

Industry Response to the Blue Economy Strategy Engagement Paper

These comments have been prepared by the Nova Scotia Boatbuilders Association. Our response includes several sections:

1. An overview of the Nova Scotia Boatbuilders Association to provide context for the comments.
2. Over-arching comments on the Engagement Paper as a whole.
3. Specific comments in response to questions posed and content shared in the Engagement Paper, where relevant to our industry.

A. Overview of the Nova Scotia Boatbuilders Association

The Nova Scotia Boatbuilders Association (NSBA) is a nonprofit industry association established by a small group of leading boatbuilders who shared a common vision of growing and diversifying this maritime industry beyond its domestic fishing boat market. For over 22 years, the NSBA has supported and represented the boatbuilding and boat repair and service industry in Nova Scotia along with related industries.

Most of the NSBA's members work with vessels under 24 meters, although some bigger companies also work on larger vessels. The NSBA has 39 boatbuilding and repair companies as Members in the Maritime Provinces, mostly in Nova Scotia, as well as 49 Associate Members including marine suppliers, consultants, and related nonprofits. Much of our work benefits non-member companies as well, particularly our advocacy, marketing, and labour market development activities.

While our membership includes some marinas offering boat repair services, most marinas along with recreational sales and service companies are represented by Boating Atlantic.

The NSBA remains the only industry association in Canada focused primarily on the construction and repair of small vessels. The Association of British Columbia Marine Industries (ABCMI) has small craft under its umbrella, but its overall mandate is quite broad. The relatively new Canadian Marine Industry and Shipbuilding Association (CMISA) overlaps with the NSBA for marine suppliers, but its primary focus is larger vessels.

Despite different foci, ocean and marine industries across Canada share common challenges, particularly around labour market attraction and retention. The NSBA engages with both ABCMI and CMISA in addition to participating in the federal Marine Industry Advisory Committee (MIAC)

hosted by Public Services and Procurement Canada. The NSBA is also a member of MIAC's new Human Resources Working Group. In eastern Canada, the NSBA partners with public, private and nonprofit groups to collaborate in various areas of shared concern.

The work done by the NSBA has evolved to meet industry needs over time, with labour market development being a major portion of the work it does today. The NSBA has four pillars in its current strategic plan:

- **Training:** Support the development of a highly-trained boatbuilding and repair workforce
- **Recruitment:** Attract employees to the industry and help members become employers of choice
- **Marketing:** Support market growth and diversification
- **Partnership:** Engage government and others as partners in success

The NSBA also has key partnerships with the New Zealand Marine and Composites Industry Training Organisation and Quadrant Marine Institute in British Columbia for training material used in the two marine trades we administer with the Nova Scotia Apprenticeship Agency: Boat Builder and Marine Service Technician.

B. Over-Arching Comments on the Strategy:

The Engagement Paper is comprehensive and effectively identifies many key challenges and opportunities for Canada's blue economy. There are four broad comments the NSBA has to offer on the Strategy as a whole:

1. Labour market challenges are a cross-cutting issue that will affect the ability to realize many aspects of the Strategy.

The Engagement Paper addresses this under *Developing the Necessary Labour Force and Skills*, but it cannot be emphasized enough based on the experiences of our industry and others with whom we engage. The problem is not limited to skilled workers: our industry also has challenges finding and retaining competent, reliable unskilled workers.

Labour market issues are especially pronounced in rural and small coastal communities, even where there are higher unemployment rates. Some companies deliberately limit growth to keep their workload manageable. Demand exceeds production capacity so greatly for companies building small fishing vessels that some book sales 3-5 years in the future.

Additionally, immigration must be part of any solution so Canada doesn't have sectors stealing from each other rather than growing collectively, as many other sectors also report labour market shortages.

2. Small craft are almost absent in the Strategy, yet essential to many parts.

Many aspects of the Blue Economy Strategy rely on smaller vessels, yet in the Strategy there is almost no recognition of boatbuilding, boat sales, boat service or related industries.

Looking at the frequency of sector references in the document, we see:

- Shipbuilding – 17
- Shipping – 13
- Shipyards – 4
- Ships – 2
- Boat – 1
- Boating – 1
- Small craft – 2

While there are more people employed in shipbuilding than in boatbuilding, most people in boatbuilding live in coastal communities. The Engagement Paper references the need for sustainability and resilience in coastal communities; boatbuilding and repair companies provide both jobs and boats, thus supporting these communities.

Based on numbers from Fisheries and Oceans Canada's Vessel Information for Atlantic Canada¹ and the Pacific Fleet² in 2019, excluding vessels over 100', there are 14,558 fishing vessels in Atlantic Canada and 2,297 in the Pacific Fleet for a total of 16,855 fishing vessels. These vessels are essential to our fisheries and must be maintained, repaired and replaced. A healthy boatbuilding industry is critical for healthy fisheries.

There also are an estimated 8.6 million recreational boats in Canada, 85% of which are under 26' and towable³. A great many of these will need maintenance and repair services at various points in their life cycle.

We haven't included numbers for small ferries and workboats, nor have we included boats used for commercial tourism, which is an economic segment highlighted in the Engagement Paper. These would further speak to the importance of the boatbuilding and boat repair industry in Canada.

Beyond jobs and economic impact, boats should also be considered when developing the environmental side of the Strategy. The environmental impact of so many small vessels operating in Canadian waters may be reduced with a measured approach balancing:

¹ <https://www.dfo-mpo.gc.ca/stats/commercial/licences-permis/vess-embarc/ve19-eng.htm>

² <https://www.dfo-mpo.gc.ca/stats/commercial/licences-permis/pacific-pacifique/pacfleet-eng.htm>

³ <https://www.discoverboating.ca/tools/overview.aspx>

- the economic costs of change for boat owners and operators as well as those building and repairing the boats;
- the availability of alternative products and technologies;
- the safety and practicality of alternative products and technologies;
- the skills needed to incorporate and support alternative products and technologies.

Government assistance may be needed to navigate changes and ensure safe, practical alternatives. This may include supporting the manufacturing companies developing those alternatives and the companies and academic institutions researching alternatives. Regulatory frameworks will need to keep pace with changes. Training pathways will be needed. Life-cycle implications of products and technologies will need to be considered. More options will be needed for end-of-use vessel disposal. While many people in ocean sectors want more sustainability, there are many factors to consider in the change process.

3. There is too much aggregation of data related to the ocean sector.

To have a clear understanding of needs and trends in the industry, good data is essential. However, there is often significant aggregation of data related to the marine industry. Industry associations like the NSBA and the Association of British Columbia Marine Industries must collect their own primary data to improve our understanding. For example, the boatbuilding industry is often captured under manufacturing or shipbuilding statistics.

While we appreciate the need to collapse data to share it with broad audiences, it presents a challenge. Professional occupations in our industry are swept up in generalized categories in the National Occupational Classification. For example, Marine Service Technician—a four-year apprenticeship program designated as a trade in British Columbia and Nova Scotia—is captured under NOC code *7384: Other trades and related occupations*. The same code includes 95 other occupations ranging from aircraft patternmaker to blacksmith to gunsmith, safe maker, saw fitter, underwater contractor and more.

Boat Builder is a designated trade in Nova Scotia with three material streams: wood, metal and composites. A wooden boatbuilder / shipwright is captured under *7271: Carpenters*, where their numbers are lost among carpenters making buildings on land. A metal boatbuilder is likewise grouped with other metalworkers. Finally, there is no place at all in the NOC list for a composite boat builder who builds a vessel from the ground up.

The ocean sector would be easier to qualify and quantify if its specialized jobs were isolated on the NOC list. Industry associations could more readily do their work with clearer data.

4. Communication between ocean sectors and stakeholders will be important to achieve the Strategy's full potential—and this may be another area where government can help.

Despite the NSBA having many connections in the marine industry, we frequently learn about initiatives after they've launched, especially around labour market development. This

is particularly true as the ocean sector – including ocean technology and other emerging sub-sectors – gains strength.

It is important to avoid a siloed approach where groups launch parallel initiatives, especially when mandate and audience coincide. However, this is difficult to avoid without centralized coordination – not control, but coordination.

The Marine Industry Advisory Committee and its working groups are trying to achieve this. The Human Resources Working Group is building a list of initiatives reported by members, but there are other initiatives that aren't yet captured in this list. One option might be a marine industry database that organizations populate themselves, including categories/tags and a robust search function could help avoid redundancy of effort and streamline communication. MIAC could lead this effort, building on the work it has started.

C. Specific Comments on the Strategy:

Looking at specific elements of the Strategy, especially elements that are relevant to labour market development and small vessels, the NSBA offers the following additional comments:

- *Advancing the Participation of Indigenous Peoples:*

The Engagement Paper asks how Indigenous peoples can best be supported to increase their participation in the ocean economy. Ultimately, self-determination is essential for Indigenous communities so answers to these questions should be shaped by Indigenous peoples themselves. As an industry association, we build relationships with Indigenous communities where possible and work with them to meet their training needs. When invited to do so, we offer guidance about training strategies and priorities. We are currently working on an initiative with some Indigenous communities to offer modular training that may result in trade certification over time.

These training activities don't necessarily address environmental sustainability, as the focus is usually capacity building. However, this may evolve over time based on the identified priorities of communities.

- *Developing the Necessary Labour Force and Skills:*

The challenges identified in the Engagement Paper reflect what we see in our industry. Labour shortages clearly hinder long-term investments and growth, aging population is a significant concern and a lack of awareness and educational pathways is a big issue.

As noted in the previous section of this paper, both skilled and unskilled workers are needed. Bridging programs, like apprenticeships, are also needed to give people foundational skills for industry jobs where they can learn and grow within the job itself.

Job-seekers with no marine experience are generally considered high-risk hires in the boatbuilding and repair sector, as they may not bring useful skills and there may be mismatched expectations between the employer and the new employee. Introductory programs including pre-apprenticeship programs would address this disconnect.

Immigration is also important to address labour market shortages. However, as mentioned above, some marine industry jobs simply can't be found on the National Occupation Classification list. Economic immigration streams generally lead newcomers to trades outside the marine industry. Additionally, we have seen situations where a newcomer, an employer and the provincial government all support permanent residency but encounter significant hurdles with the federal government. While we appreciate immigration decisions must be made at the federal level, we struggle to understand the federal barriers when they stand in the way of an unanimously supported skilled worker joining the workforce. We see room for improvement.

In the meantime, the NSBA has hired a Diversity and Inclusion Coordinator who, as a newcomer himself, is particularly passionate about supporting employers and job seekers navigating the immigration system. We look forward to him joining us late June.

The NSBA does school outreach, primarily to grades 7-12, and we have been researching youth perceptions of the boatbuilding and repair industry to inform a Communications Strategy that will more effectively reach youth and other audiences.

We are working with various partners to develop introductory training programs that meet the needs of our industry. The Nova Scotia Community College is a key partner in these discussions and we hope to further develop that relationship.

Any role the government could play to increase awareness of the sector and initiatives within the sector would be beneficial.

- *Identifying Barriers to Inclusive Growth:*

This is another area where the NSBA is working to better understand barriers and challenges. Are the barriers real or perceived or both? How much of an issue is employer inclusion—whether in leadership or among workplace peers? How do we better celebrate the diversity that already exists in the industry without making anyone in the industry feel self-conscious?

These are questions we hope to answer once our Diversity and Inclusion Coordinator joins our team. His work will include reaching out to underrepresented communities as well as working with employers to help them understand best practices for building welcoming workplaces.

We anticipate that we will find most employers and workplaces want to be welcoming and supportive but may not fully understand the needs of people who have not historically been part of the industry. A judgement-free environment to learn and ask questions can go a long way and we will do our best to create that space.

Ultimately, inclusion is best achieved through education and dialogue. The best role for government is leading by example—which it is increasingly doing—and offering supports to organizations that are working to address diversity and inclusion in their own sphere of influence.

- *Innovation:*

There is some great work being done in Canada around ocean technology. However, there are many other types of innovation beyond what is generally considered “technology”. The recent Impact Canada – ACOA Hull Efficiency Design Challenge is a good example: by re-imagining a vessel’s hull design and construction as well as propulsion, companies have opened possibilities for improving fishing vessel efficiency.

Government programs to help companies innovate exist. But there is an expensive leap that must be made for a forward-looking company: going from a concept in someone’s head to a concept ready for a government grant proposal. When it comes to changing a fishing vessel, few companies have the time or money to experiment without support.

Another challenge is that buyers may not always be open to change, especially when a vessel is essential to their livelihood. In addition to developing an innovative idea, boatbuilders may need marketing support to sell the concept before they can sell the actual product. They may even need to produce a prototype and prove it at sea, as few fish harvesters would want to pay \$300-600K for an untested vessel design.

In short, ocean innovation programs should support incremental changes that align with the operating environment while allowing for game-changing innovation. Programs should be easy to access and navigate and should create opportunities to capture the ideas of people who have been building and repairing boats for decades. It is highly likely they have untapped ideas that they have not been able to explore.

- *Market Access:*

Closed borders and isolation requirements related to COVID-19 have negatively impacted some companies in our industry by restricting access to customers. It is difficult to say how quickly business will rebound when borders re-open. Have customers found places closer to home where they can purchase or repair their boats? How quickly will people resume international travel, bringing recreational boats to Canada for vacations—and leaving them for winter repairs? It is difficult to say.

Other companies had few problems in 2020 but are now seeing issues with supply chains that haven't fully recovered. It would be great for the Canadian economy if more supplies could be sourced domestically, but this may not be feasible.

On a cost basis, Canadian companies may be able to compete with manufacturers in the United States or Europe given sufficient product demand. It would be more difficult for them to compete with or replace supply chains extending into Asia.

Beyond cost, labour market again becomes an issue. In September 2020, SYSPRO Software Ltd. hosted a virtual webinar titled "Is it time for Canadian Manufacturers to consider re-shoring?" One of the key messages from both presenters and attendees was the challenges getting workers, even in advanced manufacturing where the work is cleaner and higher-tech than manufacturing of the past. Domestic supply chains may be difficult to achieve until the labour market issues have been addressed.

One long-standing challenge for boatbuilding companies in Canada is the Jones Act—or Merchant Marine Act of 1920—in the United States. It limits use of internationally built vessels for certain purposes in the United States. Other protectionist measures such as tariffs on certain materials also affect our industry.

While most of our industry is kept busy with domestic fishing boats, our recreational boatbuilders are competing with mass-produced boats from other countries. It would be ideal if our boatbuilding industry could develop niche expertise in designing and building vessels for a sustainable future as we emerge from the pandemic looking to be noticed in various markets. Forward-thinking customers might pay more for custom crafted vessels that incorporate values such as carbon-neutral operation. It is unlikely this shift could happen quickly, but the window of opportunity is still there with the right investment support.

A final note about market access is that the proposed luxury tax could stifle builders of recreational boats. While the tax may be meant to generate revenue from people of greater wealth, the potential negative impact on custom boatbuilders as well as boat dealerships may have a net-negative impact in the end. In short, taxing the demand side may harm the supply side to a degree that exceeds the income generated by the tax.

- *Business Environment:*

This is another topic where challenges identified in the Engagement Paper reflect what we see on the ground. Rural internet is an issue. Key infrastructure is also a challenge, especially in relation to the electrification of vessels—few, if any, ports can offer plug-in shore power to a significant number of vessels. The environmental value of a move toward electric and hybrid vessels also depends on the local grid and its power source. Hydrogen and other alternative fuels may be viable alternatives to traditional fuels, but would again require infrastructure – as well as safety testing.

A key element for technology adoption is support for prototypes—including full vessels if needed—to test concepts and demonstrate the technology to potential buyers. For fish harvesters and other seagoers, risk is an ever-present quantity that must be minimized. New designs need to be proven safe and reliable for a buyer to bet their livelihood on it.

Boatbuilders are more likely to incorporate new technology into vessels where there is a confirmed market. Our industry generally doesn't build on speculation; it builds in response to specific orders, and it builds what the customer wants. If the customer will pay for product innovation, our industry will build it.

Technology adoption in the manufacturing process itself may be easier to achieve by addressing risks through targeted training. Labour-saving technology would be a welcome solution to the problem of scarce labour many of our members contend with.

- *Regulatory Environment:*

Regulations are important for protecting the safety of vessel operators, crew and passengers but they can also stifle change. They can also cause economic harm by forcing change on industries that aren't able to comply, even when they are willing, because the requirements are impracticable or unachievable. The regulatory environment should support and facilitate innovation while not forcing it before the industry and its supply chains are ready.

The regulatory environment can also impede growth by being unnecessarily prescriptive without offering flexible alternatives, or by being difficult to navigate or understand. Some boatbuilders and boat buyers stay within certain cut-offs to avoid complex regulations and requirements. Some choose not to innovate because it is easier than going through repeated plan approval processes.

Given that most construction regulations are intended to protect safety and, increasingly, the environment, it is difficult to achieve anything more than incremental change. Transport Canada is working on a significant update to the Fishing Vessel Safety Regulations and the NSBA worked with boatbuilders and fish harvesters to prepare and submit collective comments on the last two rounds of proposed changes. We have seen good progress, but the amount of work involved demonstrates why frequent regulatory change is impractical and impracticable.

- *Marine Transport, Ports, and Shipbuilding:*

As noted earlier, boats deserve separate attention in the Strategy – either here or in a their own section.

- *Commercial Fisheries:*

The discussion question about how fish harvesters can be supported to transition to carbon-neutral business operations is an important one for our industry. Recapping points made earlier in this response, this would require:

- Technology that is safe, practical, and practicable. An electric vessel dying at sea can be life-threatening. Hybrid vessels may be a reasonable interim solution until electric propulsion technology can safely meet the needs of commercial fishing vessels.
- Port infrastructure that supports alternative propulsion systems.
- A careful, measured approach to regulatory change. The proposed changes to the Fishing Vessel Safety Regulations include provisions for electric propulsion systems but it is difficult to develop regulations for rapidly evolving technologies.
- Fish harvesters who are willing to try something significantly different than the industry norm. This may require risk mitigation or financial support from the government or other sources.

- *Coastal and Marine Tourism:*

Boats stand to play a key role in coastal and marine tourism. They may be rented or chartered as a different way to see the country, they may be used for boat tours and heritage experiences, or they may be privately owned and kept in a community other than where the owner lives.

In all cases, boats will need repair and service work. In all cases, it would be great for tourism and the Canadian economy if the boats were Canadian-made, especially if they incorporate innovative technology and designs. This would be a source of pride for both Canadians and Canadian boatbuilders.

D. Contact Information

This submission was prepared by Jan Fullerton, Executive Director of the Nova Scotia Boatbuilders Association. For more information about any of these comments, please contact me using one of the following methods:

Email: exec@nsboats.com

Phone: 902-441-5667 (cell)

Mail:

NS Boatbuilders Association
21220 – 27 Parker Street
Dartmouth, NS
B2Y 4T5