

OCEAN FUTURES HUB AND CLUSTER

ON SOUTHERN VANCOUVER ISLAND

BUSINESS CASE CONDENSED

DECEMBER 4, 2020

PREPARED BY:

URBAN SYSTEMS LTD.

SUITE #312 - 645 FORT STREET
VICTORIA, BC V8W 1G2

T: 250.220.7060 | URBANSYSTEMS.CA

CONTACT:

Andrew Baigent, MCIP, RPP

E: abaigent@urbansystems.ca

REPORT TO:

SOUTH ISLAND PROSPERITY PARTNERSHIP
901-747 FORT STREET
VICTORIA, BC V8W 3E9

The Ocean Futures Hub and Cluster concept was created and put forward by the City of Victoria in partnership with the South Island Prosperity Partnership and the Association of British Columbia Marine Industries, as an initial opportunity to develop a globally fluent economy on the South Island. The project business case was funded by Western Diversification Canada, which has identified the development of clusters as a strategic priority for investment in 2019-2020, and supported by a consultants from Urban Systems, Engage // Innovate, and HATCH. The business case and feasibility study for OFH&C also lays the groundwork for the future development of Victoria's Art and Innovation District and Pacific Canada's blue economy ecosystem.

Date: December 4, 2020

PREPARED BY:

URBAN SYSTEMS
SUITE #312 - 645 FORT STREET
VICTORIA, BC V8W 1G2
T: 250.220.7060

URBAN
SYSTEMS

urban
matters

IN PARTNERSHIP WITH:

Urban Matters

Hatch

Engage // Innovate

**ENGAGE//
'INNOVATE**



HATCH

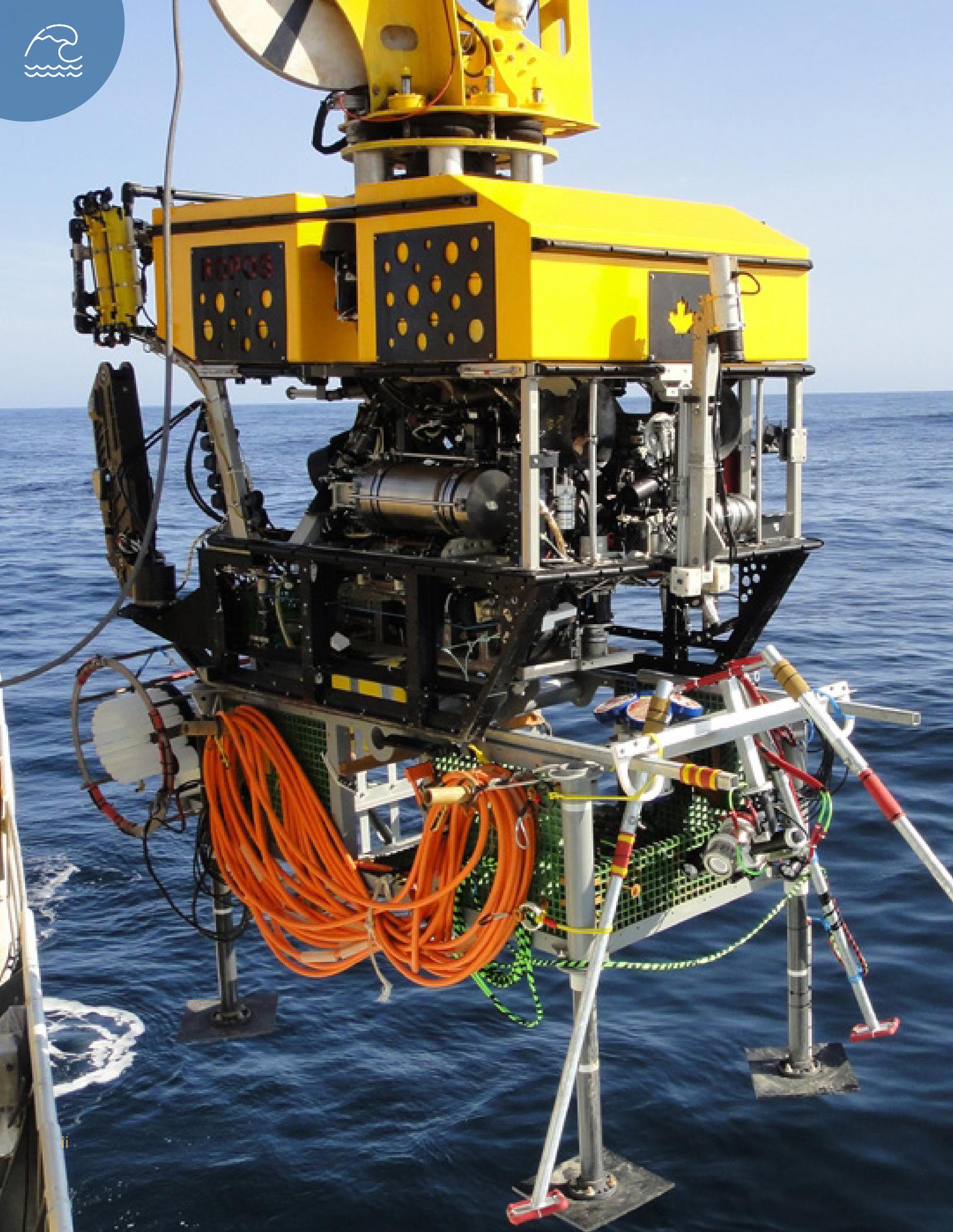
This report is prepared for the sole use of the South Island Prosperity Partnership. No representations of any kind are made by Urban Systems Ltd. or its employees to any party with whom Urban Systems Ltd. does not have a contract. Copyright 2020.



CONTENTS

EXECUTIVE SUMMARY	1
1.0 OVERVIEW	07
1.1 WHY START AN OCEAN FUTURES HUB AND CLUSTER?	07
1.2 STRATEGIC PILLARS	09
1.3 THE AMBITION – VISION 2030	11
1.4 CREATING VALUE THROUGH CLUSTER-BASED DEVELOPMENT	12
1.5 BUILDING THE OFH&C FOR FIVE STAKEHOLDER GROUPS	13
2.0 BACKGROUND/RATIONALE	17
2.1 TRENDS IN OCEAN INNOVATION CLUSTERS AND HUBS	17
3.0 PROGRAM OFFERINGS	25
3.1 ALIGNING PROGRAMS TO ENGAGEMENT FINDINGS	25
3.2 FIVE STAKEHOLDER FRAMEWORK	26
3.3 RECOMMENDED PROGRAMS	28
4.0 FIRST NATIONS	35
5.0 HUB AND SPOKE MODEL	38
6.0 IMPLEMENTATION ROADMAPS AND BUDGET	40
6.1 PERFORMANCE EVALUATION METRICS	42
7.0 CONCLUSION	46

THOMAS G THOMPSON





EXECUTIVE SUMMARY

THE VISION

A global ocean technology hub to drive ocean industry transformation for the 22nd century.

With the longest coastline in the world, Canada has access to an array of marine resources. A long tradition of development through our connections with the ocean, coupled with our position as one of the world's 10 largest economies by GDP has made us a leading player in the ocean economy. With a global shift towards more sustainable use of resources, as laid out in the UN's Sustainable Development Goals, development of the ocean economy, which is expected to reach \$3 trillion by 2030, has been rapidly shifting toward a more sustainable model known as the blue economy.

This report lays out the business case for the establishment of a new Ocean Futures Hub and Cluster (OFH&C) which will be a vehicle for industry leaders, entrepreneurs, researchers, governments, and investors to accelerate Canada's position in the global ocean technology sector with a blue economy focus. Initiating an ocean innovation cluster in Pacific Canada will complement other regional initiatives such as COVE in Halifax. The OFH&C is a long-term investment in our national competitiveness, to compete and win in the blue economy.

The OFH&C will be the foundation that nurtures a regional economic ecosystem focused on the global blue economy. These regional economic ecosystems are often referred to as "clusters". The physical location at the core is referred to as the "hub". The hub will host the team that runs the OFH&C and provides opportunities for co-working and co-location for members that wish to access shared facilities and services. The OFH&C will also offer people-centric programs, events, and facilitated networking.

OFH&C is important to support Pacific Canada in developing more resilient economies that can adapt to global dynamics, support new high-value, future-oriented jobs and enterprises. It will leverage the strengths of Pacific Canada actors while building industry capacity by developing and attracting, a highly skilled and adaptable workforce. OFH&C



will foster innovation in products, people, technology and ideas within Pacific Canada and the globe. Locally, the OFH&C is also a foundational action to Victoria 3.0, an economic development plan that also includes the creation of an Arts & Innovation District that supports revitalization of a neighborhood and an underused part of the port and waterfront.

120+ stakeholders co-designed the OFH&C concept through a series of engagements described and summarized in this report. The ocean and marine leaders that participated shared their opinions on the strategy, structure, governance, financing, and key strategic initiatives for the OFH&C, as well as the current challenges and future of the blue economy in Pacific Canada. A key theme that emerged was the need for more collaboration among existing companies and with government and academia. New alliances can increase effectiveness, gain more international contracts, and attract significant new investment into the region and Canada.

First Nations have been and will continue to be consulted as the OFH&C develops. They have deep cultural connection to the sustainable use of ocean resources and can contribute to the development of locally relevant responses to global opportunities in the blue economy. Meaningful inclusion of First Nations as partners in this initiative creates an opportunity to also advance the reconciliation agenda in Canada. Collaboration with First Nations would for example allow for advancing environmentally beneficial applications of technology such as renewable ocean energy (especially offshore wind) and improving on aquaculture practices.



Four strategic pillars were identified through the stakeholder engagement process:



1. **Innovation cluster** for capacity/skill development and shared ocean technology R&D



2. **Entrepreneurship programs** that boost local startups and make the OFH&C a global magnet for ocean tech startups focused on the blue economy.



3. **Real estate** development of a large co-location cluster of ocean and marine enterprises. Starting out with a co-working space and testing facilities and over time growing to more than 100 companies.



4. An **ocean venture fund** that provides early-stage seed financing through later-stage growth financing, focused on technologies that relate to the blue economy. The fund will have a clear for-profit mandate and will be managed by a professional venture team, allowing for rapid growth and deployment.

The ten-year 2030 strategic plan aims to position the OFH&C as a global player with a strong, international position in the global economic ecosystem for the ocean economy. The ambitious set of goals for 2030 include 1,000 new high-value jobs in British Columbia, 50 new companies started, and 100 companies located in a cluster that fosters further innovation in the blue economy.



WHAT WILL IT TAKE TO GET THERE AND MOVE US TOWARDS BECOMING THE LEADERS TRANSFORMING OCEAN INDUSTRIES FOR THE 22ND CENTURY?

Lower levels of initial investment will allow the OFH&C to get started and begin building programs that will draw in additional funding to achieve the overall vision. The following examples show what could be achieved if various levels of funding are secured. At the lower levels there will be a significant economic impact on the regional economy, but it will take full funding participation of industry, government and investors to have a transformative effect on the global ocean economy.

\$5 MILLION:

Create a co-working space, a basic venture fund, a startup incubator, and basic programs

\$50 MILLION:

Operational co-working space with 50 companies co-located, a \$5 million micro fund, incubator and start-up programs with good partnerships, strong industry participation opening up new markets for Canadian companies

\$100 MILLION:

Multiple buildings, 70+ co-located companies and test sites, \$50 million venture fund with growing angel network, strong ocean tech cluster with global participants and strong collaboration

\$160 MILLION:

World class ocean tech innovation district with 100+ companies co-located providing test sites and co-working space, two venture funds with \$250 million AUM and global significance acts as a magnet for companies to locate in Canada, fully staffed world-class accelerator with multiple programs, and a globally recognized ocean tech cluster with 300+ members driving sector transformation



Financing new clusters and hubs is always a challenge. Many places such as in Europe, Southeast Asia and the US have national programs and detailed structures to fund new cluster initiatives. This is not the case in Canada, putting us at a disadvantage against comparable countries like Norway. With a broad partnership of both the private sector and government, it would be possible to develop the OFH&C at a globally impactful scale.

GOVERNMENT FINANCING:

▶ **Federal government**

- » Western Economic Diversification (Regional Innovation Ecosystems)
- » Department of Fisheries and Oceans (as part of the blue economy strategy)
- » INAC or others (Support the inclusion of First Nations partners in a hub & spoke model)
- » COVID19 economic restart stimulus funding

▶ **BC Provincial government**

- » CleanBC
- » InnovateBC
- » COVID19 economic restart stimulus funding

▶ **Local government**

- » Staff secondments for first phase of OFH&C startup
- » City of Victoria through connecting to master planning for waterfront redevelopment and interactions with real estate developers

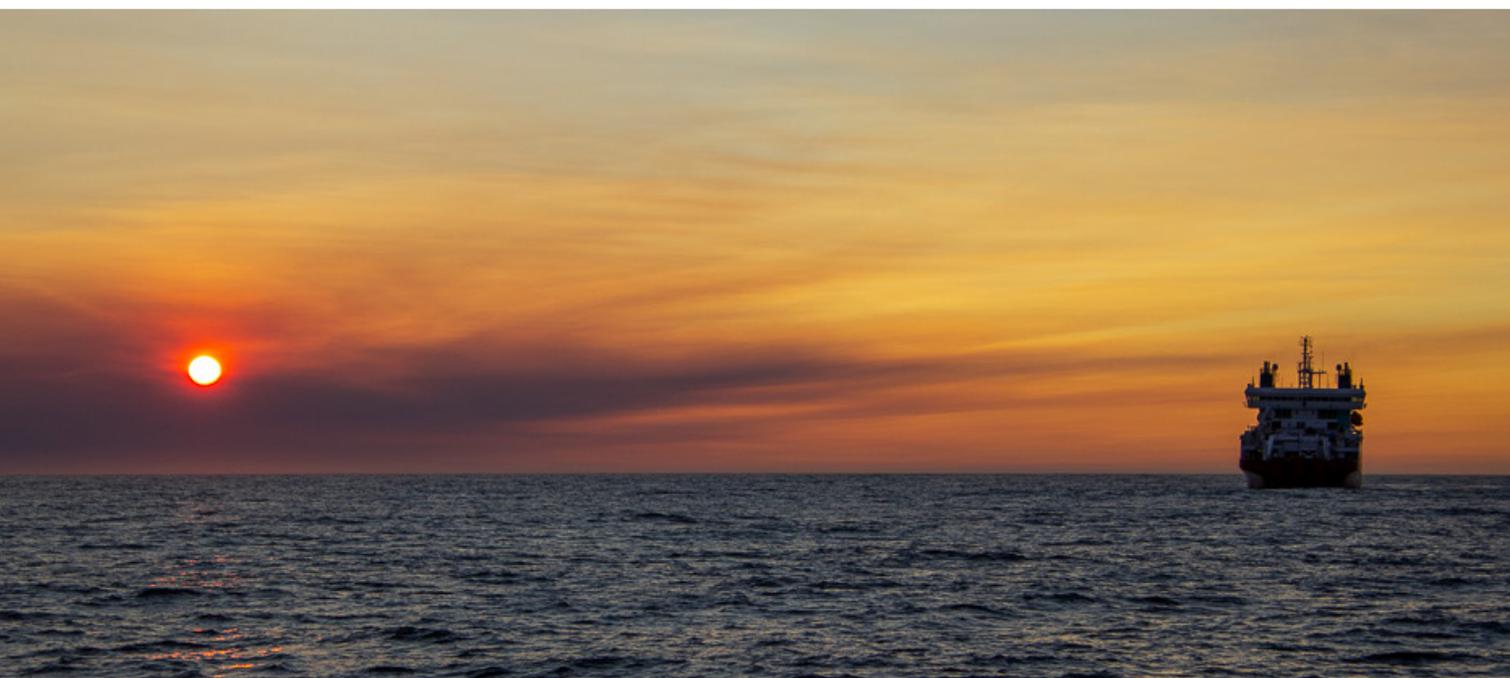


PRIVATE SECTOR

- ▶ Industry Funding through Industrial and Technological Benefits Policy investment by larger ocean economy companies
- ▶ Procurement and R&D support for OFH&C members from large industry players such as BC Ferries
- ▶ Membership fees from existing ocean economy companies operating in the region
- ▶ In the longer term, proceeds from real estate development activity at the hub
- ▶ Venture Capital funding sourced globally (unlocked through the de-risking that would result from large-scale funding of OFH&C by government and industry)

With a significant infusion of early seed funding from government, the OFH&C will be positioned to leverage co-investment from industry and follow-on investment from the global venture capital community. This coordinated collaboration would make a decade of transformation possible. Examples are provided in this report of where this has been successful before on a similarly ambitious scale and over a similar timeframe.

Canada has an opportunity to claim a space as a global leader in the blue economy through investment into developing a hub for ocean innovation in Pacific Canada. The time to seize this opportunity is now.





1.0 OVERVIEW

1.1 WHY START AN OCEAN FUTURES HUB AND CLUSTER?

The Ocean Futures Hub and Cluster (OFH&C) is a national vehicle to accelerate Canada's position in the global ocean technology sector. The OFH&C is a long-term investment in our national competitiveness, to compete and win in the global ocean economy.

Together with Canada's Ocean Supercluster and the growing number of ocean projects, like the Ocean Startup Project, the OFH&C is helping grow and expand Canada's blue economy towards the 22nd century. A substantive funding commitment would also be a fitting way to show global leadership and kickstart our participation in the United Nations Decade of Ocean Science for Sustainable Development.

Supporting the creation of an OFH&C with funding would be a meaningful demonstration of Canada's public commitment to the implementation of the United Nations' 2030 Agenda and its Sustainable Development Goals, particularly SDG#14.

Canada has been a global leader in investment into in Ocean Science and Technology, with particular strengths in ocean research funding to universities as evidenced locally through Ocean Networks Canada. Although the investment into COVE showed leadership in partnerships with industry to stimulate economic activity, Canada is falling behind its peers in the ocean investment space. Countries like Norway, Iceland, France, the United States, and Singapore have funded development of their ocean clusters on a larger scale for decades, giving companies there a substantial advantage. Funding OFH&C and continuing to support the Centre for Ocean Ventures & Entrepreneurship (COVE – a collaborative facility in Halifax similar to what is envisioned for the OFH&C) is one of many initiatives needed over the coming decade to elevate Canada into a globally leading position within the blue economy.

OFH&C is a system-solution to a large national challenge: how do we transform Canada's economy from a resource extraction economy to a knowledge-driven, technology-based economy with scalable business models for new economic growth? This is a challenge that must be addressed in a collaborative, national solution. A solution for all Canadians.



What problems are we trying to solve?

- ▶ How can we transform Pacific Canada's ocean industries for the 22nd century?
- ▶ How can we build a world-class innovation environment for large companies, small companies and fast-growing start-ups to connect, collaborate and win in global markets?
- ▶ How can we make Pacific Canada a global leader in the new, high technology ocean industries that are emerging?
- ▶ How can we build new high-growth companies with high-value jobs?
- ▶ How can Canadian companies compete and win in the ocean industries of the future?





1.2 STRATEGIC PILLARS

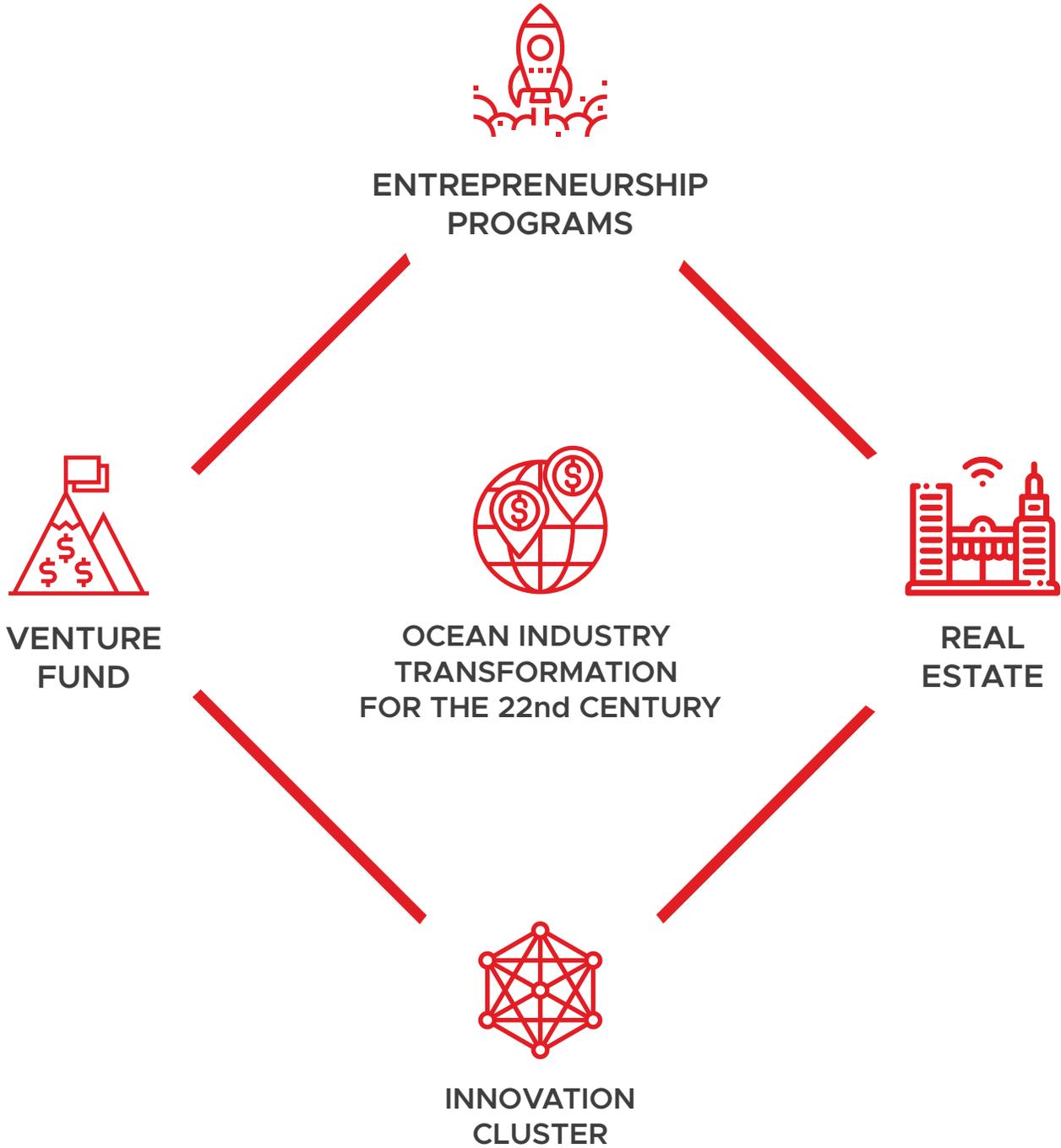
The Ocean Futures Hub and Cluster will build on four strategic pillars:

- 1. Innovation cluster** to accelerate the transformation of our existing ocean industries through capacity development, skill development, learning and development of new, co-created projects amongst key members from companies big and small.
- 2. Entrepreneurship programs** to build a culture of entrepreneurship in the blue economy. These programs will range from local startup programs to global accelerator programs, open to all ocean tech startups globally. The existence of these programs and associated funding streams will encourage global startups to locate in British Columbia so they can access the OFH&C's world class incubation and accelerator support. Through these programs, British Columbia aims to become a global magnet for ocean tech startups, all connecting into the thriving ecosystem in Victoria and beyond.
- 3. Real estate development** of a large co-location of ocean and marine enterprises. Starting out with a co-working space and expanding into testing facilities and a wide range of shared innovation infrastructure, available to all members. Over time, we expect more than 100 companies and organizations co-locating with the Ocean Futures Hub and Cluster.
- 4. An ocean venture fund** that provides early-stage seed financing to later stage growth financing, all in the ocean industries. This fund follows similar models from those of Norway and Switzerland. The fund will have a clear for-profit-mandate and will be managed by a professional venture team. The fund is expected to deliver a significant risk-adjusted return to the investors over the coming 15 years.



OCEAN FUTURES HUB AND CLUSTER

STRATEGIC PILLARS





1.3 THE AMBITION – VISION 2030

With a significant infusion of early seed funding, the OFH&C will be positioned to leverage co-investment from industry and follow-on investment from the venture capital community. Through the collaborative efforts of government, industry, academia, the investment community and entrepreneurs, a decade of transformation is possible. In this report, we will cite several examples where this has been done before, on a similarly ambitious scale and over a similar timeframe.

By 2030 we will:

- 1.** Establish OFH&C as one of the top ten ocean technology clusters globally
- 2.** Attract 300+ members to the OFH&C
- 3.** Develop five global market initiatives, where Canadian companies win new contracts in new globally competitive markets
- 4.** Transform 50 established Canadian companies through new growth in high-tech ocean opportunities
- 5.** Develop 1,000 new high-value jobs in the Ocean Economy in Pacific Canada
- 6.** Develop 50 new start-ups and scale-ups in the ocean economy in Pacific Canada
- 7.** Support and accelerate 200 start-ups in the ocean economy globally
- 8.** Develop a significant real estate footprint with shared innovation, technology, maker space and testing facilities
- 9.** Develop a significant co-location space, with minimum 100 companies co-locating with the OFH&C
- 10.** Establish strategic partnerships with globally leading networks, ecosystems and hubs to support the internationalization of Canada's ocean economy companies
- 11.** Use the OFH&C to leapfrog leading ocean economy countries and regions around the world
- 12.** Develop a venture fund with \$250M assets under management to support the Ocean Tech economy



1.4 CREATING VALUE THROUGH CLUSTER-BASED DEVELOPMENT

Innovation Clusters use evidence based, practical approaches to strengthen innovation and entrepreneurial driven ecosystems by supporting existing and emerging business. They help regions foster economic growth and social progress.

The Ocean Futures Hub and Cluster will create a concerted effort that will accelerate industry innovation and provide necessary infrastructure to create new products, new companies, and new jobs.

OFH&C will bring together entrepreneurs, governments, researchers, industry and private capital to combine innovation capabilities and resources to secure a dynamic growth of Canada's blue economy and prosperity for Pacific Canada.

OFH&C will provide an innovation infrastructure for its members that facilitates research, industry-focused education, and new business programs for entrepreneurs. Members will also have access to state-of-the-art facilities for testing, simulation and visualization in order to create faster, more effective innovation and commercialization.

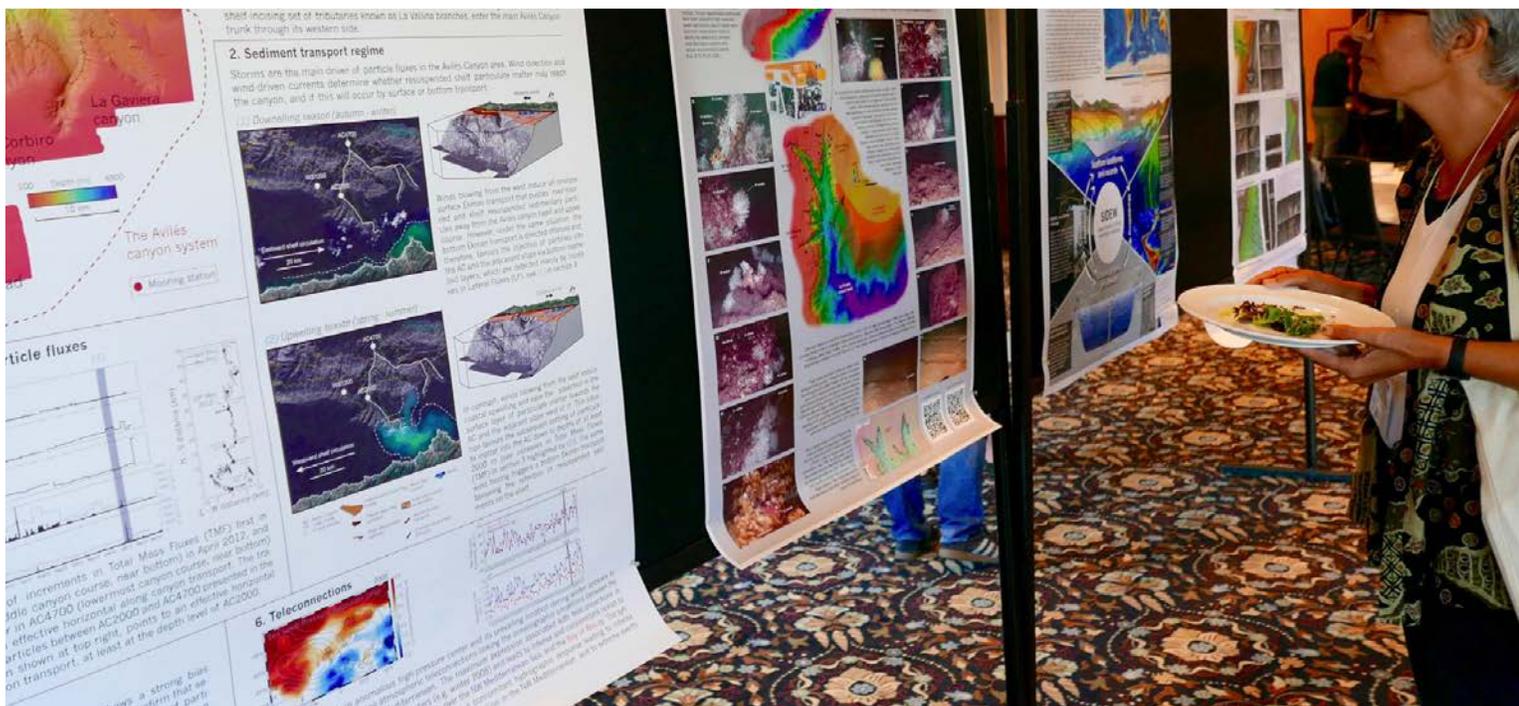


1.5 BUILDING THE OFH&C FOR FIVE STAKEHOLDER GROUPS

In line with modern theories on economic development, innovation clusters and innovative ecosystems, the Ocean Futures Hub and Cluster will create value for all five major stakeholders. The globally-recognized (MIT, Harvard, BI Norwegian Business School, etc.) five stakeholder structure is used in this report to develop the program structure. In our local setting, First Nations are an additional stakeholder group. The OFH&C will include First Nation participation across all five stakeholder groups rather than as a separate category.

Entrepreneur

- ▶ Position OFH&C as a powerhouse for entrepreneurship, by attracting capital and supporting entrepreneurship in the ocean industries globally.
- ▶ Accelerating entrepreneurship with business growth programs and risk-capital access to rejuvenate new product ideas to boost innovation in ocean industries
- ▶ Seek opportunities to ensure meaningful inclusion of First Nations, for example by partnering with existing Indigenous investing groups such as Raven Indigenous Capital Partners to create a focused start-up fund that is culturally sensitive
- ▶ Build a long-term culture of entrepreneurship, from early stage to IPO





Capital

- ▶ Build out a large-scale ocean investor landscape for all Canadians
- ▶ Connecting capital with investment opportunities and increase investors domain expertise on investment opportunities in the growing ocean economy
- ▶ Attract more private funding to accelerate innovation and job creation
- ▶ Develop a network of 100 ocean angels (business angels)
- ▶ Significantly improve value creation in the ocean space for all Canadian investors

Corporate

- ▶ Faster adaptation of knowledge and new technology
- ▶ Shorten the Time to Market for new innovations by accessing knowledge and infrastructure for testing and validation of new technologies
- ▶ Gain access to new growth markets through collaborative export programs
- ▶ Build new capabilities and skills in high-tech sectors
- ▶ Accelerate innovation through new business models
- ▶ Speed up innovation through Corporate Venture Capital (CVC)
- ▶ Start working with open innovation, through new partnerships, collaboration projects with start-ups and scale-ups





Government & Public Sector

- ▶ Translate government strategies into operational and actionable activities.
- ▶ Ensure policy and public support programs that can enhance the region's competitiveness and attractiveness to secure economic growth and jobs.
- ▶ Develop better solutions for First Nations participants
- ▶ Support industry and job creation through new, innovative formats

Academic & Education

- ▶ Collaborate with industry on new R&D programs
- ▶ Attract more funding for R & D & I projects
- ▶ Develop new, industry-related educational programs (from Bachelor to Executive levels)
- ▶ Deliver ocean learning products and engagement with communities
- ▶ Work more closely with entrepreneurs and venture capital investors to create more relevant educational programs.







2.0 BACKGROUND/RATIONALE

2.1 TRENDS IN OCEAN INNOVATION CLUSTERS AND HUBS

THE HARDWARE AND THE SOFTWARE

Over the past few decades, innovation hubs and innovation parks have been on the rise globally.

Around the world, government, policymakers, and ecosystem builders have been asking themselves how can we compete better? This has led to a massive investment into innovation parks, science parks, innovation districts and co-working spaces. Yet, many have realized that only investing into the buildings, *the hardware*, has failed to produce the expected results.

Over the past decade, this has led to a significant rise in the number of innovation clusters, currently sitting at some 7,000 around the world. These clusters form the backbone, the programs, content, relationships and soft side of these initiatives. We call them *the software*.

Increasingly countries and regions are arriving at the same conclusion, we need both the hardware and the software to compete. We need the co-working spaces, innovation parks and real estate development. But we also need the clusters, programs, shared infrastructure, and joint innovation projects. Together, this is the hardware and software.

The number one trend in global innovation policy is this joint development of both hardware and software. This is also the case for the Ocean Futures Hub and Cluster for the 22nd century, both hardware and software. To compete better.

INNOVATION HUBS IN THE OCEAN ECONOMY

With so many industries and stakeholders that have a vested interest in the Ocean Economy, many regions across the world have created ocean clusters, hubs, incubators and accelerators (see [Appendix 2](#)).

Nationally, Canada's Ocean Supercluster is a transformative cluster model that is driving cross-sectoral collaboration, accelerating innovation, and growing Canada's ocean



economy in a way that has never been done before. The Centre for Ocean Ventures & Entrepreneurship (COVE). Located in what was once the Canadian Coast Guard facility on Halifax Harbour, COVE is home to local and global ocean technology businesses, post-secondary institutions, researchers, and marine-based and service businesses that support the ocean sector. The COVE site features extensive marine facilities with two large, deep-water piers, office space, an incubator and space for shops and labs.

Norway has a governmental Cluster program that supports Cluster initiatives. In total, there are more than 12 Cluster initiatives to support the growth of ocean industries. These Clusters do not have any physical infrastructure, but are located in hubs together with industry, R&D, accelerator and incubator programs, and they play an important role as a back-bone organization to foster innovation and cross-pollinate expertise, ideas and resources among members to push Ocean Tech advances to the global market.

The Maritime Alliance (US) has taken the Cluster idea one step further and is helping organize several international maritime and ocean Clusters together. For example, the BlueTech Cluster Alliance was formed in January 2017 and it includes nine different Clusters from seven different countries.

THE BLUE ECONOMY – A \$3 TRILLION OPPORTUNITY

The global ocean economy is expected to grow to \$3trillion by 2030. For many countries and regions, the blue economy is one of the biggest growth opportunities in the coming decades. Federally, it's recognized that "investing in the Blue Economy will help Canada prosper¹.

Some countries are already capturing significant value from the blue economy. Norway has more than 25% of GDP coming from the ocean economy. The world average is 2.5% of GDP. For Canada, that number is 1.2% of GDP.

This is a massive opportunity for Canada and Canadian companies to rethink the opportunities in the blue economy in the coming decades. With the world's longest coastline, a diverse coastal economy on both east and west coast, a growing demand for new, innovative tech solutions, Canada is perfectly positioned to find and capture value in the blue economy.

¹ <https://www.canada.ca/en/privy-council/campaigns/speech-throne/2020/speech-from-the-throne.html>



Over the past decade, the term ‘blue economy’ has grown into a global call for sustainable economic development in the ocean space. A common definition is:

“Sustainable use of ocean resources for economic growth, improved livelihood and jobs, and ocean ecosystem health”.

The blue economy encompasses all economic activities related to the oceans, including both established and emerging sector. This allows for the important role of tech transfer or knowledge transfer, using legacy capabilities to build new future growth industries in the ocean space. Examples of established industries include ship building, security, oil & gas and marine tourism. Emerging sectors often include ocean robotics, autonomous ships, offshore wind energy and marine biotechnology.

Countries and regions around the world are racing to position themselves within the prime emerging sectors. National ocean strategies, innovation clusters, venture funds, national R&D programs are all tools being used by visionary governments and industry leaders to compete and win in the global blue economy of the future.

For Pacific Canada, the time is now to organize, collaborate and lead the development of new high growth sectors in the global blue economy.

IMPACT INVESTING & BLUE FINANCE

Another global trend that has moved quickly over the last decade has been the development of impact investing. Impact investing is defined by the Global Impact Investing Network (GIIN) as investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return.

Impact investing has progressed steadily from a fringe specialty to niche, alternative and now a mainstream investment class. Over a decade ago they appeared mostly as negative-screen mutual funds that appealed to retail investors by pledging not to invest in specified types of companies such as those that dealt in alcohol, firearms or tobacco. This has now grown to a global scale that GIIN estimates at USD \$715 billion as of the end of 2019 and has all types of investments including a massive social venture capital sector.

Green economy focused investing is now well established, and the latest trend within the impact investing space is known as “blue finance”. Blue Finance funds (Katapult Ocean, SeaAhead, Aqua-Spark etc.) focusing on investment opportunities in sustainable ocean companies have emerged in the last few years and grown explosively.



BC'S EMERGING ECONOMY IS CLEANER AND MORE INNOVATIVE

Prior to COVID-19, the Emerging Economy Taskforce began compiling its final report, which was released in March 2020. The report explores future opportunities and challenges for British Columbia. They found that British Columbia's economy is influenced by changing global trends, emerging technological advancements, changing business processes, climate change and a variety of other factors. In the report, they outline five strategic goals which the OFH&C supports.

- 1. Embracing Technology and Innovation** – OFH&C will build on the strengths in the ocean and marine technology sector and foster further investment in innovation.
- 2. Leveraging B.C.'s Green Economy** – OFH&C supports the emerging blue economy, which similar to the Green Economy and circular economy, is low-carbon, resource efficient and socially inclusive, as it presents high-value opportunities.
- 3. Building a Highly Skilled and Adaptable Workforce** - OFH&C will help ensure B.C. continues to attract, develop and retain a highly skilled workforce within the rapidly growing ocean economy.
- 4. Ensuring an Effective Enabling Ecosystem** – OFH&C also recognizes that an enabling ecosystem for B.C.'s economy, which allows for the efficient flow of products, people, technology and ideas within the province and with the rest of the world, is essential.
- 5. Demonstrating Public Sector Leadership** – “Given the accelerated pace of change, flexible solutions must go hand-in-hand with a new level of public sector responsiveness.”² OFH&C will help communicate to government and public sector agencies how they best stimulate innovation and mitigate risks in Pacific Canada's blue economy.

² https://www2.gov.bc.ca/assets/gov/employment-business-and-economic-development/economic-development/emerging-economy-task-force/eetf-final_report-20200511-final.pdf (page 10)



In addition to B.C.'s Emerging Economy Taskforce, the OFH&C also aligns with CleanBC and InnovateBC. CleanBC is a guide to a more prosperous, balanced and sustainable future. The plan states that “rising to meet the global challenges of climate change is an opportunity for British Columbia to mobilize our skilled workers, natural resources and boom technology sector to reduce climate pollution and create good jobs and economic opportunities across B.C.”³.

In turn, InnovateBC is a Crown Agency that represents the government of British Columbia and the people who make up B.C.'s innovation ecosystem. Their role includes funding, supporting and building connections for innovators. Two priorities of InnovateBC that were outlined in their 2020-21 mandate letter was advancing reconciliation with Indigenous Peoples and moving towards a low-carbon economy⁴.

OFH&C will be a catalyst for a cleaner, more innovative B.C.

³ https://blog.gov.bc.ca/app/uploads/sites/436/2019/02/CleanBC_Highlights_Report_Updated_Mar2019.pdf

⁴ <https://innovatebc.ca/wp-content/uploads/2020/03/2020-21-Mandate-Letter.pdf>





COVID-19 RECOVERY AND THE SOUTH ISLAND REBOOT

As the COVID-19 pandemic continues to unfold across the globe, the need to foster resilient economies throughout Canada has become evident. Distressed national and global markets have caused unprecedented interruptions to trade, employment, and economic activity. Locally, unemployment has risen above 10% in Greater Victoria.

In response, a Rising Economy Taskforce was launched on April 16, 2020, one month after the BC Government first declared a state of emergency caused by the COVID-19 outbreak. In their economic recovery plan “Reboot,” the Taskforce identifies ten recovery pillars, one of which calls for investment into innovation ecosystems⁵:

“To keep up with global economic trends, respond to disruptions, like COVID-19 or climate change, and create new products and jobs, we need to strengthen our innovation ecosystem. Innovation ecosystems that are supported by industry, government and academia sustainably grow local businesses, foster research and development, attract new businesses, capital and talent, as well as support commercialization, entrepreneurship and exports.”
– (Reboot, p. 18)

OFH&C is a keystone initiative that directly supports investment into innovation ecosystems, recovery from COVID-19 and long-term resilience through new technology, companies and jobs.

⁵ https://southislandprosperity.ca/wp-content/uploads/2020/11/Reboot_Greater-Victorias-Economic-Recovery-Plan-2020-2022_SIPP-FINAL.pdf



VICTORIA 3.0 – RECOVERY, REINVENTION, RESILIENCE

Victoria 3.0 is an economic action plan that accompanies the City's Official Community Plan to 2041. It's a long-term plan and vision for a sustainable, influential city that will build a strong innovation ecosystem and create a strong and resilient economy now and for the future. The actions laid out in Victoria 3.0 will build an economy that enables everyone to flourish and that will set Victoria on a path to low-carbon prosperity.

Victoria 3.0 has three main goals. The first and immediate focus is on supporting businesses to adapt to a new normal and become more resilient in light of experiences and lessons learned during the COVID-19 pandemic. The second goal is to create a city and an economy for everyone. Finally, the third goal is that while Victoria builds its economy over the next two decades, it is done within the boundaries of the Earth's capacity to sustain us.

The plan also complements the South Island Prosperity Partnership's Rising Economy Taskforce by situating itself within their important work to reboot the regional economy.

Two of the cornerstone initiatives of Victoria 3.0 are the Ocean Futures Innovation Hub as well as an Arts and Innovation District.

The Arts and Innovation District, which will host the Ocean Futures Hub and Cluster, includes waterfront properties and is a place for cross-sector collaboration. It too shares the vision of being a place where ideas are turned into products and services and where new high-value, future-oriented jobs are combined with a global-facing, export-oriented mindset. In short, the Arts and Innovation District will be a neighbourhood of future-oriented, globally-fluent leaders and organizations, such as the OFH&C, collaborating to solve problems as society progresses to the 22nd-century.



INFRASTRUCTURE AND SPACE REQUIREMENTS

The key themes provided by stakeholders regarding infrastructure and space were:

- 1.** Clear need for water access on-site.
- 2.** Strong support for providing shared and collaborative spaces including, event and auditorium space, co-working and meeting space, research and development kitchens, testing facilities, and other light industrial areas.
- 3.** Strong support for shared resources such as a mobile crane, storage lockers or containers, testing equipment, boat launches, internet and IT, and vehicle parking.
- 4.** Emphasis on the need to leverage connections with industry leaders, institutions, and government, with the possibility of co-locating these partners at OFH&C to improve communication and collaboration.
- 5.** Provide spaces that allow for enterprises to grow on-site.
- 6.** Explore options to utilize an existing building or infrastructure to reduce costs.
- 7.** Providing services on-site including administration, event coordination, and networking.
- 8.** Learn from existing models like COVE, both the positive and negative aspects.

More specifically, the survey and interviews highlighted the need for at least 3,275 square meters of office space (private and co-working), light industrial workshop space, warehousing and foreshore area over the next three years as potential tenants relocate. In addition to 3,275 square meters of floor space, the following equipment is also needed:

- ▶ Pressurized test tank and 2-small water test tanks
- ▶ Laboratory space for biology-based and chemistry-based activities
- ▶ Community Observatory used to mount sensors and relay data
- ▶ Barge with a winch and internet access to submerge and test products
- ▶ Boat access for small/medium-size boats
- ▶ Boardrooms with abilities to live stream (in and out) with digital screens



3.0 PROGRAM OFFERINGS

3.1 ALIGNING PROGRAMS TO ENGAGEMENT FINDINGS

In designing what programs should be offered to participants in an innovation hub, there are hundreds of options to choose from. In the short term, the OFH&C should start with the programs that are most aligned to what the interested participants feel would be of greatest interest to helping them grow their organizations. Once established and some momentum is achieved, programs can be expanded in scope and scale and new programs can be added to attract international players to move or establish an office at the OFH&C. The prioritization of programs originated from the extensive stakeholder engagement process described in the previous section and informed by the experiences of the start-up of other innovation hubs.

As part of the engagement process, interested future OFH&C participants were asked in the survey to rank the ten programs identified in an earlier stage based on how interesting they were to their organization. There was high variation between respondents' answers with no clear consensus on a single program ranking. However, the weighted average rank of each program is shown below, in order from most interesting (1) to least interesting (10).

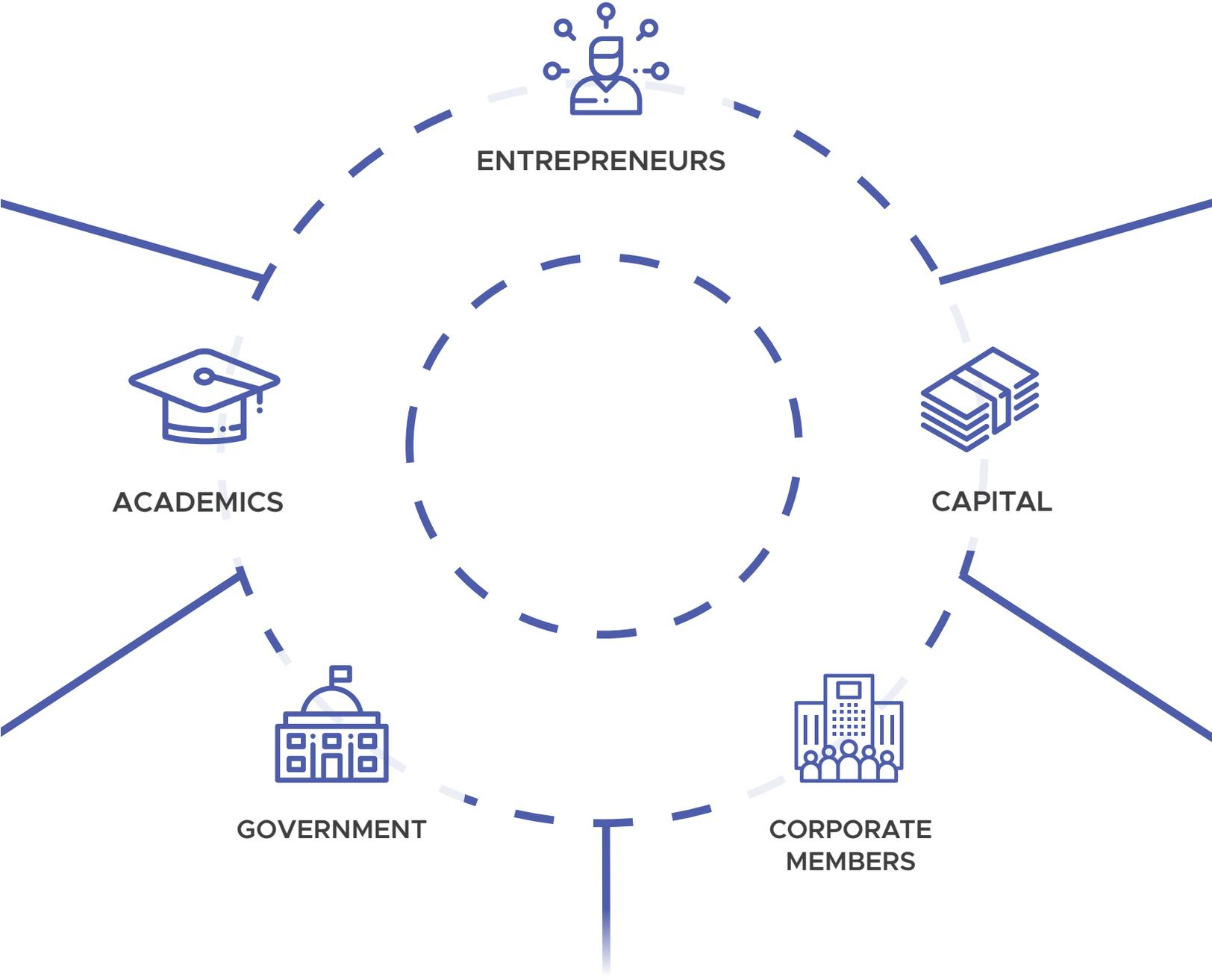
- 1.** Shared access to academic research based on common challenges (3.8 / 10)
- 2.** Business development work in international or outside of BC markets (4.1 / 10)
- 3.** Shared advocacy with senior government (4.5 / 10)
- 4.** Liaison with First Nations (4.6 / 10)
- 5.** Specialized training and recruitment programs to attract and retain talent (5.4 / 10)
- 6.** Improved access to capital (public and private) (5.4 / 10)
- 7.** Research into and management of joint submissions to RFPs (5.5 / 10)
- 8.** Shared marketing and public relations to raise industry profiles (5.6 / 10)
- 9.** Identify and connect with specialized testing facilities outside of the region (7.3 / 10)
- 10.** Access to early supply chain support (8.3 / 10)

Taken together with stakeholder interviews and the design workshops, it is possible to work towards some clear direction on the most relevant programming to stakeholders.



3.2 FIVE STAKEHOLDER FRAMEWORK

In assessing the program needs of various stakeholders, we have applied the five-stakeholder framework. This allows us to group the stakeholders by this typology to see where common threads were appearing. The five types in this framework are:



The five pillars of an Innovation Cluster (based on research from MIT, Harvard, BI Norwegian Business School, Engage // Innovate)



The full stakeholder list was created by the South Island Prosperity Partnership’s working group for the OFH&C. They went very broad on invitations to participate and those that responded were across all the five types. Established medium and large marine economy companies based in (or with significant existing presence in) this region represent the strong majority of those that have expressed interest in participating and who helped develop the needs assessments. In mapping out the needs, one dominant message and five sectors have emerged. Collaboration came through during all the steps in the engagement work as a key message. Beyond that, we find five topics:

- ▶ Corporate transformation (large-scale business reinvention)
- ▶ Corporate innovation – and a need to work with smaller skunkworks, fast-paced start-ups
- ▶ Shares testing facilities
- ▶ Shared offices, co-location and community building
- ▶ Start-up & Scale Up Programs

INDUSTRY-LED STRATEGIC INITIATIVES

To drive economic development

The following five strategic focus areas were identified as the top priorities and will be the foundation of the strategy for the Hub starting in 2021.



**INDUSTRY
TRANSFORMATION**

How do we accelerate the transformation of our currently largest and most important ocean-based companies?



**MARKET
DEVELOPMENT
(INTERNATIONAL)**

How do we collaborate to unlock new market opportunities in the global ocean economy?



**SHARED
INNOVATION
INFRASTRUCTURE**

How do we collaborate to develop new, world-class testing and development facilities, open to companies, R&D and educational providers alike?



ENTREPRENEURSHIP

How do we better support and development our current startups, while also building the infrastructure for the next 500 ocean-based startups in Pacific Canada?



CAPITAL

How do we attract and secure private venture capital financing into the future ocean economy, from business angels, local investors and global ocean-focussed venture funds like Hatch & Katapult Ocean?



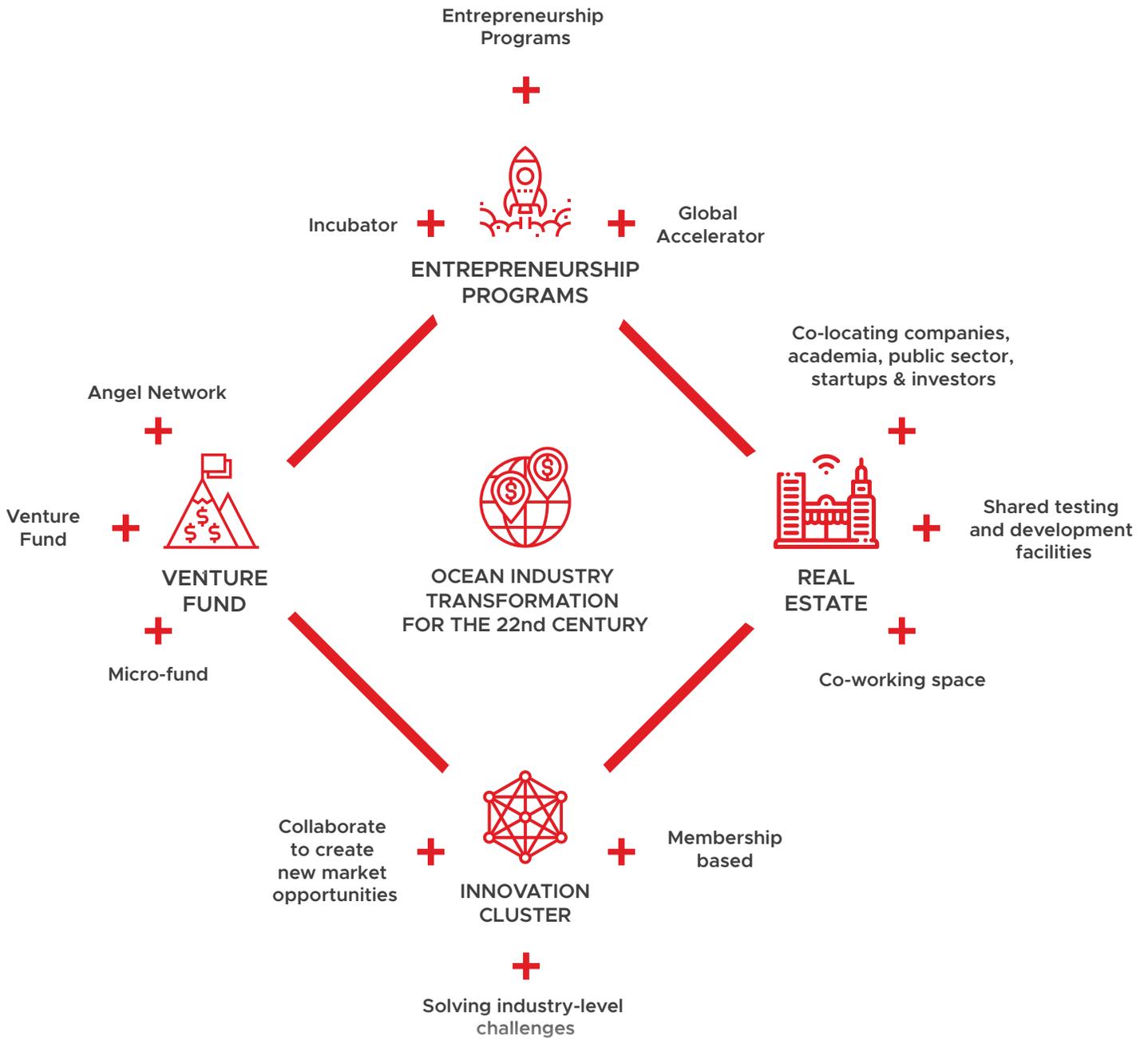
3.3 RECOMMENDED PROGRAMS

Over the following pages we have listed the recommended programs we believe should be developed in the Ocean Futures Hub and Cluster. Taking into consideration the Five Stakeholder Framework and the needs assessments of stakeholders that want to be a part of founding the OFH&C, we have grouped them into four distinct and logical pillars that can have clear goals and can grow into distinctly managed or separately funded programs. Each of these programs is broken down into others that would be managed within those groupings. All of them are designed to be rapidly started and capable of scaling up quickly to lead to transformation of the ocean industry for the 22nd century. These are ambitious programs. But, if delivered, they are guaranteed to have a significant impact on OFH&C, both regionally and globally. Due to space considerations in this business case document, the programs are described in short outlines in a table format. We recommend continuing the development of these programs once the OFH&C is established.





CORE PROGRAM AREAS + INITIAL PROGRAM OFFERINGS





CORPORATE TRANSFORMATION PROGRAMS

Need	Corporate Transformation	Detailed overview
Program Initiative #1	Cluster innovation project 1: Corporate Transformation	Company development program on corporate transformation.
Program Initiative #2	Cluster innovation project 2: Executive MBA Program - Corporate Transformation in the Ocean Industry	Collaborate with B.C. based business school. Establish a part-time, Executive MBA Program on Corporate Transformation in the Ocean Industry. Look to NHH Norway collaborations with NCE Seafood and NCE Finance Innovation Clusters.
Program Initiative #3	Cluster innovation project 3: Global market mapping	Collaborate with all members to develop a global market map of the opportunities for Canada's Ocean Industries. Look to global market. Extensive work should go into communication and awareness building post-publication.
Program Initiative #4	Cluster innovation project 4: Assessing your transformational capability	Advanced level program on assessing members' transformation capabilities. Followed up with executive conversation. Connects with CEO Forum.
Program Initiative #5	Cluster innovation project 5: R&D for future technologies	Collaborate with members, universities and future thinkers. Develop a tech roadmap of future technologies and how they might impact Canada's ocean industries.

CORPORATE INNOVATION PROGRAMS

Need	Corporate Innovation	Detailed overview
Program Initiative #1	Global Growth 1: new market	Establish a cluster-led program format for Global Growth: a shared market entry- and development program. Aim for 15 – 20 members into each program. Select a market/ segment (i.e. floating wind, Japan). Run program #1.
Program Initiative #2	Global Growth 2: new market	Run program #2
Program Initiative #3	Global Growth 3: new market	Run program #3
Program Initiative #4	Global Growth 4: new market	Run program #4
Program Initiative #5	Global Growth 5: new market	Run program #5
Program Initiative #6	Innovation Challenge Jam: Bring your challenge to the world	Cluster wide innovation challenge program. Map and activate around challenges. Collaborate to solve. Awards and prizes.
Program Initiative #7	Accelerator 4: Ocean Opportunities (corporate Accelerator)	Establish a corporate accelerator program for ocean economy. Follow global standard formats. 5-day Bootcamp (X2 Corporate Accelerator) or Techstars global programs
Program Initiative #8	Partner with Accelerator 5: GOT – Global Ocean Tech	Activate corporate members to partner closely with the GOT – Global Ocean Tech Accelerator in Victoria



SHARED TEST FACILITY PROGRAMS

Need	Shared test facilities	Detailed overview
Program Initiative #1	Develop Shared test facility #1	Establish shared test facilities
Program Initiative #2	Develop Shared test facility #2	Establish shared test facilities
Program Initiative #3	Develop Shared test facility #3	Establish shared test facilities
Program Initiative #4	Develop Shared test facility #4	Establish shared test facilities
Program Initiative #5	Develop Shared test facility #5	Establish shared test facilities

CO-LOCATION AND CO-WORKING PROGRAMS

Need	Co-location, co-working, community building	Detailed overview
Program Initiative #1	Establish co-working	Set up co-working. Establish legal structure. Formal contract. Brand. Communications and business development functions..
Program Initiative #2	Start co-locating companies	Secure and sign tenants. Build out community. Expand services.
Program Initiative #3	Host events, meet ups, conferences to build community	Host a wide range of small events, meetups, programs and conferences. Build cross-collaboration, meetings and avenues to connect.
Program Initiative #4	Build out real estate masterplan	Have a small team work with key stakeholders, partners, members, local government and real estate developers to develop a 30-year masterplan for the area.
Program Initiative #5	Work to support the long-term building and development of the larger real estate foot print	Develop an active plan to support the long-term development of the larger real estate side of the project.



SHARED TEST FACILITY PROGRAMS

Need	Start-up & Scale Up Programs	Detailed Overview
Program Initiative #1	Incubator (low touch)	Set up the incubator. Aim for a very low touch, entry point. Aim to get companies to co-locate. Offer very basic services. Most incubators offer office space, co-working and basic training programs.
Program Initiative #2	Start-up short programs: - Ocean Industries - Lean Start-up - Business Models - Investor Readiness - Start-up Boards - Start-up CFO - Securing your first ocean customer - Raising global growth capital	Develop a wide range of short programs for entrepreneurs. These should be a mix of online and offline delivery. Suggested programs include: Ocean Industries – an introduction to the market opportunities and future market & tech trends. Lean Start-up – entry-level program to lean start-up development. Business models – entry-level program to business model design. Investor readiness – 1-3 month program to get your company ready for first or second round of investment. Can follow Katapult Ocean's Model of 100% digital delivery. Start-up Boards – How to assemble and develop a start-up board. Start-up CFO – how to handle the role of the start-up CFO. Securing your first customer – sales training in the ocean industries. Raising global growth capital – 3 month program to raise you're A- or B- Series.
Program Initiative #3	Ocean Angels Network	Develop a regional angel network for the ocean industry. Should be done in very close collaboration with Victoria's. Capital Investment Network and Vantec angel network. Aim to build global angels into the network. Create the tech platform for the angel community.
Program Initiative #4	Accelerator 1: The Ocean Accelerator. (Entry level)	Develop a standard 3-month accelerator program. Aim for entry-level, open to all Canadian firms. Target standard \$100,000 at 7% equity. Build a local delivery team, with global partner network. Can also be done in partnership with Hatch, Katapult Ocean or any other accelerator program.
Program Initiative #5	Accelerator 2: Build your Ocean Start-up (Company Builder Program)	Develop a pre-company, venture building program. Often called 'Hyper-accelerator'. Target 'solving ocean industry challenges'. Aim for 15 – 30 participants. Consider following the Norwegian X2 Labs Start-up Lab model, for 4 week + 12 month program design. Target \$100,000 investment per company.
Program Initiative #6	Accelerator 3: Fast-track to IPO: Ocean Tech (for later stage)	Develop an advanced stage (late stage) mini-accelerator to help fast-track to IPO. This growth-stage program should have 4 – 10 companies, part-time over 1-6 months. May take equity or participant fee. Bring in outside venture experts.
Program Initiative #7	Accelerator 4: Ocean Opportunities (corporate Accelerator)	Establish a corporate accelerator program for ocean economy. Follow global standard formats. 5-day Bootcamp (X2 Corporate Accelerator) or Techstars global programs
Program Initiative #8	Accelerator 5: Global Ocean Tech (Global ocean start-ups)	Longer-term, develop a highly competitive accelerator with a stated ambition to bring the very best global ocean tech start-ups to Victoria. Develop specific ocean verticals. Connect with global players in the ocean economy. Build a world-class team. Requires Fund #1 to run, ideally also Fund #2







4.0 FIRST NATIONS

We acknowledge that the South Island region is within the unceded territories of the Coast Salish peoples whose relationship to the land and water has existed for millennia. The Ocean Futures Hub and Cluster’s proposed location is in the Lekwungen territory, also known as the Songhees and Esquimalt First Nations communities.

In 2005, the B.C. government and the First Nations Leadership Council entered an era of reconciliation based on recognition of rights, respect, co-operation, and partnership. Furthermore, in November 2019, the Province of B.C. adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) into legislation. “BC is the first province to commit to aligning its laws with UNDRIP. This legislation is the first steps towards the meaningful implementation of UNDRIP⁷”. Provided that the OFH&C is situated in the traditional territories of Songhees and Esquimalt First Nations, and that its members will ultimately work throughout many other traditional territories and with many Indigenous communities, reconciliation is also important to the Ocean Futures Hub and Cluster.

The OFH&C will endeavour to collaborate with Coast Salish First Nations, among other First Nation communities, as stewards of the land and desired partners in improving Pacific Canada’s economies and ecologies.. T’sou-ke Nation is one of the first Indigenous communities that have expressed interest in partnering with OFH&C by providing a letter of support (See [Appendix 4](#)).

7 <https://tkemlups.ca/province-of-bc-adopts-undrip/#:~:text=On%20November%2026th%20the,the%20meaningful%20implementation%20of%20UNDRIP.>

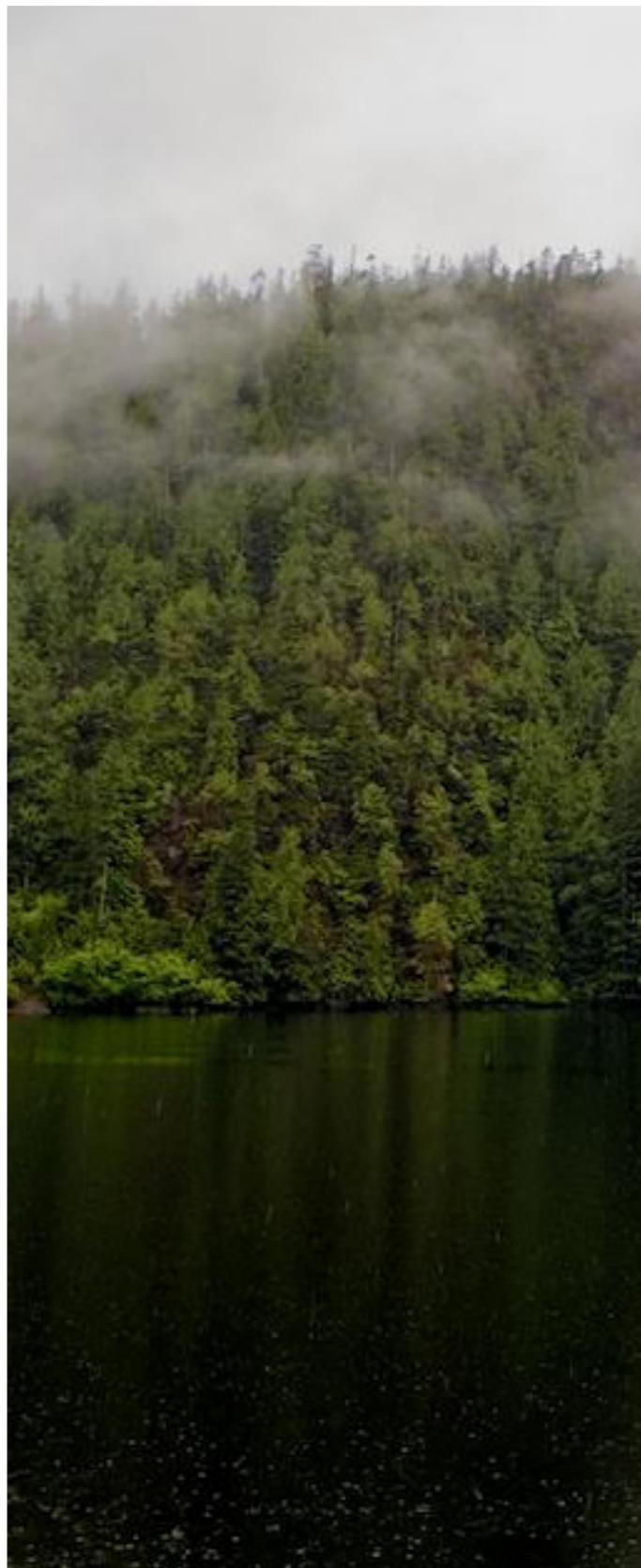
T’Sou-ke Centre for Sustainability and Innovation at Chee-a-nun (Muir Creek) will serve as a center of scientific research embedded in the environment and traditional cultural practices of the T’Sou-ke Nation. It will be a place where both indigenous and non-indigenous scientists and knowledge holders can develop, share and deepen an intimate understanding of the natural processes and human impacts on the marine ecosystem. It will also serve as a test and evaluation site and proving ground for marine innovation. (see [Appendix 4](#))



During the stakeholder interviews, numerous participants stated that they are directly or indirectly engaged with Indigenous communities. First Nations are often involved as partners with ports, especially around expansion of port activity and climate change, and many have created sophisticated Economic Development Corporations to facilitate conversations with organizations like the OFH&C.

They also serve as clients, as well as business and research partners. Marine Labs, Ocean Networks Canada, ASL Environmental Sciences, Cascadia Seaweed and other OFH&C participants have substantial working relations with Indigenous communities and already maintain relationships with dozens of communities on all three of Canada's coasts; with specific note to Tsleil-Waututh Nation and T'sou-ke Nation.

The Ocean Futures Hub and Cluster can play two important roles in reconciliation. First, OFH&C can celebrate the ongoing collaborations of its members with Indigenous communities throughout Canada. Second, it can help cultivate Indigenous talent, with several interviewees seeing potential in cultivating Indigenous talent in the region and a growing desire to hire Indigenous community members in their industries. OFH&C can utilize existing apprenticeship and career development initiatives, such as ACCESS (Aboriginal Community Career Employment Services Society), CSETS (Coast Salish – Employment and Training Society) and the Victoria Native Friendship Centre's CEER (Career, Employment and Education





Resources) to help develop and connect talented Indigenous people to OFH&C members who need skilled workers. Ongoing relationships can also identify talent gaps in the blue economy which ACCESS, CSETS and CEER can help fill with Indigenous talent.

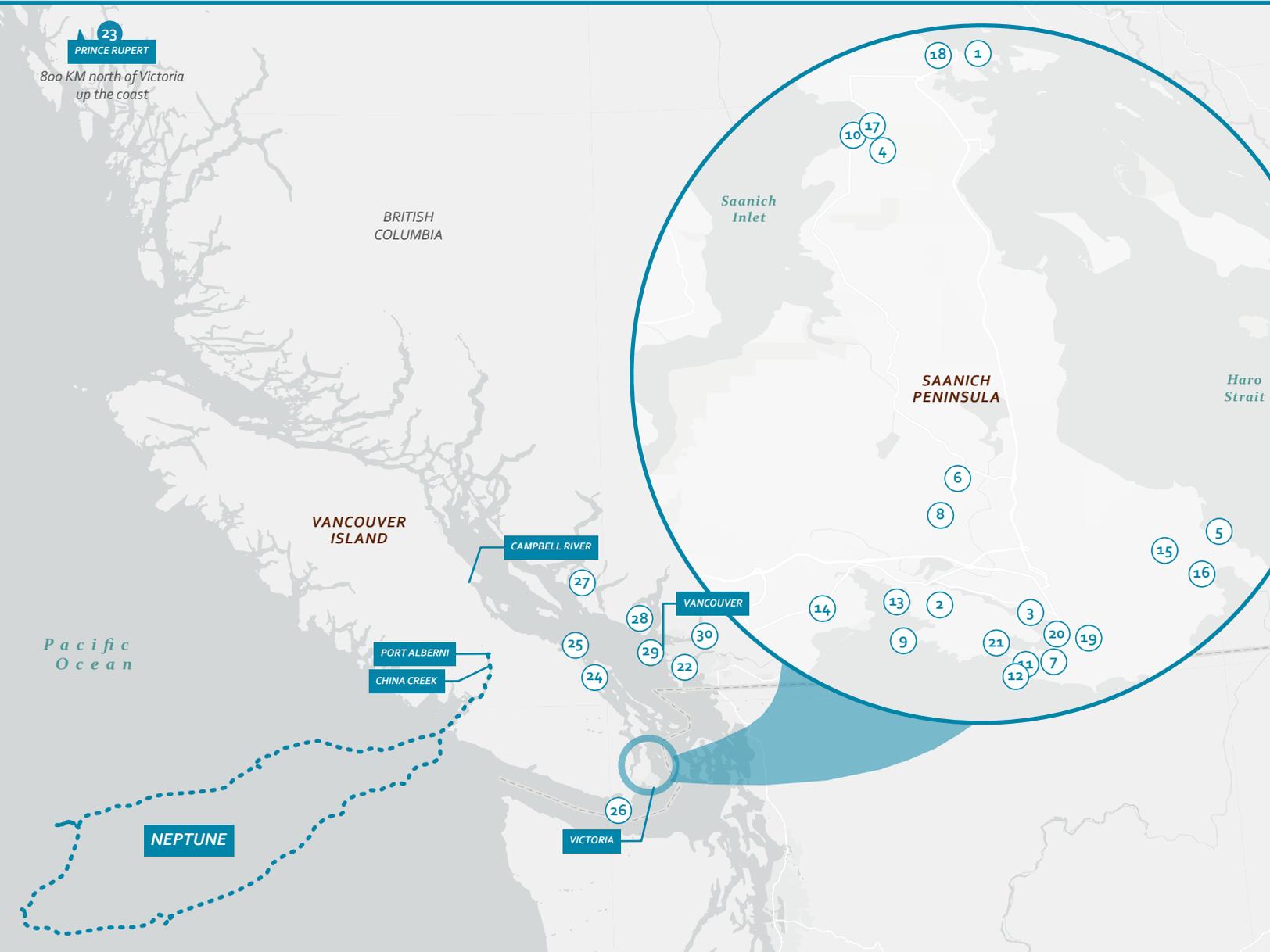
One OFH&C participant is already actively involved with ACCESS and has invested over \$3million into the program. ACCESS serves to enhance human resource development and the sustainable capacity of the urban Indigenous population in Greater Vancouver through the provision of employment and training services, and something similar can be done in Greater Victoria.

Working with First Nations will require forming equal partnerships built on shared values, respect and mutual benefits, and relationships where Indigenous communities in the region can share in the success of the OFH&C initiative (i.e. data, profits, talent development, and more). Once established, the OFH&C will work with local First Nations communities to establish a memorandum of understanding as a basis for initiating future partnerships and consultation procedures. The OFH&C will also seek to continuously engage local First Nations in opportunities to collaborate in the development of the region's ocean economy and the creation of new employment opportunities for indigenous people. Additionally, as landowners (under Matullia Holdings) in the proposed City of Victoria Arts and Innovation District, it is also proposed that the OFH&C will also work with First Nations landowners on future real estate and development opportunities in the area.



5.0 HUB AND SPOKE MODEL

OCEAN FUTURES HUB AND CLUSTER INNOVATION NETWORK



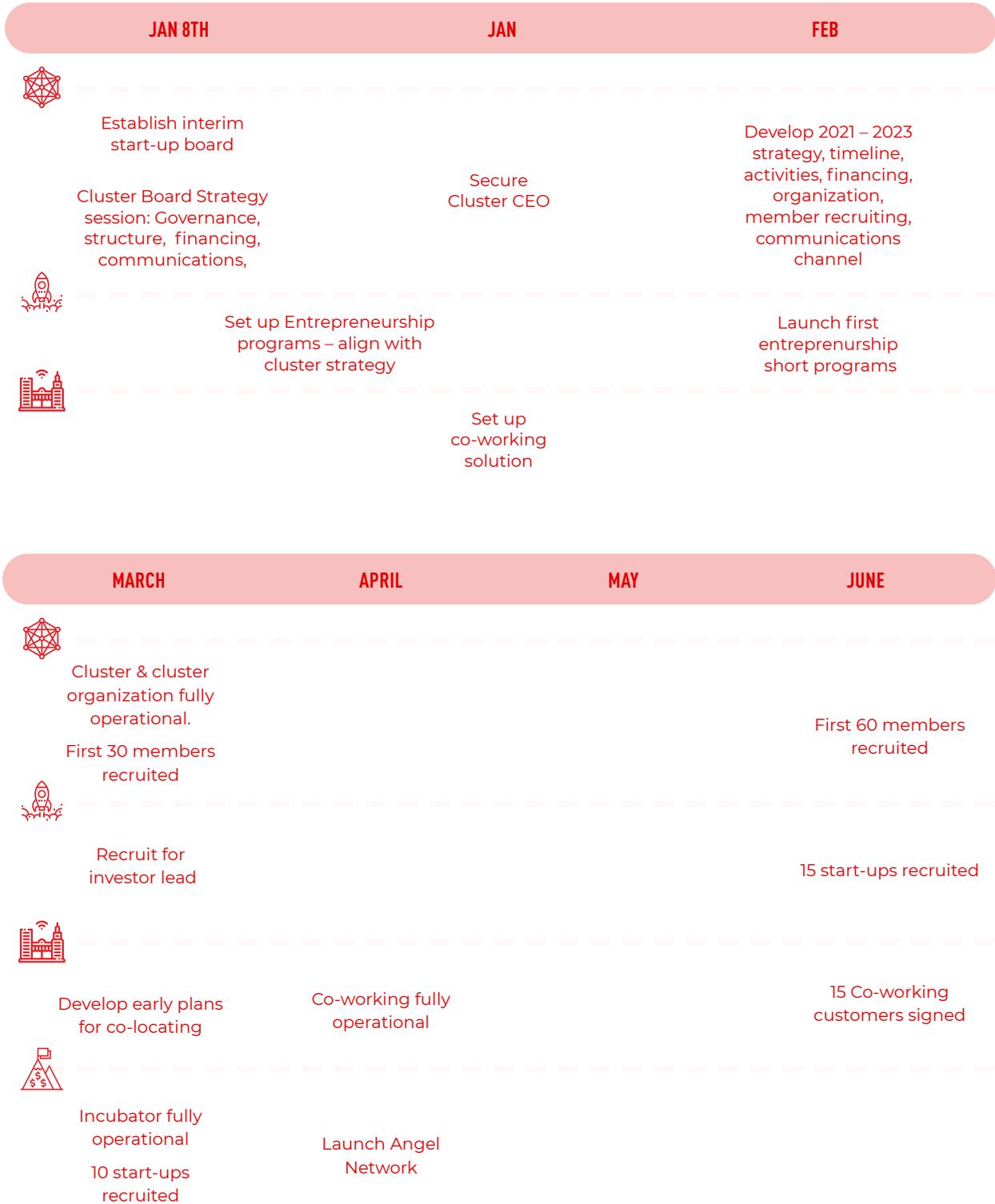


- 1 Quadrant Marine Institute
- 2 Esquimalt Graving Dock
- 3 Point Hope Shipyards
- 4 ROPOS (Canadian Scientific Submersible Facility)
- 5 Ocean Networks Canada
- 6 Vancouver Island Technology Park
- 7 Belleville Terminal (International Ferries)
- 8 Camosun College - Interurban Campus
- 9 Royal Canadian Navy - Maritime Forces Pacific (CFB Esquimalt)
- 10 North Pacific Marine Science Organization (PICES)
- 11 Greater Victoria Harbour Authority
- 12 Ogden Point (Deep Water Port)
- 13 Camosun Coastal Centre (Marine Training)
- 14 Royal Roads University
- 15 University of Victoria
- 16 University of Victoria - Coast Capital Savings Innovation Centre
- 17 Canada Institute of Ocean Sciences
- 18 Swartz Bay Ferry Terminal (BC Ferries)
- 19 Alacrity Canada (Clean Tech)
- 20 VIATEC Accelerator Program
- 21 Canadian Coast Guard Western Region
- 22 Port of Vancouver
- 23 Port of Prince Rupert (OFF MAP)
- 24 Port of Nanaimo
- 25 Pacific Biological Station
- 26 T'sou-ke First Nation
- 27 Pender Harbour Ocean Discovery Station (PODS)
- 28 Nicholas Sonntag Marine Education Centre
- 29 University of British Columbia
- 30 Simon Fraser University



SIX MONTH ROADMAP

6.0 IMPLEMENTATION ROADMAPS AND BUDGET





	BUILDING THE FOUNDATION (I) 2021 - 2023	SCALING THE HUB AND CLUSTER (II) 2024 - 2029	GLOBAL POSITION AND IMPACT (III) 2029 +
	<ul style="list-style-type: none"> Establish angel network Set up micro-fund Raise \$5M 	<ul style="list-style-type: none"> Develop international co-investors Set up second fund Raise \$50-\$250M 	<ul style="list-style-type: none"> Expect first batch to IPO or exit Focus on value creation Return first fund to LP's
	<ul style="list-style-type: none"> Establish Co-working space Establish one test facility Co-locate 40 organizations 	<ul style="list-style-type: none"> Co-working space: 40 companies Establish four test facilities Co-locate 80 organizations 	<ul style="list-style-type: none"> Co-working space: 50 companies Establish five test facilities Co-locate 100 organizations
	<ul style="list-style-type: none"> Establish Incubator Establish 2 accelerator programs Establish micro-fund & angel network 	<ul style="list-style-type: none"> Incubator: 140 firms (lifetime) Accelerator programs: 4 Two funds, angel network 	<ul style="list-style-type: none"> Incubator: 200 firms (lifetime) Accelerator programs: 5 \$250M assets under management, Angel network: 100 members
	<ul style="list-style-type: none"> Legal organization Operating organization Secure funding Attract members Deliver on first projects 	<ul style="list-style-type: none"> Scale operations Expand team Secure larger financing Grow international network Deliver high-impact programs 	<ul style="list-style-type: none"> Strong organization in place International position well-established Attracting global players to Canada A magnet in the global ocean economy Documenting economic impact & job creation



6.1 PERFORMANCE EVALUATION METRICS

To assess the OFH&C Performance, we work on two principles.

- A.** 2030 and 2023 timeline
- B.** Assess performance on each of the four strategic pillars

Using these principles, we have developed a scorecard containing a total of 12 scorecard items, split over nine categories. This scorecard will also help the incoming board and management team to select their priorities against available resources, staff and funding

THE AMBITION

By 2030 we will:

- 1.** Establish OFH&C as one of the top ten global ocean technology clusters globally
- 2.** Attract 300+ members to the OFH&C
- 3.** Develop five global market initiatives, where Canadian companies win new contracts in new globally competitive markets
- 4.** Transform 50 established Canadian companies through new growth in high-tech ocean opportunities
- 5.** Develop 1000 new high-value jobs in the Ocean Economy in Pacific Canada
- 6.** Develop 50 new start-ups and scale-ups in the ocean economy in Pacific Canada
- 7.** Support and accelerate 200 start-ups in the ocean economy globally
- 8.** Develop a significant real estate footprint, with shared innovation, technology, maker space and testing facilities
- 9.** Develop a significant co-location space, with minimum 100 companies co-locating with the OFH&C
- 10.** Establish strategic partnerships with globally leading networks, ecosystems and hubs to support the internationalization of Canada's ocean economy companies
- 11.** Use the OFH&C to leapfrog leading ocean economy countries and regions around the world
- 12.** Develop a venture fund with \$250M assets under management to support the Ocean Tech economy



These goals are indeed ambitious, but not unprecedented. There is a very conducive macro environment with rapid growth in the blue economy, an existing base of successful and growing local companies, and a shift towards investing in Blue Finance. Looking at the scope of what COVE and Katapult Ocean achieved in their first two to three years and MarineHolm has achieved in a decade, these ambitious goals become much more realistic.

THE 2030 SCORECARD

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2030 Target state
--	------	------	------	------	------	------	------	------	------	------	-------------------

INNOVATION CLUSTER

Members recruited (# firms)	100	150	200	250	270	300	330	360	400	400	400
Innovation Projects started (# projects)	3	3	4	5	5	5	5	5	5	10	50
New Markets Entered (# new markets)	0	2	5	-	-	-	-	-	-	-	5

ACCELERATE: ENTREPRENEURSHIP PROGRAMS

Incubator (# firms)	20	25	30	50	80	120	140	160	180	200	200 start-ups
Accelerator Programs	1	2	2	2	3	3	4	4	5	5	5 accelerator programs.
(# programs, # firms completed)	0	6	10	20	30	35	50	60	70	75	75 companies have completed.

VENTURE FUND

	20	30	40	50	60	70	80	90	100	100	100 active angels.
	1	1	1	2	2	2	2	2	2	2	\$250M assets under management,
Venture fund (Network, Funds, AUM)	\$1M	\$5M	\$50M	\$100M	\$250M	\$250M	\$250M	\$250M	\$250M	\$250M	over two funds.

WORK: REAL ESTATE DEVELOPMENT

Co-Working Companies (# firms)	20	22	25	28	30	35	40	45	50	50	50
Test facilities operational (# operational)	0	0	1	1	2	3	4	5	5	5	5
Organizations co-located (# firms)	20	25	40	50	60	70	80	90	100	100	100 firms



THE 2023 SCORECARD

	2021	2022	2023	2023 Target state
--	------	------	------	-------------------

INNOVATION CLUSTER

Members recruited (# firms)	100	150	200	200
Innovation Projects started (# projects)	3	3	4	4
New Markets Entered (# new markets)	0	2	5	5

ACCELERATE: ENTREPRENEURSHIP PROGRAMS

Incubator (# firms)	20	25	30	30 start-ups
Accelerator Programs	1	2	2	2 accelerator programs.
(# programs, # firms completed)	0	6	10	10 companies have completed.

VENTURE FUND

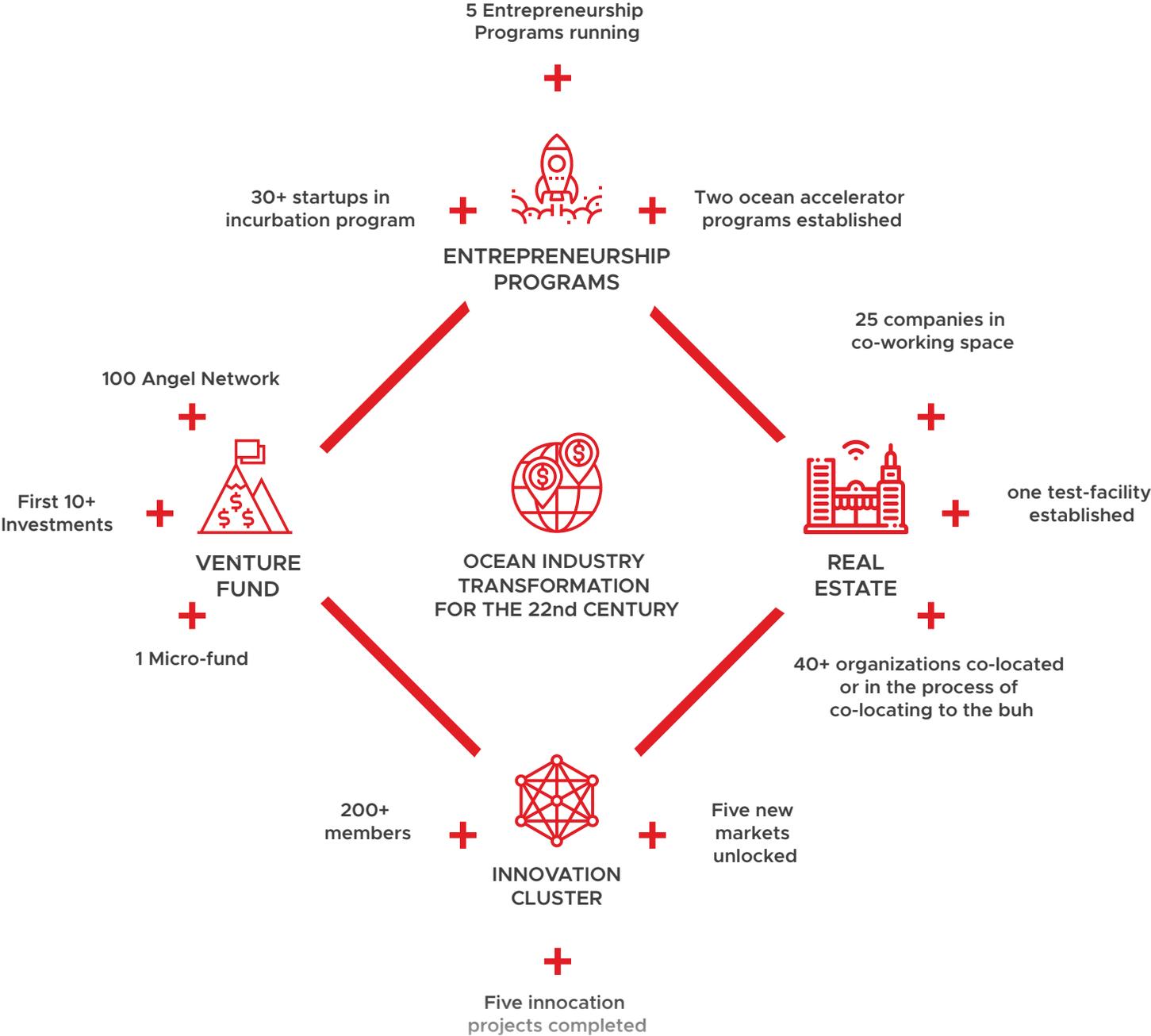
Venture fund (Network, Funds, AUM)	20	30	40	40 active angels.
	1	1	1	\$50M assets under management,
	\$1M	\$5M	\$50M	over one fund.

WORK: REAL ESTATE DEVELOPMENT

Co-Working Companies (# firms)	20	22	25	25
Test facilities operational (# operational)	0	0	1	1
Organizations co-located (# firms)	20	25	40	40 firms



OCEAN FUTURES HUB AND CLUSTER





7.0 CONCLUSION

The Ocean Futures Hub & Cluster has had broad interest from stakeholders in industry, government, academia, and the investment community. Many of them are committed to the success of the OFH&C and are moving forward with convening a group to form a non-profit which will begin work as the core of OFH&C, continuing with detailed design and planning for the rapid start of a transformative collaboration. There has been strong support and a substantial investment of time through the planning and design process from:

- ▶ South Island Prosperity Partners
- ▶ City of Victoria
- ▶ ABCMI (Association of BC Marine Industries)
- ▶ Several local ocean technology companies
- ▶ Large national ocean economy companies
- ▶ Ocean Networks Canada/University of Victoria

An ideal starting location has been identified to host the first employees and co-located ocean tech companies. The location is in the heart of the City of Victoria's Arts & Innovation District, creating opportunities for synergy with other innovation initiatives. There are also several unused or under-used waterfront and near-waterfront properties that would allow for rapid expansion with the attraction of start-up and international companies.

The core of the stakeholder group is several fast-growing ocean tech companies with increasingly blue economy focused activities. Together with the other stakeholders, there is a unified desire to make the blue economy opportunities a focus of activity





at the OFH&C. A rapid expansion of these activities, through stimulation of start-ups and scale-ups at the OFH&C, and the rapid global growth of Blue Finance funds seeking quality investments make the Ocean Futures Hub and Cluster an ideal part of the rollout of Minister Jordan's blue economy Strategy for Canada.

Major industry partners have expressed interest in participating through their Industrial and Technological Benefits Policy requirements, and investing in research activity that mutually benefits the local and Canadian blue economy. Participation would be strongly encouraged through substantial stimulus or seed contributions made by all three levels of government. The local government of the City of Victoria and the federal government through Western Economic Diversification funding have already been supporting the genesis of this activity and are continuing to support the first phase of the launch through this report. Due to the scale of the need and opportunity for the full implementation of the OFH&C, it will be necessary for both the provincial and federal governments to support the initiative on a much larger scale. Substantial support from senior government will unlock private sector follow-on investment, resulting in economic growth opportunities for BC and Canada.

The people and organizations that supported this initiative to this point are standing by and ready to scale up the OFH&C rapidly to support the transformation of ocean industries for the 22nd century. Members of industry and the VC investing communities have been primed and are watching developments closely. In recent years Canada has been slipping in global relevance in the ocean economy as the blue economy rapidly grows and other countries' governments support their ecosystems. We have an opportunity to reclaim our space as a global leader with by far the longest coastline of any country in the world. The time to seize that opportunity is now.



SOUTH ISLAND
PROSPERITY
PARTNERSHIP

OCEAN FUTURES HUB AND CLUSTER

ON SOUTHERN VANCOUVER ISLAND

BUSINESS CASE
CONDENSED