



Fraser Valley Regional District | May 7, 2020

Clean Economy in the Fraser Valley

**Spotlight on the Fraser Valley Session at GLOBE 2020
Summary Report**



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Prepared by:



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BACKGROUND CONTEXT

Purpose & Objectives

The Fraser Valley Regional District (FVRD) engaged the Delphi Group in the fall of 2018 to undertake research and analysis designed to better understand the existing capacity and competitive strengths related to the Fraser Valley region's clean economy. The Delphi Group produced a summary report which the FVRD turned into a shorter resource guide for local governments and other regional stakeholders that provides a profile of the sector and identifies a number of clean economy sector opportunities for the region.¹ The report also identified opportunities for alignment with federal and provincial policy priorities such as the Province of BC's CleanBC Climate Plan.

Following a presentation of the clean economy study findings to the FVRD's Board of Directors in the summer of 2019, the Board expressed an interest in further exploring the immediate clean economy opportunities for the region and to host an event or Forum showcasing the region. In response to this interest, Delphi was retained to support efforts to convene key economic development stakeholders in the region to prioritize some of the clean economy opportunities and to organize a special session for local stakeholders to present these opportunities and priorities at the international GLOBE Forum 2020 event, held in Vancouver, BC, from February 10-13, 2020.² The Forum, delivered by Delphi's sister organization GLOBE Series, is the largest international business and sustainability conference in North America, bringing together corporate executives, policy-makers, investors, clean technology solution providers, academics, ENGOs and think-tanks active in the global clean economy.

The purpose of this special session at GLOBE Forum 2020 (referred to as the "Spotlight on the Fraser Valley") was to provide project partners with a platform to present their clean economy projects and opportunities to a targeted group of local stakeholders, as well as prospective partners, investors, and cleantech companies attending GLOBE 2020 from across Canada and internationally. The ultimate objective was to foster connections and potential future partnerships to support and progress the Fraser Valley's clean economy project and economic development opportunities.

Stakeholder Engagement Process

Working with the FVRD starting in September 2019, staff reached out to all member municipalities to determine interest in participating in a Fraser Valley forum. The Delphi Group facilitated calls with regional stakeholders organizations to establish partnerships, help grow awareness for the region's clean economy opportunities, and work in collaboration to identify and prioritize the clean economy opportunities of highest interest that could be showcased at the *Spotlight on the Fraser Valley* session at GLOBE 2020, in line with regional needs, challenges, strengths, and capacity. Partner organizations included:

- City of Abbotsford (Economic Development)
- District of Mission (Economic Development)
- Harrison Hot Springs
- Advantage Hope
- Stó:lō Community Futures

¹ See: <https://www.fvrd.ca/EN/main/about-the-fvrd/projects-initiatives/clean-economy.html>

² See: <https://www.globeseries.com/forum/>

In addition, Chilliwack Economic Partners Corporation (CEPCO) had a scheduling conflict but was able to participate by presenting Chilliwack interests and priorities at the Spotlight session.

Following one-on-one discussions with partner organizations, several in-person and virtual meetings were held between October 2019 and January 2020 to develop a shortlist of clean economy opportunity areas and projects to be showcased at GLOBE 2020, plan the format of the session and related logistics, and finalize a list of presenters from the region. The partners decided to host the session using a panel format with the Delphi Group acting as the session facilitator, which was then followed by an audience question and answer period and time for networking between attendees and the presenters over coffee and snacks.

SESSION SUMMARY

Entitled “Opportunities in BC’s Clean Economy: A Spotlight on the Fraser Valley” the special session at GLOBE 2020³ took place on February 11th, from 9:30am-11 :45am, at the Vancouver Convention Centre West building. The session was described as follows:

Statistics on Session Participants

- 55 participants in total
- 70% from outside the Fraser Valley
- 35% cleantech companies
- 15% provincial and federal governments

“Located immediately adjacent to Metro Vancouver, the Fraser Valley is British Columbia’s third largest metropolitan region. In 2018, the Fraser Valley’s clean economy was valued at \$1.17 billion, underpinned by an agriculture sector that is one of the most productive and diversified in Canada. Made up of six municipalities and eight electoral areas, the Fraser Valley is a growing hub for agrifood, trade, and cleantech manufacturing, with ties to the broader Cascadia Innovation Corridor. The region is open to solution providers and investors for project and investment opportunities across its clean economy sectors and in line with its Regional Growth Strategy.

This session will put a spotlight on the Fraser Valley’s clean economy needs and opportunities through a panel discussion with industry and community leaders. The coffee networking reception immediately following will allow GLOBE 2020 participants to connect with Fraser Valley companies, local economic development officers, city councillors, Stó:lō community leaders, and government officials.

Who should participate? *Cleantech companies, investors, project funders and partners, and government and policy leaders active in green building and low-impact development, renewable power and RNG project development, water technology / infrastructure, smart mobility / low-carbon transportation, agri-tech, and circular / bioeconomy innovation.”*

Presenters for the panel were chosen as they provided a range of perspectives across the key sectors and opportunity areas relevant to the region’s clean economy. The speakers included:

- **Paul Shorthouse**, Senior Director, The Delphi Group (session facilitator)
- **Alison Stewart**, Manager of Strategic Planning, FVRD
- **Jason Lum**, Chair, FVRD Board of Directors and Councillor, City of Chilliwack
- **Vern May**, Economic Development Manager, City of Abbotsford
- **Stacey Crawford**, Director of Economic Development, District of Mission
- **Greg Cross**, Director of Public Works, Seabird Island Band
- **Raymond Szabada**, Chairman of the Board, XLRator

³ See: https://www.globeseries.com/forum/event_session/spotlight-clean-economy-opportunities-in-bcs-fraser-valley/

- **Dr. Lenore Newman**, Canada Research Chair in Food Security and the Environment and Director of Food and Agriculture Institute, University of Fraser Valley

Following brief welcoming remarks by the session facilitator from the Delphi Group, FVRD’s Alison Stewart provided some local context setting, including an overview of the Fraser Valley region and its clean economy strengths and high-level opportunities. She highlighted the Fraser Valley’s unique strengths and opportunities in line with those profiled in the Fraser Valley Clean Economy Guide and Summary report (see Figure 1 below).

The clean economy opportunities for the region also align with the FVRD’s Regional Growth Strategy objectives and values in promoting economic strength and resiliency, as well as with the Province of BC’s CleanBC Climate Plan that includes key themes such as clean transportation, green buildings, and clean industry.⁴ Given this alignment and support at the local and provincial levels, Alison underscored the fact that communities across the Fraser Valley are poised to take advantage of an environment that is ripe for clean economy investment, job creation, technology acceleration, and economic development / diversification.






Sustainable Resource & Ecosystem Management	
	<ul style="list-style-type: none"> • <u>Bioeconomy</u>, bioproducts, and waste-to-resource (incl. organics mgt) • Smart technology applications (e.g., precision agriculture) • Local food processing • Natural assets / green infrastructure in place of grey infrastructure
Green & Sustainable Transportation	
	<ul style="list-style-type: none"> • Transit and first mile-last mile options • Smart mobility solutions (e.g., sensors, apps) • Logistics corridors and smart goods movement • Commercial biofuel production (e.g., biocrude, RNG)
Green & High-Performance Buildings	
	<ul style="list-style-type: none"> • Mixed-use, transit-oriented developments (densification) • Building retrofits • Pre-fabrication and modular construction • High-performance building products (e.g., windows / doors, insulation) • Software and applications linked to BIM, IPD, and controls
Renewable Energy Supply & Storage	
	<ul style="list-style-type: none"> • Grid modernization and resiliency (i.e., smart / micro grid and storage) • Renewable energy project deployment (rural communities and off-grid)
Knowledge & Innovation	
	<ul style="list-style-type: none"> • Industry 4.0 applications • Digital fabrication, additive manufacturing • <u>Agrifood</u> and high-tech cluster and ecosystem development

Figure 1: Fraser Valley Clean Economy Opportunities by Sector

⁴ See: https://blog.gov.bc.ca/app/uploads/sites/436/2019/02/CleanBC_Full_Report_Updated_Mar2019.pdf

Below is a summary of the main points and key take-aways from the session presenters.

Vern May, Economic Development Manager, City of Abbotsford

With an estimated economic impact of 11,300 FTE and \$1.8 billion in expenditures, Abbotsford’s agriculture sector is comprised of dynamic partnerships among innovative agriculture and agri-tech companies. Examples of key players currently innovating and bolstering the city’s agricultural sector include BW Global, Nutriva Group, WestGen, Egg Solutions Vanderpol’s, and Vitalus.

The city is poised to feed a growing population, but to do so within the broader context of the clean economy, the City is looking to nurture partnerships with companies who are innovating in efficient and sustainable wastewater and agri-food technologies.

Stacey Crawford, Director of Economic Development, District of Mission (presentation delivered by Paul Shorthouse)

Facing unprecedented growth, the District of Mission is undertaking major residential, commercial, and industrial development projects. There are currently six major projects in stream that offer over 2,000 hectares of development and are looking to adopt relevant cleantech and green building related solutions and systems. Of particular focus is the Waterfront District, a significant gateway to Mission along the Fraser River that offers rich opportunities for building mixed-use areas that bring together the District’s commercial strengths, art and culture, environment, and health, providing employment opportunities and economic benefits in line with CleanBC and the broader clean economy for the region.

Greg Cross, Director of Public Works, Seabird Island Band

In line with CleanBC’s focus on improving industrial energy and process efficiency, as well as managing waste / resource streams more sustainably in order to reduce GHG emissions, the Seabird Island Band has developed a waste management plan that reframes waste to being considered a key resource, having set the goal of becoming a “zero-waste” community. A project that has emerged from the development of this plan is its Eco-Station, a commercial scale composting facility that is being used by the community as both a means to achieve their zero-waste goals, and as a platform to attract and implement clean technologies. In addition, the community is in the process of seeking partners and investors to build an anaerobic digester fuelled by manure and off-farm food waste in order to produce biogas / renewable natural gas (RNG). Investment and partnerships on this project will leverage Seabird Island’s rich agricultural land and outputs while bolstering First Nation community innovation through the development of related bioenergy opportunities.



Ray Szabada, Chairman of the Board, XLRator

Beginning in 2011, XLRator has worked to drive the development and growth of a regional technology ecosystem in the Fraser Valley. XLRator has focused its efforts on driving innovation and the incubation of start-up tech companies, commercializing technology targeted for agriculture and manufacturing, and building out the skilled technical training and education needed to create a workforce and related ecosystem that can support a growing technology hub in the Fraser Valley. One example is the recently launched Agrilyze, a platform that centralizes agricultural and geospatial data specific to the Fraser Valley to inform sustainable and efficient planning and development of the region’s resources and limited industrial lands. By building off of projects such as this, XLRator is pursuing the strongly held belief that the Fraser Valley can become the applied agricultural technology capital of Canada.

Dr. Lenore Newman, Canada Research Chair in Food Security and the Environment and Director of Food and Agriculture Institute, University of Fraser Valley

The Fraser Valley is home to a thriving agricultural sector, and the application of agritech will be a highly valuable and necessary component to ensure sustainable growth. The outputs from the recent Provincial Task Force on Food Security, to which Dr. Newman co-led, supports the region’s ALR and provides recommendations on the implementation of an effective and responsible agritech ecosystem for BC, creating new project and partnership opportunities. The initiative includes a strong post-secondary research component, which draws from universities across the Lower Mainland and will establish a portion of the region’s ALR to be set aside for agritech development and serve as an incubator accelerator for investors and collaborators.

Jason Lum, Councillor, City of Chilliwack, and Chair, FVRD Board of Directors

While the discussion of the Fraser Valley’s strengths tends to revolve around its agricultural sector, the City of Chilliwack is working to integrate clean economy concepts and opportunities through the region’s creative sectors, including film, interactive, and digital media. Given Chilliwack is a hub for the creative sector, there are opportunities to attract and facilitate economic growth that leverages clean economy concepts and ties in with local talent and expertise.



OUTCOMES

Following the presentations, session attendees were given the opportunity to voice insights, make comments, and ask questions. The overall response to the projects and opportunities presented was very positive.

Speakers were successful in developing new connections with attendees who brought technology and international insights and expertise to the opportunities that were presented. For example, attendees from international organizations expressed interest in collaborating with stakeholders on waste management technology, specifically with Seabird Island First Nation on its biogas / renewable natural gas plant and related technology. While supporting this type of initiative participants were informed that waste to energy technologies involving incineration are not supported by the FVRD given the impacts on the region's fragile airshed.



In response to the agritech opportunities highlighted within the Fraser Valley's ALR, insights were raised by those with agritech experience in Europe around the perceived trade-off between technological advances that increase food production and decrease the consumer costs for food, although may result in negative impacts for local farmers and a decrease in overall food quality. The response was that the technology actually improves food production as a whole and, when food is more affordable, people have access to better diets and quality of life – so long as food is produced in a healthy and environmentally-sensitive manner. While further research and discussion is warranted around this issue, it represents an important consideration as the Fraser Valley's agriculture sector evolves and adapts its processes within a larger clean economy.



POTENTIAL NEXT STEPS

The Fraser Valley Regional District and its project partners (including the local economic development agencies) may wish to continue advancing the opportunities that were showcased through this initiative. This includes working with partners and other key contacts at the BC Government and Government of Canada to identify ways to support clean economy projects in the Fraser Valley region that are aligned with CleanBC and federal priorities for GHG emission reductions and clean economy / circular economy sector and investment opportunities.

In light of the COVID-19 pandemic, there is an opportunity to assess clean economy priorities that can improve long-term resiliency of the region's economy and public well-being. Furthermore, as the region responds to the new economic reality, there may be potential opportunities to leverage recovery stimulus spending to invest in structural and system upgrades that reduce GHG emissions and apply a clean economy lens to this spending to allow for a more resilient economy in the future.⁵

For example, as residents are being encouraged to stay at home and practice social distancing, there is an increased need for maintenance and expansion of reliable rural broadband infrastructure to enable connectivity among residents, businesses, and governments. This further highlights the need for reliable access to electricity, which aligns with the clean economy opportunity around grid modernization and resiliency (i.e., smart / micro grid storage). Local resiliency and strengths can also be reinforced through investment in smart technology applications (e.g., precision agriculture, smart mobility), local food processing, agrifood and high-tech cluster development, innovative transportation options for the movement of goods and people, and waste-to-resource solutions.

Moving forward, it is important to maintain the momentum that has been built with local leaders. To move the clean economy opportunities forward, the FVRD, its partners, and other key stakeholders can work together to monitor this situation, undertake an assessment of the clean economy projects, and prioritize those that best support a resilient future for the region and its economic recovery efforts.

⁵ See: <https://www.corporateknights.com/channels/climate-and-carbon/changes-brought-coronavirus-help-tackle-climate-crisis-15844366/>

APPENDIX A: List of Participating Organizations in the Fraser Valley Spotlight Session

- Abbotsford Economic Development
- Advantage Hope
- Agriculture and Agri-Food Canada
- American Ecotech
- Aqua Pure Technologies Inc
- BC Government (Climate Action Secretariat)
- BC Government (Ministry of Jobs, Economic Development, and Competitiveness)
- BC Government (Ministry of Agriculture)
- BDC (Business Development Bank of Canada)
- BW Global Food Systems Evolved
- CEE Energy Payback Projects
- City of Abbotsford
- City of Chilliwack
- Community Futures North Fraser
- Consulate General of the Federal Republic of Germany Vancouver
- Destination Canada
- District of Mission
- E8 Angels
- Food Mesh
- Food Stash Foundation
- Form3
- FortisBC
- Fraser Valley Regional District (FVRD)
- Hedgehog Technologies
- Innovation, Science, and Economic Development Canada (ISED)
- i-Open Group
- Ju Tian Cleantech
- Kinava Co Ltd
- Lumex Instruments Canada
- Mission Chamber of Commerce
- Mission-Matsqui - Fraser Canyon
- Mitacs
- Motion Canada
- National Industrial Symbiosis Program (NISP) Canada
- SBI Bio Energy Inc.
- Seabird Island First Nation
- Siemens Canada Limited
- Sto:lo Community Futures
- Sun Country Organics
- Swirltex
- The Delphi Group
- Titan Clean Energy Projects Corp.
- Trident Processes Inc
- University of the Fraser Valley
- XLRator
- Yale First Nation