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**Clean Technologies on Vancouver Island**Prepared for the Vancouver Island Economic Alliance and Foreign Trade Zone Vancouver Island by   
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# Clean Technologies Business Case

The Vancouver Island Clean Tech sector is aligned with global, national and provincial priorities to profitably capitalize on initiatives to reduce dependency of fossil fuels and improve efficiencies in the future delivery of goods and services. A strategic vision can be predicated upon the reduction or elimination of barriers to growth within a construct that not only mitigates damage to natural systems, but enhances these systems. There are investments to be made in companies at the fore of this transformation. The economics suggest there is also a significant return on that investment.

The most recent famed example of such thinking was the 2018 Nobel Prize in Economics. The prize in 2018 was awarded for research integrating innovation and climate with economic growth[[1]](#footnote-0). The Nobel laureate P. M. Romer looked at how knowledge can be a long term driver of economic growth. His co-recipient W. D. Nordhaus developed a quantitative model that described the interplay between the economy and climate. Romer studied the creation of new technologies and demonstrated how economic forces govern the willingness of companies to produce new ideas and drive innovation.

In a recent policy announcement, the Province of British Columbia outlined its initiatives for “reducing pollution”[[2]](#footnote-1). Of course the premise is that the economy will grow in harmony with the environment. It is useful to examine the Province’s priorities, as they are in sync with global objectives. In the priority area of energy production, consumption and storage there are opportunities in industrial electrification, carbon capture and storage and cleaner fuels for industry. When considering waste reduction as a global need, the Province is promoting technologies to build more efficient buildings. This means pivoting to less harmful emissions, carbon capture and storage and renewable gas. The Province also identified priorities and opportunities in transportation technologies by promoting a switch to cleaner fuels and the introducing the mandate of 100% zero emission vehicles by 2040.

British Columbia boasts companies such as Saltworks Technologies, and Axine Water technologies, all focused on efficiencies in water treatment and water pollution harm reduction. In the area of energy conservation, Awesense Wireless applies analysis of big data to manage electrical grid efficiencies while Minesense, recently named to the Global Clean Tech 100, is a pioneer in digital mining solutions, providing real-time, sensor-based ore sorting for large-scale mines.

Vancouver Island can be considered a competitor to the lower mainland of British Columbia in that there is a critical mass of scientists and engineers working in the greater Victoria and Nanaimo areas. Victoria is known as a tech hub employing more than 16,000 people and having an economic impact of more than $5 billion dollars. Vancouver Island, outside of Victoria, has seen tremendous growth in tech enterprise whose impact is estimated to be in excess of $300 million annually. Tech companies, including start-up investment, from Duncan and north on the Island have grown dramatically over the past five years. Victoria itself has a share of clean technology companies including Carmanah Technologies who have been industry leaders in the adoption of industrial LED lighting solutions, and Quester Tangent Corp. whose technology platform makes North American passenger rail transportation more efficient. Axys Technologies located in the greater Victoria area designs and manufacturers technology in support of offshore renewable energy, offshore wind resource assessment and environmental monitoring, and Boydel Wastewater Technologies is developing better, more controllable and reliable raw sewage treatment technology.

In addition, a Cleantech Scale-Up Program that is part of Alacrity Canada based in Victoria, partners with government and strategic investors to identify and invest in clean technologies globally.

## Product Overview

Clean technology refers to any process, product, or service that reduces negative environmental impacts through significant energy improvements or by the sustainable use of resources, or environmental protection activities.

Clean Tech is also an industry term used to describe products or services that improve operational performance, productivity, or efficiency while reducing costs, inputs, energy consumption, waste, or environmental pollution. Its origin is the increased consumer, regulatory, and industry interest in clean forms of energy generation. This is caused, perhaps, by the rise in awareness of global warming, climate change, and awareness of the impact on the natural environment from the burning of fossil fuels.

For the purpose of attracting foreign direct investment, clean tech in this report encompasses a broad range of technologies including recycling, renewable energy (wind power, solar power, [biomass](https://en.wikipedia.org/wiki/Biomass), [hydropower](https://en.wikipedia.org/wiki/Hydropower), biofuels, etc.), information technology, green transportation, electric motors, green chemistry, lighting, greywater. CleanEdge, a US-based web-portal focusing on the transition to a clean-energy, low-carbon economy, notes that "Clean technologies are competitive with, if not superior to, their conventional counterparts. Many also offer significant additional benefits, notably their ability to improve the lives of those in both developed and developing countries".

## Business Overview

### Market Landscape

British Columbia is well positioned to provide resources and support to help clean technology companies grow into the global market for clean and green technologies and services.

The clean technology sector, including power generation, energy efficiency, transportation and industrial processes that create green benefits, has been growing steadily and is considered to be worth $3 trillion per year globally, creating great opportunities for investment.

More than 270 clean-technology companies have made British Columbia home. These green-thinking firms are recognized globally for leadership in this industry. BC’s targeted incentives and support programs will help clean technology companies grow and expand to meet worldwide demand.

British Columbia is leveraging its brand as a hub of Clean Tech. It has one of the highest ratios of clean technology companies to GDP in Canada with Vancouver being home to 23% of Canadian clean technology companies.

British Columbia’s clean technology sector is built on a solid foundation of global recognition for sound environmental stewardship and leadership in areas such as the fuel cell industry. In addition to these advantages, the province also offers a leading-edge bio-energy sector, world-class utility programs, ready-access to natural gas and strong linkages to markets around the world. Investors and companies from around the world are discovering the financial and environmental benefits of clean technology projects in fields including hydrogen fuel cells, particularly for applications beyond transportation, from the smallest mobile devices to telecommunications stations. Clean transportation, with major international manufacturers developing plug-in electric, fuel cell natural gas engines.

The reach of the industry is significant as B.C.’s clean tech companies sell a significant amount of their products and services to customers outside of the province. The largest export market is the United States and this is expected to remain the case for the next three to five years, while combined sales to Europe, Asia and other countries are expected to grow to one-third of total revenue by 2021.

Both the Government of Canada and the Province of British Columbia offer considerable financial incentives to enterprise in the Clean Tech space including:

* The BC TechFund is $100 million venture capital fund established to invest in emerging technology companies in British Columbia across multiple sectors, including Information and Communications Technology (ICT), Digital Media, Clean Tech and Life Science/Healthcare.
* The First Nation Clean Energy Business Fund Promotes increased First Nation participationin the clean energy sector.
* The National Research Council of Canada Industrial Research Assistance Program provides financial support to qualified small and medium-sized enterprises in Canada to develop technologies for competitive advantage.
* Sustainable Development Technology Canada finances and supports clean technologies that provide solutions to issues of climate change, clean air, water quality and soil and that also deliver economic, environmental and health benefits to Canadians.
* Both the the BDC and EDC, crown financial corporations, have Clean Tech specialists offering tailored services and solutions.

The foreign direct investor must also consider the capacity of the human capital within target area. In the case of British Columbia there are numerous academic institutions that house Green Centres of Excellence bringing in experts from the public, private and academic sectors together to collaborate on applied research, development and commercialization of new technologies Table 11 (also see Figure 10).

*Table 11 List of Centres of Excellence focusing on Clean Tech in British Columbia*

|  |  |
| --- | --- |
| **Centre of Excellence** | **Focus** |
| Centre for Energy Systems Applications, *British Columbia Institute of Technology* | Renewable energy technologies (geo-exchange, photovoltaic and high efficiency lighting) in an integrated systems approach |
| Centre for Interactive Research on Sustainability *University of British Columbia* | Sustainable transportation, clean energy/technology |
| Energy House, *Northern Lights College* | Wind turbines, photovoltaic, solar thermal, biomass, geo-exchange |
| Institute for Integrated Energy Systems, *University of Victoria* | Renewable energy systems |
| Institute for Resources, Environment and Sustainability, *University of British Columbia* | Sustainable resource management and ecology |
| Pacific Institute for Climate Solutions, *University of Victoria* | Low-carbon economy, climate change, sustainable communities, resilient ecosystems |
| Jim Pattison Centre of Excellence in Sustainable Building Technologies and Renewable Energy Conservation, *Okanagan College* | Sustainable construction management technology, geothermal, electrical, carpentry, green building design and construction, onsite alternative energy sources, metering and monitoring of green buildings |

The Alacrity Foundation, based in Victoria, is a not-for-profit organization founded in British Columbia in 2009 with a mandate to promote technological entrepreneurship and facilitate regionalized investment opportunities. Since inception, Alacrity Foundation companies in Victoria and Vancouver have employed more than 200 people and have had a direct economic impact of $300 million in Western Canada. The foundation has also helped bring over $225 million dollars into the BC technology ecosystem through an investor readiness program through 2014-2017.

Though Alacrity’s individual and autonomous mission in Canada is to support technological innovation and regionalized investment opportunities in Western Canada, it is also part of a global Alacrity ecosystem. Alacrity Canada and its partner Wesley Clover have helped implement the unique Alacrity process in offices around the globe, including, Mexico, France, Dubai, India, China, Singapore and more. Alacrity is supporting the scale-up of BC clean technology companies to drive export revenue and growth capital from select foreign markets.

Alacrity has identified global challenges in a number of areas where there may be opportunities to export/deploy existing and emerging BC technologies as part of the solution. They are worth mentioning here within the context of attracting foreign investors to Vancouver Island. The workforce capacity in scientific and engineering skills exist on the Island to engage in the profitable pursuit of these challenges:

***Construction Materials****: Fabrication of residential wood frames, home furniture and home building.*

***Biomass****: Exporting British Colombia Biomass technologies to developing nations that have abundant supplies of biomass materials but limited expertise For example. after discussions with multiple industry leaders in India, no biomass technologies are being used to convert bamboo into pellets for clean energy. India is the second largest bamboo growing country in the world with over 14 million hectares. Annual production in India amounts to ~4.6 million tonnes, of which 1.9 million tonnes is used by the pulp industry.*

***Tidal Power:*** *Export British Columbia Tidal Power technologies to capture power and energy from the ocean’s tides.*

***Electric Vehicle Charging Stations:*** *Manufacturer and/or supplier of electric vehicle charging stations for markets where the charging infrastructure has not yet been commercially developed.*

***Battery Power & Storage:*** *Export current battery power and storage technologies (lithium ion) or new battery technologies that can lower the cost or increase battery efficiencies.*

***Battery Recycling:*** *New applications for second life-cycle of batteries. Potential could be used in wind or solar farms to harness and store energy as second life-cycle batteries still hold ~80% efficiency levels. Increase in charging stations around the country can prompt new applications for second use batteries.*

***E-waste:*** *New technologies for recycling used electrical or electronic equipment.*

***Run-of-the-River Hydro Power:*** *Export technologies or plants for Run-of-the-River Hydro-electricity. Run-of-the-river hydropower projects have emerged as a viable, low-impact alternative to deliver power.*

***Monitoring software for Wind Turbines:*** *Export monitoring and quality control software applications for Wind Turbine farms.*

An emerging sector of interest is in the area of Digital Decarbonization. The Victoria technology community has a long history of its members successfully monetizing “data” based enterprises, from the early days of eCommerce and virtual/distributed marketplaces, to todays’ world-class and leading-edge developments in the area of Digital Customer Acquisition. All of these enterprises are exporters, with extensive global networks, communities, in many cases investors. Their workforce is highly skilled in a wide range of ICT competencies.

***Digital Decarbonization:*** *In 2017, the Economist proclaimed that data was the new oil. Just as trade in oil has underpinned the global economy for a century, flows of data— the most valuable resource of the twenty-first century—now drive economic value. In 2017, all five of the world’s most valuable publicly traded companies specialized in digital technologies, whereas just a decade earlier three of the top five companies were in the energy sector.*

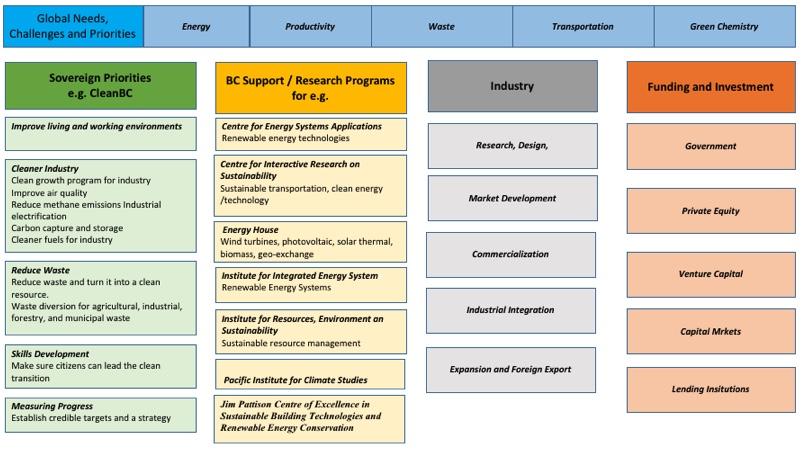
*This does not mean that the energy sector has been left behind by the digital revolution. To the contrary, digitalization is at the heart of the tectonic shifts that are starting to reshape the energy landscape. As energy industries produce ever more data, firms are harnessing greater computing power, advances in data science, and increased digital connectivity to exploit that data. These trends have the potential to trans- form the way energy is produced, transported, and consumed.*

*An important potential benefit of this digital transformation of energy is a reduction in global emissions of greenhouse gases that cause climate change. The elimination of such emissions from the global economy is known as decarbonization. By enabling clean energy systems that rely on low-carbon energy sources and are highly efficient in using energy, digital innovations in the energy sector can speed decarbonization.*

### Value Chain

The range of business pursuits under the label Clean Tech is wide yet it is helpful to summarize the value chain along a common path (Figure 10). Global needs arise from an historical behavior of growing consumption. Sovereign jurisdictions seek sustainable solutions for improving working and living condition, whilst reducing environmental impacts. The research and investment communities channel efforts and resources into areas of highest need and potential returns. Financial enterprises develop expertise and lending programs specific to Clean Tech sectors. Individual business follows the common path from research through to product export.

*Figure 10 Clean Tech value chain.*



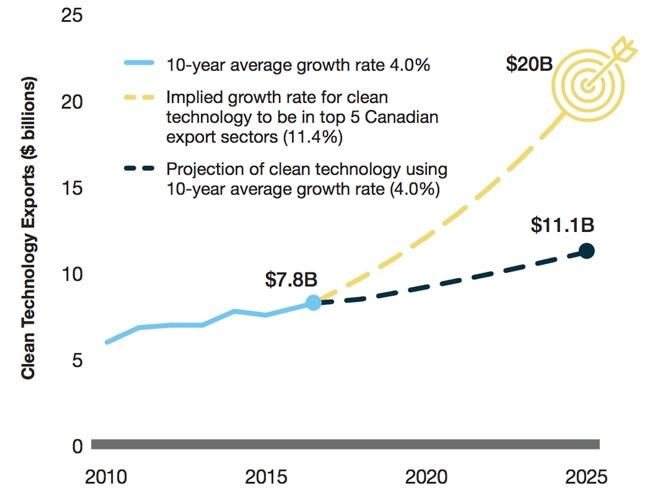
## Financial Overview

The global market for clean technologies is rapidly expanding. Estimates are that the global market is worth over US$1 trillion. In low-carbon, energy-efficient technologies alone trade is expected to almost triple by 2020[[3]](#footnote-2). An increasing need for sustainable solutions such as green energy, paired with the pace of technological change, is driving the development of new climate solutions and economic opportunities that promise a sustained demand for clean technology. As an example, China will spend trillions over the next four years on clean water, air, food and energy as it turns from aggressive economic growth to sustainability. Consider also the EU’s climate change plan calls for a 20 per cent cut in greenhouse gasses by 2020.

In Canada there is a climate change agenda within the Federal Government that includes carbon pricing and increased low-emission transport and energy efficient buildings. The demand will be satisfied by domestic and foreign investment fueling growth of the clean technology sector. The sector is already a significant economic contributor to Canada’s GDP. In 2016 about 3% of Canada’s GDP (~$60 billion) was attributed to production of clean technologies, clean energy, waste management, and environmental goods and services. To approximate the clean technology contribution (separating out clean electricity and waste management), the remaining environmental and clean technology activity accounted for 1.4% of Canada’s 2016 GDP.

In a March 2018 report by Smart Prosperity, a national research network and policy think-tank based at the University of Ottawa, the Canadian clean tech sector employs more than 55,000 workers, and is poised to grow. It has been estimated the sector in Canada could export as much as $20B by 2025 (Figure 11).

*Figure 11 Canada’s Clean Technology Exports 2016 and projection for future targets.[[4]](#footnote-3)*



In British Columbia, which boasts the majority of clean tech enterprise in the country, equity to fund company growth comes from a variety of sources but the vast majority is BC in origin. Over the past decade sources of equity have moved away from the United States and Europe in favour of more domestic and Asian funding. This demographic shift may be more a function of a general tone of trade diversification in Canada.

The average revenue from BC Clean Tech firms is estimated to be $7 million based on 2017 projections with an expected total revenue stream in the vicinity of $1B. In a 2016 survey KPMG identified nine firms identifying as clean tech on Vancouver Island. This estimate is probably low as many Island companies do not consider themselves as servicing the greening of the economy. Total annual revenues from Clean Tech companies on Vancouver Island could be as high as $75 million. There is a critical mass of engineering and technologist skill sets on the Island with increasing access to university and college graduates suggesting growth in this sector will continue and could be enhanced by foreign direct investment.

# Summary and Recommendations

By-en-large the global appetite for international trade is increasing. Countries and even regions within countries are vying to be seen as the “the best” place to do business while promoting their competitive advantages. VIEA, in being the only non-government organization with a mandate to promote the Island’s economic growth, has embraced the role of global-marketer of VI’s business opportunity. It recognizes that the first step in developing a good marketing plan is knowing your product and knowing your customer. Developing business cases, starting with the Wood Products Business Cases in 2017, and continuing through this report, is a prime example of the development of these market insights.

In producing this report, we took the pulse of the business community through a process of reaching out to community thought leaders and gauging the enthusiasm for taking local businesses to international markets. Being on an Island, with wondrous nature all around, risk aversion and complacency are naturally looming in the background. However, from our thought-leader discussions, it became clear quite rapidly that there is an eagerness for exploring options for international trade, with companies eagerly participating in discussions that will lead to greater exports.

The diversity of Vancouver Island business is a microcosm of the Canadian business community and there is no shortage of ideas reflecting global trends in goods and services. Our mandate was to present business cases across many VI sectors, with a view to bringing the “low-hanging” fruit to the fore. This was done by establishing a long list and, using criteria developed specifically for the purpose of this project, reducing the long list to those opportunities considered to be reasonable targets for foreign direct investment. Not surprisingly, the short list has elements that are influenced by Island-driven non-market forces. Suffice to say that if the opportunities to generate large profits, family-sustaining jobs, and community wealth did not exist, there would be little incentive to raise the issues in public to the level at which it exists today.

The short list of opportunities is varied within the VI market and this diversity is reflected in the presentation of the individual business cases. Aquaculture, Marketable Waste Wood, Cultural Tourism and Clean Tech were selected as the business cases to be delivered at this time. Other business cases of similar interest to foreign direct investors should be addressed in the near future. With each of the cases, the goal was to describe products or services to be sold internationally. The business overview was presented in terms of the market landscape and the value chain. The value chain discussion was important because it reflects the potential of Island companies to take advantage of connections and partnerships that are readily available on Vancouver Island. For each case a review of the respective financial implications provides potential investors with key points to consider.

After engaging with VI communities and researching the marketplace, a number of ideas were identified that may warrant further investigation. These are presented here in the form of recommendations:

1. There is a common thread passing through three of the four cases presented here. This is the role that First Nations will play in the future economic development of the Island. In tourism. aquaculture and forestry, land ownership and access is on the critical path to successfully pursuing economic growth and attracting foreign direct investment. We recommend a dialogue be initiated between the business arms of FN governments, the investment community with deep knowledge of foreign investment market, representatives from three levels of government, and local export business experts. The purpose would be to discuss and support First Nations business strategic plans across the Island.
2. There may be considerable opportunity in the development of a more integrated food distribution network on Vancouver Island. Initial discussion with a large US-based food company indicated a willingness to invest more on the Island to support localization of their product base and reduce the carbon footprint by reducing transportation costs. This opportunity should be further explored in conversation with the “Island Good” initiative established by VIEA.
3. Information is available on the free trade agreements to which Canada is a signatory. To fully maximize the details within each agreement, we recommend that trade specialists be engaged to explore the targeted business cases and, of equal importance, to advise on structuring the business case presentations to best address specific interests and concerns of prospective international investors.
4. To take advantage of the groundwork laid through this initiative, these FDI opportunities should be used to seed B2B discussion at the upcoming VIEA Business Match conference due to be held in March of 2019.
5. Business match-makers should travel to meet with prospective foreign investors, developing relationships, and further refining the understanding of needs, strengthening the ability to intelligently respond to concerns and expressions of interest.
6. The community engagement process identified potential international partners that are capable of translating the FDI ideas into country-specific marketable information. The documentation will be useful in gauging interest or soliciting further discussions. These opportunities should be explored further.
7. Building on the initial funding to conduct research, engage stakeholders and develop business cases, the foundation is now laid for pro-actively and aggressively pursuing foreign investment. At the moment, the trend on VI is be reactionary in response to random requests for information. While individual communities may have developed capacity to market certain features available in their jurisdictions, such efforts tend to be narrow focused and limited in their reach. Establishing an Island-based FDI office under the auspices of the Foreign Trade Zone designation currently held by VIEA, will unify and strengthen the voice. For example, there was opportunity this past year to accompany an Island-based entrepreneur seeking closer ties to an Asian customer. Having an established VI FDI office may have helped in creating an opportunity for meeting directly with potential investors, while enhancing meeting preparations productivity.
8. It is clear that successfully delivering foreign direct investment in Canada is as much a function of global demand as it is what Vancouver Island has to offer. To that end, any further development of Vancouver Island Foreign Direct Investment business cases must include a more exhaustive “buy-side” demand component. Emphasis will need to be placed on understanding the risk framework of investors target trade partner markets so as to present opportunities in a manner that will satisfy primary interests and concerns from the buyer's perspective. The portfolio of business cases should be used as specific and tangible investment products to be marketed directly to foreign investors in related sectors. Presentations could be tailored so as to address the risk concerns that are specific and unique to each prospect.

# Appendix A The Team

Bill Collins

The team was led by Mr. Bill Collins, a consultant and principal of CollinsWorks Ventures Inc. Bill has more than 30 years’ experience in R&D, global sales and marketing, advanced manufacturing and M&A activities from bases in Canada, Europe, the South Pacific and the United States. For the past 15 years Bill has been on the leadership team for Quester Tangent, a BC based enterprise delivering engineering centric, complex technology. Bill is a member of the Professional Engineering and Geoscientists Association of British Columbia. Bill has been an evangelist for the growth of a vibrant advanced manufacturing sector on Vancouver Island.

John McCannel

John has over 35 years’ experience gained across a variety of roles in the Financial Services industry including: High Technology expertise in the areas of Advanced Manufacturing, Information Technology, Life Sciences, Clean Tech, and Digital Media. John has specific experience in Foreign Trade and Foreign Direct Investment as well as real estate and project financing.

# Appendix B Round of Thirty

Key priority areas as identified in the VIEA ‘State of the Island’ Economic Report of 2017 were used as starting points to identify opportunities. Each opportunity is loosely defined and then measured subjectively against the criteria. Scores were given only as a guide with 1 being worst and 5 best. Final choices were made following community discussions.

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| --- | --- |
|  |  |
| **Sector** |  | **Revenue** | **Profits** | **Employment Potential** | **Competitive advantage** | **Market access** | **Capital**  **Intensity** | **Level of maturity** | **Timing** | **VI Premium** |
| **Tourism** | Tour buses (hop on and hop off), boat & ship cruises | 3 | 3 | 4 | 3 | 1 | 1 | 4 | 5 | 5 |
|  | Eco-tourism | 4 | 3 | 3 | 2 | 4 | 5 | 4 | 5 | 3 |
|  | Business Tourism | 1 | 3 | 2 | 3 | 1 | 2 | 1 | 4 | 4 |
|  | Partnerships with travel agencies (Holiday + transportation packages) | 2 | 4 | 3 | 4 | 5 | 1 | 4 | 5 | 5 |
| **Agriculture** | More organic food produce | 4 | 4 | 5 | 5 | 5 | 2 | 3 | 3 | 5 |
|  | Value-adding to fruits & veggies | 4 | 4 | 5 | 3 | 5 | 1 | 2 | 5 | 4 |
|  | Increase in livestock produce | 3 | 4 | 5 | 3 | 5 | 1 | 2 | 3 | 3 |
|  | Expansion of vineyards; wine production and export | 4 | 5 | 5 | 4 | 5 | 1 | 4 | 4 | 4 |
|  | Dairy Farming & production | 2 |  | 5 |  | 5 | 1 | 4 | 5 | 5 |
| **Aquaculture** | Salmon canning & packaging | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 5 |
|  | Shellfish research centres & Institutes, fish plants | 3 | 3 | 4 | 4 | 5 | 1 | 3 | 5 | 2 |
|  | Provision of equipment & supplies | 1 | 2 | 2 | 4 | 2 | 5 | 5 | 5 | 2 |
|  | Technical support services to the aquaculture industry(Installation, assessment & monitoring) | 3 | 2 | 4 | 5 | 3 | 2 | 3 | 5 | 2 |
| **Manufacturing** | Manufacture of detergents | 1 | 1 | 4 | 1 | 1 | 4 | 1 | 1 | 1 |
|  | Production of soft ply. Tissue, napkins and paper | 2 | 2 | 5 | 2 | 2 | 1 | 5 | 3 | 2 |
|  | Manufacture of herbs and cereals | 1 | 1 | 5 | 1 | 5 | 2 | 1 | 2 | 2 |
| **Forestry** | Manufacture of Cross Laminated Timber | 4 | 2 | 2 | 5 | 4 | 1 | 3 | 5 | 3 |
|  | Wood pellets as form of energy | 3 | 3 | 3 | 4 | 5 | 3 | 5 | 5 | 4 |
|  | Forest and Land Management | 5 | 5 | 5 | 1 | 1 | 4 | 5 | 5 | 1 |
|  | Value- added wood products | 5 | 5 | 5 | 5 | 4 | 2 | 5 | 4 | 4 |
|  | Wood fibre Insulation | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| **High-Tech** | Electric car production | 5 | 5 | 2 | 5 | 5 | 1 | 3 | 5 | 5 |
|  | Robotics | 5 | 5 | 4 | 4 | 4 | 1 | 4 | 5 | 5 |
|  | Renewable Energy | 4 | 4 | 3 | 4 | 3 | 2 | 5 | 5 | 5 |
|  | Green Building & Clean water technology | 1 | 1 | 4 | 1 | 1 | 2 | 2 | 5 | 5 |

# Appendix C Focus Group Template

A common approach was needed to assess the size and impact of each opportunity. The team found it useful to cast the prioritization criteria in terms of impact on the Income Statement and Balance Sheet. These key indicators are common to all business. By focusing attention on extracting this information, focus groups were encouraged to think beyond the normal course of executing a business. Most attendees were not financial professionals so the attention was not necessarily on generating numbers but on assessing the risk and rewards that would be key indicators to a foreign direct investor.

|  |  |  |
| --- | --- | --- |
| Criteria | **Income Statement** | **Balance Sheet** |
| Revenue | •Rev. -  Stability, Cyclicality  •COGS – Known cost base? |  |
| Wealth Generation | •Multiplier  •Trickle Down  •Community Wealth | •Rate of Wealth creation |
| Employment | •#’s  •FT/PT/FTE implications  •Quality/Skills  •Availability  •Training |  |
| Location | •Import/Export  •Logistics  •Foreshore lease | •Land?  •Bldg. ?  •Equipment |
| Market Access | •Marketing |  |
| Capital Intensity | •COGS (Leases) | •Capex  •Amounts (H $10M+, M $5 +/- $2M, L <$1M  •Complexity |
| Level of Maturity | •Revenue Stability  •Known Cost Base  •R&D |  |

1. *The Prize in Economic Sciences 2018, https://www.nobelprize.org/prizes/economic-sciences/2018/press-release/* [↑](#footnote-ref-0)
2. *CleanBC. our nature. our power. our future. https://cleanbc.gov.bc.ca/* [↑](#footnote-ref-1)
3. *Export Development Canada, https://www.edc.ca/en/blog/cleantech-canada-growing-global-markets.html* [↑](#footnote-ref-2)
4. *The Innovation and Competitiveness Imperative: Seizing Opportunities for Growth Report of Canada’s Economic Strategy Tables: Clean Technology* *https://www.ic.gc.ca/eic/site/098.nsf/vwapj/ISEDC\_CleanTechnologies.pdf* [↑](#footnote-ref-3)