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L'AQUACULTURE



Fisheries Council of Canada  
Conseil Canadien des Pêches

# Canada's Blue Economy Strategy 2040

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## Canada's Fish & Seafood Opportunity



# Introduction:

Canada is a water nation. With three coasts, and amongst the most marine and freshwater resource capacity in the world, communities and families across Canada have built their lives and futures on capturing value from our precious waters. Our water is integral to our stories and identities as Canadians.

Seafood production is a central and proud part of this identity. This history is one of great toil, risk and courage to capture nature's oceans and water bounty to feed families, Canada and the world. The culture of many Indigenous peoples is intimately bound to fish and seafood. Today the livelihoods of eighty thousand Canadians are directly connected to producing seafood.

We have learned much but still have more to learn. Where once only wild stocks provided our food, increasingly today we use precise techniques to carefully raise fish, shellfish and kelp from egg or seed to plate, farming Canadian waters.

Today, working with international partners, wild stocks are monitored to assess sustainability, and nations are increasingly working together to ensure sustainable capture. New technology and techniques to farm seafood both in water and on land provide an almost limitless possibility for Canada to grow its seafood production.

Canada is a signatory to the High-Level Panel on a Sustainable Oceans Economy (HLP), an international, multi-national initiative looking at the role the oceans can play in global sustainable development. Their most recent paper, "A Sustainable Oceans Economy by 2050: Approximating its Benefits and Costs," estimates that investments in



oceans economic activity can have an economic net positive benefit ratio of 5:1, while increasing production of sustainably sourced ocean-based proteins is 10:1.<sup>1</sup> With massive potential for Canada, the sector is a very smart investment that will bear much fruit.

The COVID-19 crisis has thrust upon the world an unprecedented challenge. With such significant economic, social and environmental benefits as recognized by the HLP, as we look for ways to drive recovery and strengthen our communities and economy, Canada's seafood producers are ready to meet the challenge. Canadians are increasingly concerned about food security and stable job creation. Despite many difficulties during this COVID period, elements of the seafood sector have shown great resiliency and stability and continue to create jobs and to provide a stable, local food supply.



In this document we propose what Canada can and must do to regain global leadership, to "seize the podium" in supercharging its seafood production. We do not look to be the "biggest," but rather the best: The most sustainable, and the best quality. Our vision is dependent on healthy oceans and waters and thriving ocean ecosystems to provide the bounty that we must cherish.

Canada needs to regain pride in its seafood sector, and in so doing grow new futures for coastal and rural families and communities across Canada.

# Strategy Recommendations:

We propose the following recommendations be adopted for the government's Blue Economy Strategy, in order to be visionary and aspirational, but also pragmatic and progressive:

1. The Blue Economy Strategy should be time-limited but with a stretch date: we recommend 2040
2. The Strategy should clearly enable lead departments to develop economic strategies to support economic development of our seafood sector
3. Practical, time-based (e.g. 5 years), sub-sector action plans (e.g. for seafood sector, marine shipping, etc) should be implemented and regularly measured for success and reported to the public
4. The Strategy must have the active participation of provincial governments, Indigenous communities and all political parties, in order to secure meaningful contribution to its development to achieve broad and lasting support towards implementation
5. The strategy should enable and ensure a process to achieve ongoing regulatory improvement



# Canada's Seafood Opportunity – Setting the Stage:

**Canada has tremendous potential as a seafood producing nation with world-leading marine and water resources and a talented workforce.**

Global demand for seafood is increasing at a significant rate, amongst the most for all food sectors. Demand is projected to increase 7-9% per year according to the UN Food & Agriculture Organization. At present, only 3% of all human food comes from the oceans, while approximately 71% of the Earth's surface is covered by water. While the sustainability of many global wild stocks is improving due to concerted efforts, future growth in demand is expected to be largely met by seafood farming (aquaculture).

**Today, for example, about half of all global seafood production for human consumption is farmed, and this is expected to rise to over 60% by 2030<sup>2</sup>.**

At present only about 1% of viable waters (not including the Arctic or inland fresh water) is used for seafood farming in Canada.<sup>3</sup>

The increasing demand for seafood makes much sense with its identification as a sustainable and healthy protein. Numerous studies highlight the benefits of eating seafood regularly, with its high Omega-3 and high vitamin content, benefiting brain development, heart function and a healthy lifestyle. Canada's Food Guide has long recommended 1-2 servings of fish and seafood per week, but few Canadians actually eat this amount. As an example, eating two servings of fatty fish a week provides the equivalent of 300 to 500 mg of omega-3 fatty acids a day, the amount recommended by the World Health Organization.<sup>4</sup>

Sustainably produced seafood is also an environmental choice. Fish and seafood is a low-carbon protein, amongst the lowest of all animal species. It also uses

very little water, takes up little space, and converts food very efficiently. This is why seafood is such a critical future food as identified by the global High-Level Panel for a Sustainable Oceans Economy, to which Canada is a signatory. The Panel's findings identify sustainable seafood production (both wild capture and farmed) as a major solution towards a lower-carbon food future.<sup>5</sup> The ability of seafood to meet so many sustainable goals, including social and economic development through lower-environmental impact, is the reason why seafood plays an important role in the United Nations Sustainable Development Goals (UNSDGs).<sup>6</sup>

Like other sectors, Canada's seafood sector has been negatively impacted by the COVID-19 crisis. Some subsectors have been deeply and negatively impacted (e.g. inshore fisheries and shellfish farming), while others have been relatively stable (e.g. groundfish fisheries and major finfish farmers). To date, major salmon production, which constitutes close to 90% of the value of Canada's seafood farming sector, has seen no layoffs due to the COVID crisis. This is an important sign of strength and resiliency upon which Canada's coastal communities can build and grow.

Our sector is poised to be an important part of economic recovery in the coastal, indigenous and rural communities that depend on us. This is strengthened by Canada's recognition of the importance of sustainable seafood production, most recently identified in the Agri-Food Economic Table recommendations to the Finance Minister (2018)<sup>7</sup>, in the role this sector will play in meeting Canada's economic growth targets as a critical part of sustainable economic growth and recovery.



# Caution – Canada Falling Behind:

Canada has steadily fallen in global rankings for production volume and exports. For example, only 25 years ago, Canada was the top fish and seafood exporter. We are now eighth in the world. Another example is that while Norway produces close to four times the seafood value of Canada, Canada has almost four times as much viable marine capacity (not including the Arctic and inland waters) and significant additional freshwater assets.

There are many reasons for this decline, but we would capture it essentially in this way:

**Canada has not identified and embraced its seafood opportunity. There has been no integrated vision and strategy to capture this potential. This has hurt and undermined coastal community development and job creation, sustainable food production, and indigenous reconciliation.**

Other nations, including the UK<sup>8</sup>, Australia<sup>9</sup>, New Zealand<sup>10</sup> and Norway<sup>11</sup> have all developed multi-year plans to sustainably develop their seafood opportunity, grow jobs and develop their leadership. These integrated plans and actions have resulted in positive change and realization of greater value.

This Blue Economy Strategy is this opportunity for Canada, and it needs to be embraced by all political parties and communities who want to realize a renaissance of coastal communities and an innovative, sustainable food future.



# The Vision:

Canada cannot and should not compete on a volume basis. It is very unlikely we will ever again be the top seafood exporter in the world. However, with the talent and innovative capacity of Canadians, we seek to capture our innovative potential to produce the best and highest quality seafood in the world, measured by sustainable production and customer satisfaction.

**We simply want to be the producers of the “best sustainable seafood in the world.” We can achieve this.**

## Overall Vision by 2040:

**Canada to be Global Top 3 Best Sustainable Fish & Seafood Producer**



We would measure this through assessing the classic three legs of the sustainability stool, with adding reputation measurements:

-  **Economic Benefits**  
(Job Creation and other Economic Benefits)
-  **Social**  
(Indigenous & Social Partnerships and Social Health)
-  **Environmental**  
(Certification and Traceability; Science & Research)
-  **Customer Satisfaction and Reputation**



# The Vision:

The federal government, working with provincial governments, industry, indigenous communities and other stakeholders, would decide on a set of criteria that would define excellence and success. We propose the following criteria to begin:



## Economic

- Investment in local and regional businesses
- Expansion of direct and indirect jobs
- Taxes paid and value to local communities
- Overall value of sector and exports
- Innovation & Technology adoption and deployment



## Social

- Coastal community revitalization – indicators and research needed
- Indigenous leadership and partnership
- Attract and maintain a stable and skilled labour supply
- Increase domestic consumption of Canadian fish and seafood



## Environmental

- Top 3 performer within global sector on sustainability certification and traceability by 2040
- Stable investment in fisheries science, and coordinated sharing of data
- Consistent and stable funding for recovery of key species (e.g. wild salmon)
- Regional Area-Based Marine planning finalized by 2025
- Prevent IUU products from entering Canada
- Achieving commitments on ocean plastics



## Customer Satisfaction

- Through surveys, measure Canadian and global customers' perspectives on the reputation and experience with Canadian-sourced seafood

# Specific 2040 Sustainable Growth Targets:

“Best Sustainable Seafood” implies smart growth. Every plan must have an end point, and *growth targets* are both implied but also critical to understand where we want to go and measure against them. Specific targets for growth of major products (e.g. lobster, salmon, trout) should be identified to achieve real action.

## By 2040, we want to:

1. Double Value of Canadian Seafood
2. Double Economic Benefits
3. Double Domestic Consumption of Fish and Seafood





# Required Actions:

To realize the 2040 Vision for Canada's seafood, and to reach the targets identified on the previous page, we recommend the following steps that need to be immediately implemented in order for Canada to move ahead, strengthen coastal communities and the expansion of indigenous partnerships and opportunity, and re-position Canada's seafood resource potential on a global scale:

## **1. Identify a federal department to drive economic development of sector and build departmental economic capacity**

The mandate of the Department of Fisheries and Oceans needs immediate clarity. While its primary mandate is to protect and manage wild stocks, it provides various industry development programs that some perceive create conflict of interest within the department. Its half-in, half-out nature of supporting industry growth results in mediocrity and we believe is a major reason for the sector's languishing. Clarity of mandate and purpose is essential in order to drive positive change. We believe that if DFO is to accept the business development mandate for all seafood, that it make this explicit, and it form its internal structures so that the different functions (e.g. science, regulatory affairs, enforcement, business development) are clearly functionally separated and properly resourced. If the decision is that it is best for another department to take on business development (e.g. Innovation, Science and Economic Development, home of the Economic Strategy Tables, or Agriculture and Agri-Food Canada), then this too needs to be made explicit and properly resourced.

Norway's sector has been advanced by its department that is clearly economically mandated: the department of *Trade, Industry and Fisheries*. Having such an explicit economic development mandate is critical to moving the sector in Canada into the 21st Century.

## **2. Like other nations, develop a specific organization within a department with the explicit mandate to sustainably grow the seafood sectors, e.g. the Canadian Seafood Development Council.**

Other nations that have seen their industries successfully advance and grow have identified the opportunity and instituted well-resourced agencies to support their development. The department of Agriculture and Agri-Food (AAFC) has historically done this for non-seafood commodities. While AAFC has extended some of these programs to seafood (e.g. AgriMarketing and AgriAssurance programs), the seafood sector does not enjoy the breadth of supports that the land agricultural community has enjoyed.

Like other nations (example Ireland's "Seafood Development Agency") and considering the need for a new government structure to energize the new approach, we ask that a specific "Seafood Development Agency" be set up to drive the sustainable growth of Canada's seafood sector. This could be under one single department, or report to several departments. This organization would focus on regulatory coordination, efficiency, policy planning, and support public promotion. More information is on the following page.

# Required Actions:

### **3. Develop 5-year action plans, with mandatory reviews/reporting, for the seafood sector; these plans would set growth targets, identify legal and regulatory blockages, and support public education and promotion to sustainably grow the sector**

To realize the vision and development goals of this proposal, the new departmental structure needs to develop 5-year action plans that will lay out step goals towards the final objective. These plans should be developed with broad stakeholder input. Towards the end of the 5-year period, there should be a reporting against the objectives and an open and honest accounting of successes and failures, with learnings incorporated into subsequent 5-year plans.

The plans should focus on regulatory efficiency, policy planning, integration of disparate programs (e.g. fish health for aquaculture) and address longstanding needs to support business confidence and investor clarity, to ensure that Canada is competing on a level playing field with other nations and advancing innovative policy and regulatory solutions. As the Canadian seafood industry is very diverse, it should support promotional activities to Canadians and internationally as well, as seen in other major producer nations (e.g. Norway, Scotland, Ireland, etc.).

### **4. By 2025, through marine-based planning, ensure seafood harvesting/development areas are finalized/clarified**

Our sector supports sustainable development goals and the need for identifying certain biodiversity -rich areas as off-limits to certain forms of harvesting or farming. We believe that long-term certainty for all stakeholders can be provided if the federal government finalizes its area-based plans for those regions which have none or where there is insufficient clarity.

We also propose that even in bio-sensitive areas, new technologies and approaches are emerging and can be incentivized to demonstrate advancement in sustainable fishing and seafood farming practices.

### **5. Expedite development of Aquaculture Act**

The seafood farming sector has asked for almost 30 years for the creation and adoption of a federal *Aquaculture Act*. We are pleased that there has been some recent positive developments on this file and that this issue features prominently in the mandate letter of the current DFO Minister.

The *Fisheries Act*, under which aquaculture in Canada is regulated, was never meant for a growth oriented farming sector. A new Act can help to produce a better modern framework and help manage the future sustainable growth of the sector.

### **6. Timely completion of the new regulations under the amended Fisheries Act**

In 2019, the *Fisheries Act* underwent the most significant change in its 150-year history, with additional regulatory changes to follow. The amendments authorized some 15 new regulatory instruments. This amount of change, at the best of times, is difficult for the sector to digest and integrate into investment plans. Policy certainty can facilitate investment. A transparent process and timely completion to develop and promulgate the regulatory changes are critical to keep the wild-capture sector investing and innovating.



# Need to Address Issues Blocking Sustainable Growth:

The actions above are proposed to address the critical issues we see as weaknesses in the current approach that are driving mediocrity in performance. A short description follows each issue.

## **Lack of departmental economic leadership – supporting growth**

- As discussed above, clarity of mandate and proper support are elementary.

## **Lack of planning clarity (clarity on areas for seafood harvesting, indigenous partnerships and investment certainty) and framework for sustainable growth**

- Where there is no plan and goals, there is confusion that constrains development. This must be rectified.

## **Understanding and agreement of Canada's seafood strengths, and focus on actions to further develop strengths**

- Identification of Canada's actual strengths for species and specialization is an important discussion and element to consider, e.g. are some sectors ripe for innovation, and what is holding us back?

## **Clarity on Indigenous rights and title**

- There are tremendous opportunities for indigenous peoples and communities to lead and partner in the further development of seafood resources. Achieving clarity will be critical for the benefit of all Canadians.

## **Lack of public understanding, low seafood consumption**

- Recent research (CAIA/FCC) shows that the vast majority of Canadians have very little understanding of the seafood sector and consume very little seafood. Developing pride and understanding of our sector is important, as is increasing consumption of seafood.

## **Dependence on other nations for seafood technologies**

- Because Canada has not identified seafood as a major opportunity nor developed integrated plans, other nations (e.g. Norway and Iceland) have advanced to be leaders in the manufacture of seafood-related industrial equipment and technology. While there are numerous excellent Canadian-sourced technologies, these are few. Canada needs to continue to facilitate the development of Canadian seafood technology that can be exported to the world.

## **Lack of competitive access to animal health products (seafood farming)**

- Canada's food system is well-respected around the world for its safety and integrity. However, our commercial seafood farming sector is still young (~40 years) and the Canadian system has not provided sufficient support for competitive access to fish health products that we see in other nations. Partly this is the result of lack of integration in the federal system for this sector (multiple agencies of oversight including DFO, AAFC, CFIA, Transport Canada, ECCC, Health Canada etc), with no driver for integration and economic development. We hope that with the other key recommendations addressed above that this can be addressed and changed. Competitive access to fish health products in a modern farming sector is critical to ensure the sustainable expansion of the industry.

# Conclusion:

With amongst the most marine and freshwater capacity in the world, and many coastal communities and regions looking for economic recovery and growth strategies, the seafood sector can and must answer the call for renewal and vitality.

The current government has received important advice from agri-food business leaders that identifies the seafood sector as a major opportunity for sustainable, low-carbon food production, for a world that is demanding more healthy protein.

Canada has a proud seafood history. However, we have faltered and lost focus and confidence. We believe that the new path outlined in this proposal can help enable the industry towards innovation and development and support Canadian entrepreneurs to “seize the podium” to produce the best, most sustainable seafood in the world.

Doing so will benefit coastal and indigenous families and communities, our nation and human and planetary health. It's a vision worth realizing without further delay.



# Authors:



Canadian Aquaculture Industry Alliance (CAIA) is the national association that speaks for Canada's seafood farmers, representing their interests in Ottawa and internationally. CAIA members generate over \$6 billion in economic activity, \$2.45 billion in GDP, and employ over 25,000 Canadians delivering a healthy, growing and sustainable seafood farming sector in Canada.



Fisheries Council of Canada (FCC) is the voice of Canada's wild capture fish and seafood industry, promoting a healthy resource and prosperous industry playing a vital role in the Canadian economy. Our members include small, medium and larger-sized companies along with Indigenous enterprises that harvest and process fish from Canada's three oceans.

# References:

<sup>1</sup> High Level Panel on a Sustainable Oceans Economy, A Sustainable Ocean Economy by 2050: Approximating its Benefits and Costs, June 14, 2020. [https://oceanpanel.org/sites/default/files/2020-07/Ocean%20Panel\\_Economic%20Analysis\\_FINAL.pdf](https://oceanpanel.org/sites/default/files/2020-07/Ocean%20Panel_Economic%20Analysis_FINAL.pdf)

<sup>2</sup> See State of the World's Fisheries and Aquaculture 2020, United Nations Food and Agriculture Organization: <http://www.fao.org/state-of-fisheries-aquaculture>

<sup>3</sup> Analysis by Canadian Aquaculture Industry Alliance. The assessment looks quantifies viable marine shoreline, and does not include freshwater shoreline or Arctic waters.

<sup>4</sup> Fish consumption and health, Government of Quebec. <https://www.quebec.ca/en/health/advice-and-prevention/healthy-lifestyle-habits/fish-consumption-and-health/recommendations/#c761>

<sup>5</sup> See more information on the High Level Panel, especially its Blue Paper on "Food from the Sea" at <https://www.oceanpanel.org/blue-papers/future-food-sea>

<sup>6</sup> "Fisheries and aquaculture offer ample opportunities to reduce hunger and improve nutrition, alleviate poverty, generate economic growth and ensure better use of natural resources." Food and Agriculture Organization of the United Nations, Sustainable Development Goals, SDG 14 - Life Below Water. <http://www.fao.org/sustainable-development-goals/goals/goal-14/en/> "Aquaculture production has the potential to

contribute to the achievement of the Sustainable Development Goals, especially SDG 2 (Zero hunger) and SDG 14 (Life below water)." FAO. 2019. The State of the World's Aquatic Genetic Resources for Food and Agriculture. FAO Commission on Genetic Resources for Food and Agriculture assessments. Rome. <http://www.fao.org/3/ca5256en/CA5256EN.pdf>

<sup>7</sup> Report from Canada's Economic Strategy Tables: The Innovation and Competitiveness Imperative, Innovation, Science and Economic Development Canada. [https://www.ic.gc.ca/eic/site/098.nsf/eng/h\\_00020.html](https://www.ic.gc.ca/eic/site/098.nsf/eng/h_00020.html)

<sup>8</sup> SEAFOOD 2040 A strategic framework for England. [https://www.seafish.org/media/1726762/seafood\\_2040\\_lo\\_singlep\\_041217.pdf](https://www.seafish.org/media/1726762/seafood_2040_lo_singlep_041217.pdf)

<sup>9</sup> National Aquaculture Strategy, Commonwealth of Australia. <https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/fisheries/aquaculture/national-aquaculture-strategy.pdf>

<sup>10</sup> The New Zealand Government Aquaculture Strategy. <https://www.mpi.govt.nz/dmsdocument/15895-the-governments-aquaculture-strategy-to-2025>

<sup>11</sup> Norway's Updated Oceans Strategy <https://www.regjeringen.no/en/dokumenter/the-norwegian-governments-updated-ocean-strategy/id2653026/>