
7. Stimulate and reward innovation and economic development  
Item A. Streamline and simplify our Planning Processes

Written by: Mark Paoli, Manager, Land Use Planning, Planning and Development

### **Approved by:**

A handwritten signature in black ink, appearing to read 'Sandra Datars Bere', written in a cursive style.

Sandra Datars Bere  
Chief Administrative Officer

# Land Use Planning

## Review of Bruce County Land Use Planning Division:

Structure, Service Delivery Model, Roles and  
Responsibilities

### FINAL REPORT

June 30, 2020




## REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

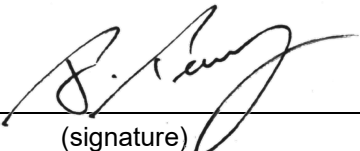
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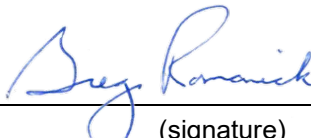
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# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## BACKGROUND

### 1.0 BACKGROUND

#### 1.1 PROJECT OBJECTIVE

Earlier this year, Bruce County received one-time funding from the Provincial government to assess and modernize the delivery of their various services. Through this investment, the Province intends to assist small and rural municipalities to plan, modernize and improve the way in which services are provided to their communities.

A portion of the investment has been allocated to help support the delivery of modern and efficient services by the Bruce County Land Use Planning Division, including a review of the organizational structure of the division and how it serves the County and eight (8) local municipalities of Bruce County. As such, Stantec has been retained to complete a review of Bruce County's department design, structure, organization and the delivery of services offered by the County Land Use Planning Division.

In the current service delivery model, the Division provides both Local and County-level planning services. The Division processes applications and reports to County Council on County development planning matters (i.e. land division, plans of subdivision/condominium, and county official plan amendments). The Division also undertakes longer-range policy planning at the County level being responsible for advising County Council on the implementation of the County Official Plan and other special long-range planning policy studies and initiatives. By way of memorandums of agreement with local municipalities, the division also processes applications and provides planning advice by way of reporting to local municipal councils on development planning applications to amend local planning documents (i.e. minor variances, zoning by-law amendments, official plan amendments). From time to time, the Division has also undertaken or supported special projects (e.g. comprehensive zoning by-law reviews, community improvement plans, issue-specific studies/report, and comprehensive official plan updates, etc.) on behalf of the local municipal level of government.

Over recent years, of the planning services provided, processing local municipal and County development planning applications has taken priority to the Division fulfilling its long-range policy planning responsibilities at the County level, particularly in updating the County Official Plan. The Planning Division staff spends most of its time processing local municipal development planning applications. With increasing application volumes and timeline limitations set out in Provincial Regulation, the Division's time and effort has been directed more and more heavily to development review.

The resulting outcomes mean less resources in terms of staff time allocated to comprehensive, long range policy review projects like development of a new County Official Plan, five-year reviews and updates, monitoring of Community Improvement Plan programs, finding ways to realize attainable/affordable housing targets, and working on strategic, County corporate projects that serve to proactively address today's emerging challenges such as climate change, transportation, culture and the provision of a range and mix of housing.

As these larger, 'big picture' challenges evolve and begin to impact market conditions and land use development requirements and patterns (e.g. parking requirements, lot sizes/setbacks, target densities, etc.), outdated policies and by-laws may be creating an unnecessary burden of additional work for the Lands Use Planning Division, as applications to amend standards on a site-specific basis increase. Around this, Planning staff have little flexibility to adapt and change the way they manage their workloads due to legislated timeframes for application processing for the local municipalities.



# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## BACKGROUND

Additional concerns have emerged more recently as communities are experiencing significant challenges related to the recent health crisis caused by the COVID-19 pandemic. Ensuring the communities of Bruce County are looking forward and planning for their desired future growth and development, as well as getting the economy back on track, will be paramount considerations. This reality has also been a consideration in this review.

This report seeks to review and make recommendations for enhancements relative to the Division's role, structure and service delivery model to realize an improved, comprehensive delivery of planning services. The purpose of this report is to find ways to improve the effectiveness and efficiency of the Bruce County Land Use Planning Division in a manner which allows the County to best address future growth and development in a way that reflects the land use goals and objectives of the County and local municipalities.

## 1.2 METHODOLOGY

The work undertaken to complete this review took place over an approximately five-weeks of work time (between May 4<sup>th</sup> to June 19<sup>th</sup>, 2020). As requested in the original request for proposals, the methodology included a significant effort to obtain stakeholder/key informant insights to serve as inputs to the review. These included:

1. Interviews with stakeholders/key informants, which included interview calls with senior staff (often the CAO, Clerk, CBO) at each of the eight (8) local municipalities (Stantec spoke to one to three local staff within each municipality). Also, Stantec held interviews with the Saugeen Valley Conservation Authority and the Niagara Escarpment Commission;
2. An interview with planning staff from each of the three hub offices (three (3) staff members);
3. Documentation of the current situation by a review and evaluation of information provided and requested by the consultant team was undertaken. This included the following: a review of application volumes by type, application turnaround times, staff workloads/responsibilities, LPAT history, current state of special projects and policy planning initiatives, review of the BruceGPS, review and assessment of the legislative and procedural basis for the current service delivery model, review and consideration of current operating and capital budgets for the Division; and,
4. Analysis and comparison of four (4) other counties in Southwestern Ontario by way of initial data collection and follow-up interview calls with land use planning Directors and/or Managers;
5. Three (3) meetings with the County Project Team (Director of Planning and Development Department, Manager of Land Use Planning Division, Corporate Strategic Initiatives Specialist).

It should be noted that findings and recommendations provided herein are guided by the responsibilities of the Planning Authority, as outlined in the *Planning Act, R.S.O. 1990, c. P.13* and the Provincial Policy Statement (PPS, 2020), which sets the legislative and policy foundation for regulating the development and use of land. Although no issue-specific policy recommendations have been expressed by Stantec in this review, any proposed process changes are intended to align with the responsibility of an upper-tier government as outlined in the *Act*. Additionally, the recommendations contained in this report are given with the anticipation that the Bruce County Land Use Planning Division will be working with a full staff complement. As of the day this report was completed, the division had two (2) vacancies to fill in order to achieve their complete staffing structure. Prioritizing, employing and optimizing the recommendations of this report should be considerate to staff's existing capacity.



# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## BACKGROUND

### 1.3 REPORT STRUCTURE

The sections of this report are organized into themes that emerged from the early discussions with the County Project Team and the stakeholders/key informant interviews. In these report sections, we examine the Bruce County Land Use Planning Division's organization, provision of planning services on behalf of the County and to the local municipalities, financial considerations and aspects of education and engagement:

- **Background**
  - Provides an overview of the structure and key findings
- **Service Delivery and Divisional Structure**
  - Examines the legislative basis for planning, reviews the development and long-range/policy planning functions, and, looks at the current Divisional structure
- **Service Delivery Costs**
  - Examines the current financial support for development planning through application fees relative to cost
- **Education and Engagement**
  - Examines how the County relates to local municipality and community expectations and their understanding regarding the roles and responsibilities of the Division.
- **Summary of Recommendations**

### 1.4 KEY FINDINGS SUMMARY

A summary of municipal stakeholder feedback is included in **Appendix A**. It outlines the detailed comments received from the local municipal staff during this review, organized by the sections presented in this report. In summary, the high-level themes that were heard often during these consultations included:

- Generally, local municipal Staff feel that the planning service being provided by the County Land Use Planning Division is good; there is an appreciation that County planning staff endeavour to provide timely and objective planning advice to the local municipal councils to utilize in their decision making in regard to planning development applications in their municipalities
- There are areas where local municipal staff feel that the service to their local municipality could be improved; in this regard, there is a great diversity of need in the various municipalities which have different character and different issues and needs; some of the themes for improvement included:
  - Land use planning inquiries and development planning applications are a constant factor to be addressed and the local municipalities depend on the County Land Use Planning Division to lead the management and processing of these applications.
  - Some municipalities could use more support in responding to planning and development inquiries and in interpreting their planning documents (e.g. their zoning by-law).
  - Some municipalities feel that their long-range plans, particularly their Official Plan and Community Improvement Plans, are not getting the attention they could and are becoming out of date and less relevant.



## REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

### BACKGROUND

- Some local municipalities indicated they would value improvement in communication about the nature and status of applications. Ideas for enhancement in this area could include ideas such as more dialogue with the local municipalities, in-person involvement of local staff at the time applications are being prepared/accepted, particularly during pre-consultation, cc'ing of local staff on emails to applicants, keeping local municipal staff aware of the status of applications, etc.
- There is a real interest to have each municipality's unique character and needs reflected in their planning documents and in the consideration of development planning applications.
- County planning staff must spend most of their available time responding to development planning applications for the local municipalities, thereby not being able to address the long-range planning needs of the County, particularly advancement of a new and up-to-date Official Plan.
- The previous challenge for County planning staff is compounded by a relatively high turnover of planning staff.

To better understand how the land use planning process is functioning in Bruce County in comparison with other County departments (some similar in structure, some different), interviews with four (4) other County planning directors or managers were conducted.

Some of the key findings from Stantec's review of the information include:

- Nuanced differences in application processing, department structure, and the roles and responsibilities of each County vs. local staff between (and among) each County provide a challenging base line to provide reasonable and accurate quantitative comparators. No other County planning department interviewed provides the exact same development review and long-range planning services as Bruce County as each has unique structures and service delivery models so a clear "apples to apples" comparison is difficult. That said, the comparators examined do offer a variety of services for lower-tier municipalities and the processes and procedures used by each to undertake these activities has provided opportunities for improvements that could be applied by Bruce County. A high-level, qualitative comparison of each County's delivery of roles is outlined in Table 1.
- With all vacancies filled, Bruce County employs a similar number of planning staff to comparator counties, whose staffing structures range from 8 to 13 full-time equivalent (FTE) employees. The number and range of planning applications received and processed by Bruce County staff is within the range of observed in comparator counties.
- Comparator counties dedicate between 30-40% of staff time to long range planning work as provided by high-level assessments by the relevant Planning Directors. In each County (with the exception of Grey County), one to two planners have an assigned policy role in their title. All comparator counties indicated they saw value in ensuring all staff have opportunities to work in long-range, strategic planning roles in addition to development planning roles, and, all of the Counties practice this full-planning role approach. Such an approach is also viewed as a way to strengthen the delivery of work in both areas, to build overall department capacity, and, to broaden and make more diverse and interesting the planning roles thereby also contributing to position retention. In Bruce County, two Senior Planners have an assigned policy role in their titles; although, these positions have not been able to be fully utilized due to pressure from the development application workload.
- Bruce County is the only County that does not finance planning projects (e.g. growth-related studies) from Development Charges.



**Table 1: High-level Assessment of Comparator County's Roles and Responsibilities**

County Comparators	Local Development Application Services	Local Policy/Long-Range Planning Services	County Development Application Services	County Policy/Long-range Planning Services
<b>BRUCE COUNTY</b>	Intake of local planning applications are done by County planning staff at "Hub" offices. County planning staff prepare and present reports to Committees of Adjustment or local Councils, as appropriate. These responsibilities are outlined in MOUs with each local municipality.	Through special agreements, County planning staff have been able to manage local 5-year OP reviews, but recently County staff lack capacity to fulfill desired long-range projects of local municipalities. As such, some local municipalities are contracting out their long-range planning projects. Additionally, un-disputed local OPA have been delegated to County planning staff.	County staff accept, write reports for, and present on consent applications to Land Division Committee, un-disputed consents have been delegated to County planning staff. Subdivision/Condominium applications are accepted, processed and presented to Councils by County planning staff.	County-wide longer range Policy Planning and Special Projects are provided by the County Planning Division, however, these services often cannot be prioritized due to the Division's necessary focus on development review. This is based out of necessity, due to increasing application volumes, and, limitations due to work-load and staff capacity.
<b>HURON COUNTY</b>	Intake of minor variances and zone changes occur at the local level, with County planning staff preparing and presenting reports to Committees of Adjustment or local Councils. Site plan control is carried out by the local municipality. Often when they are combined with other applications, the County planners are more involved. They write reports on site plans, if requested, based on a fee for service.	All Local Official Plan reviews and Municipal Zoning By-law updates are done in-house, by County planning staff. The department generally sticks to a schedule of doing two OP reviews and two ZB updates each year, to fit into the 5-year cycle. County planning staff are also responsible for local CIP updating. Un-disputed local OPA have been delegated to County planning staff.	County staff accept, write reports for, and present on consent applications to Land Division Committee, un-disputed consents have been delegated to County planning staff. Subdivision/Condominium applications are accepted, processed and presented to Councils by County planning staff.	Few updates to County-wide Official Plan are necessary due to the high-level nature of the County OP; their 5-year review and County-wide planning projects are completed largely in-house (e.g. cycling strategy, residential intensification strategy)
<b>GREY COUNTY</b>	Local-level planning applications are reviewed by the County, with the majority of the responsibility regarding application processing being managed at the local level. Regarding Site Plan Control, this is a local municipal process and these applications are not always circulated to County planners.	Local-level policy is managed at the local-level, with some local municipalities completing policy in-house and others hiring consultants should a full-time or part-time planner not be on staff. County is circulated for commenting.	Subdivision/Condominium applications are accepted, processed and presented to Councils by County planning staff for all local municipalities except Owen Sound.	County-wide policies are primarily monitored and reviewed in-house. If no in-house expertise, background studies have been contracted out, but the development of County policies are mostly done by County staff.
<b>OXFORD COUNTY</b>	County staff can accept applications for zone changes and prepare and present reports to local Councils. Minor variances are processed by the local municipality, with the County planners preparing and presenting reports to local Committees of Adjustment. Site plan control is largely administered by local municipal staff.	Local municipalities do not have their own Official Plans; County may partially fund and/or provide planning guidance on long-range projects (secondary plans, servicing studies); Municipal Zoning By-laws are updated by County planning staff.	County staff accept, write reports for, and present on consent applications to Land Division Committee; County staff also process all County Official Plan Amendments, and present to County Council and applicable local Council. Subdivision/Condominium applications are accepted, processed and presented to Councils by County planning staff.	County-wide policies are primarily monitored and reviewed in-house. If no in-house expertise, background studies have been contracted out (e.g. population projections).
<b>WELLINGTON COUNTY</b>	There are some Local Development Applications that County planning staff provide assistance with. In these cases, the County directly invoices the applicable local municipalities. Many applications are provided to the County through their statutory circulation of applications, which are not invoiced for.	Local municipalities are not obligated to have OPs, so many lower-tier municipalities are covered through County OP. Within the local municipalities, the Town of Erin has a complete Official Plan and the urban centres of Fergus, Elora and Salem have OPs (in Centre Wellington).	County Staff accept, process, and present on all County-level development applications to Planning Committee.	County-wide policies are primarily completed in-house by dedicated policy staff (only about 30% of County policy work is contracted out). For instance, a recent Climate Change Action Plan was done internally while an attainable housing plan, a strategic plan, and a Municipal Comprehensive Review were run by consultants.

## BACKGROUND

- The basis for the existing planning service delivery model was developed over 20 years ago through Memorandums of Agreement (MoAs) between the County and the local municipalities; it appears that the service model laid out in those agreements may have shifted over the years from what was originally intended.
- Development Application fees contribute a comparatively small proportion of the cost of providing development planning application processing, review and advisory services. This was not the intent of the original MoAs.
- Job descriptions are clear and well-crafted with emphasis placed on the processing of development applications for the entry-level and front-line job descriptions. Emphasis on long-range planning has traditionally received less emphasis within role descriptions. Recent changes have sought to address this, creating dedicated, senior roles for policy and long-range planning.

Bruce County land use planning staff are at the core of the conversation. They work to move development forward via the provision of professional, objective planning advice to County and local municipal councils. Staff are expected to make sound, informed and community-reflective recommendations which are rooted in the public interest. At the same time, they have a responsibility to reflect the unique context and local needs of each community – at both the County and local levels. The Planners work is to ensure that each communities' ideals are represented and expressed through the implementing requirements and standards.

Annual Applications Processed

Year	Applications Processed
2015	218
2016	284
2017	258
2018	293
2019	298

# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## SERVICE DELIVERY AND DIVISIONAL STRUCTURE

## 2.0 SERVICE DELIVERY AND DIVISIONAL STRUCTURE

Defining the balance between proactive planning and maintaining consistency and predictability in the decision-making process for the development industry becomes an increasing challenge over time. This review attempts to re-calibrate the service delivery model of the County's land use planning functions and service delivery model, to examine the quality of the services being provided to the County, local municipalities, agency partners, development stakeholders, and the greater public.

As County Planning Staff support local municipal development reviews through the processing and reporting to local councils on development applications in the respective communities, stakeholders at both levels of government were engaged to complete this review, as well as review agencies. A comparative analysis of other County-level planning departments was also used to gain an understanding of alternative approaches and evaluate possible solutions.

Stantec analyzed departmental structures of the County and the local municipalities, current Memorandums of Agreement (MoAs) and considered the typical job descriptions which are used to fill organizational planning position vacancies. Where information and data may have been lacking in this regard, Stantec sought qualitative feedback during key stakeholder interviews. This section outlines the finding and recommendations of Stantec's review of the County Land Use Planning Division organization.

### 2.1 LEGISLATIVE & PROCEDURAL UNDERSTANDING

Bruce County is a two-tier County. The responsibility and authority for undertaking planning and providing planning services in the County rests with both the County and the local municipality.

The County is responsible for translating provincial policy and requirements, and to reflect and apply a County-wide vision and related objectives through the County Official Plan. The County Official Plan is to provide input and direction to local municipal planning, and the local municipal Official Plans and Zoning By-laws are to conform to the County Plan. These planning tools allow each local municipality to translate the goals of the County OP and interpret them at the community level.

The Bruce County Land Use Planning Division's current organization is such that Staff provide a planning role directly to and for County Council. As well, planning services are provided by the County Land Use Planning Division to the eight (8) Local Municipalities. The provision of planning services by the County to the local municipalities is not a mandated authority as part of the Province's legislated County structure, or, the Planning Act, but is based on service delivery agreements enabled under the Planning Act.

We have reviewed several of the service delivery agreements (i.e. Memorandums of Agreement (MoA)). We note the following:

- The service delivery agreements were entered into the latter 1990's and so may not be current to existing policy, actual service delivery practices or provincial legislation.
- The key and only planning service to be provided by the County Planning function to the local municipalities is the "processing, review, reporting and recommending upon (local level) Official Plan (Amendments), Zoning By-law (Amendments) and Minor Variances...providing the local municipality (and in the latter instance the Committee of Adjustment) with recommendations on such applications".



## SERVICE DELIVERY AND DIVISIONAL STRUCTURE

- Stantec's observations from the key informant, Bruce County staff, and other County Comparator staff interviews and work completed to date include:

- Overall, given the age of the current agreements (as well as the fact that agreements do not seem to exist between all eight municipalities), a review of service delivery agreements is recommended to update and confirm the role of the County in local land use decision-making as well as to define what role the County should play in local long-range or policy planning activities. Updated considerations related to funding and cost recovery should also be considered. More discussion on this point is provided in the Cost section below.

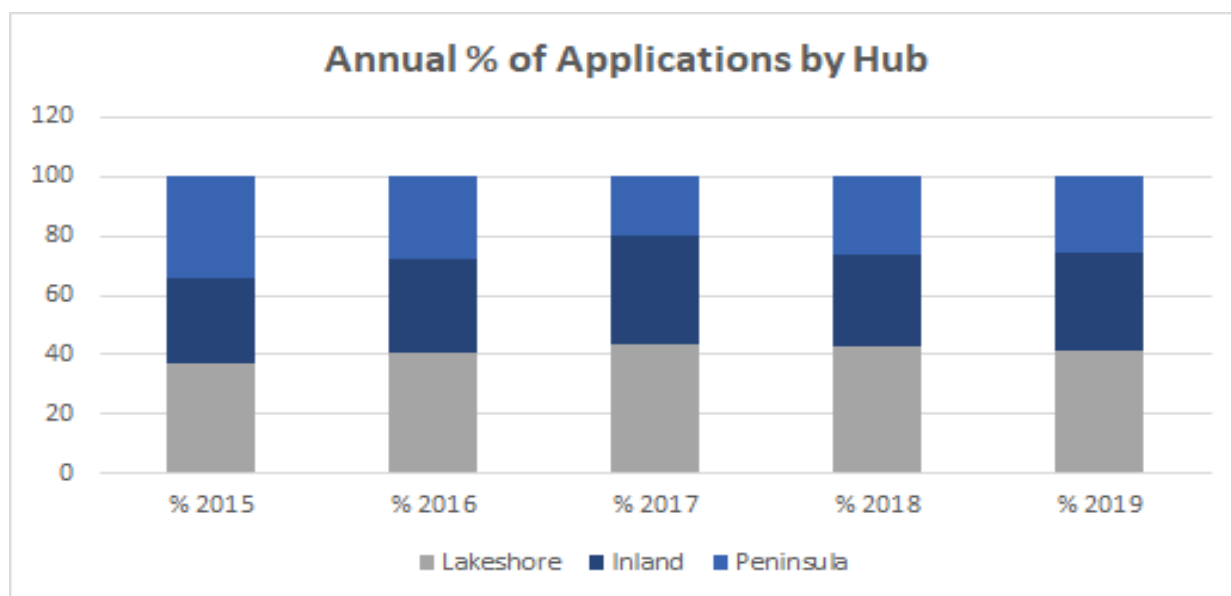
# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## SERVICE DELIVERY AND DIVISIONAL STRUCTURE

### 2.2 DEVELOPMENT PLANNING

There is general agreement that one component of the planner's role is to process development applications from individual landowner's seeking changes in the use of their lands. The *Planning Act* establishes a basis for a streamlined development review process, which is intended to emphasize local autonomy in decision-making and ensure citizens' rights are maintained in the development process.

**Figure 2: Annual % of Applications by Hub**



In the County of Bruce, there has been a 37% increase in total applications processed over the past 5-year period (2015-2019) with a total of 295 applications in 2019 alone. The majority of applications seen by County Staff are severance applications (38% of total applications), followed by rezoning applications (28%) and minor variance applications (25% of total applications).

Of the three County Planning Hubs that process applications, the Lakeshore hub has averaged around 40% of all County Applications over the past 5 years, with the Inland hub receiving 32% of County Applications and the Peninsula Hub receiving 26% of the Applications.

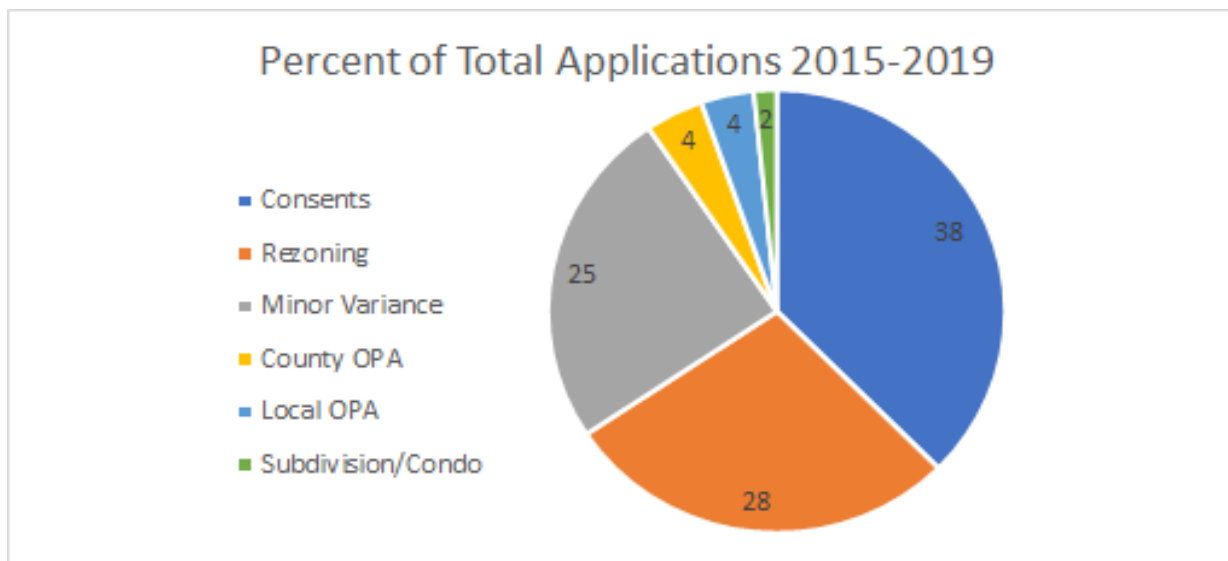
In terms of the type of applications, a large percentage (66%) of applications received by the County are consents and zoning by-law amendments. Approximately 25% are minor variances. Only 8% of applications are applications to amend either the local or County OP.

Tracking of annual applications received alone does not illustrate the entire role of the Land Use Planning Division as Planners do not only receive and process applications but are heavily relied on to assist with public inquiries prior to an application being submitted. In 2019, the Lakeshore Hub alone assessed 338 public inquiries.

## REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

### SERVICE DELIVERY AND DIVISIONAL STRUCTURE

Figure 3: Percent of Total Applications 2015-2019



The amount of inquiries received also plays into the length of time the processing of applications takes as planners are balancing the assessment and communication related to potential applications, with that of working on processing existing applications. Overall, County staff are turning around applications readily and Stantec has received a significant amount of positive feedback in this regard. This has been due to process improvements as well as authority delegations to senior Staff provided by municipal Councils to support quicker and clearer decision-making and processing.

County planning staff also play a role in addressing and responding to public and provincial appeals and representing the municipality's decision where it aligns with the recommendations of the County planners and the goals and objectives of the County Official Plan. The majority of previous Provincial appeals and ongoing appeals surround the topic of lot creation in the Agricultural designation. While the number of appeals is not large, the time and effort required to participate in an active appeal process does take significant staff time.

Overall, feedback from municipal and agency stakeholders was positive and there is a high level of satisfaction with the Development Planning Application review service that the County provides, and, there is the observation that the level of service has improved in recent years. That said, stakeholders did indicate several areas of potential improvement. These include:

- On-hand / real-time tracking of applications would be useful to municipalities and applicants.
- Clearer role definition and coordination defining respective responsibilities of County and local municipal staff when an application comes in would be useful. Overall, role definition/clarification and communication could be improved.
- The intake process for applications differs from municipality to municipality. It is challenging for County Planning Staff to respond with differing levels of service to meet differing local municipal need. Recognizing different needs, and to the extent reasonable and manageable, some harmonization of the process would aid in clarity and consistency of the process for applicants, and, may realize some streamlining and potentially reduce County Planning Staff time in this part of the process."

## REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

### SERVICE DELIVERY AND DIVISIONAL STRUCTURE

- The two external environmental agencies interviewed noted that they have some ideas they would like to discuss and explore to improve the planning process (e.g. more frequent use of Pre-Consultation).
- Notwithstanding the “Hub” structure for service delivery, additional opportunities for face-to-face connections are highly valued (even virtual face-to-face). More regular, scheduled office hours in (and for) each municipality would support more direct applicant discussions and serve to smooth out the intake process.
- There could be more public information (print, web, etc.) on planning process to inform applicants of steps in the process, the reasons for each step, background information requirements and timeline expectations.

During the comparator analysis, a significant driver of efficiency and streamlining of applications appeared to be the ability of the County Planning staff (typically department Directors/Managers) to employ the Council-delegated authority to staff to sign-off on applications which were “non-disputed”. While delegation of authority is provided to Bruce County staff in a number of instances, comparators (namely Huron County) have used this tool to a more expansive degree supporting significant reductions in processing time, and allowing planning staff more time to deal with more complex issues/applications.

#### 2.2.1 Recommendations

1. That the County continue to take a continuous improvement approach to seeking for and making improvements and adjustments to the existing Service Delivery model; ideas could include:
  - a) Developing standard terms of references for technical studies to accompany Complete Applications; with communication that discussing and obtaining agreement on tailored terms of reference to fit situational needs is encouraged.
  - b) Continue to monitor and report on the CityWorks digital application tracker for creating and sharing information on a public portal.
  - c) Work towards expanded and more regular office hours for County Planning Staff within all local municipality offices.
  - d) Continue to monitor the implementation of the recently updated “Delegation By-law” and the County’s approach to streamlining application processing by delegating un-disputed applications to staff for certain application types. Identify additional opportunities for delegation of approvals to support additional areas of efficiency.
2. That the County work with and assist local municipal staff, in delivery of some functions related to the Development Planning Application process to support streamlining the interface of service delivery between the local municipalities and the County. Specific function and roles should be agreed to and defined via updated Memorandums of Understanding.

### 2.3 LONG-RANGE/POLICY PLANNING

Planning, in a general sense, should promote sustainable development balancing economic, environmental and social considerations in a manner that protects and enhances quality of life for residents and visitors to the Bruce, and, that respects provincial legislative requirements, public health and safety and the quality of the natural and built environment. As such, County and local municipalities are required to establish policies that provide clear, reasonable and attainable approaches to ensure development is directed to suitable areas in an appropriate way.



## REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

### SERVICE DELIVERY AND DIVISIONAL STRUCTURE

Creating capacity for long-range planning works to better define the future the County is looking achieve while also reducing the inefficiencies of “fixing” land use regulatory problems on a site-by-site basis. Stantec recommends that service delivery, process and organizational adjustments and changes (and strategic departmental integration) can also help to reduce processing timelines and serve to improve staff’s ability to work on long-range policy planning projects.

Currently long-range planning activities are limited by the unavailability of staff time to drive and support these activities. The County’s policy planning priorities focus primarily on County level policy development, most immanently the upcoming update to the County Official Plan. Staffing resources will need to be found to support this effort. At the same time, some local municipal stakeholders expressed an interest in having the County undertake policy work on their behalf. Some were under the understanding that this was a role delegated to the County in the existing MoAs (though it is not), indicating some shift in the perception of these agreements and the County’s role over time. If the County wishes to undertake policy work on behalf of the municipalities, additional resources will need to be found to support this additional work.

Traditionally the County’s three senior planners were assigned geographically to undertake supervision to junior staff, sign-off on applications and take the lead on more complicated or comprehensive files within each of the hub offices. Recently, two of the three senior planner positions have been re-designated to focus the majority of their time on policy and long-range planning functions (it is recommended that these planners maintain some role in development applications, though not a majority one going forward). At the same time, a Manager Land Use Planning position has been established with a clear role to provide additional division leadership to support process improvements and the future policy program.

This move is supported by the research that Stantec has undertaken for this report. Designating two policy planners emphasizes the importance of this function and recognizes the high level of experience necessary to undertake policy development and project management of large-scale activities, most of which include a significant amount of public engagement. The remaining senior planner will take the lead on development applications. This will require a greater level of involvement and support from the planner and technician roles as laid out above. In general, it is our feeling that this approach once fully implemented will support continued service delivery and meeting of provincially mandated turnaround times while at the same time resource a strong policy and long-range planning program. The manager role will provide additional resources while also supporting the Director of Planning and Economic Development by providing focused leadership and direction to planning staff in this area.

From Stantec’s interviews with comparable County’s, this approach mirrors some of the structures assessed in other upper-tier planning departments. There was a mix of organizational approaches for completing long-range planning initiatives, and no one clear model that was followed by all Counties studied. Similar themes for undertaking long-range policy projects included:

- Geographically assigning one planner to a lower-tier municipality with their position being a combination of policy-related work and development review.
- Many Counties have at least one (or more) designated policy planner, by title and job description. In many cases, the designated policy planner(s) would often still be involved with some development review, especially to work on complex or large files.
- In many instances, the policy planner would not be the primary County contact for policy-related projects at the lower-tier, as the assigned planner would fulfill that role, with support and guidance internally from the policy planner.



## REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

### SERVICE DELIVERY AND DIVISIONAL STRUCTURE

- For projects that required external consultants to complete, a County planner would play a key role in either management of the project or providing advice and guidance to the lower-tier for a specific project. If the project was specific to a lower-tier, the assigned planner/development planner may be the primary contact with a consultant. For County-wide policy work, the assigned policy planner (e.g. senior policy planner or policy manager) is often the key external contact.
- Unofficial schedules for reviewing local official plans are sometimes developed, with the ability to be shifted with changing priorities.
- As is already practiced in Bruce County, providing information and updates to Councils when policies change at a Provincial level, was seen as an important way to inform and educate Council(s) and the public on legislation that may impact the implementation of County and local policies.

Through this review, some opportunities related to Official Plan policies across Bruce County were identified. Stantec believes that shifting some local Official Plan coverage to the County level could provide benefits through a more consistent approach to policy and as such should be explored via a legal opinion about the legislative basis for this change. As a case in point, currently, seven out of the eight local municipalities within Bruce County have already adopted the rural policies of the County Official Plan as the operative rural policies for their municipality. From the interviews conducted with other Counties, at least one other County has had many of local municipalities it serves, “up-delegate” responsibility to the County level through the County Official Plan serving as the official plan for that local municipality. This opportunity could also be explored with each local municipality separately through a review of the Memorandums of Service Agreements (MoAs).

### 2.3.1 Recommendations

1. Build capacity of all planners and technicians to support policy planning by providing opportunities to work part of their time on longer range policy type special projects (more on this in the Division Structure Section).
2. Reinforce and raise the profile and importance of policy planning; this can be done in a number of ways, for example, include long range policy planning initiatives/projects in annual Business Planning and annual reporting to County Council, and if possible, to local municipal Councils, including schedule objectives and monitoring of same.
3. Reinforce and clarify the process for communication between the County of Bruce and the Province on land use planning policy matters by:
  - a) Identifying the Manager as having responsibility for providing timely reports and advice to County Council on major Provincial policy initiatives or policy issues between the County and Province; such reports would provide, subject to Council approval and where appropriate, the County's position to the Province; and,
  - b) Identifying the Senior Policy Planners as having responsibility for consulting with appropriate Provincial staff as subject matter experts where needed to support County-specific policy development projects.
4. That the designation of two current senior planners to policy roles be maintained to drive the County's policy program going forward.
5. That the County explore opportunities related to integrating local official plan policies at the County level via 1) procurement of a legal opinion about the legislative basis for this approach, and; 2) engagement with local municipal stakeholders as part of the update process for the Memorandums of Agreements (MoAs).



# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## SERVICE DELIVERY AND DIVISIONAL STRUCTURE

### 2.4 DIVISIONAL STRUCTURE

The Bruce County Land Use Planning Division's staff complement is organized and distributed geographically into the three (3) hub offices-located in Brockton (Walkerton), Southern Bruce Peninsula (Wiarton) and Saugeen Shores (Port Elgin) and with each office staffed by an applications (planning) technician, a planner, and a senior planner. The Manager of the Land Use Planning Division is typically located in the Administrative Centre in Brockton but does make visits to the other offices on a regular basis. Job descriptions provided a further understanding of the various levels of planning positions and their relative responsibilities within the Division's structure. Additionally, qualitative feedback was provided through the staff interviews to provide a high-level assessment of staff workloads and capacities.

During the review, Stantec learned that the current Division Structure model is working well in terms of handling development planning application volume. With three "Hub" office locations spread out across the region, residents have the option for face-to-face interaction with planning staff within a reasonable commute. That said, input suggests that having "Hub" planners more regularly present in local municipality offices would allow for more consistent and accessible engagement with both local resident and local municipal staff.

It was also said that the benefits of the current service delivery model may work best for more seasoned developers and builders, and, not necessarily so for the public at-large. Furthermore, comparable Counties echoed the sentiment that the presence of County staff in the local offices on a regularly scheduled basis (an approach practiced by all four Counties interviewed) added value to their collective service delivery, improved customer service, and maintained strong inter-staff relationships. The frequency of the scheduled office times varies across the different Counties assessed. It is important to note that no other County interviewed have a "Hub" model of satellite County offices. In the other Counties, planning staff would be working in a centralized County office, if not working out of their respective, scheduled local municipal office(s). In Bruce County, it was requested by the local municipalities that clarity be provided to distinguish the services provided by local municipal offices and County "Hub" centres, as this would assist in clarifying roles and responsibilities between the County Land Use Planning Division and the local level Staff.

Under the current geographical "Hub" model, staff must address the volumes of applications processed through their "Hub". More contentious/complex applications are overseen by the senior planner, while the planner on staff carries several applications through the development review process. Each office also has an Applications Technician who receives the applications, providing the important front-line customer service role. While this model provides geographic coverage across the County, application volumes vary from hub to hub and ability to shift staffing resources from one hub to another is difficult given the knowledge of local Official Plans and zoning bylaws that is required.

Currently there exists some inconsistency in the front-line administrative approach, with each local municipality having its own set of front-line procedures dictated by history, need, and the nature and volume of development applications by type. This creates challenges for applicants. A more standardized approach to the intake and handling of planning matters along with a more consistent role for local staff in that intake process across the County would improve ease of use for applicants.

The position of Applications Technician appears unique to Bruce County when compared to other County planning departments. Often, applications take time 'in queue', waiting for a file to be opened and determined 'complete' under the Planning Act. Having three positions fulfilling this administrative role in the three Hub offices across the County improves application flows, response times, circulation, etc. Comparing this role to other County departments, which tend to rely more on administrative staff, Applications Technicians offer more technically proficient, geographically responsible staff member to support



## SERVICE DELIVERY AND DIVISIONAL STRUCTURE

Additionally, the Bruce County Land Use Planning Division has consistently experienced high staff turnover specifically in the planner positions. Feedback from stakeholders indicated that one contributor to this outcome likely relates to the fact that a planner's role is focused almost exclusively on the processing of applications, with some emphasis on the more administrative aspects of applications circulation, or, on simpler types of applications such as severances and minor variances. The processing of these types of applications may not support a varied and challenging workday or career progression for these staff. Increasing the role of Application Technicians to undertake a greater role in processing these applications would potentially free up time to allow planners to play increased roles in future policy planning or special projects in addition to application processing work. This would support more varied work conditions, staff attraction and retention, as well as support internal hiring and succession planning over time.

1. That the County undertake a review of existing Memorandum of Service Agreements with the objectives of clarifying respective roles and responsibilities, understanding the addressing of long-range policy and other similar planning initiatives (e.g. local Official Plans, Community Improvement Plans, etc.) and the financial basis on which such service model is delivered.
2. That the County consider enhancing the role of the Applications Technician to:
  - a) Play a stronger role with applicants, supporting them through the application process.
  - b) Develop and empower them to undertake additional tasks in the processing of straightforward applications such as severances and minor variances.
  - c) Provide technical support (land use analysis, data review, GIS, etc.) for long-range, land use planning projects in addition to the support being provided for development review.
3. That the planner function be elevated to take on a greater role in application processing (with oversight and mentoring from the Senior Development Planner). Also, that a portion of planner time be devoted to support long-range and policy planning functions to support skill development, job variety, and ultimately support staff attraction and retention.

# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## SERVICE DELIVERY COSTS

### 3.0 SERVICE DELIVERY COSTS

#### 3.1 FEES AND COST RECOVERY

As stated previously, the Division's current service delivery was established through a number of agreements with lower-tier municipalities, most dating back to the late 1990s. While there is some variation between the agreements reviewed, the actual execution of services has evolved somewhat since then. These originating agreements delegate to the County, "...authorities, responsibilities, duties and functions... for the processing, review, reporting and recommending on Official Plan and Zoning By-Law applications... and, providing the Council of the Local Municipality with recommendations on such applications; b) the responsibility for processing, review, reporting and recommending upon matters to Committee(s) of Adjustment..."

Funding of these functions was envisioned by these agreements via the County collecting fees and/or charges that, "...shall be designed to meet the anticipated cost to the County with respect to the processing of each type of application."

Given this assessment, a preliminary review of the funding model for planning services within the County was undertaken.

The Planning and Development Department includes functions related to Economic Development and Land Use Planning. Table 2 below focuses on only the portion of the Departmental Operating Budget allocated to the Land Use Planning function/Division. The Land Use Planning Division takes in revenue related to application fees and charges which support, in part, the cost of the delivery of these services. The table below provides a summary of actual and budgeted land use planning-related expenditures, total revenue from fees and charges and a calculation of the percentage of those costs recovered through applicable charges.

**Table 2: Summary of Actual and Budgeted Land Use Planning-Related Expenditures 2016-2019**

	2016 Actual	2017 Actual	2018 Budget	2019 Adopted
Land Use Planning Program Expenditures	\$1,285,224	\$1,321,113	\$1,755,688	\$1,943,101
Fees and Charges Revenue	\$266,488	\$252,707	\$234,000	\$242,500
Percentage Recovery	21%	19%	13%	12%

In general, actual recovery amounted to approximately 20% of total costs in 2016 and 2017 (the most recent years that actuals are available). Budgeted recoveries in 2018 and 2019 actually see a decrease due to a budgeted increase in departmental expenditures (driven by new initiatives that include BruceGPS, Natural Heritage and LEAR) coupled with only minor increases in projected fee revenue.



## REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

### SERVICE DELIVERY COSTS

Application fee increases are by limited by design, as the County Fee By-law limits increases to those seen in Statistics Canada's Annual Consumer Price Index. Based on this, the increase between 2019 and 2020 is expected to be 1.7%.

Overall, this equates to the County subsidizing the provision of these planning services to the lower-tier municipalities through the County tax base rather than through user fees as was intended by the original agreements establishing this practice. While taxes at the municipal and County level are paid by the same residents, this current practice may raise issues of equity as taxpayers in slower-growing areas fund a service that is being used at a proportionally higher rate by faster-growing areas.

A review of the current fee structure and future increases with an aim to covering a greater proportion of current expenditures may now be warranted in order to meet the original intent of the agreements that established the current service delivery model. From Stantec's review of other comparable Counties, user fee recovery rates relative to planning costs ranged from 13% to 40%. Some other Counties undertake regular fee review processes and ensure that an assessment of actual service delivery costs are considered in their relation to the fees (undertaken every five years for example).

A revised fee structure would provide revenue to better support current development application activities, allowing County taxpayer funding to be directed tin support of resources needed to implement a County-level program of policy development.

That said, it's important to note that the originating agreements establishing the County's role in land use planning at the local level, did not anticipate the County undertaking planning work beyond the processing of applications. The original agreements reviewed state that:

*It is agreed that any authority, responsibility, etc., of a planning nature such as community improvement plans, property standards, site plan control, the authority to adopt Official Plans and Zoning By-Laws and Amendments thereto, under the Planning Act or any other Act, which is not specifically mentioned above, shall be retained by the Council of the Local Municipality.*

While this approach has evolved somewhat, with County planning staff playing a role in zoning bylaw and policy updates at the local level (though this is limited significantly by current resourcing constraints) this was not the original intent of the agreements. That said, feedback provided by municipal stakeholders indicated that a number would see value in having County staff undertaken certain policy projects on their behalf as it would save them from staffing up to manage or undertake this type of activity. Other municipalities indicated that they would prefer to undertake this policy work themselves. Given this split interest there may be an opportunity to develop a model that would see the County undertake this type of work for interested lower-tier municipalities on a cost recovery basis. This would provide a wanted service to some, while ensuring fairness for those municipalities not availing themselves of this option.

Based on this, we would recommend that discussions related to the Memorandums of Understanding also include discussions with lower-tier municipalities regarding a new funding model related to longer-range and policy planning work undertaken by County staff funded by each municipality on a project-specific basis. Depending on the scale of services requested, the County may need to undertake the development of a multi-year work plan that forecasts specific resourcing needs and project timelines to determine staffing requirements and/or consultant costs to undertake.

In addition to fee revenue, development charges also play a role in supporting the costs of planning work within the County. Currently our understanding is that Development Charges are collected at the lower-tier municipal level and only exist within a small proportion of communities. Those that do exist are focused largely on infrastructure cost recovery and may not include provision for certain soft costs which may support longer-term planning activities. These activities could cover a range of growth-related reporting and



## REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

### SERVICE DELIVERY COSTS

studies which could provide resources on an area or project-specific basis for staffing or consultant costs that help to bolster local planning capacity. Bruce County was one of the only Counties reviewed in our County comparison that does not collect fees for planning studies through development charges.

#### 3.1.1 Recommendations

1. That the County consider a review of planning application fees, increasing them to levels adequate to cover a greater share of the County's application processing service costs. The aim should be full cost recovery, however, given the profile of applications this may not be possible.
2. That the County begin discussions with lower tier municipalities, through the recommended update to Memorandums of Understanding, to refine the current funding model and practices for longer-range and policy planning services undertaken by the County on their behalf. This could include charges paid by the lower tier to support County staff management of Official Plan or Zoning Bylaw updates on a cost recovery basis. Municipalities not interested in the County playing this role/providing this service would not be required to support this function.
3. That, if the County establishes a Development Charge, it includes soft costs for growth-related plans or studies, where appropriate.



# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## EDUCATION AND ENGAGEMENT

### 4.0 EDUCATION AND ENGAGEMENT

#### 4.1 EDUCATION AND ENGAGEMENT

This review also aims to understand and assess how the Bruce County Land Use Planning Division manages and communicates to County Council, the local municipalities (Councils and staff) and the communities it serves regarding the Division's purposes, roles and responsibilities in delivering planning services and providing independent, professional planning advice.

We heard through the stakeholder consultations that there was some sense that the requirement to apply a “one-size-fits-all” Provincial Policy meant that at times such an approach conflicted with being able to realize outcomes more appropriate to the Bruce County context. There was a sense that this conflict at times impeded the realization and reinforcement of the unique and strong Bruce County identity. As well, we also heard that some local municipalities want to reflect and reinforce their own unique local municipal character and identity in their planning approach. A few stakeholders suggested that they felt at times the County planners were too “hands on” in influencing their planning affairs, yet other local municipalities noted they want more guidance and support from County Planning than what is currently being offered. Clarification of roles and responsibilities in these areas of inconsistent understanding and expectations would help in addressing these diverse types of concerns.

For Stantec's review of other County organizations, all Counties interviewed reinforced the importance and value of on-going education of Councils, stakeholders and the community regarding planning, the role of planners, the planning process(s), etc.; the Counties all had varying and different approaches and ideas on how to do this. Some approaches that were outlined in the review include:

- Informing Councils on the implications of legislative changes (through reports), as they come out from the Province, to enable Councilors to ask targeted questions about specific Provincial direction and its relation to the County/local policies.
- Annually reporting on the tasks undertaken by the department in the preceding year, which was undertaken with varying levels of formality and detail.
- Providing Planning 101 sessions, new Council training, ‘speed dating’ type sessions each time new Councils are elected.
- Dedicated presentations by topic or interest (e.g. “hot topics”) to community and stakeholder groups or planning committees, upon request. Examples of topics include: climate change, aggregates, affordable housing, etc.

The public's perception is important and therefore so is managing how the Division's roles and functions are portrayed, communicated and understood in the public realm. This could include how planning recommendations are being formally communicated through reports and studies, and how the Division is more informally represented on public forums like websites and social media. More fundamentally, this should also include taking and making opportunities to explain “good planning”, including the benefits of good development review, and, how solid long-range planning contributes to good development review, and ultimately, good community growth and change. The recommendations of this section aspire to improve the general impression that the organization presents to the public, to increase awareness of the role of planning and foster positive and progressive dialogue in land use planning matters.



# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## EDUCATION AND ENGAGEMENT

### 4.1.1 Recommendations

1. That the County consider addressing knowledge gaps with annual reporting to County and Local Councils on the services offered to them in the previous year, including summaries of application volumes and types, work and status on long-range planning initiatives, and, special projects, with an explanation of the fees/costs and achievement of timelines of those services, initiatives and projects; explanation of the planner's role and responsibilities in providing these services, including the ethical considerations in relation to professional responsibility and to realizing the "public good".
2. That the County work to communicate how policy planning and special policy projects are contributing to the realization of land use planning vision, goals and objectives and thereby helping to shape and retain the unique character of Bruce County and its local municipalities.
3. That the County, in concert with the local municipalities, consider the creation of citizen application guides explaining development application process, why it's important and what to expect (e.g. time frames of the Planning Act) in response to the community push back regarding processing timelines.
4. That the County and local municipalities consider providing clarity on websites for the appropriate land use/development contact information, by application type or policy/special project.
5. That the County work with local municipalities to improve the annual business planning process by making it more interactive and a shared process. The idea of improving this process would be to better understand and organize for the County's, and the local municipalities', goals, plans, work projects and directions in relation to land use planning, thereby contributing to a realistic and integrated Land Use Planning Division business plan.



# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## SUMMARY OF RECOMMENDATIONS

### 5.0 SUMMARY OF RECOMMENDATIONS

Relative to Bruce County's Land Use Division's role, structure and service delivery model, Stantec has presented options and recommendations to improve effectiveness and efficiency of the Division and generate additional capacity and awareness for Bruce County to facilitate the growth of communities across the County.

#### SERVICE DELIVERY AND DIVISIONAL STRUCTURE – DEVELOPMENT PLANNING

NO.	Recommendations
1	<p>That the County continue to take a continuous improvement approach to seeking for and making improvements and adjustments to the existing Service Delivery model; ideas could include:</p> <ul style="list-style-type: none"><li>a) Developing standard terms of references for technical studies to accompany Complete Applications; with communication that discussing and obtaining agreement on tailored terms of reference to fit situational needs is encouraged.</li><li>b) Continue to monitor and report on the CityWorks digital application tracker for creating and sharing information on a public portal.</li><li>c) Work towards expanded and more regular office hours for County Planning Staff within all local municipality offices.</li><li>d) Continue to monitor the implementation of the recently updated "Delegation By-law" and the County's approach to streamlining application processing by delegating un-disputed applications to staff for certain application types. Identify additional opportunities for delegation of approvals to support additional areas of efficiency.</li></ul>
2	<p>That the County work with and assist local municipal staff, in delivery of some functions related to the Development Planning Application process to support streamlining the interface of service delivery between the local municipalities and the County. Specific function and roles should be agreed to and defined via updated Memorandums of Understanding.</p>

# **REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES**

## **SUMMARY OF RECOMMENDATIONS**

### **SERVICE DELIVERY AND DIVISIONAL STRUCTURE – LONG-RANGE/POLICY PLANNING**

<b>NO.</b>	<b>Recommendations</b>
<b>1</b>	Build capacity of all planners and technicians to support policy planning by providing opportunities to work part of their time on longer range policy type special projects (more on this in the Division Structure Section).
<b>2</b>	Reinforce and raise the profile and importance of policy planning; this can be done in a number of ways, for example, include long range policy planning initiatives/projects in annual Business Planning and annual reporting to County Council, and if possible, to local municipal Councils, including schedule objectives and monitoring of same.
<b>3</b>	Reinforce and clarify the process for communication between the County of Bruce and the Province on land use planning policy matters by: <ul style="list-style-type: none"> <li>a) Identifying the Manager as having responsibility for providing timely reports and advice to County Council on major Provincial policy initiatives or policy issues between the County and Province; such reports would provide, subject to Council approval and where appropriate, the County's position to the Province; and,</li> <li>b) Identifying the Senior Policy Planners as having responsibility for consulting with appropriate Provincial staff as subject matter experts where needed to support County-specific policy development projects.</li> </ul>
<b>4</b>	That the designation of two current senior planners to policy roles be maintained to drive the County's policy program going forward.
<b>5</b>	That the County explore opportunities related to integrating local official plan policies at the County level via 1) procurement of a legal opinion about the legislative basis for this approach, and; 2) engagement with local municipal stakeholders as part of the update process for the Memorandums of Agreements (MoAs).

### **SERVICE DELIVERY AND DIVISIONAL STRUCTURE – DIVISIONAL STRUCTURE**

<b>NO.</b>	<b>Recommendations</b>
<b>1</b>	That the County undertake a review of existing Memorandum of Service Agreements with the objectives of clarifying respective roles and responsibilities, understanding the addressing of long-range policy and other similar planning initiatives (e.g. local Official Plans, Community Improvement Plans, etc.) and the financial basis on which such service model is delivered.
<b>2</b>	That the County consider enhancing the role of the Applications Technician to: <ul style="list-style-type: none"> <li>a) Play a stronger role with applicants, supporting them through the application process.</li> <li>b) Develop and empower them to undertake additional tasks in the processing of straightforward applications such as severances and minor variances.</li> <li>c) Provide technical support (land use analysis, data review, GIS, etc.) for long-range, land use planning projects in addition to the support being provided for development review</li> </ul>
<b>3</b>	That the planner function be elevated to take on a greater role in application processing (with oversight and mentoring from the Senior Development Planner). Also, that a portion of planner time be devoted to support long-range and policy planning functions to support skill development, job variety, and ultimately support staff attraction and retention.

# REVIEW OF BRUCE COUNTY LAND USE PLANNING DIVISION – STRUCTURE, SERVICE DELIVERY MODEL, ROLES AND RESPONSIBILITIES

## SUMMARY OF RECOMMENDATIONS

### SERVICE DELIVERY COSTS

NO.	Recommendations
1	That the County consider a review of planning application fees, increasing them to levels adequate to cover a greater share of the County's application processing service costs. The aim should be full cost recovery, however, given the profile of applications this may not be possible.
2	That the County begin discussions with lower tier municipalities, through the recommended update to Memorandums of Understanding, to refine the current funding model and practices for longer-range and policy planning services undertaken by the County on their behalf. This could include charges paid by the lower tier to support County staff management of Official Plan or Zoning Bylaw updates on a cost recovery basis. Municipalities not interested in the County playing this role/providing this service would not be required to support this function.
3	That, if the County establishes a Development Charge, it includes soft costs for growth-related plans or studies, where appropriate.

### EDUCATION AND ENGAGEMENT

NO.	Recommendations
1	That the County consider addressing knowledge gaps with annual reporting to County and Local Councils on the services offered to them in the previous year, including summaries of application volumes and types, work and status on long-range planning initiatives, and, special projects, with an explanation of the fees/costs and achievement of timelines of those services, initiatives and projects; explanation of the planner's role and responsibilities in providing these services, including the ethical considerations in relation to professional responsibility and to realizing the "public good".
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4	That the County and local municipalities consider providing clarity on websites for the appropriate land use/development contact information, by application type or policy/special project.
5	That the County work with local municipalities to improve the annual business planning process by making it more interactive and a shared process. The idea of improving this process would be to better understand and organize for the County's, and the local municipalities', goals, plans, work projects and directions in relation to land use planning, thereby contributing to a realistic and integrated Land Use Planning Division business plan.



# **APPENDIX A**

## **Municipal Stakeholder Summary**

Municipal Stakeholder Engagement Summary

Structure and Organization	<p>Strong feeling that recent staff changes have encouraged a model of collective goals/objectives - working together as opposed to against the County</p> <p>In inland municipalities, downtown businesses are struggling, as they do not gain an economic benefit from tourism like the shoreline municipalities do.</p>
Strengths	<p>Generally, the relationship between staff at the County and the local municipality has been great, although there is a fear of becoming adversarial as the political climate can change quickly.</p>
Weaknesses	
Opportunities	<p>County does all planning applications - applicants previously went straight to County; now send query to local staff first to determine what applications needed and then go to County</p>
Threats	<p>Local staff only contact County for interpretation issues; Local staff only made aware of applications when County reaches out for comments - not copied by applicant or county when application has been received by County staff.</p> <p>Steady number of applications, spring heavy with rezoning and public meetings</p> <p>Receive an even number of consents and rezoning, not may minor variances</p> <p>Communication between County and Local level during initial review period feels circuitous at times</p> <p>High amount of applications for minor variances (mostly) and zoning amendments. Only instances of public waiting on applications is with regards to a planner's leave of absence/planner turnover - however recognize that planner's workload is very high due to sharing of planner amongst municipalities</p> <p>Opportunity to streamline review process at beginning so local and county are not duplicating review efforts; and for improvement on initiation at the onset of an inquiry (e.g. public relations)</p> <p>When high amount of application volumes, general feeling that the staffing can manage the load (processing applications within the required timeframe) but done at the expense of providing good customer service.</p> <p>Recently "embarked on a period of growth" which has created confusion, and uncovered complexities within the planning process.</p> <p>Many of the complex projects that are being undertaken in the municipality receive attention from the more senior planners on staff in the Division.</p> <p>Many people speculating/buying a lot come into local offices for questions</p> <p>Local level tracks every inquiry received, pulls property information and saves in file for future inquiries/future land purchases of same property</p> <p>Having access to planning application documents at county level would be helpful when assisting walk-ins/public inquiries/providing comments or even to know what has happened on a property in the past</p> <p>When influx of one type of application, local level reviews own by-law to determine inconsistencies</p> <p>County turn-over of young staff due to no social environment or social network for younger people (20s/30s) in Bruce County</p> <ul style="list-style-type: none"><li>- Need focus on professional development of young staff to be able to grow and retain as senior staff down the road</li></ul>

Municipal Stakeholder Engagement Summary

	<ul style="list-style-type: none"><li>- Recommendation of entrepreneurship and innovation discussion groups/mentorship investment</li></ul> <p><b>Opportunity</b> for Open GIS data system to help track development in county and achieve more degree of accuracy</p> <p>Own secondary plans for urban areas but refer to County OP for everything else</p> <p>Any reoccurring issues, review of policy is done and reassessed to reduced need for applications (2018 review most recent)</p> <ul style="list-style-type: none"><li>- hired outside consultants to complete these reviews</li></ul> <p>total of 20 - 25 applications ins a year</p> <p><b>Weakness</b> to not have dedicated planner in immediate resources but at same time best way to share resources as local level could not obtain own</p>
<p><u>Service Delivery Model - Development Review</u></p> <p><b>Strengths</b></p> <p><b>Weaknesses</b></p> <p><b>Opportunities</b></p> <p><b>Threats</b></p>	<p>For application processing, the efficiency of assigned planner was commended despite recent increase in application volumes; long processing timelines remains a major concern for local Council; public’s awareness of expected processing timelines could improve with additional guidance; better on-hand data/ real-time tracking of applications</p> <p>Provision of County services has been much improved in recent years; intent and principles of policies and by-laws sometimes do not connect with final report recommendations</p> <p>Initial development process disjointed - many agencies involved but not from the forefront</p> <p><b>Public has hard time understanding planning act and planning approvals process as a whole</b> - leads to misunderstanding when reaching out to County and requires more guidance through process</p> <p><b>Process for getting approvals is disjointed</b> - going from County for some approvals, back to local, then to conservation authority - <b>opportunity</b> to streamline process from beginning</p> <p>Pre-consultation only held for large applications and usually for developers who has own planners (not for the average public) - <b>opportunity</b> to make process easier for average public to go through</p> <p>Utilizing digital systems to coordinate pre-con meetings with all relevant parties would help process run more smoothly - <b>opportunity</b></p> <p>Applications - County good at sticking to timeframes</p> <p><b>Opportunity</b> - record timeline of applications and make measurable performance measures to determine how/where to improve (local level could be involved in helping improve processes if local level was informed by progress reports)</p> <ul style="list-style-type: none"><li>- planning process is constantly under attack so this could also be something they could positively show for\</li></ul> <p><b>Opportunity</b> for County to assist in natural heritage role/archaeology role as no agency ‘owns’ this type of work - could become expert or hire expert to do this work within County for lower-tier development</p> <p>Have no complaints with timelines for processing applications. Recognize that they are not overwhelmed with applications in their municipality.</p>

# Municipal Stakeholder Engagement Summary

Some discussion on the provincial direction on farm severances (more specifically the sizes of surplus farm lots), and how the provincial direction is implemented locally. **It is a known policy conflict between the desired growth of their municipality vs. Provincial direction.**

Thoughts about whether land use planning reports should be broken up to explain: 1. what parts of the recommendations cannot change (are law); and 2. what parts are flexible, and County may be able to provide input into (and there may be options for).

Regarding the accessibility of the planners, office hours for pre-consultation meetings 1-2 times/month to accommodate those residents who cannot readily travel to the County Hub Office. **Lack of face-to-face interaction with the public when coming for inquiries is a challenge.**

**Seeing a steady decline of the type of services being offered locally (office visits, plan review assistance)**

**Opportunity** for improved onboarding of planners to become aware of municipal development history (timing is **threat** now)

Would be a strength for county planner to have local office hours

**Great planners over the years, high rate of turnover, which leaves room for errors** but once planner gets comfortable, **they do a good job**

**Would like more availability of the planner for questions.**

Received public complaints of timelines taking up to a year - staff recognize this could be due to incomplete application(s) and exaggerated as public are disgruntled over having to even submit planning application to begin with

Keeping lines of communication open is key to local staff being able to work efficiently and timely - disconnect between County/Applicant and local level; **local staff do not know the background or applicant well before working on application (i.e. site plan control application/agreements)**

Less hands-on at local level in Bruce County than at other Counties

**Suggest adapting an approach where everyone is involved from the forefront - best when everyone is part of bigger/broader conversation**

Accessibility of Planner: ½ day, twice a month the planner comes into the office to discuss current projects - publicly advertised so that residents can book time during those two days to discuss planning matters

New application processing tool has some kinks that still need to be worked out (e.g. collection of application fees), and **the launching of the system was not well communicated by the County.**

**Inquires and informal pre-consultation meetings were better facilitated when there was a planner with regular office hours at the Local office. Over time, their presence locally has diminished. For example, it was one day per week but now face-to-face meetings with planners are done on an ‘as needed’ basis.**

**Opportunity** to have someone come into the office more frequently to help fulfil the customer service role and provide face-to-face interactions.

**Requesting additional detail in the site plan application sketches is an example or where efficiencies can be found.**

Municipal Stakeholder Engagement Summary

	<p>Very positive relationship with County staff</p> <p>2007-2008 used to hold regular office hours for county staff - took this for granted as this kind of availability was helpful to local staff and public. However, more presence of planner in office wouldn't necessarily make a big significant change - online and calling works fine now</p> <p>Recommendation</p> <ul style="list-style-type: none"><li>- Find commonalities amongst and determine strengths/opportunities to provide technical/specialty areas at the County level - lower level would find it helpful (similar to how SVCA can provide feedback on env. related studies)<ul style="list-style-type: none"><li>o i.e. Archaeological management - find it expensive and difficult get this but maybe County could get expertise on this and provide this</li></ul></li></ul> <p>When thinking of service delivery model, thinking of County as consultants and local level as clients</p>
<p><u>Service Delivery Model - Policy Review</u></p> <p>Strengths</p> <p>Weaknesses</p> <p>Opportunities</p> <p>Threats</p>	<p>Respecting agricultural roots, while planning for growth of rural Towns/communities and smaller rural centres can be a challenge, as there may be conflicting uses between agricultural practices and rural residential uses</p> <p>For special projects, local municipality feels that they could be more informed of ongoing County efforts (e.g. Bruce Power component replacement project)</p> <p>Out-of-date local policy documents; may still be some conflicts between local vision/goals vs. County's; little time/staff capacity to fully define local vision/goals</p> <p>Adversarial position when County planners publicly speak to/recommend updates to local OPs, as the public sees them representing the County's opinion and questions their ability to adequately represent the local interest. This could be solved by using external consultants and/or employing PR-type firm to help with engagement.</p> <p>Local staff and Council feel that there is a disconnect between policy ("motherhood statements") and standards (which are black and white).</p> <p>Seems to be a disconnect in how the justification and background (root) of policy direction is being communicated to the local municipality.</p> <p>Require clarity in the roles and responsibilities (between County and local municipality) regarding who takes the lead on monitoring the implementation of local policy objectives (e.g. CIP updates).</p> <p>Opportunity for County to further engage local municipalities during County Policy updates</p> <p>County unable to assist with local level policy update (ZBA and CIP) as too busy and unavailable to assist</p> <p>Shoreline development/planning for shoreline protection is controversial (ZBL hasn't been updated in 10+ years due to shoreline protection pushback from existing owners/residents)</p> <p>Regarding long-range planning, could use updated ZBL and new local Official Plan. Existing policy does not address a lot of the issues dealing with now (e.g. shipping containers)</p> <p>Previous ZBL update(s) became too political</p> <p>Lack of conservation authority to regulate shoreline so falls on planners, which can be a challenge for long-range planning</p>

Municipal Stakeholder Engagement Summary

Local municipalities can see benefits and downsides to the County fulfilling role in Local long-range planning. On one hand, they have experience with the specific region, while on the other, the Local municipality may be looking for innovative ideas from an external perspective. When recent decisions were made to outsource project recently (i.e. Comprehensive zoning bylaw), it was due to staffing capacity at the County level.

Options to have local planner on staff have been entertained in the past, to provide a better customer service function (and not necessarily to improve capacity of long-range planning).

Minor variances are not meeting planning deadlines

Local level and county disagree with issuing of timelines - local would like to stick to 20-day as per planning act and not 40-day that County sometimes allows

Local level completes/leads a lot of policy review and invites County to comment

Very rare for local level and County to want to focus efforts in different areas

Long-range Planning - comfortable with where county/local level is going, not so much with where they are

Slow process to get policy moving forward (public comments, advisory committee set up, engagement, analysis, etc.)

Seasonal communities a challenge when wanting public consultation on policy - aiming for consultation in summer months is different than most municipalities that avoid consultation in summer months

Happy with local Ongoing projects

Senior staff also doing ‘grunt’ work that could be done by junior staff and not given enough time to dedicate to strategic planning

Try to keep documents as up to date as possible (OP 2018/ ZBL 2017)

New local growth and master servicing plan (how to direct people to live in full-service areas)

Local level is the ‘general contractor’ for all local policy

Hoping to get County growth forecasts/employment numbers done by Watson to assist with this

Local planning demands insider knowledge, which is difficult when disconnect between County and local level

Internal staff guide internal policies to meet local needs but want knowledge and expertise from County on specialized topics

Bruce Lens - would like a ‘municipal lens’ to be placed within ‘County Lens’

- didn’t feel consulted when came out with ‘Bruce Lens’ and felt like review was separate process from local level involvement

improve county and local level communication - feeling that some policy development at county level is duplicate of what local level already has done - opportunity

Municipal Stakeholder Engagement Summary

	Prefer to have individual consultants that are able to cater to local level and are able to meet local level deadlines as the consultant is only focused on one municipality rather than being pulled in multiple directions by multiple local levels of government like the County
Education, Identity and Public Perception	Regarding communication with Public, policy/process intent could be shared more with the public (e.g. process diagrams and flowcharts on minor variance application processing)
Strengths	Higher-level Council vision for land use planning not often communicated from County to local Councils, typically development-specific conversations; costs of LPAT process may be unknown
Weaknesses	County struggles to find a consistent identity: one that provides appropriate local autonomy in decision-making and respects local municipality implementation of own documents, while providing the necessary amount of oversight, professional advice, and monitoring capacity that may be needed/desired by the local municipalities. Local Municipalities have varying needs; and therefore, rely on the County in varying capacities.
Opportunities	
Threats	Council County and staff are dealing with tension between needs and desires of shoreline residents and those of inland/rural residents, who have different expectations about the level of services that should be provided.
	The public’s perception on the County overseeing the local OP policy updates have challenges (see notes).
	Public equates outdated provisions/standards with looser, more flexible restrictions, and therefore resists policy, by-law, standards being updated to align with ‘good’ planning principles.
	The “Why?” isn’t being presented to Council very well. Opportunity: want to do next step in addressing the ‘why’ in planning and get third party expert to host council workshop
	Council appreciates service of County planners and values planning - value reports put forward. See planning as directing expansion, services, everything that enables municipalities will thrive
	Public perception of planning relates to a lack of knowledge about planning, issues arise as public disagrees with planning in general, not Bruce County Planning specific
	Orientation Session happens with every new council to overview planning process
	Planning 101 Pamphlet good idea to implement for incoming public inquiries
	Mixed council: have members who want to understand role of planner vs role of advisor, but overall council has good level of respect and takes planning staff recommendations
	Struggle to understand the ‘Bruce lens’
	The less mention of ‘the province requires this’ the better received by the public as don’t want province telling them what to do - want local respect
	Opportunity for County policy to be general enough that allows local communities to focus on what they value and the unique themes that each local level faces (i.e. urban vs rural development).

## Municipal Stakeholder Engagement Summary

	<p>Would like county to recognize which local municipalities have expertise in rural development vs urban centre development</p> <p>Public disgruntled about having to get a planning application at all, worse when additional studies needed etc. Usually when they have a conversation with local staff about why planning application is needed (that the planner didn't dream up requirement, is a provincial requirement etc.) they generally settle down.</p> <p>Planning 101 for public and council would be good - focus on the practical side of planning and local municipal specific planning concepts/processes</p> <p>Councils have a good understanding that planners are the professionals, heavily rely on planners' expertise and guidance (except for political topics like ZBL). They understand that the planner is following various provincial legislation and that it's not opinion based but is going by what they know is good planning (still sometimes take the opinion of 'customer is right')</p> <p>Rely heavily on the County to guide the County-perspective</p> <p>Most concern from the public stems from the need to complete studies and reports to justify their proposed development. Timing is not as much of an issue as the requirement to complete studies and the lack of guidance provided to them for completing such studies. It is recognized this varies based on the developers experience in submitting applications.</p> <p>Communication coming from the Planning Division sometimes is too complex for smaller landowner/developers (e.g. acronyms, long attachments, etc.). Improvements can be made to provide more guidance (e.g. the necessary contents of supporting studies/reports). "Helping people navigate" through the planning process was mentioned as an important need.</p> <p>Communication with Councils is lacking, compared with how it used to be. For instance, 10 years ago there was an afternoon workshop (optional) for Councilors to attend that explained the role of planning.</p> <p>From Public perspective, very complex system - multiple agencies involved, different timelines and fees and notice periods etc.</p> <p>Only new councilors get planning 101 session - last shuffle of council, only one new councilor so only one v one session</p> <p>Public put less value on County opinion as the County is further removed - value local staff opinion more, even if it's the same as county</p> <p>Public appreciates face to face discussion - office hours (monthly) work well</p>
<u>Costs/Financial</u>	<p>Challenge attracting tax base for some local municipalities</p>
Strengths	<p>Local DC's are used to pay for local planning studies and anything 'growth' related</p>
Weaknesses	<p>If model/system were to change and local planners were assigned to each local municipality, there would need to be consideration given to the financial implications as local municipalities may not have the resources and/or capacity to support a full-time planning position.</p>
Opportunities	
Threats	

# Review of Bruce County Land Use Planning Division: Structure, Service Delivery Model, Roles and Responsibilities

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## Introductions:

Greg Romanick, RPP, MCIP, MBA  
Senior Planner (Project Manager)

Jonathan Tinney, RPP, MCIP  
Principal, Stantec Planning (Senior Advisor)



## Provincial Ministry of Municipal Affairs and Housing (MMAH) Modernization Funding

GOAL: To support the delivery of modern and efficient  
(planning) services

# Current Service Delivery Model

Four (4) areas of Planning Service:

- County level (required):
  1. County level long-range policy planning (e.g. County Official Plan)
  2. County level development applications (e.g. County Official Plan Amendments, Severances, Plans of Subdivision/Condominium)
- Local Municipalities-Memorandums of Agreement (voluntary):
  1. Local Planning Development Applications-Processing and Review (site specific Official Plan and/or Zoning By-law Amendments to permit development)
  2. Some long-range policy planning projects on a one-by-one agreement basis (e.g. Official Plan updates, 5-year reviews. Community Improvement Plans, etc.)



Role of Land Use Planning Division-provide independent, professional planning opinion

Role of County or Local Council-consider planning opinion in making final decisions

# Methodology

- Interviews with key Staff stakeholders/key informants-eight (8) local municipalities (e.g. CAO, Clerk, CBO, etc.)
- Interviewed-cross-section of County Planning Staff from three Hub offices
- Interviews, analysis and comparison of four (4) other Counties
- Review and consideration of provided documentation:
  - Legal/Procedural basis/mandate for providing planning services (e.g. Memorandums of Agreement)
  - Application volumes, turnaround, staff workloads/responsibilities, LPAT Appeal history, etc.
  - Current state of special projects, policy planning initiatives (e.g. Official Plan)
  - 2020 Departmental Business Plan & Key Projects
  - Job descriptions and recent job advertisements
  - Current operating and capital budgets

## Some Key Findings

- Local municipal stakeholder feedback VERY POSITIVE and APPRECIATIVE
- Number of suggestions for possible improvement in process; NOTE-diversity of needs
- Long-range policy planning-lower priority to development planning-County and local municipal level
- Potential ideas from County Comparators:
  - Cross-training for planners (development and policy planning roles)
  - Formalize and enhance long-range policy planning role and function

## Key Recommendation Areas

- Update Memorandums of Agreement-clarify roles, responsibilities, process, costs, etc.
- Continuous improvement of processes
- Prioritize and enhance long-range policy planning role and delivery at County and local municipal level
- Review planning application fees; increasing to level to cover a greater proportion of processing development applications and special projects
- Consider Development Charges financing growth-related planning
- Enhance Education, Communication and Engagement mechanisms

Thank you!

Questions?



## 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

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### 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 next generation technologies".

Later that year, at the October 18<sup>th</sup> 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:**

NA

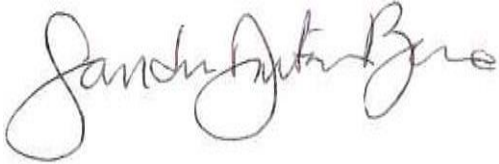
### **Link to Strategic Goals and Elements:**

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

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

**Approved by:**

A handwritten signature in black ink, appearing to read "Sandra Datars Bere". The signature is fluid and cursive, with the first name "Sandra" being the most prominent.

Sandra Datars Bere  
Chief Administrative Officer

# Ottawa, Alberta develop new hydrogen strategies

EMMA GRANEY > ENERGY REPORTER

KELLY CRYDERMAN >

PUBLISHED JUNE 14, 2020

UPDATED 11 HOURS AGO

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Last week, Germany's cabinet adopted a national hydrogen strategy – a hydrogen-pumping station seen here in Berlin on June 10, 2020 – aimed at making the country a leading player in the technology.

SEAN GALLUP/GETTY IMAGES

The federal government says it will have a comprehensive strategy for hydrogen in place by

the end of the summer, signalling Ottawa’s intention to pursue the fuel source as a key component of its goal to reach net zero in greenhouse-gas emissions by 2050.

Alberta, the heart of Canada’s oil and gas sector, is also looking to hydrogen in a bid to diversify the economy. Like Ottawa, the province will release a hydrogen development plan this summer as part of a larger blueprint for the future of the province’s natural gas and petrochemical industries.

It’s the first step in establishing “a very aggressive and profitable hydrogen industry” in the province, Alberta’s associate minister of Natural Gas Dale Nally told The Globe and Mail.

“This could position us as a leader in the hydrogen industry in this country," he said.

Hydrogen is enjoying “unprecedented momentum” across the globe, according to the International Energy Agency (IEA). It’s light, storable, energy-dense and produces no direct emissions of pollutants or greenhouse gases – a boon for countries pursuing net-zero emission goals.

In Canada, a new focus on growth for a hydrogen sub-economy could be a rare area where the federal Liberals and Alberta’s governing United Conservative Party find common political ground.

Current policy support for hydrogen deployment, 2018		
Number of countries		
Passenger cars		15
Vehicle refuelling stations		10
Buses		10
Electrolysers	6	
Trucks	5	
Buildings heat and power	2	
Power generation	2	
Industry	2	
Other fleet vehicles	1	

THE GLOBE AND MAIL, SOURCE:  
INTERNATIONAL ENERGY AGENCY

In Alberta, a pilot project to operate two long-range hydrogen-powered trucks between

Edmonton and Calgary received \$7.3-million from Emissions Reduction Alberta (ERA), a Crown corporation funded by the carbon tax on large emitters. The project demonstrates how hydrogen could be applied to improve fuel efficiency and reduce greenhouse-gas emissions to zero in the long-haul trucking industry.

The agency received multiple applications for hydrogen-themed projects in its latest funding competition, ERA chief executive Steve MacDonald told The Globe. He added that the gas has an important role to play in a low-carbon future.

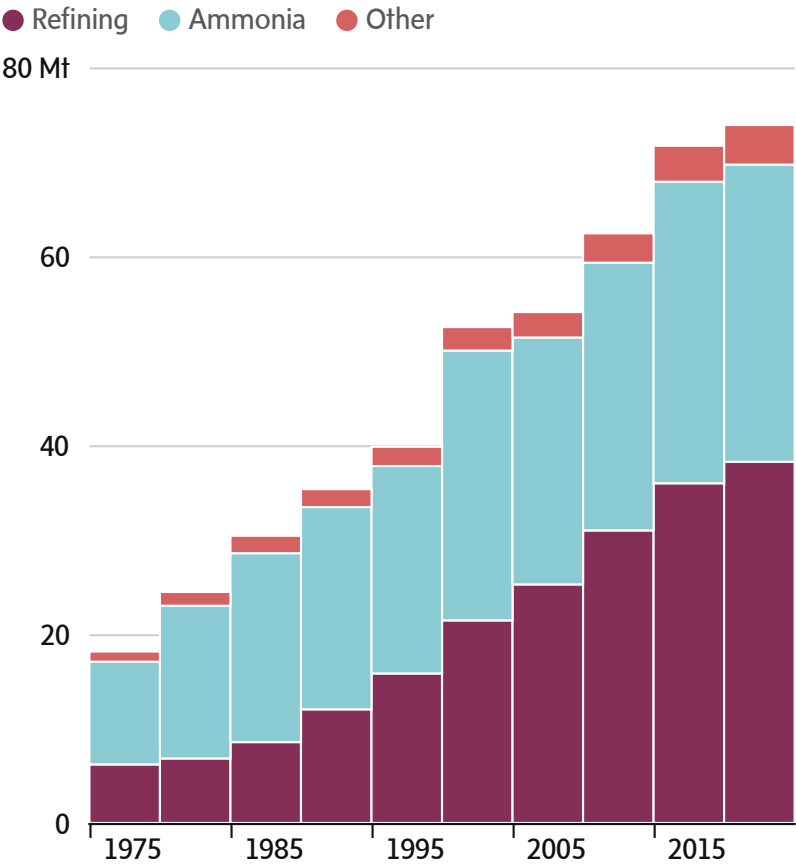
During a recent discussion about Canada’s energy future, Natural Resources Minister Seamus O’Regan acknowledged that the fuel is expensive to produce. But the costs are coming down, he said, making the fuel source "increasingly viable."

As such, hydrogen is "very much a focus for our government," he said.

“We’ll have a comprehensive strategy in place by the end of the summer.”

**Global demand for pure hydrogen, 1975-2018**

Megatonnes



THE GLOBE AND MAIL, SOURCE: INTERNATIONAL ENERGY AGENCY \*NOTE: 2018 IS ESTIMATED

DATA | SHARE

Hydrogen’s potential as a fuel source isn’t new; according to a June, 2019, IEA report, it

powered the first internal-combustion engines more than 200 years ago.

But the development of commercial markets for hydrogen have been stalled for decades. The gas is costly to produce, and its transportation and handling is difficult and expensive. Tesla CEO Elon Musk – defending his long-standing position that batteries, not hydrogen, will win the race to decarbonize auto transport – referred to hydrogen fuel cells as “fool cells” in a tweet last week.

But dozens of countries, including Canada, now are working toward net-zero greenhouse-gas emissions, which is acting as a catalyst for a new global push on hydrogen use. This is being helped along by continuous improvements in the cost and performance of fuel technologies over the past five years.

Investments have been quick to follow.

Australia established a fund worth 300-million Australian dollars for hydrogen projects in May, for instance, while Norway earmarked US\$369-million for green technologies including hydrogen power solutions. Last week, Germany’s cabinet adopted a national hydrogen strategy aimed at making the country a leading player in the technology.

The IEA says hydrogen’s versatility could help make a significant contribution to clean-energy transitions, although it must be adopted in sectors where it is almost completely absent, such as transport, buildings and power generation.

## **Keep on trucking**

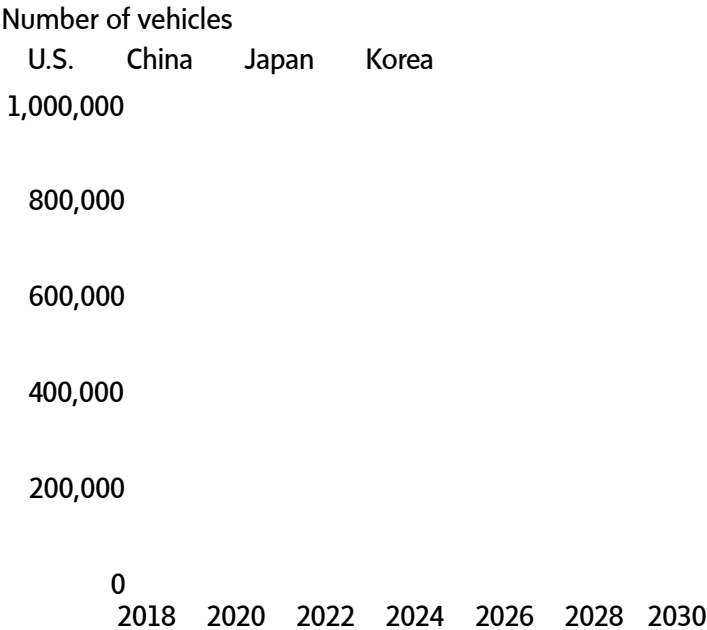
Demand for hydrogen-based electric vehicles has been outstripped by those powered by batteries, HSBC analyst Sean McLoughlin writes. That’s because of rapidly falling battery costs and the rapid rollout of home and public charging points. In contrast, hydrogen refuelling infrastructure is scarce.

But hydrogen is seen as a solution for decarbonizing heavy transport, in particular. Hydrogen is light, fuel cells are not range-constrained and refuelling is fast – unlike the large batteries that would be needed to move heavy trucks.

“There were nearly 13,000 hydrogen-powered vehicles in use globally at the start of 2019. Japan has taken an early lead but may soon be eclipsed by China, which already has more than 2,000 hydrogen buses and is rolling out hydrogen-powered commercial transport to reduce

emissions,” Mr. McLoughlin said.

**Fuel cell electric vehicle targets for selected countries, 2018-2030**



THE GLOBE AND MAIL, SOURCE:  
INTERNATIONAL ENERGY AGENCY

Many energy players say they believe Canada has the potential to be front and centre in what is a renewed global focus on hydrogen.

Anyone talking about Canada’s role in hydrogen development in decades past would have immediately pointed to Ballard Power Systems Inc. – the long-struggling Vancouver-based company that has seen its share price surge in recent months. This year, investors have come to believe that Ballard’s focus on much-refined fuel-cell technology could reap the company benefits from China’s promise to maintain aggressive efforts to reduce air pollution, partly through zero-emission buses and trucks.

British Columbia, which opened Canada’s first hydrogen fuelling station in 2018, already boasts a small network of government-sponsored retail hydrogen stations. Like Ottawa and Alberta, B.C. is also developing a hydrogen strategy.

Quebec is making a push on hydrogen, too, with the government purchasing a fleet of 50 hydrogen-powered vehicles last year and a business group exploring the idea of hydrogen exports to the northeastern United States.

But the next focus of production could be in hydrocarbon-rich Alberta.

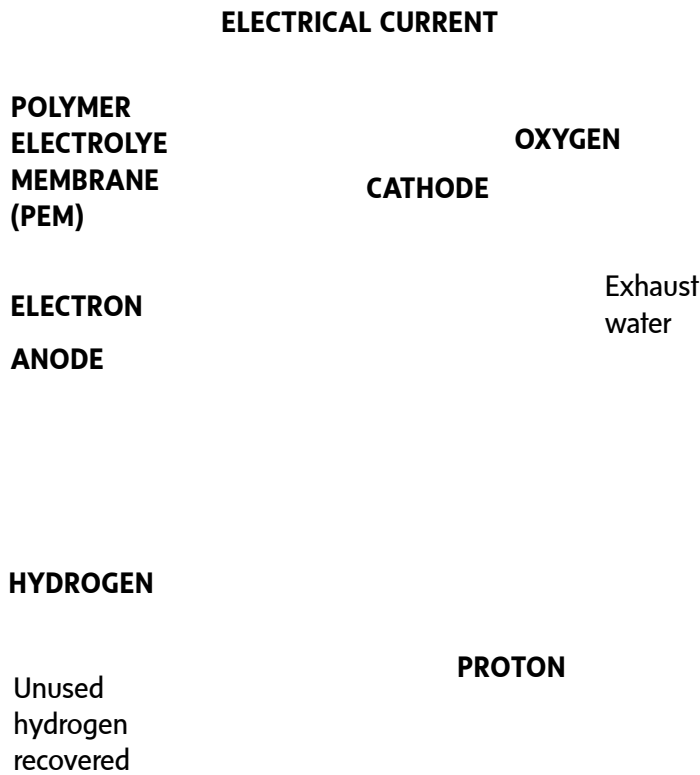
The province already produces millions of tonnes of hydrogen each year, said David Layzell,

director of the Canadian Energy Systems Analysis Research initiative at the University of Calgary. The gas is used to crack bitumen, which sees the heavy oil processed to create synthetic crude, gasoline, diesel, jet fuel, plastics and fertilizers.

Like any other form of energy, the production process matters, energy economist Peter Tertzakian said. Globally, the vast majority of hydrogen production today involves subjecting natural gas to a high temperature and separating the carbon and hydrogen – an energy-intensive process that creates significant greenhouse-gas emissions. This is called “grey hydrogen” – the downside of which is that the environmental benefits can be negated by the emissions-intensive process.

But because you get a pure stream of carbon dioxide in using natural gas to produce hydrogen, there is an opportunity to capture that gas. It’s possible to store the emissions underground, through carbon capture and sequestration, Mr. Tertzakian said.

**HOW A HYDROGEN FUEL CELL WORKS**  
Hydrogen and oxygen are combined to produce electricity, water and heat



Hydrogen fuel is channelled through field flow plates to the anode while oxygen is channelled to the cathode

At the anode, a platinum catalyst causes hydrogen to split into positive hydrogen ions (protons) and negatively charged electrons

The PEM allows protons to pass through it to the cathode. The electrons travel along an external circuit to the cathode, creating electrical current

At the cathode, the electrons and positively charged hydrogen ions combine with oxygen to form water, which flows out of the cell

MURAT YÜKSELİR / THE GLOBE AND MAIL, SOURCE:  
GRAPHIC NEWS; SETRA SYSTEMS INC.

It is in this realm of “blue hydrogen” – where the carbon gets captured and stored – where Alberta could make its mark in a world focused on net-zero emissions.

Dan Wicklum heads the Transition Accelerator, a newly created, climate-focused non-profit spearheading a push for the development of a hydrogen economy in the oil processing and petrochemical region known as Alberta’s Industrial Heartland. Some of the lowest-cost hydrogen in the world could be produced in and around Edmonton, he said, for use as a fuel, as a feedstock for other products and for domestic use and exports.

Mr. Wicklum says the world is at the beginning of a “fundamental retooling” of the global energy system, and Canada has to move quickly to take advantage of the opportunity to build expertise in using hydrogen as a fuel and building an export market for the gas.

“Other countries are certainly ahead of us on this.”

Mr. Tertzakian is hopeful about the resurgence in hydrogen but also guarded. He saw a wave of excitement about hydrogen two decades ago flame out when it became apparent that the economics of fuel cells would not support mass adoption.

But he said Canada does have the right ingredients to be a player in an emergent global hydrogen market – it’s home to Ballard, a premier fuel-cell maker, and there’s a vast array of hydrocarbons and carbon capture on the prairies.

“It’s not clear yet whether the market mechanisms are there to create an economy around hydrogen,” Mr. Tertzakian said.

“This is where the government comes in, and could act as a catalyst.”

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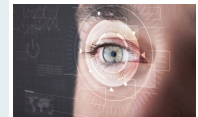
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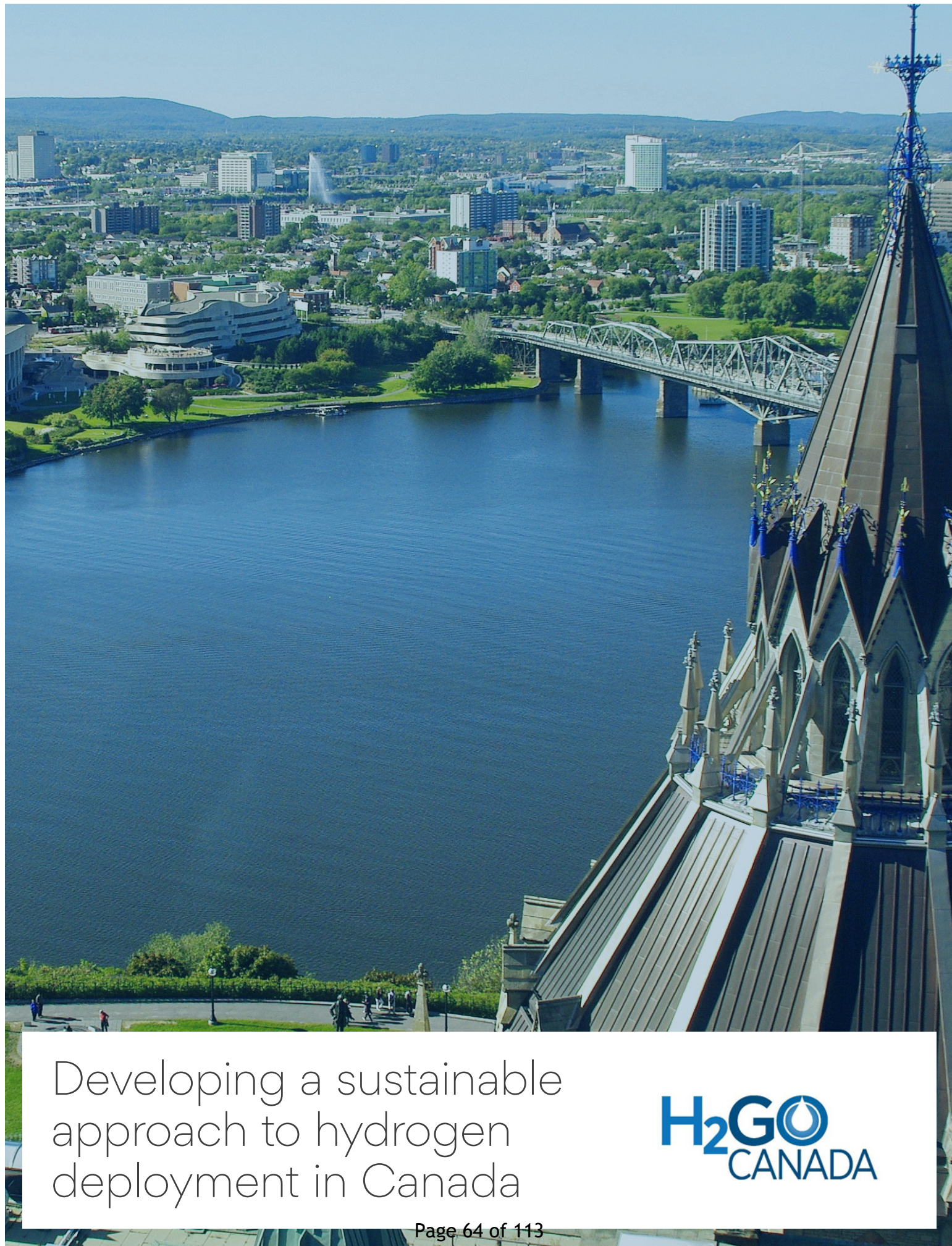
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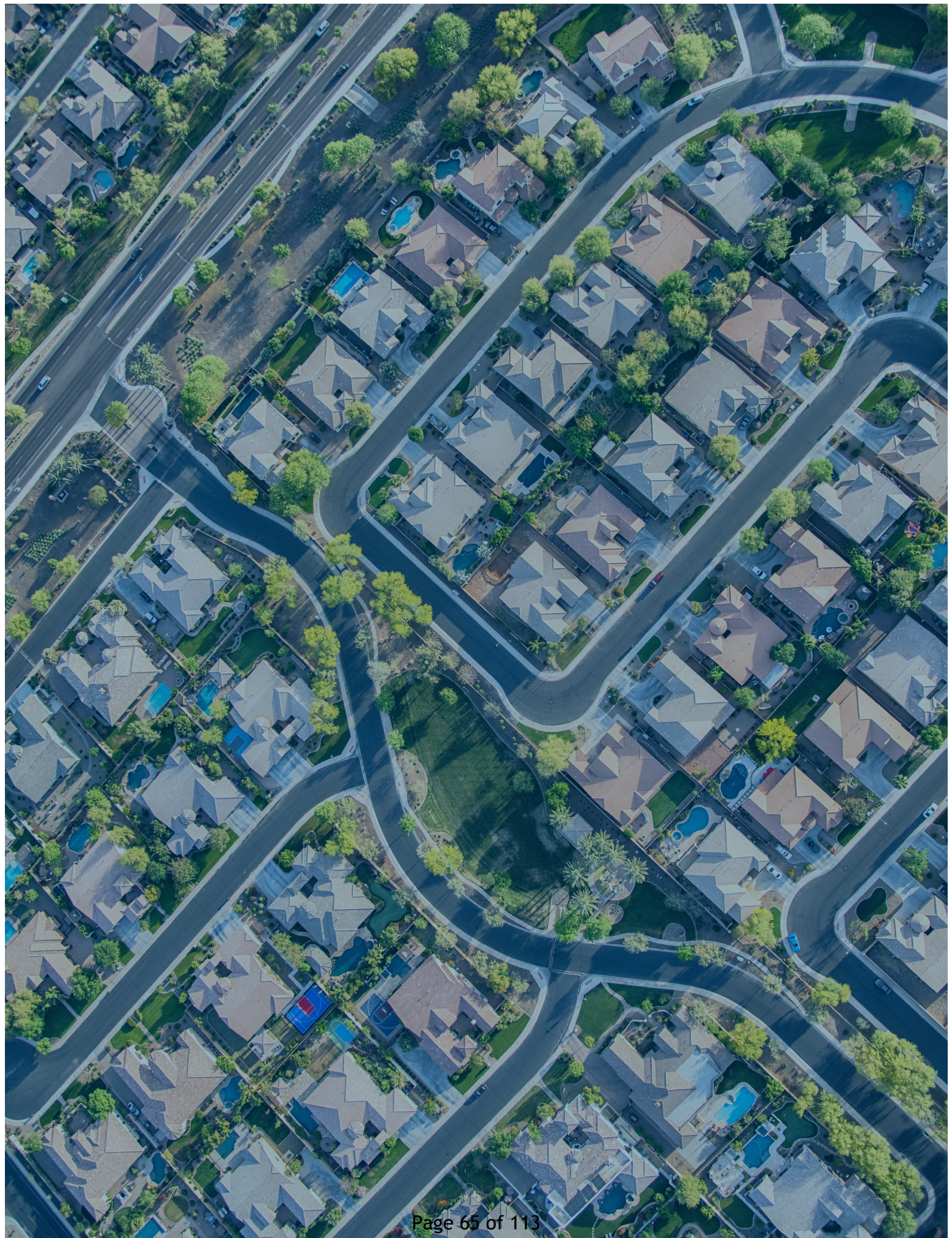
Phillip Crawley, Publisher





Developing a sustainable  
approach to hydrogen  
deployment in Canada

**H<sub>2</sub>GO**  
CANADA



## Why you should read this report

In jurisdictions around the world, hydrogen technologies and infrastructure are being deployed according to plans co-developed and implemented by governments and industry stakeholders. These deployments are a feature of deliberate efforts to develop hydrogen as a supporting option in the broader pursuit of transition pathways to less carbon-intense economies.

As these plans drive growth in hydrogen system investments, internationally, Canada is participating in an ad hoc and reactive manner, mainly as an exporter of hydrogen technology and expertise. Should the decision be made to develop a strategic approach to cultivating hydrogen opportunities in Canada, this report provides guidance from the perspective of a range of private sector organizations representing diverse sectors of the national economy and regions of the country.

Herein the qualities of hydrogen that make it attractive are presented, as well as the challenges to adoption. An approach is suggested, along with a set of principles to consider, such that the needs of the market are met and conditions for success are established.

## About H2GO Canada

H2GO Canada is a not-for-profit entity that serves as a collaborative, partnership-building conduit bringing together public and private sector resources in support of the strategic, sustainable deployment of hydrogen systems in Canada. The organization is structured to catalyze and mobilize hydrogen supply and demand, raise awareness through education and facilitate market demonstration projects of hydrogen systems.

## Acknowledgements

Financial support for this project has been provided by Natural Resources Canada.



H2GO Canada would like to thank Natural Resources Canada for its support, as well as Fasken and PricewaterhouseCoopers, whose support made the production of this report possible.

We are deeply grateful to the following organizations, representatives of which generously contributed their knowledge and perspectives through their participation in H2GO Canada's consultations.

- Aecon Group
- ATCO Group
- Arkema Canada
- Bruce Power
- Canadian Hydrogen & Fuel Cell Association
- Des Nedhe Development
- ERCO Worldwide
- FortisBC
- GHD
- Greenfield Global
- Harte Gold
- Honda Canada
- HTEC
- Hydrogenics
- Markham District Energy
- Peter Ballantyne Group of Companies
- Powertech Labs
- Toyota Canada
- University of British Columbia
- WSP
- York University
- University of Calgary
- Hyundai Auto Canada Corp
- Dana Incorporated
- Ballard Power Systems

We also thank the many more organizations that participated in the consultations but are not named here, as formal permission was not received at the time of publication.

H2GO Canada is solely liable and responsible for the contents of this report. Inclusion of the names of organizations is for acknowledgement purposes only and does not constitute an endorsement of the material.

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## Executive summary

In December 2018, H2GO Canada began consulting with a diverse array of private sector organizations about the prospects for increasing hydrogen production, distribution and use in Canada. The goal was to identify the barriers and opportunities to deploying hydrogen systems that could support deep, long-term reductions in greenhouse gas emissions, and do so in a manner that is economically and socially practicable. This report presents the perspectives gathered through the consultation process in a narrative format.

The interest of industry in the hydrogen option stems from three key characteristics:

1. It is versatile – hydrogen is a non-carbon energy commodity, capable of meeting society’s demands for heat, power and mobility;
2. It is accessible – hydrogen can be produced from a wide range of developed sources, the supply chains for which can be progressively decarbonized; and
3. It can integrate with current systems – hydrogen works with existing infrastructure and distribution channels.

In exploring the implications of these characteristics, three compelling benefits were identified that are particularly relevant to Canada’s circumstances:

First, hydrogen offers a pathway to decarbonization that is *highly inclusive*. Crucial roles must be played by established companies in resource extraction, power generation and manufacturing, among others, as well as by technology innovators and entrepreneurs.

Second, existing infrastructure and industrial assets need not be stranded, since hydrogen integrates with current systems. Hydrogen technologies build onto these systems, using them in ways that create new value as opposed to marginalizing their role or advancing their displacement.

Third, as a consequence of the previous two benefits, the hydrogen pathway is an option that can *preserve* current employment and create *new jobs*.

Notwithstanding the potential benefits, scaling up hydrogen faces many practical barriers, including the maturity of the supply chain, alignment of finance and policy, and a need to build knowledge and understanding. A coordinated approach is advised, involving public- and private-sector collaborations. Seven principles are presented as guidance for the development of a Canadian plan:

1. Prioritize a **net gain in employment**
2. Be guided by **analytical rigour**, basing deployment decisions on full life cycle analysis of sustainability criteria
3. Focus on the **development of markets** to accelerate scale-up
4. Build on international leadership to **secure growth in exports of technology**, services and expertise
5. Use hydrogen to help mobilize **Canada’s resources for export**
6. Showcase the application of hydrogen to **integrated community energy system** design
7. Deliver **clean air** benefits to the public



# INTRODUCTION

In December 2018, H2GO Canada launched a process of consultation with private sector organizations on the prospects for increasing hydrogen production, distribution, and use in Canada. The purpose was to qualitatively identify the barriers and opportunities to achieving a vision of hydrogen use in Canada that supports decarbonization of energy systems and reductions in greenhouse gas emissions. Hydrogen can be used in many industrial and commercial applications, and it can be produced from a diversity of sources. Accordingly, the consultation team – assembled by Fasken and PricewaterhouseCoopers with the support of Natural Resources Canada – worked to engage companies representing a wide range of industrial sectors.

Nearly 50 companies were initially invited to participate in the consultation process, of which more than 35 chose to engage. Most were large, established employers whose activities are expected to profoundly influence the evolution of Canada's energy system in the coming decades. This is not a large subset of industry, but the diversity of sectors represented is an important quality of the process.

Following the circulation of an engagement package, one-on-one interviews were scheduled and conducted – mainly during December 2018 through March 2019. The collective input gathered through the interviews was synthesized into a draft report, which was shared with participating organizations in a series of regional workshops held in Burnaby, Calgary and Toronto, in April. In these workshops, the interview findings were further discussed, with an eye toward developing basic guidance for government and industry stakeholders in deploying hydrogen systems that are sustainable and scalable. This report is the outcome of that dialogue.



Herein the collective perspectives of the private sector organizations engaged in the consultation process (i.e., stakeholders) are presented. This is not a verbatim report, nor is the text attributable to any specific company. It represents the best efforts of the consultation team to reflect the spirit of the input gathered in a coherent, narrative format. No part of this document should be considered as obliging the stakeholders to any action, nor be construed as promise or covenant. Rather, the value of this document is as a source of vision and guidance, voluntarily submitted by industry stakeholders, regarding the challenge of developing a successful hydrogen deployment plan for Canada.

Questions about this report and the consultation process should be directed to the consultation team:

**Bob Oliver**, H2GO Canada

**Daniel Brock**, Fasken

**Stephen Lidington**, PwC LLP

**Rymal Smith**, Change Energy Services

**Chad Heard**, Heard Communications

**Aniket Bhatt**, Fasken

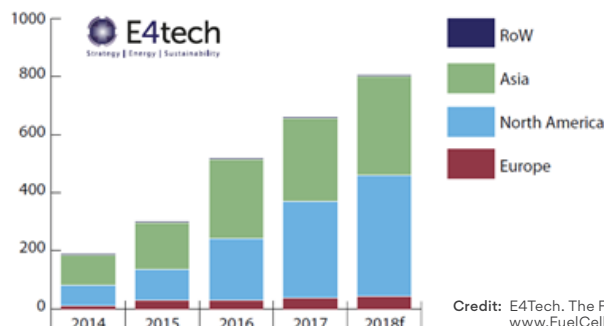
# WHY HYDROGEN?

## Establishing context for the interest in hydrogen

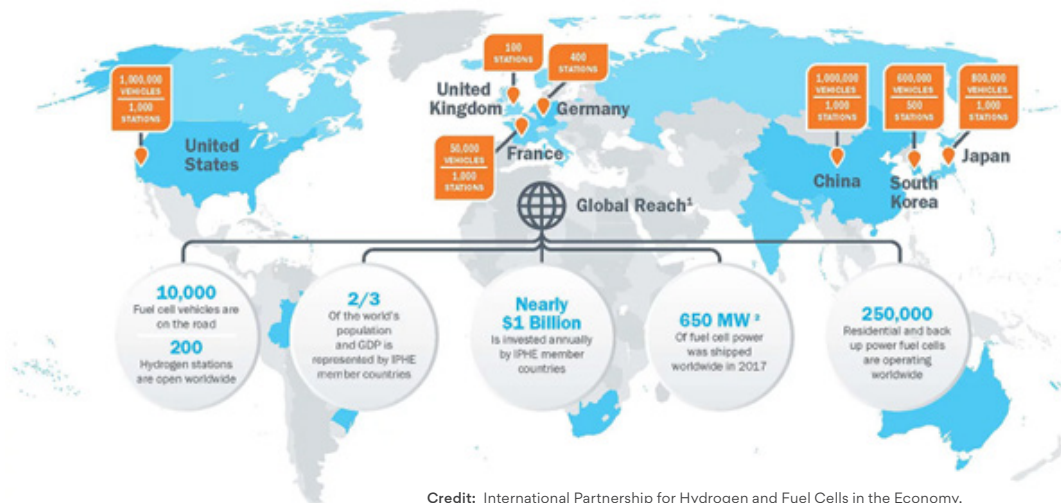
Interest in hydrogen is growing. This is observable by the growth in global investments made in hydrogen technologies and infrastructure in recent years, as well as the projected rates of adoption expressed in ambitious declarations by governments and industry alike. The images below illustrate these indicators. The first shows the recent, global growth in installed capacity of fuel cells – just one type of hydrogen technology – according to publicly reported data. The other shows recent levels of unit and system deployments worldwide, as well as the targets among leading countries for hydrogen powered vehicles and refueling stations. Each image is a snapshot – a recently-captured instant-in-time – of a rapidly evolving landscape.

The interest in hydrogen arises from the imperative to reduce concentrations of greenhouse gases in the atmosphere, globally, as the primary, long-term solution to the problem of climate change. The governments of many national and subnational jurisdictions around the world, including in Canada, are establishing targets and timelines for the reduction of emissions of greenhouse gases – chiefly, carbon dioxide – aiming to forestall the worst impacts of global warming. Achieving these goals is the orienting principle of many new and emerging policies of government, including regulations promulgated under law; in particular, those concerning the production, distribution and use of energy.

Megawatts by region of adoption 2014 - 2018



Credit: E4Tech. The Fuel Cell Industry Review 2018. [www.FuelCellIndustryReview.com](http://www.FuelCellIndustryReview.com)



Credit: International Partnership for Hydrogen and Fuel Cells in the Economy. <https://www.iphe.net/about>

Private sector organizations – especially larger, more established companies that employ millions of Canadians and invest significantly in the country’s economic growth – are confronted with the challenge of contributing to climate change objectives while fulfilling obligations to their stakeholders and commitments to their communities. In this context, *options* are highly valued: options for corporations to decarbonize their internal processes, as well as the larger energy systems of which they are a part (and on which they rely); options among which to compare risks and contrast benefits; and, perhaps most importantly, a choice between options that *work*.

Indeed, not every pathway to a lower-carbon future is a practical option for every organization or community to follow. Some involve fundamental trade-offs that are untenable, either because the application of the relevant technologies is infeasible, or the transitions proposed are disruptively inconsistent with regional economic and social norms.

As an option, hydrogen is generally considered compelling for three main reasons:

**1. Hydrogen has potential to serve as a versatile, non-carbon energy commodity, capable of meeting society’s demands for power, heat and mobility (to some significant degree).**

Converting the potential energy stored in molecular hydrogen ( $H_2$ ) into work results in no emissions of carbon dioxide. This is true whether the hydrogen is used in a fuel cell to generate electrical power, or to generate heat through simple combustion. The electrochemical reaction in a fuel cell generates only pure water or water vapour. Similarly, burning hydrogen generates only water (plus low levels of nitrogen oxides when drawing oxygen from the air, which is four-fifths nitrogen).

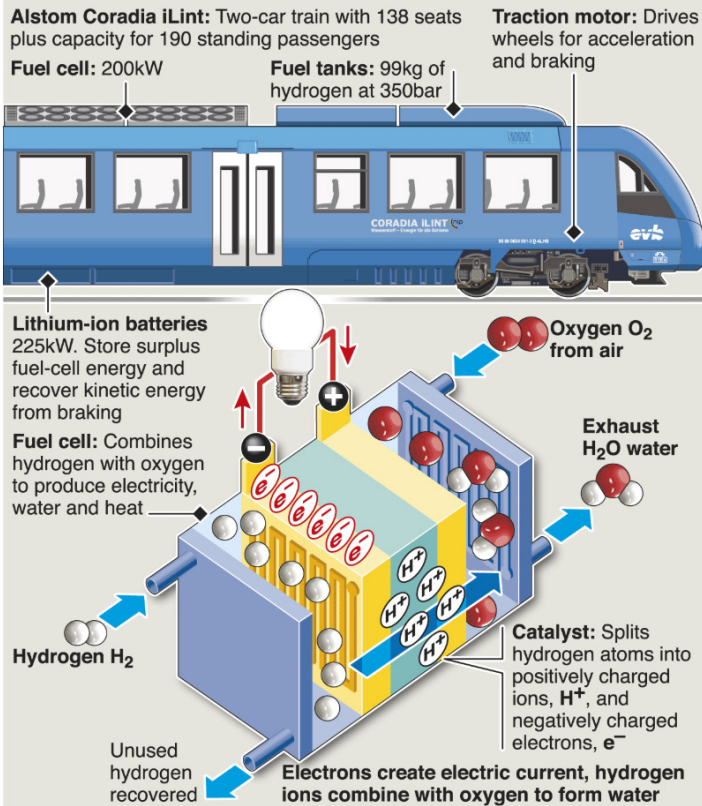
Hydrogen is thus a carbon-free carrier of energy.

Furthermore, hydrogen has roughly three times the energy content of gasoline, diesel and natural gas, by mass. Accordingly, it has been shown to effectively power vehicles of all types. It can be used as a fuel for internal combustion engines; it can also serve as the source of energy for electric propulsion, stored onboard. It can efficiently deliver heat at high temperature in industrial process applications, or at lower temperatures suitable for buildings and district thermal systems.

So, through the application of different technologies, the energy in hydrogen can be converted into heat or electricity. As well, the efficiency with which heat or electricity is produced from hydrogen is at least as high as that with other, more common technology, and often much more so. This is how hydrogen is considered capable of satisfying the demands of primary energy end-uses in industry, in buildings and in transportation.

## Hydrogen to power trains of the future

French TGV-maker Alstom has unveiled the world's first passenger-carrying hydrogen-powered train – the two-car Coradia iLint has a range of 600km and can travel at speeds of up to 140km/h



Sources: Alstom, Institution of Mechanical Engineers

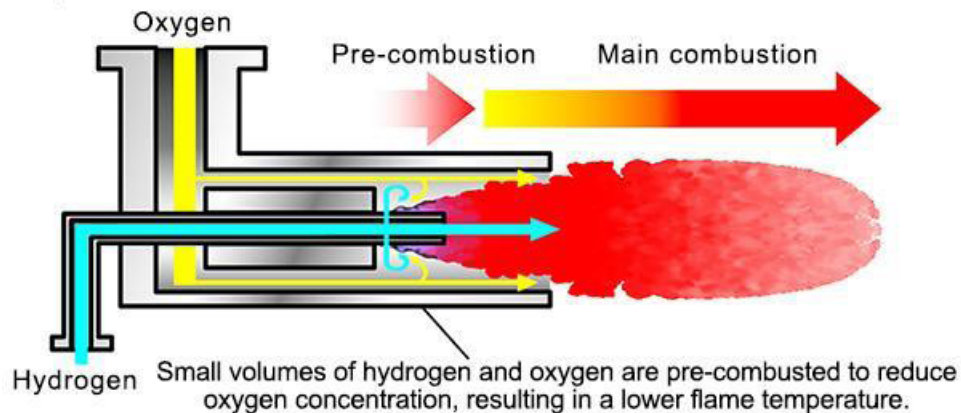
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## HYDROGEN FOR ELECTRIC MOBILITY

The inset image describes how hydrogen fuel cells are used to generate enough electrical power to propel a train. The fuel cells are supplied with hydrogen from pressurized tanks onboard, as well as with oxygen drawn from the surrounding air. In an electrochemical reaction, the hydrogen ( $H_2$ ) and oxygen ( $O_2$ ) bond to form water ( $H_2O$ ), releasing energy in the form of electrical current. Some of the current from the fuel cell is used to power the electric motors that propel the train along the track, and some is used to maintain charge on a set of batteries. These batteries also help meet the demand for propulsion power, and for other systems onboard. The energy stored in the hydrogen is substantial – enough for the train to travel much farther than would be possible on batteries alone.

The train shown is a model using fuel cells built by Hydrogenics, headquartered in Mississauga, Ontario.

**Credit:** Graphic News, sourcing Alstom, Institution of Mechanical Engineers. <https://www.graphicnews.com/en/pages/38485/TRANSPORT-Hydrogen-powered-trains>



## HYDROGEN FOR INDUSTRIAL HEAT

The inset image describes the operation of a general-purpose burner, fueled by pure hydrogen. Recently developed by Toyota, and intended for industrial use, the burner uses the high-temperature properties of hydrogen combustion. For many industrial applications, this provides an option for zero-carbon process heat.

**Credit:** Gasworld. Toyota develops world's first general-purpose hydrogen burner for industrial use. <https://www.gasworld.com/toyota-develops-worlds-first-hydrogen-burner/2015852.article>

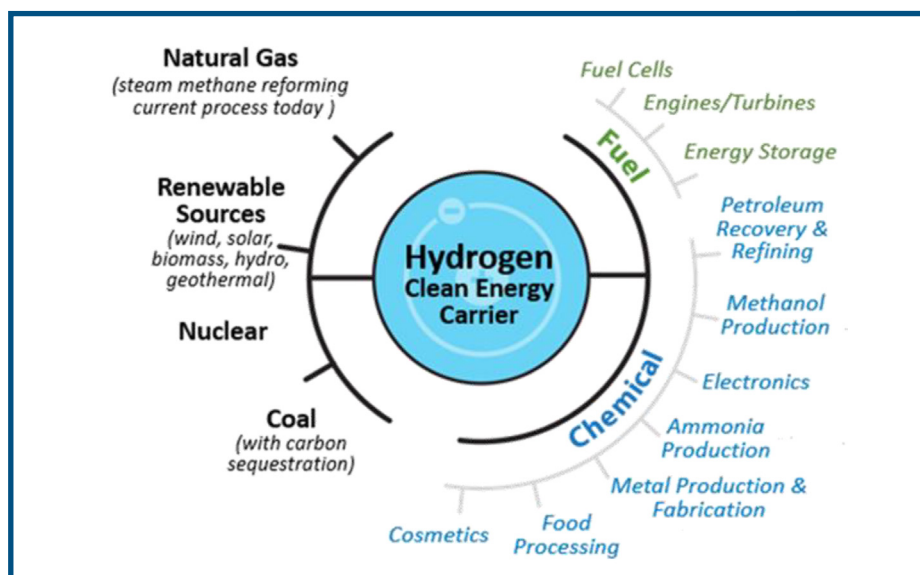
## 2. Hydrogen can be produced from currently developed sources, the supply chains for which can be progressively decarbonized.

Hydrogen is the most abundant element on earth, present in both organic and inorganic compounds. Through various processes, hydrogen can be drawn out of these compounds. Common means of hydrogen production include electrolysis of water ( $H_2O$ ), where the application of electricity separates the hydrogen from the oxygen, and reforming of fossil fuels – mostly natural gas ( $CH_4$ ) – where the application of heat separates the hydrogen from the carbon (which is usually released to the atmosphere as by-product carbon dioxide). Hence, a source of energy and a material are needed to generate hydrogen. As with electricity, hydrogen is a *carrier* of energy – not a primary source of energy.

The carbon-intensity of the hydrogen supply chain is, therefore, a function of its inputs. If, for example, hydrogen is produced using electricity generated from hydropower, nuclear power or wind power, then its carbon-intensity is virtually zero (or nearly so). If the hydrogen is

extracted from natural gas, with the by-product carbon dioxide captured and sequestered, then the hydrogen can be considered to have net-zero carbon-intensity.

So, hydrogen can be used as an energy commodity, but that is only part of the story. In chemicals processing and in manufacturing processes, hydrogen often serves as a material input to production. It is also a by-product of many industrial processes. Where the appropriate facilities for storage and distribution exist, substantial volumes of hydrogen are currently generated, exchanged and used within industrial clusters. Where by-product hydrogen cannot be economically captured and put to practical use, it is usually vented to the atmosphere. Hydrogen is non-toxic and, as the lightest element, it rapidly disperses into the air. Biogenic industrial processes, such as the treatment of municipal solid waste and wastewater, represent further opportunities to build up the supply of hydrogen in Canada.



### HYDROGEN CONNECTS AND INTEGRATES

The U.S. Department of Energy's H2@Scale program views hydrogen as an integrating medium connecting multiple sources and uses. "Hydrogen is an energy carrier: used as fuel or feedstock; produced from diverse domestic resources and used in many applications."

Credit: U.S. Department of Energy, [http://www.metrolinx.com/en/news/announcements/hydrail-resources/Sunita%20Satyapal\\_DOE%20Keynote%20Metrolinx%20Canada%2011%2016%202017%20rev.pdf](http://www.metrolinx.com/en/news/announcements/hydrail-resources/Sunita%20Satyapal_DOE%20Keynote%20Metrolinx%20Canada%2011%2016%202017%20rev.pdf)

### 3. Hydrogen has the potential to integrate with established energy infrastructure and modes of distribution.

To a significant degree, existing energy distribution infrastructure can be used to move hydrogen to market. Indeed, the integration of hydrogen and hydrogen technologies into energy systems can add value by enhancing the productivity and flexibility of deployed assets.

Existing retail forecourts for refueling vehicles already serve as host sites for many hydrogen dispensers, alongside gasoline, diesel and natural gas pumps. Like these fuels, hydrogen is trucked in via over-the-road transport and stored on-site. In some cases, hydrogen is generated at the forecourt by an electrolyzer or a reformer.



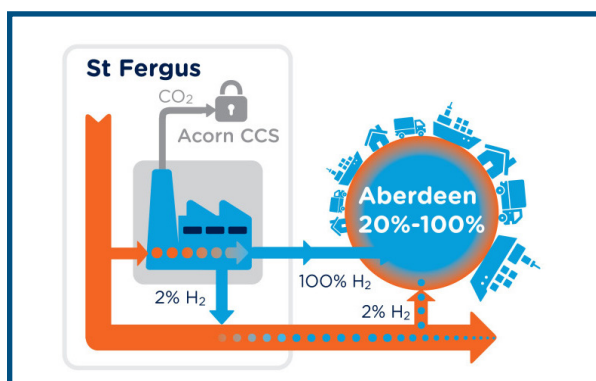
#### BUSINESS AS USUAL - HYDROGEN USING CURRENT DISTRIBUTION SYSTEM

- Newport Beach refueling forecourt with hydrogen dispenser – the 35th retail station to open in California, 2018. Credit: The California Fuel Cell Partnership.
- Hydrogen refueling station in Mountain View, California, with liquid-hydrogen delivery truck, and a Toyota Mirai fueling up. Credit Wikimedia Commons.

Credit: [https://commons.wikimedia.org/wiki/File:Linde\\_hydrogen\\_station\\_Mountain\\_View.jpg](https://commons.wikimedia.org/wiki/File:Linde_hydrogen_station_Mountain_View.jpg)

In either case, parts of the existing network of retail stations could service hydrogen-powered vehicles, the refueling patterns of which are like conventional vehicles.<sup>1</sup>

As well, hydrogen can blend with natural gas. In various hydrogen-methane mixtures, existing natural gas pipeline networks and equipment can be used – in some cases with little or no modification. Such blending of hydrogen produced from low-carbon sources effectively reduces the carbon-intensity of the gas delivered to customers.



#### HYDROGEN INTEGRATING WITH NATURAL GAS INFRASTRUCTURE

SGN, which manages the natural gas network for much of Scotland and the south of England, has initiated an investigation into the viability of converting the existing natural gas pipeline network for the purpose of distributing pure hydrogen. The study will inform the U.K. Government's strategy for decarbonizing heat for buildings and industrial processes, which is key to it achieving greenhouse gas emissions reductions goals in 2050. Various hydrogen delivery options are being examined, including:

- using Aberdeen's regional gas system to deliver up to 100% hydrogen to power up to 300 homes;
- blending hydrogen with natural gas in concentrations of up to 2% in the older national network serving the wider U.K.; and
- constructing a dedicated hydrogen pipeline that would serve Aberdeen's transportation hubs.

Work on the study officially started in late 2018 and is expected to be completed by the summer of 2019.

Credit: Pale Blue Dot. 2018. <https://pale-blu.com/2018/10/10/sgn-and-pale-blue-dot-collaborate-on-aberdeen-hydrogen-vision>

<sup>1</sup> A typical fill-up for fuel cell-electric vehicles currently sold in parts of Canada by Hyundai and Toyota can take only three minutes.

Hydrogen production can also add energy storage and buffering capacity to existing electricity networks. Grid-scale electrolysis plants are currently being used in Europe to add load to the grid to minimize curtailment of supply, especially in areas served by non-dispatchable generating assets, such as nuclear power plants and wind farms. The fleet of electrolyzers produce hydrogen, representing stored energy from the grid. This hydrogen, which is zero-carbon, is often injected directly into the natural gas grid, helping to decarbonize gas supplied to customers. It can also be used as a fuel for hydrogen-powered vehicles. Because it is feasible to store hydrogen as a gas indefinitely, the prospects for *seasonal* energy storage are also being explored.

In these ways and more, hydrogen and hydrogen technologies can expand and extend the utility of existing infrastructure and the services it supports, while also improving energy system efficiencies and asset utilization.

The above-described attributes of hydrogen – (i) its capacity to meet the demand for heat, power and mobility, (ii) the range of developed sources that can contribute to its supply, and (iii) its integration with existing infrastructure and distribution channels – make it a compelling option for decarbonization of energy systems.

While these attributes are driving investments in hydrogen systems *globally*, Canada has the potential to realize benefits that are particularly relevant to its national and regional circumstances.

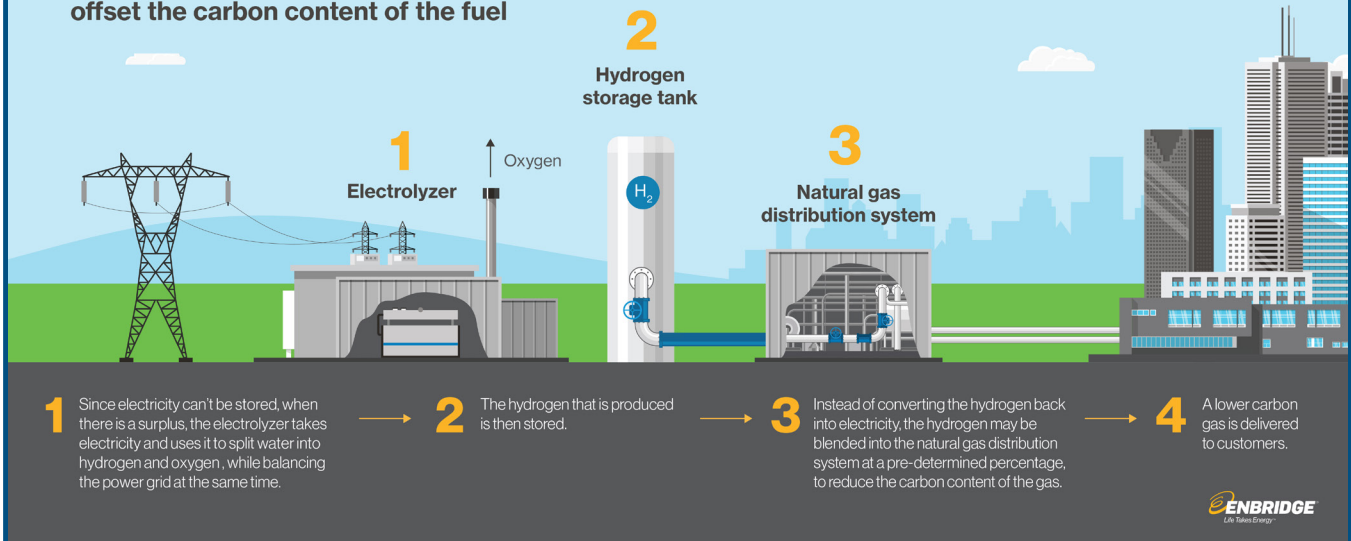
First, hydrogen offers a pathway to decarbonization that is highly *inclusive*. Crucial roles must be played by established companies in resource extraction, power generation and manufacturing, among others, as well as by technology innovators and entrepreneurs.

Second, existing infrastructure and industrial assets need not be stranded, since hydrogen integrates with current systems. Hydrogen technologies build *onto* these systems, using them in ways that create new value as opposed to marginalizing their role or advancing their displacement.

Third, as a consequence of the previous two benefits, the hydrogen pathway is an option that can preserve current employment and create new jobs.

# Power-to-Gas

**Future State - Blending hydrogen into the natural gas distribution system to offset the carbon content of the fuel**



## HYDROGEN INTEGRATING WITH ELECTRICITY INFRASTRUCTURE

Electrolyzers can also improve grid power quality and stability. Electrolyzer facilities can be developed as a fast-response, dispatchable, multi-megawatt load, from which a grid system operator draws valued services, including frequency regulation, flexibility ramping and spinning reserve. Hydrogen is the by-product of such grid services, which can be stored or distributed to other applications. A 2.5 MW Power-to-Gas plant was co-developed by Hydrogenics and Enbridge in Markham, Ontario, is currently being operated by that province's Independent Electricity System Operator.

**Credit:** Enbridge. <https://www.enbridgegas.com/Natural-Gas-and-the-Environment/Enbridge-A-Green-Future/Hydrogen-Storage>

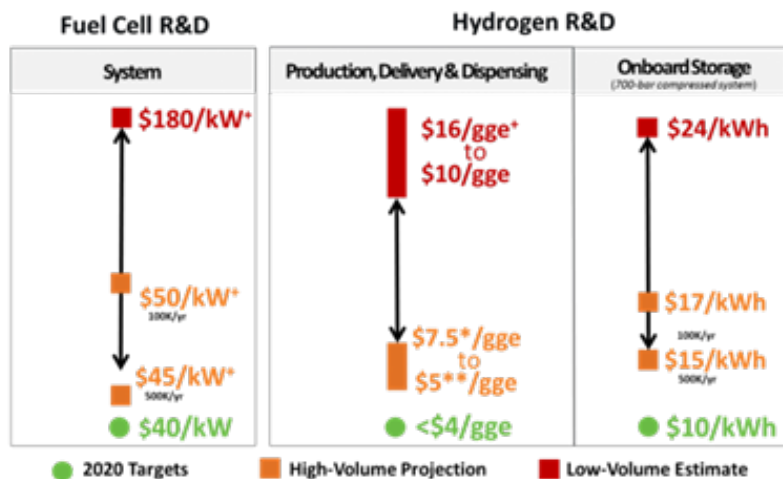


# WHAT IS STOPPING US?

## The challenge facing sustainable hydrogen deployment

Notwithstanding all the potential benefits of hydrogen systems, the deployment of technology and supporting infrastructure faces practical barriers, most of which are economic in nature. Using established modes of production and distribution, the effective price of hydrogen in the market is usually much more than that of conventional fossil fuels. Worse still, the lower the carbon-intensity of the hydrogen, the larger this cost disadvantage often becomes.

However, efforts to scale up hydrogen production and use are expected to moderate prices. Moreover, as demand for hydrogen increases, corresponding innovations in business models and supply solutions are being developed, with the aim of further minimizing cost. Similarly, the cost of hydrogen technologies (e.g., fuel cells, electrolyzers) shipped to market are also expected to drop due to scale-of-production effects and manufacturing improvements.



### COST AND PRICE PROJECTIONS

Accomplishments and progress reported by the U.S. Department of Energy's Fuel Cell Technology Office show a 60% reduction on high volume automotive fuel cell costs from 2006 to 2016, during which time durability quadrupled. The cost of producing hydrogen from renewable power and dispensing hydrogen at high pressure have also reduced significantly

Credit: U.S. Department of Energy, Fuel Cell Technologies Office  
<https://www.energy.gov/eere/fuelcells/fuel-cell-technologies-office-accomplishments-and-progress>

In certain applications the business case for hydrogen systems is already strong. Examples include long-term energy storage and critical backup power supply, and where zero-emissions vehicle operation is an overriding constraint. Such cost-effective deployments could form the building blocks of a broader network of hydrogen systems, wherein multiple actors contribute to the supply and the take-up of hydrogen, each deriving value from the exchange.

To achieve the scaling-up of production and use that is required for hydrogen to become an effective decarbonization pathway in Canada, a plan is needed that coordinates the activities of many diverse organizations, private-sector and public-sector alike. Currently, there is no such plan, meaning that hydrogen systems are likely to deploy slowly and in a fragmented manner. This will inhibit participation in the hydrogen pathway for many organizations, keeping costs high and narrowing the scope of options for reducing greenhouse gas emissions.



#### BUSINESS CASE FOR HYDROGEN USE IN FORKLIFTS

More than 20,000 hydrogen fuel cell-powered forklifts are now in use across the U.S. (ref. U.S. Department of Energy. Industry Deployed Fuel Cell Powered Lift Trucks. 2018. [https://www.hydrogen.energy.gov/pdfs/18002\\_industry\\_deployed\\_fc\\_powered\\_lift\\_trucks.pdf](https://www.hydrogen.energy.gov/pdfs/18002_industry_deployed_fc_powered_lift_trucks.pdf))

In materials handling applications where indoor, zero-emissions operation is required, the business case for hydrogen is strong, partly due to fast-refueling. Fuel cell-electric lift trucks tend to remain in productive use longer with fewer, briefer breaks to refill.

Credit: Connecticut Hydrogen-Fuel Cell Coalition;  
U.S. National REnewable Energy Lab

NREL Image Gallery Photo by Hydrogenics

# THE WAY FORWARD

A diverse array of industry stakeholders is prepared to collaborate with government on the development of a strategic plan for hydrogen in Canada. The representatives from the organizations that participated in the H2GO Canada consultations support the Government of Canada using its capacity as a national convenor to form a multi-stakeholder team, which could work together to define a set of objectives and a suitable process. It is further advised that this process be industry-led, such that the needs of the market are duly addressed in any plan that emerges.

## **Principles and opportunities to consider**

A hydrogen plan for Canada can be developed according to a set of principles, such that it capitalizes on existing advantages and opportunities. Stakeholders in the plan should collectively determine the key indicators of success, which help steer activities toward desired outcomes. The following recommendations offer guidance on the development of such a plan.

## 1. Prioritize a *net gain in employment*.

Hydrogen systems build on existing energy infrastructure and the production of hydrogen relies on currently developed resources. As well, the distribution of hydrogen can work within existing business models. Therefore, as the use of hydrogen for heat, power and

mobility expands, it should be possible to preserve jobs in traditional sectors while growing the opportunities for new employment in the development, deployment and support of hydrogen technologies. Nurturing opportunities with potential for this outcome should be a focus area of a hydrogen plan.

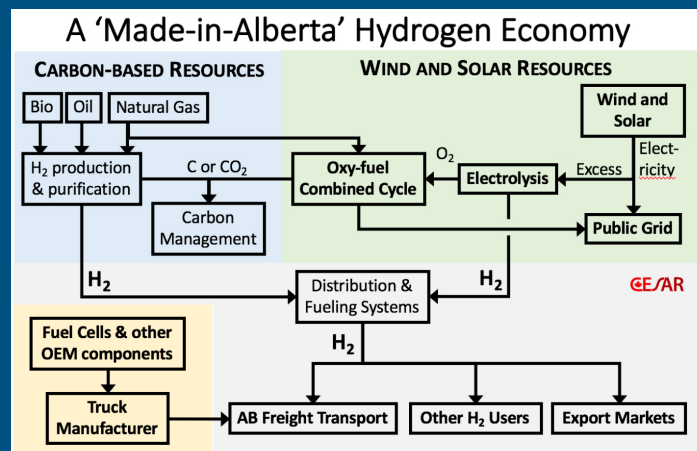
### A VISION OF HYDROGEN-DRIVEN GROWTH IN ALBERTA

The Canadian Energy Systems Analysis and Research initiative (CESAR) at the University of Calgary has begun to quantify the potential for Alberta to benefit from a transition to hydrogen in North America. Noting that exports of Alberta's oil sands products are mainly refined into gasoline, diesel and jet fuel, the CESAR team asserts that the province is very much in the transportation fuel business. From this perspective, hydrogen used to power heavy-duty, fuel cell-electric vehicles is a growth opportunity.

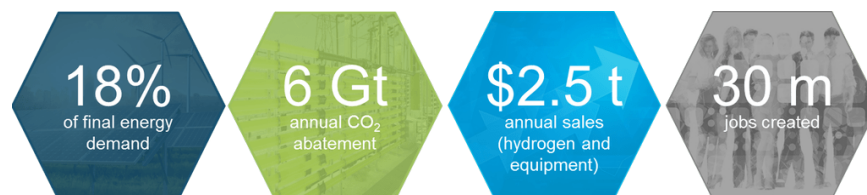
The CESAR team has considered three ways in which hydrogen can be economically produced in Alberta: (1) steam-methane reforming of natural gas, (2) gasification of bitumen or biomass, and (3) electrolysis of water using wind or solar power. These options reflect the province's vast oil and gas resources, its geology that facilitates CO<sub>2</sub> sequestration, its plentiful wind and solar energy resources and its human resources (citing skills and expertise in Alberta, which is already a major producer of hydrogen used in hydrocarbon refining and fertilizer production).

The team concluded that the business of exporting hydrogen for use in heavy-duty vehicles, in the way industry in Alberta currently meets the demand for diesel throughout North America, could generate two-to-four times more economic activity. Importantly, the relatively low cost of natural gas coupled with prospects for carbon capture and storage in Alberta's sedimentary basin, led CESAR researchers to project ways for the province to become one of the lowest-cost sources of low-carbon, large volume hydrogen in North America.

According to the CESAR team, "This will not only mean jobs, but the earnings from the production, wholesale and retail sale of hydrogen will contribute to the province's gross domestic product, royalty and tax revenue."



Credit: Canadian Energy Systems Analysis Research. Zero-emission Transportation Fuels: Alberta's New Economic Opportunity. 2019. <http://www.cesar.net.ca/blog/zero-emission-transportation-fuels-alberta-s-new-economic-opportunity>



### EMPLOYMENT POTENTIAL OF HYDROGEN

The Hydrogen Council – a global CEO-level advisory body providing long-term vision on the important role of hydrogen technologies towards an energy transition – estimates that hydrogen can deliver nearly one-quarter of the global reductions in greenhouse gases necessary to fulfill the Paris Agreement (ref: IEA, 2017; from 34 Gt in 2015 to 26 Gt in 2023 and 13 Gt in 2050), while creating 30 million jobs worldwide.

Credit: The Hydrogen Council vision for 2050, from Hydrogen scaling up – a sustainable pathway for the global energy transition. November 2017. <http://hydrogencouncil.com/study-hydrogen-scaling-up/>

2. Be guided by analytical rigour – deployments should be based on **full life cycle analysis of sustainability criteria**.

In the early stages of market development, installation costs often run high. The initial deployment of hydrogen systems and supporting infrastructure will likely be no different. For sustainable markets to evolve around the early, strategic deployments, careful analysis will be needed to ensure that the optimal, value-creating opportunities are prioritized. The analysis should be based on transparent, full life cycle assessments of the relative economic, social and environmental factors.

It will be important that life cycle assessments are normalized to a set of common metrics or indices, facilitating a fair comparison with other low-carbon pathway options. It should not be expected that hydrogen will always be the best solution for every problem. A vehicle application, for example, must be considered from the perspective of the fuel supply, the vehicle type and its pattern of use. Each of these factors must be considered to establish the extent to which a business case favours hydrogen as a fuel, and these factors may further vary by geography and jurisdiction.

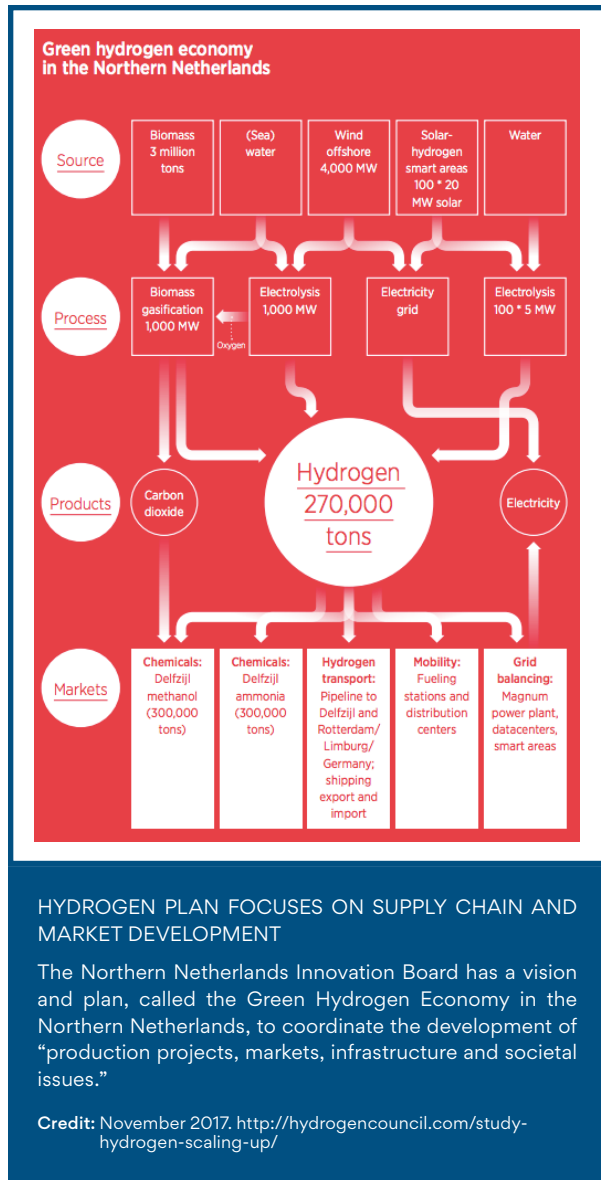
A comprehensive, analytical approach will also help to characterize distinct roles for government policy and for free market forces in jointly advancing hydrogen systems deployment. Where the analysis shows that tangible value is created using hydrogen, but the required capital cannot be mobilized – perhaps through insufficient returns on private investment – there may be a role for government to help bridge the gap between sustainable development objectives and commercial tolerance for risk as part of a long-term pathway to decarbonization. Strategic procurement by government can also help to establish centres of hydrogen production and use in volumes enough to catalyze and support market-driven growth.

3. Focus on the **development of markets** to accelerate scale-up.

Real value arises in exchange, and markets are where exchange happens. For hydrogen to scale-up efficiently, such that transactions in hydrogen as a fungible commodity can significantly contribute to decarbonization, commercially sustainable markets must be cultivated. Scaling-up is crucial to the success of hydrogen markets – the greater the number of transactions and the greater the volume of trade, the more opportunity for competition to drive hydrogen prices down. This enables more users to embrace hydrogen, thus creating greater value overall.

The technologies involved in hydrogen production, storage, distribution and use are already in commercial use all around the world. So, limited or sporadic deployments that mainly serve to demonstrate technology are no longer needed.

Instead, the simultaneous development of hydrogen supply and demand, with an eye towards the opportunities that are most promising for scalability, should be the objective. Once a stable exchange in hydrogen is achieved in a given area, it is easier and less costly to subsequently introduce additional sources of supply and demand on the margin. This will create the conditions for incremental scale-up of the market, ideally achieving commercially self-sustaining growth.



4. Build on international leadership to **secure growth in exports** of technology, services and expertise.

Canadian hydrogen technology developers and manufacturers are already considered leaders in the global market, with growing sales in Europe, Asia and the U.S. According to a member survey conducted by the Canadian Hydrogen and Fuel Cell Association, 2018 revenues of more than \$150 million were generated through exports, mainly to China, the U.S. and Germany.<sup>2</sup> Product sales ranged from fuel cells and electrolyzers to hydrogen and refueling infrastructure. The revenues support direct employment of more than 2,000 Canadians.

Furthermore, research and development expenditures were more than \$90 million in 2017. Investments by Canadian firms and governments have helped to advance the state-of-the-art in hydrogen technologies, globally. This is particularly true of proton exchange membrane systems, which are the dominant fuel cell technology for mobility applications.

Any plan to deploy hydrogen systems within Canada should lever its existing export advantage and ensure that its world-leading innovators have a competitive incentive to remain headquartered in Canada. As the growth in hydrogen systems adoption accelerates in Asia and Europe, Canadian firms (and their intellectual property) will be under pressure to move central operations closer to their main markets in other jurisdictions.

Additionally, consideration should be given to how promoting the adoption of hydrogen systems internationally can help Canada – as an exporter of hydrogen technology and knowhow – to improve its trade balance.

<sup>2</sup> ref: Canadian Hydrogen and Fuel Cell Sector Profile – November 2018.  
<http://www.chfca.ca/media/CHFC%20Sector%20Profile%202018%20-%20Final%20Report.pdf>



#### HYDROGEN TECHNOLOGY EXPORTS TO CHINA

Through licensing agreements and direct sales, Hydrogenics is supplying companies in China with thousands of fuel cell modules, valued at more than \$50M, for its fast-growing fleet of fuel cell-electric buses.

**Credit:** <https://www.hydrogenics.com/2017/06/08/hydrogenics-signs-purchase-and-license-agreement-valued-at-over-50m-usd-for-1000-fuel-cell-bus-power-modules/>

<https://www.hydrogenics.com/2018/01/18/hydrogenics-receives-7-8-million-fuel-cell-order-in-china/>



#### HYDROGEN TECHNOLOGY EXPORTS TO U.S.

The Orange County Transportation Authority, which has ordered 10 of New Flyer's 40-foot *Xcelsior CHARGE*™ hydrogen fuel cell-electric buses, recently completed a test demonstration of the model in which a range of more than 560 km without refueling was achieved, exceeding the Authority's performance target by 17%. These buses use fuel cells built by Burnaby-based Ballard Power Systems.

**Credit:** <https://www.greencarcongress.com/2019/04/20190426-nfi.html>

##### 5. Help mobilize Canada's *resources for export*.

It has been noted that hydrogen can be synthesized from Canada's hydrocarbon resources (e.g., natural gas) and from its renewable resources (e.g., hydroelectric power, biomass). This hydrogen can be moved to international markets to meet the growing, global demand for low-cost, low-carbon hydrogen.

Export of hydrogen is thus a potential growth opportunity for Canada's resources and energy sectors, possibly using existing corridors and rights-of-way to reach border crossings and coastal ports.

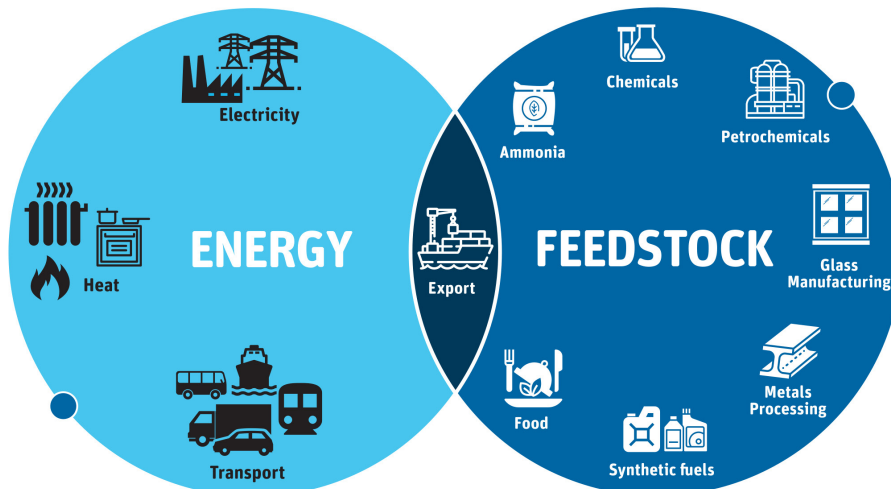


#### HYDROGEN FOR EXPORT AND DOMESTIC USE

Air Liquide and Hydrogenics will build a 20 megawatt PEM electrolyzer – the largest water electrolysis plant of its kind in the world – in Bécancour, Québec, at Air Liquide's existing facility. The plant will be capable of producing 3,000 tonnes of hydrogen daily using low-carbon hydropower from Hydro-Québec. The proximity of the site to major industrial markets in Canada and the U.S. boosts the supply of low-carbon hydrogen in North America.

Credit: <https://www.greencarcongress.com/2019/02/20190226-airliquide.html>

#### APPLICATIONS FOR HYDROGEN



#### HYDROGEN EXPORTS STRATEGY FOR AUSTRALIA

Commonwealth Scientific and Industrial Research Organisation (CSIRO) – an independent Australian federal government agency – in its National Hydrogen Roadmap declared that the country's "extensive natural resources, namely solar, wind, fossil fuels and available land lend favourably to the establishment of hydrogen export supply chains." Indeed, the first trial shipment of hydrogen from Queensland to Japan happened in March 2019. The hydrogen was embedded in a liquid chemical compound, methyl cyclohexane, which can be safely and efficiently transported in conventional road tankers, pipelines and supertankers. The Australian Government's Chief Scientist describes hydrogen as the country's next multibillion-dollar export opportunity.

Credit: <https://www.csiro.au/en/Do-business/Futures/Reports/Hydrogen-Roadmap>  
<https://www.pv-magazine.com/2019/03/29/queensland-sends-first-green-hydrogen-shipment-to-japan/>

6. Showcase/study application of hydrogen to **integrated community energy system** design.

Hydrogen could work well with integrated community energy systems. For example, in district thermal systems requiring low-temperature heat, hydrogen could be used as a fuel in combustion engines that power generators to meet local electricity needs. As well, hydrogen can be produced using electrolyzers powered by local sources of electricity. In an example of cascading energy use that makes integrated community systems so energy efficient, the waste heat from either engines or electrolyzers could help meet the load within a district thermal distribution system. This helps community energy systems lower greenhouse gases even further.

As well, hydrogen used as a fuel for vehicles (ranging from light-duty to heavy-duty) can help resolve the challenge of integrating transportation into community energy

systems. As previously noted, this is because hydrogen can be used as a zero-carbon energy commodity that can be combusted or converted to electricity in a fuel cell, thus delivering heat, power and mobility within the community. The hydrogen used could also be produced within the community as by-product of industrial processes or waste treatment, and from local renewable energy sources.

In electrical grid modernization efforts, hydrogen systems provide remote communities with a means to improve service reliability through low-carbon back-up power facilities. In off-grid settings, hydrogen systems can reduce the community's reliance on imported diesel for power generation. In both cases, hydrogen facilitates the commercial development of local energy resources (i.e., power generation coupled to seasonal energy storage, process and building heat, and fuel cell-electric vehicle operation).



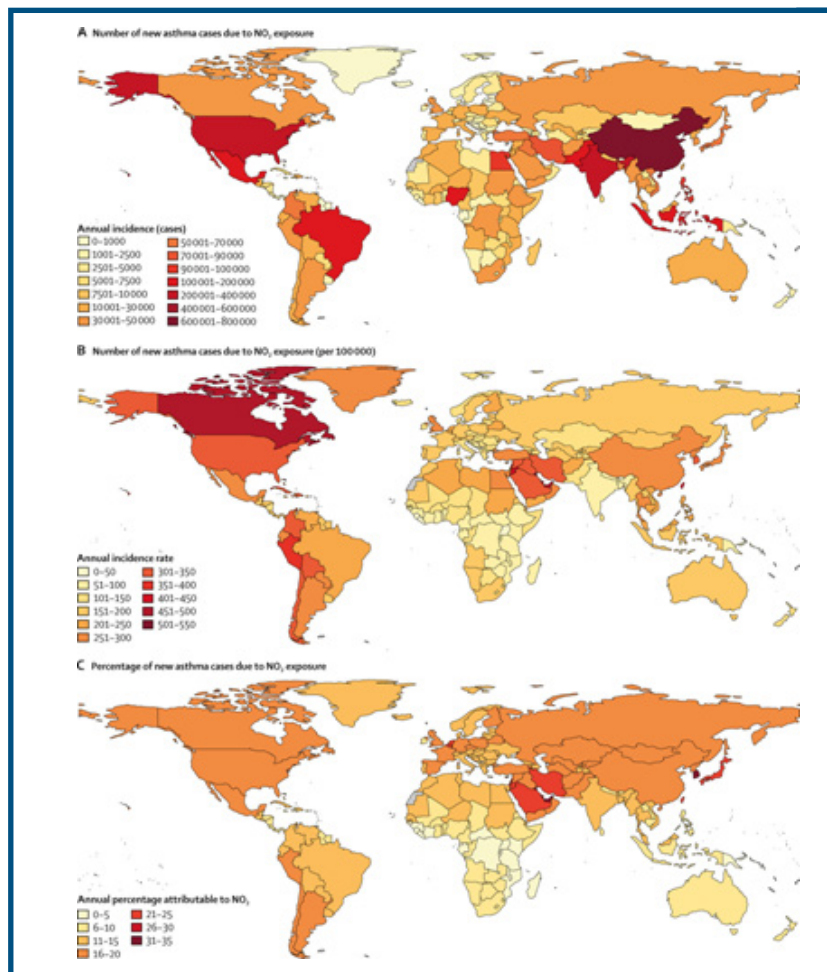
#### HYDROGEN IN REMOTE COMMUNITIES

The remote Orkney Islands in Scotland have the potential to generate more renewable power (e.g., tidal, wind) than the small island population can consume. To become an energy exporter and to fully decarbonize its local systems of transportation, industrial energy, building heat and power, and industrial feedstocks, the community is pursuing a transition to a hydrogen-based integrated energy system.

Credit: Orkney Surf'N'Turf. <http://www.surfnurf.org.uk/>

## 7. Deliver *clean air* benefits to the public.

The social costs of air pollution are often overlooked, given the general improvements in air quality owing to industry efforts to reduce smog-forming emissions from vehicles and stationary sources. Yet local emissions sources are still a threat to human health and cited by the public as an ongoing environmental concern. Cultivating uses of hydrogen that can deliver immediate health benefits to the public, via cleaner air, can reduce health care costs. It also has the co-benefit of building public acceptance of hydrogen by putting risks in the context of real, tangible benefits.



### AIR QUALITY A CONTINUING DRIVER OF CHANGE

About 4 million children worldwide develop asthma each year because of inhaling nitrogen dioxide air pollution, according to an open-access study published in The Lancet Planetary Health by researchers at the George Washington University Milken Institute School of Public Health (Milken Institute SPH). The study, based on data from 2010 to 2015, estimates that 64% of these new cases of asthma occur in urban areas.

“The study is the first to quantify the worldwide burden of new pediatric asthma cases linked to traffic-related nitrogen dioxide by using a method that takes into account high exposures to this pollutant that occur near busy roads,” said Susan C. Anenberg, PhD, the senior author of the study and an associate professor of environmental and occupational health at Milken Institute SPH.

Credit: April 2019. [https://www.eurekalert.org/pub\\_releases/2019-04/gwu-moc040919.php](https://www.eurekalert.org/pub_releases/2019-04/gwu-moc040919.php)

# BARRIERS TO CONFRONT

Notwithstanding the benefits that drive interest in hydrogen, there are many practical barriers to successful deployment. Organizations participating in the H2GO Canada consultations identified several that a strategy should address. These barriers are thematically organized as supply chain maturity, financing and policy, and knowledge and awareness.

- **Supply chain maturity**

Stakeholders consulted generally viewed fuel cell technology as proven and market-ready. Installed systems have been operating for years, which has built confidence. Increased durability and reduced cost are expected as the scale of commercial adoption expands. Yet scaling up faces significant market inertia. Costs won't drop until volume grows, and volume won't grow until costs drop. Some impulse is needed to activate market development.

Indeed, an organization's procurement officer is often obligated by policy to source materials and services competitively. For specific applications of hydrogen technology, there may only be a handful of suppliers, globally, from which to buy. Similarly strained is the supply of trained installers and maintenance personnel. Thus, many companies may be deterred from embracing hydrogen alternatives until robust supply chain conditions are achieved. Navigating this dilemma will require leadership.

Specific to hydrogen-powered vehicles, another major barrier is the availability of hydrogen refueling stations. Return-to-base commercial vehicle fleets that can refuel in a private, centralized depot are likely to be economically viable in the near-term. But for interurban goods movement, the ability to refuel at public roadside stations (ideally along highways) is necessary to achieve market-driven scale-up of technology adoption.

In terms of the price for hydrogen, the majority is currently produced for use as a material for industrial processes, not as an alternative energy commodity for generalized end-uses, such as heat, power and mobility. The market price for hydrogen today can range well upward of \$16/kg, delivered by industrial gas suppliers or merchant gas suppliers. This is not competitive with the price of gasoline or diesel. However, the U.S. Department of Energy estimates that less than \$4 per gallon of gasoline-equivalent is achievable, through technical improvements in production and distribution arising from further research and the development of economies-of-scale.<sup>3</sup>

A lack of pipeline infrastructure for moving hydrogen is also noted as a barrier to the use of industrial by-product hydrogen. A pipeline network linking local industrial producers and users of hydrogen could enhance economic productivity. It would enable low-cost, by-product hydrogen to be exchanged among manufacturers who otherwise have few supply options, and thus pay a premium for delivered hydrogen. The value arising in this exchange would serve to monetize by-product hydrogen within industrial clusters.

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<sup>3</sup> U.S. Department of Energy.

Presentation: U.S. Department of Energy Hydrogen and Fuel Cell Technology Overview. 2018. [https://www.energy.gov/sites/prod/files/2018/03/149/fcto\\_doe\\_h2\\_fc\\_overview\\_satyapal\\_fc\\_expo\\_2018\\_0.pdf](https://www.energy.gov/sites/prod/files/2018/03/149/fcto_doe_h2_fc_overview_satyapal_fc_expo_2018_0.pdf)

DOE Hydrogen and Fuel Cells Program Record. Current Status of Hydrogen Delivery and Dispensing Costs and Pathways to Future Cost Reductions. 2018. [https://www.hydrogen.energy.gov/pdfs/18003\\_current\\_status\\_hydrogen\\_delivery\\_dispensing\\_costs.pdf](https://www.hydrogen.energy.gov/pdfs/18003_current_status_hydrogen_delivery_dispensing_costs.pdf)

- **Financing and policy**

There are trillions of dollars in investor appetite for energy and infrastructure developments, globally.<sup>4</sup> Scarcity of capital is not a barrier to hydrogen deployment. However, a consistent policy framework that mobilizes the requisite capital may be needed. Many investors are attracted to long-life assets, in which contracted cash flows can provide high visibility on achieving a return on invested capital threshold. This may facilitate the level of investment needed to rapidly scale hydrogen markets, but it would rely on the extent to which hydrogen technology and infrastructure (and the services provided) could be incorporated into the scope of a regulated or unregulated operation. Infrastructure investors typically avoid investing in unproven or first-of-a-kind assets. Infrastructure investments are typically highly levered, and debt investors like to see a long track record of performance. Hence, large-scale hydrogen system financing will likely require a degree of policy innovation to indemnify investors.

Furthermore, a project that is large in scale may be necessary to attract the interests of large-scale investors (e.g., into the hundreds of millions). The larger the project, the more substantial the opportunity to build knowledge on hydrogen systems and normalize their use. As public infrastructure initiatives, large projects could be appropriately de-risked through government involvement, based on the fulfillment of a public good. In this context, cost-minimization may not be the only driver of the public good; indeed, innovation is also widely recognized as a function of government procurement.

A related challenge to scaling up hydrogen supply and reducing cost is a fundamental lack of demand for more hydrogen. There is no market *pull*, because the deployment of fuel cells in stationary and vehicle applications is minor in Canada. Partly, this is because consumers (individuals and businesses) have little incentive to pay a premium for zero-emission solutions. The climate change and clean air benefits are distributed across society, and globally. The benefits are highly valued but are *external* to a discrete project business case.

As said in the previous section, techno-economic analytics are foundational to the business case of hydrogen projects. For example, the current cost of hydrogen refueling station construction and operation is higher than typical plug-in vehicle recharging stations. However, the cost disparity narrows as the electricity infrastructure is sized to meet multiple, concurrent demand for fast, convenient electric vehicle recharging. Some of the stakeholders consulted estimate that hydrogen-electrified transportation *en masse* can be cost-competitive with other carbon-neutral alternatives, and that in some applications, there may be no other practical option. A full cost comparison would help put equipment and installation costs into context. Such analysis is needed to inform the public discourse.

4. Institutional investment in real assets could represent a \$100 trillion market by 2030, according to a Brookfield Asset Management Investor Day presentation in New York on 26-Sep-2019. <https://bam.brookfield.com/~media/Files/B/BrookField-BAM-IR-V2/ir-day/2018/copy-of-investor-day-2018-bam-f-aum-update.pdf>

- **Knowledge and understanding**

A general lack of experience with hydrogen systems is a practical barrier to deployment. This applies to professional teams as well as to the public. Installation crews and inspection personnel require familiarity with prevailing codes and standards. Otherwise, commissioning of new work may be inefficient and costly. Certainty and clarity from the permitting authority is likewise crucial.

At the same time, the public needs to have confidence in the safety and reliability of hydrogen systems that are put into general use. Unfamiliar with hydrogen in their day-to-day lives, people tend to focus on examples of downside risks. Absent an understanding of how hydrogen is safely used and the benefits it yields, fears can become amplified and erode the support of the community.

In the U.S., government and industry organizations work together to develop and disseminate knowledge on safe hydrogen management through various programs and initiatives, such as *Hydrogen Tools*, the *Hydrogen Risk Assessment Model* (HyRAM) *Toolkit* and the newly-established *Centre for Hydrogen Safety*. Likewise, there is the California Fuel Cell Partnership, a not-for-profit organization that works with the state government to educate the public and to mobilize stakeholders in the development of policy. By contrast, there is not an identifiable, organizing *presence* in Canada to build national capacity and to engage at the local level to cultivate support for hydrogen.

Lacking visibility, hydrogen is not well-represented in public policy dialogues in Canada. Often the efforts to promote hydrogen options are too technically-oriented and too focused on engineering discussions, marginalizing the participation of many stakeholders. Consequently, it becomes an afterthought when setting objectives and developing plans. There is a need for more sophisticated stakeholder outreach and engagement.

### **Concluding remarks**

The findings of the consultations presented in this report lead H2GO Canada to believe that the time has come for hydrogen and hydrogen systems to be properly recognized as an important part of Canada's long-term plan for decarbonization. Work must begin now to scope near-term opportunities to deploy hydrogen systems that are in the public interest and can become commercially viable. Such deployments may be separately initiated, but part of the underlying justification is their connection to a broader vision. Thus, we need to approach the challenge of scaling up hydrogen at two levels, simultaneously: a regional level, in which the local sources of supply and demand are knitted together into a self-sustaining market; and a national level, in which the sum of the regional efforts contribute to the realization of a broadly-held vision.

This approach will require careful analysis, the development of partnerships, the mobilization of investors and the engagement of the public. H2GO Canada looks forward to doing its part to support the development of sustainable, scalable hydrogen markets in Canada.







**FOUNDATIONAL HYDROGEN INFRASTRUCTURE STEERING COMMITTEE**  
**(the “Committee”)**

**TERMS OF REFERENCE**

**1. Vision**

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 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**”), together the “**Founding Partners**”), have launched an initiative called “Bruce Innovates: Foundational Hydrogen Infrastructure Project” (“**Bruce Innovates**”). Bruce Innovates goal is to illustrate, by deploying transformational technologies such as hydrogen production that Bruce County intends to become the clean energy capital of Canada by establishing a leading region for collaboration and training in clean technology development and energy innovation.

Bruce Innovates also plans to establish a platform for creating unique commercial partnerships with key strategic partners (a “**Project Partner**”). An example of this approach is the Power-to-Gas pilot project (the “**P2G Project**”) currently under consideration by the Founding Partners. The P2G Project aims to develop of a 2 MW electrolyser and fueling station to create hydrogen from low-carbon electricity and through a methanation process to create synthetic natural gas. As Bruce Innovates progresses in its mandate, other commercial ventures will be developed to further the hydrogen economy.

Bruce Innovates provides Project Partners with a collaborative platform to bring economic opportunities to the participants, the Bruce region and SFN territory while contributing meaningfully to de-carbonization goals within Canada.

These terms of reference outline the governance of the Committee and its oversight of Bruce Innovates.

**2. Purpose**

To oversee the development, management and oversight of the Bruce Innovates mandate.

At the core is the establishment of Bruce Innovates as a leading region for collaboration and training in clean technology and energy innovation. Bruce Innovates represents a platform located within Bruce region to:

1. Develop, test and scale-up hydrogen production and storage viability;
2. Diversify and boost the economy through investments in hydrogen and clean energy innovation;
3. Support SON and other First Nation communities in building capacity towards greater energy self-sufficiency through hydrogen-based solutions; and
4. Accelerate the commercial deployment of Canadian-based hydrogen technologies both nationally and abroad.

These actions will help unlock the potential for a hydrogen economy in the Bruce region.

As part of this core mandate, a secondary focus of Bruce Innovates will be to work with strategic partners to develop commercial enterprise using hydrogen-based technologies. The P2G Project is an example of one such venture currently underway.

### **3. Responsibilities**

The Committee is the core group representing the Founding Partners that meet on a regular basis to move Bruce Innovates forward. It is the point of contact for each of the Bruce County council and the SFN band council (the “**Councils**”). As Bruce Innovates progresses in its mandate, Project Partners will be invited to join the Committee as sitting members as appropriate.

The Committee’s primary role is the development of the activities noted below and to recommend for approval the recommendations of the Committee to the Councils and the boards/management committees of Project Partners.

Responsibilities shall include, without limitation:

- Establishing a work plan and schedule;
- Overseeing the process, including government relations activities, to obtain corporate, regulatory and contractual approvals to effect Bruce Innovates;
- Overseeing the preparation and execution of agreements with strategic partners such as the Federation of Canadian Municipalities, the Ontario government, the Canadian government and the Independent Electricity System Operator;
- Reviewing the results of legal and financial due diligence;
- Regularly updating each Council, board and management committee (as the case may be) on progress, and soliciting input and feedback as required;
- Overseeing ongoing stakeholder and community engagement and communication activities related to Bruce Innovates;
- Overseeing process to engage stakeholders and the community for ideas and feedback related to Bruce Innovates;
- Liaising with other organizations to clarify information, test planning assumptions and receive feedback on proposed actions/measures;
- Receiving, reviewing and finalizing key deliverables from legal counsel and supporting consultants;

- Overseeing the development and implementation of a shared communication and community engagement plan; and
- Establishing and receiving recommendations from supporting working groups and work streams as may be required.

The Committee may create the following working groups and work streams to assist the Committee in discharging its responsibilities:

- i. Power-to-Gas Working Group;
- ii. Foundational Large Scale Infrastructure Working Group; and
- iii. Innovation Centre Working Group.

Other working groups may be established as necessary.

#### **4. Principles**

The following principles guide the work of the Committee:

Communication: The Committee will speak with one voice. Key messages for appropriate stakeholders will be developed after each meeting. Discussions will be kept confidential at meetings until a decision is made by the Committee that information can be shared beyond members of the Committee. Each Project Partner will follow their own processes for internal communication through their respective organizations.

Collaborative: Consensus-based decision-making. Consensus decision making strives to synthesize many diverse elements rather than focus on binary options. It focuses on process and is concerned with understanding and mitigating minority objections. Consensus decision making appreciates that it is in the organizations' best interests to understand all of the options, to debate and be open to a new and better option. On that basis, the Committee will value respectful disagreement to advance the purposes of the Committee and its purpose.

Open, respectful dialogue: The Committee believes that the different perspectives of the Committee members will fundamentally produce better outcomes that have buy-in from a broad range of stakeholders. These perspectives can only be properly shared with respectful dialogue between members.

Active Participation: All members of the Committee are expected to attend all meetings in-person or by teleconference. Each Committee member is an active participant in Bruce Innovates. In order to ensure continuity among members, apart from a new individual replacing another in the organization (such as a newly elected Chief, CAO, etc.) alternates (or proxies) will only be permitted on an exceptional basis.

Transparency: All relevant information will be shared between the Project Partners.

## 5. Authority

Once a decision has been reached by the Committee on a certain matter, each Project Partner will be permitted to present the recommendation as a Committee-backed recommendation to its respective council, board, management committee or other decision-making body for approval.

In addition to the foregoing, the Committee has the following authority:

- to share information about their organizations' services, governance, management and operations;
- to recommend, on behalf of their organizations, plans and actions associated with the planning activities;
- to establish working groups, work streams and sub-committees, as required, to explore specific issues related to Bruce Innovates; and
- to recommend the scope and approach of the financial and legal due diligence work, to be presented to the Councils for approval.

The Committee does not have the authority to approve the implementation of Bruce Innovates or specific projects, as this authority is reserved to the Councils, and where applicable, the approval bodies of the Project Partners.

## 6. Founding Partners and other Committee Members

The Committee will be composed of the following members:

<u>Title</u>	<u>Name</u>
Chief of Saugeen First Nation, Founding Partner	Chief Lester Anoquot
Warden of Bruce County, Founding Partner	Mitch Twolan
Director of Planning and Development, Bruce County	Kara Van Myall
Consultant and Legal Counsel	Mark Rodger
Industry Expert	Jason Van Geel
Industry Representative	Ron Oberth, OCNI
Project Partner	Kim Brown, Bruce Power
Project Partner	David Haberman, Canadian Tire

Additional members can be proposed by either of the Founding Partners and presented to the Committee for its consideration. Bruce and SFN members will not be compensated for their attendance at Committee meetings; however, the Committee will reimburse reasonable costs and expenses to the members for travel costs reasonably incurred to attend the meetings.

## **7. Decision-making process**

- a. Frequency of meetings: monthly, with additional meetings as required.
- b. Quorum: Two-thirds (2/3) of the members must be in attendance for quorum, and each of the Founding Partners' representatives (which can include a designate appointed by the Founding Partner) must attend.
- c. Votes: Except for the decision to dissolve the Committee, which decision shall be made exclusively by the Founding Partners, acting jointly, decisions and recommendations of the Committee will be made on a consensus basis. The Committee members commit to supporting a consensus-based decision even if they do not support all elements of it.
- d. Meeting agenda items and materials: Every effort will be made to prepare and distribute meeting agendas and related materials no less than two days in advance of Committee meetings.
- e. Confidentiality: In order to maintain the integrity of the process, all the Committee members are expected to, unless otherwise agreed upon, keep discussions conducted at meetings and all materials prepared for use by the Committee and its sub-committees as confidential. For certainty, the Committee information can be shared with each Board in the Board's in-camera sessions throughout the process to keep the Board informed.

## **8. Conflicts of Interest**

Full transparency is required to effectively support and inform Bruce Innovates. Therefore, all Committee members are asked to identify and declare potential, perceived and/or actual conflicts of interest. When decision-making arises, members must declare their conflicts and immediately remove themselves from decision-making.

When any Committee Member becomes aware that they (or their respective organization) may become involved in a hydrogen-related project that could compete, directly or indirectly, with the goals and objectives of Bruce Innovates, that Member shall identify and describe the potential conflicting project with the Committee. Thereafter the Committee may determine how to proceed with respect to such matters, including directing the Member to establish ethical walls within its organization or requiring that the Member resign from the Committee.

## **9. Amendment**

Amendment to these terms of reference can only be made by the Founding Partners, acting jointly.

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## 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:** Rural Economic Development Program Funding Application

---

### Staff Recommendation:

That a by-law be introduced to execute the Agreement with the the Ministry of Agriculture, Food and Rural Affairs for the Rural Economic Development program to support the Skills Training and Development Plan implementation.

### Background:

On June 13<sup>th</sup>, 2019 the Trades and Skilled Workforce Secretariat Action Plan was brought forward to Council for review and approval. The plan covered three counties, Bruce, Grey and Huron, with direction and input from local industries, Bruce County and the Nuclear Innovation Institute. The action plan described 27 key initiatives across eight themes that where to be carried out in connection with local school boards, community colleges, universities and industry. Focal areas included:

1. Raising the awareness of trades and STEAM (Science, Technology, Engineering, Arts and Math) to young people so they are aware of the great career opportunities that are available;
2. Working with underrepresented populations promoting pathways into the trades and STEAM fields; and
3. Collecting and compiling data on the vast local resources, providing a focal point for information of what is available in the region.

On August 1<sup>st</sup> 2019, a Memorandum of Understanding (MOU) was brought forward to Council between the County and the Nuclear Innovation Institute (NII), a part of this MOU was for the Trades and Skilled Workforce Secretariat to transition over to the NII and for the Trades and Skilled Workforce Secretariat Action Plan to continue. The NII Business Plan was also presented at this time and the same intentions where noted.

After successfully transitioning the Trades and Skilled Workforce Secretariat to the NII, the organization was restructured, and the Trades and Skilled Workforce Secretariat and accompanying Action Plan were not pursued.

Recognizing this change, staff began working to address this known and critical workforce gap and on April 16<sup>th</sup> 2020, the Workforce Attraction Strategy Phase 1 Update was brought forward to Council. This report outlined the current issues of:

1. Rapidly Shrinking Labour Force
2. High Labour Force Participation Rates
3. Aging Population
4. Low Unemployment Rate
5. Migration Trends
6. The Business Culture Shift
7. Mismatched Worker Skills to Available Work
8. Sector Specific Challenges

Subsequently, on June 18<sup>th</sup>, 2020, the Recommended Actions for the Workforce Attraction Strategy were endorsed by Council under the following 4-pronged approach:

1. Continuous data collection
2. Attraction
3. Retention
4. Skills building

### **RED Funding:**

Bruce County finalized its submission to the Rural Economic Development Program (RED) with the Ministry of Agriculture, Food and Rural Affairs (OMAFRA) in February 2020 to support the advancement of this critical work. Staff received conditional confirmation on May 28<sup>th</sup> that the funding application was approved for the amount of \$34,000. This funding is to be leveraged with matching County funds \$34,000 bringing the total funding to \$68,000.

The RED grant funding will allow for the actioning of Workforce Attraction Strategy including the specific elements of the Trades and Skilled Workforce Secretariat Action Plan specific to the needs of Bruce County, some examples include:

- Support the community in developing a programming approach for the region that includes developing the trades and skilled workforce
- Participate in school events with trade facilities where kids and parents can experience the trades together
- Generating awareness of upcoming opportunities and career pathways in the region
- Collaboration with indigenous communities and organizations and promoting the skilled trades opportunities
- Develop student testimonial videos to illustrate local student pathways and generate awareness and exposure
- Advocate for the development of programs to attract more women to the skilled trades and generating awareness of opportunities

Funding announcements will be made public following execution of the Agreement with the Ministry of Agriculture, Food and Rural Affairs.

**Financial/Staffing/Legal/IT Considerations:**

\$34,000 will be allocated from the 2020 Economic Development budget to support this initiative through 2020/2021. Combined with the \$34,000 from the RED grant for a total of \$68,000 to support the approach as outlined.

**Interdepartmental Consultation:**

Planning and Development and the Office of the CAO staff worked together and co-wrote the RED Grant application.

**Link to Strategic Goals and Elements:**

Goal #7: Stimulate and reward innovation and economic development.

Written by: Pierre Valley, Economic Development Officer

**Approved by:**A handwritten signature in black ink, appearing to read "Sandra Datars Bere". The signature is fluid and cursive, with the first name "Sandra" being the most prominent.

Sandra Datars Bere  
Chief Administrative Officer



## 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:** South Bruce Peninsula's Accommodation Feasibility Study

---

### Staff Recommendation:

That \$5,000 from the Economic Development budget to support the South Bruce Peninsula's Accommodation Feasibility Study, be approved.

### Background:

Recognizing that tourism is a strong economic driver in the Peninsula, the Town of South Bruce Peninsula identified the need to investigate the potential for a large-scale accommodation provider in order to further develop the area as a four-season destination. Large scale accommodations are difficult to attract without the required data to support such a large investment. The Peninsula could benefit from an accommodation / resort attraction that helps to increase appeal and number of visitors.

As a result, the Town has begun the process to undertake a "Mixed-use Resort/Hotel/Commercial Feasibility Study" to solidify what a sustainable, profitable business model for a specific area or site might entail. The Feasibility study does this by considering viability related to market, location, costs, and financing. A feasibility analysis is a crucial step for South Bruce Peninsula to attract outside investment and secure the appropriate accommodation to advance tourism development. It will also provide the quantitative data that the municipality needs to ensure it is focusing its efforts on the right investment attraction opportunities.

Accommodation investors from brands associated with many typical hotel/motel chains across the Country consider multiple locations as they develop and grow their enterprises. Potential investment areas are more appealing when they have completed the necessary feasibility assessment. A study of this nature includes such things as:

- An Economic and Tourism Review
- Stakeholder consultation
- Historic Market Performances - Identification of a regional competitive market

- Facility Type Recommendations - facilities most suitable for development and potential brands
- Site Selection Criteria - qualitative factors that developers consider for site selection
- Market Projections - annual supply growth projections for competitive markets
- Property Market and Operating projections - the potential property market growth and estimated average daily rate (ADR)
- Preliminary Assessment of Economic Viability - indication of investment for a proposed hotel
- Reporting/Accommodation Needs Study - Complete study report and executive summary for investment attraction

In the event the study results deem the area is not able to sustain a profitable business model for a large-scale accommodation development, recommendations on how the Town could leverage non-traditional accommodation assets such as Airbnb, lodges and B&B's will be presented as part of a cohesive approach to grow overnight stays.

The cost associated with this study is \$36,400. A successful application to the Ontario Tourism Development Fund (TDF) and project partners can fund the project up to a \$31,400 shared contribution resulting in a shortfall of \$5,000. The County is being approached to contribute \$5,000 towards this work to address the shortfall.

#### **Financial/Staffing/Legal/IT Considerations:**

To support the study and help advance the region as a complete four-season destination, aligns well with the "Find Yourself In Bruce County Economic Development Strategy". \$5,000 can be allocated from the Partnership / Community Development lines within the Economic Development budget.

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

#### **Interdepartmental Consultation:**

None

#### **Link to Strategic Goals and Elements:**

Goal #3 - Find creative new ways to engage our public

Goal #6 - Stimulate and reward innovation in Economic Development

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

**Approved by:**



Sandra Datars Bere  
Chief Administrative Officer



## 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:** 2020 Economic Impact of Tourism Business Survey Update - June

---

### Staff Recommendation:

The 2020 Economic Impact of Tourism Business Survey Update - June report is for information.

### Background:

Assessing the Economic Impact of Tourism in Bruce County is an annual undertaking of the Planning and Development department. The framework initiated in 2018 integrates data from multiple sources including:

1. Shared data from partner organizations, including National parks, Provincial campgrounds, municipal parking, harbour data, Ontario Ferries / Chi-Cheemaun;
2. A survey of regional businesses that intersect directly with visitors; and
3. A survey of tourists conducted on-site at various locations / events throughout the County during the summer season. *(Note: In 2018, a panel survey of Ontarians was undertaken by an outside vendor [Ipsos] - this will be repeated in 2020 as recommended and in light of the pandemic).*

The Covid-19 Pandemic that hit mid-March continues to significantly impact businesses across the region, especially those in the tourism industry. These businesses were the first to feel the impact and will be likely take the longest to recover. As such, staff began the process to assess the economic impact of the COVID-19 pandemic on tourism businesses now and do so monthly for 6 months. Doing so will support the analysis needed to follow what is happening in the industry from month to month. Hopefully, this will also acknowledge when the industry begins to rebound as more businesses open, adapt, when restrictions are eventually eased, and increased revenue generation is realized.

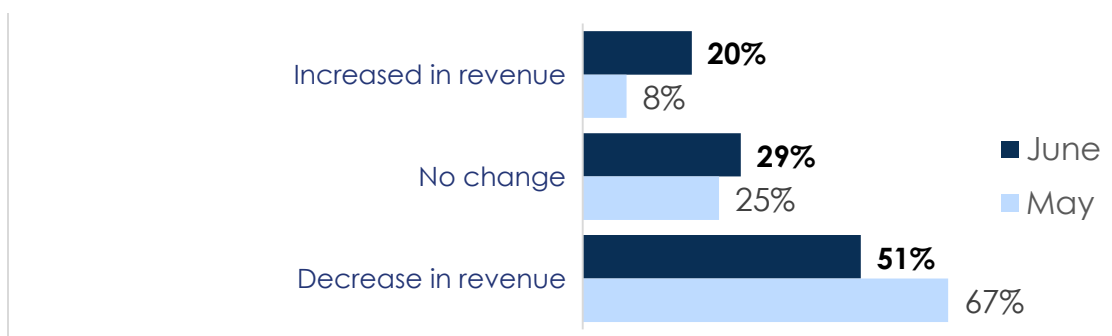
## Key Findings from the June 2020 Business Surveys:

The following represents the key findings in the June 2020 business surveys, based on a total of 45 business respondents. This data will continue to build as the work advances over the coming months.

Business Category / Type	Number
Groceries, markets, specialty foods, and alcoholic beverages	12
Retail businesses selling clothing	3
Retail businesses selling products other than clothing	2
Accommodation services including:	15
Hotels and resorts	1
Motels	3
Cottages and cabins	2
Bed and Breakfast	3
Campgrounds and recreational vehicle parks	4
Vacation and recreational camps	2
Recreation, entertainment, and cultural institutions	8
Restaurants and bars	5
Private transportation	-
Vehicle rental	-
Public transportation	-
Adventure outfitters/tour operators	-
None of the above / Not applicable	1

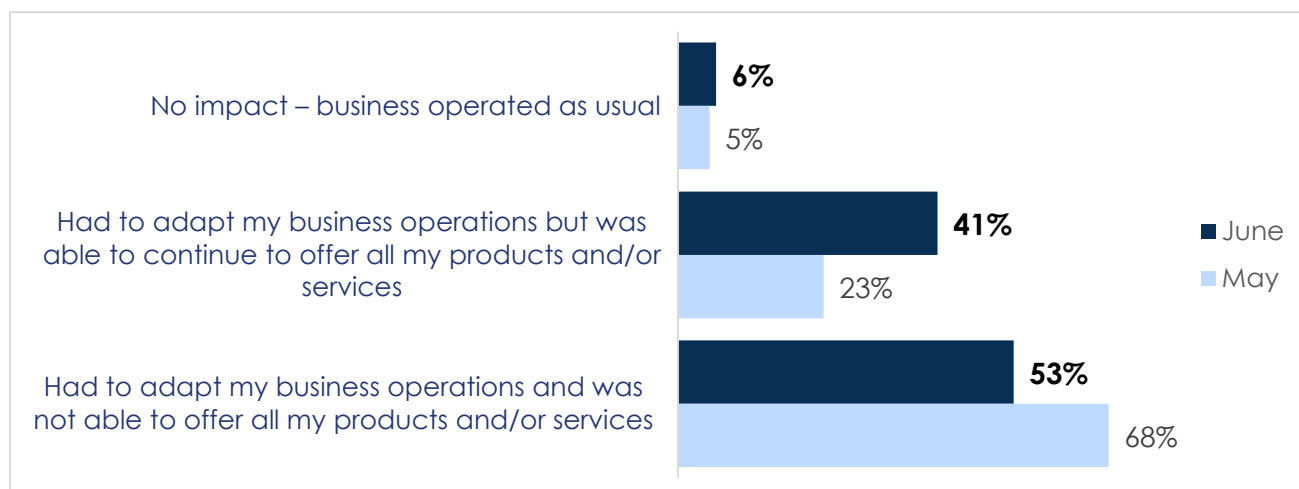
## Highlights of the Impact of COVID-19 on Tourism Businesses to date:

- 38% of businesses surveyed were open in March, April and May, while 56% of businesses surveyed were open in June, indicating that more businesses are indeed opening
- The COVID-19 measures continue to have a big impact on businesses in Bruce County but that impact appears to be lessening. The proportion of respondents who report reduced revenue is down directionally from May and the proportion who report revenue has increased is up directionally:



***Business Revenue Changes in 2020 Compared to 2019***

- A higher proportion of businesses are reporting adaptations in June than in May, however a lower proportion of businesses report being able to offer all their products and/or services in June than in May:



### *Impact of COVID-19 measures on operation of business*

#### **Next Steps:**

Business surveys will be continued monthly and the results will start to frame a narrative around the impact of the COVID-19 pandemic on the tourism economy in Bruce County. The monthly findings will be compared consecutively with a final analysis after 6 months. The business survey results will then be tabulated and included with the shared data and visitor survey to compile a fulsome report on the sector. This will inform staff and operators on potential actions to ensure that the tourism industry in Bruce County is back in a growth position post pandemic.

#### **Financial/Staffing/Legal/IT Considerations:**

The total cost to run the monthly business survey from May until October, conduct a panel survey of 500 Ontarians, collect shared data from applicable tourism industry sources and report the Economic Impact of Tourism in Bruce County for 2020 is \$50,000. The Regional Tourism Organization 7 (RTO7) will pay \$25,000 and the other \$25,000 will be allocated as an emergency pandemic expense.

#### **Interdepartmental Consultation:**

NA


#### **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

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

Approved by:

A handwritten signature in black ink, reading "Sandra Datars Bere". The signature is fluid and cursive, with the first name "Sandra" being the most prominent part.

Sandra Datars Bere  
Chief Administrative Officer



## 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:** July Communications in the Field

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### Recommendation:

That the July 2020 Communications in the Field Report is received for information.

### Background:

The July Communications in-the-Field Reports for Economic Development and Land Use Planning - reporting on June activities and updates - are included below.

### Financial/Staffing/Legal/IT Considerations:

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

### Interdepartmental Consultation:

N/A

### Link to Strategic Goals and Elements:

N/A

Approved by:

Sandra Datars Bere  
Chief Administrative Officer

## Communications in-the-Field Report

There are three objectives driving economic development communications in Bruce County: 1) Attract more young families and other residents over time; 2) Attract new and expanding businesses; 3) Encourage sustainable, longer stay and off-season tourism

### ECONOMIC TASK FORCE

In response to the urgent, critical needs of Bruce County's business community in the wake of COVID-19, the Economic Task Force has acted quickly since its inception on March 26. The Economic Task Force has also provided guidance on the launch of several components of the \$1.75M Support the Bruce: Business Sustainability Fund, endorsed by County Council on May 12, including:

Component	Total Available	Launched	# of Applicants*	Approximately Funds Remaining*
Emergency Business Sustainability Loan	\$750,000	May 21	16	\$460,000
Enhanced Spruce the Bruce Grants	\$125,000	June 1	48	\$31,000
<i>Tourism Special Edition "Spark" Grants</i>	<i>\$100,000</i>	<i>June 4</i>	<i>35</i>	<i>\$0</i>
<i>Business Pivot / Adaptation Grant</i>	<i>\$200,000</i>	<i>June 18</i>	<i>69</i>	<i>\$0</i>

\*as of June 26

### ACTIVITIES

- Bruce County Economic Development has partnered on the "ShopHere Powered by Google" program: now available to businesses and artists in Bruce County through a new partnership with Digital Main Street and other corporate and government sponsors. The program sets participants up with an online shopping experience at no cost and covers monthly membership fees for Shopify software for the first 90 days.

**Coming up:** Launch of the final 2020 component of the Support the Bruce: Business Sustainability Fund, the Business Safety Supplies Grant, anticipated in early July

## Communications in-the-Field Report

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There are three general areas that will be reported monthly, including: 1) Legislative changes and other trends 2) Land Use Transformation project update 3) highlights or planning applications of interest.

### LEGISLATIVE CHANGES

- The Province passed a Regulation in June that ended the suspension of Planning Act timelines as of June 22<sup>nd</sup> that were put in place for the pandemic. The normal time-based requirements for processing planning applications are back in effect.

### PROJECTS

- Plan the Bruce projects on hold as per the April 16th Committee resolution. Staff are currently evaluating timelines for the Plan the Bruce discussion papers.
- 3 projects funded by the Municipal Modernization Fund are currently underway:
  1. Reviewing the role and structure of the Land Use Planning Division
  2. Identifying best practices for the Official Plan (OP) and land use planning service delivery
  3. Creating a shared system - bringing together information and data from upper and lower-tiers to support effective development planning and longer-term growth management planning
- Investigation of using under-utilized Municipal Modernization Funding underway to support drafting a Memorandum of Understanding for Municipal Development Application Services and a Land Use Planning Fees Review

### PLANNING APPLICATIONS

- The processing of applications continued during the COVID-19 pandemic, with applications received somewhat lower in April (10 applications) and then rebounding in May (23 applications). The year to date total of 102 applications is somewhat lower than last year's pace so this will be monitored over the summer months to see if volumes catch up as the Province reopens.
- An application for a residential subdivision in Lucknow was recently submitted (late June) which proposes 28 single-detached lots and 38 - 46 townhouse units.