



The National Shipbuilding Strategy

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Overview

- Overview of the National Shipbuilding Strategy
- Performance Against Objectives
- Program Updates
- What's Next



Shipbuilding in Canada prior to 2010

- Traditional Government of Canada approach was “one-off” project-by-project procurements
 - Costly and inefficient “boom and bust” cycles with constant rebuilding of infrastructure and workforce within shipyards.
 - The last large vessels built in Canada were the Halifax-class Canadian Patrol Frigates (production ended 1996).
 - During the “bust” cycle several yards had to either shut down, be repurposed, or converted to ship repair.



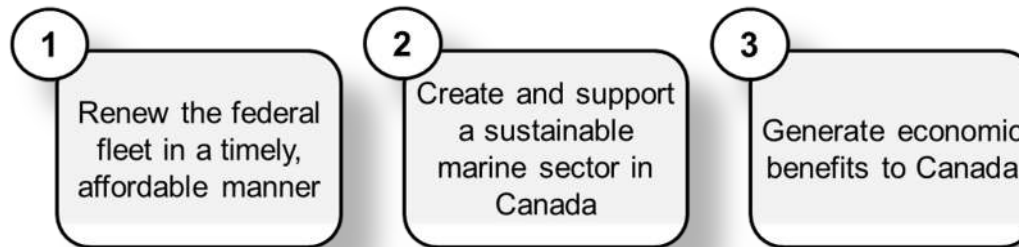
9 of the 12 Halifax-class frigates were built at Saint John Shipbuilding during the 1980s and 1990s



Saint John Shipbuilding was left with little work after constructing the Halifax-class frigates. The yard officially closed in June 2003

Creating a National Shipbuilding Strategy

- NSS was announced with the following three core objectives:



- Following extensive consultation with industry, the National Shipbuilding Procurement Strategy was launched in June 2010.
- Renamed the National Shipbuilding Strategy in 2016.
- NSS has evolved to meet new challenges and emerging requirements.

Creating a National Shipbuilding Strategy

- For years industry called for a long-term shipbuilding strategy with considerations to maximize benefits and deliver results to the Canadian shipbuilding industry.
- Government commitment to a long-term shipbuilding strategy provides an opportunity to:
 - Provide more predictable work for industry through elimination of boom/bust cycles;
 - Allow for infrastructure improvements to the shipyards; and
 - Stabilize, grow and renew shipbuilding workforce and supply chain for vessel construction, repair, refit and maintenance.



Canada's largest icebreaker, the CCGS Louis S. St-Laurent, has been in service since 1969



Prior to NSS, Canadian shipyards lacked the modern infrastructure and well-trained workforces required to build and maintain new ships

Pillars of the National Shipbuilding Strategy

1. Large Vessels (Over 1000 tonnes)

- In 2011, Vancouver Shipyards (VSY) and Irving Shipbuilding (ISI) were competitively selected to undertake separate programs of work.
- In 2019, to respond to evolving federal shipbuilding requirements, the Government announced that a third shipyard was to be selected to build six Program Icebreakers (PIB) for the Canadian Coast Guard.

2. Small Vessels (Under 1000 tonnes)

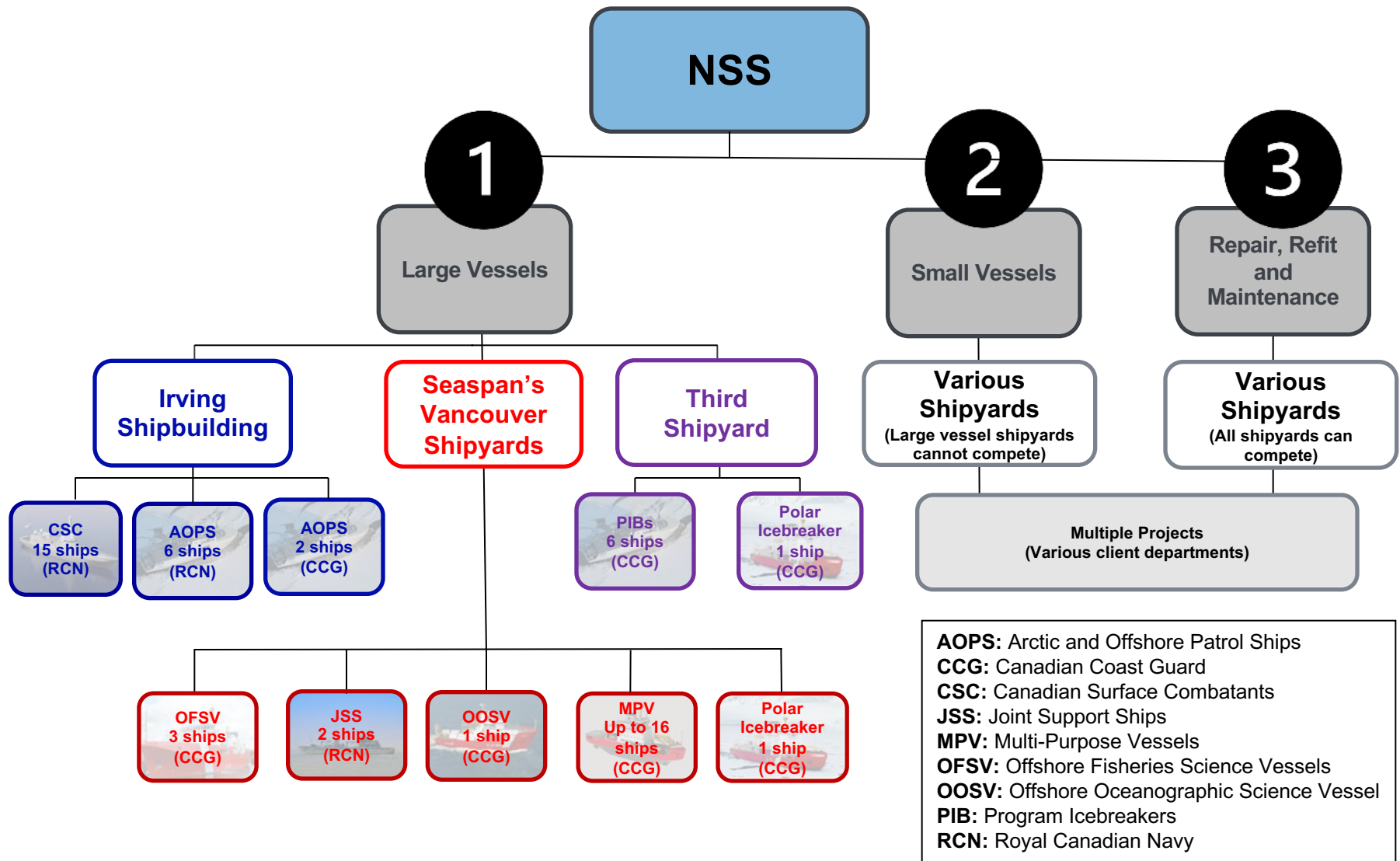
- Competed amongst shipyards other than the three large vessel shipyards.

3. Vessel Repair, Refit and Maintenance

- All shipyards may compete.



The 3 Pillars of the National Shipbuilding Strategy



Shipyard Selection Process

- In June 2010, it was announced that two Canadian shipyards would be competitively selected for large vessel construction.
- Five Canadian shipyards were short-listed following a Solicitation of Interest and Qualification process.
- Short-listed shipyards were invited to participate in a Request for Proposals (RFP) process, with three bids received.
- In October 2011, it was announced that Irving Shipbuilding Inc. (ISI) would build the Combat Package and Seaspan's Vancouver Shipyards (VSY) would build the Non-Combat Package.
- Process confirmed as fair, open and transparent by an independent fairness monitor and the Auditor General of Canada.



Third Shipyard Selection Process

- In May 2019, the Government announced that a third shipyard was to be selected for large vessel construction under the National Shipbuilding Strategy.
- In August 2019, an Invitation to Qualify (ITQ) to establish a short list of shipyards that could demonstrate that they met the initial, defined requirements to build six program icebreakers for the Canadian Coast Guard.
- Two responses were received.
- Of these, Chantier Davie Canada Inc. (CDCI) was the only pre-qualified respondent at the end of the ITQ Process and moved to the next (RFP) phase of the selection process.
- After successful completion of the RFP and evaluation stage, CDCI has now moved on to the next step of the selection process, the finalization and negotiation of an Umbrella Agreement.



Umbrella Agreements

- Canada signed Umbrella Agreements with both ISI and VSY in February 2012.
- Agreements define the working relationships and administrative arrangements between Canada and the shipyards.
- Include parameters on ships to be built, shipyard modernization requirements, economic benefits obligations, dispute resolution processes, etc.
- While not contracts themselves, they do contain an obligation for Canada to “backstop” the shipyards’ initial infrastructure modernization investments, required to undertake National Shipbuilding Strategy work, should Canada not award contracts in a timely manner and a restriction on the shipyards to only be able to recover their paid capital costs for these investments through normal and usual profits earned from resultant contracts.
- All other Umbrella Agreement commitments are made contractual by incorporation in resultant contracts via special covenants.



Contracts for Large Vessels

- Resulting contracts are awarded for each ship project to design and build the vessels
- Contracts are structured to:
 - Share the risk amongst the parties;
 - Motivate shipyards to achieve efficiencies by sharing the cost savings;
 - Eliminate risk premiums by paying only the actual costs;
 - Provide appropriate profit by establishing minimum and maximum levels based on performance; and
 - Define specific Industrial and Regional Benefits and Value Proposition delivery obligations and reporting.



Types of Contracts

- Ancillary Contracts
 - Used to understand the requirements and initial design.
- Definition/Production Engineering Contracts
 - Awarded to mature the design so it is ready to be built.
- Long Lead Items Contracts
 - Enable the shipyard to initiate early discussions with potential suppliers and to purchase required material and equipment.
- Build Contracts
 - Awarded to shipyards to begin construction.



*Vancouver Shipyards Launch of OFSV 1
December 8, 2017*



*Irving Shipbuilding Launch of the AOPS 1
September 15, 2018*



*OFSV 1 (CCGS Sir John Franklin) and AOPS 1
(HMCS Harry DeWolf) at Sea
2020*



Contract Negotiation: Best Practices

- Establish consistency of terms and conditions between contracts.
- Interest-based negotiations.
- Ensure clear mandates, roles and responsibilities in negotiation.
- Support from strong governance model and subject matter experts.
- Important principles:
 - Simplicity;
 - Flexibility;
 - Mutual trust;
 - Respect for commitments; and
 - Fair risk sharing.



Performance Against Objectives: Timely, Affordable Delivery of Ships

- Six large vessels delivered, six under construction.
- Program and Portfolio Risk Management Process.
- Challenges experienced:
 - Overly optimistic initial cost estimates and schedules.
 - “Green” shipyards and workforce.
 - First-of-Class builds.
 - Short production runs.
 - Human resource capacity.
 - COVID-19.
 - Inflation.



OFSV 1 was accepted by the Canadian Coast Guard on June 27, 2019

Performance Against Objectives: Create a Sustainable Marine Sector

- National Shipbuilding Strategy Value Proposition (NSS VP)
 - The large shipyards are required to invest an amount equal to 0.5% of the value of the large-vessel NSS contracts they are awarded in the Canadian marine industry to support human resources development, technology investment, and industrial development.
 - Both shipyards have made investments in all three priority areas, and have placed particular focus on skills development and advancing the participation of under-represented groups in Canada's marine industry.
 - As of December 31, 2021, NSS shipyards had accrued over \$31.2 million in NSS VP obligations and the value of completed investment activities and approved future activities has exceeded \$36.9 million.
- Growth in Canada's Marine Defence Industry
 - ISED has reported that Canada's marine industry outperformed the broader manufacturing sector between 2018 and 2020 and contributed close to \$3.8B in GDP and 35,600 jobs across the Canadian economy in 2020.
- Domestically-focused Supply Chain Activity

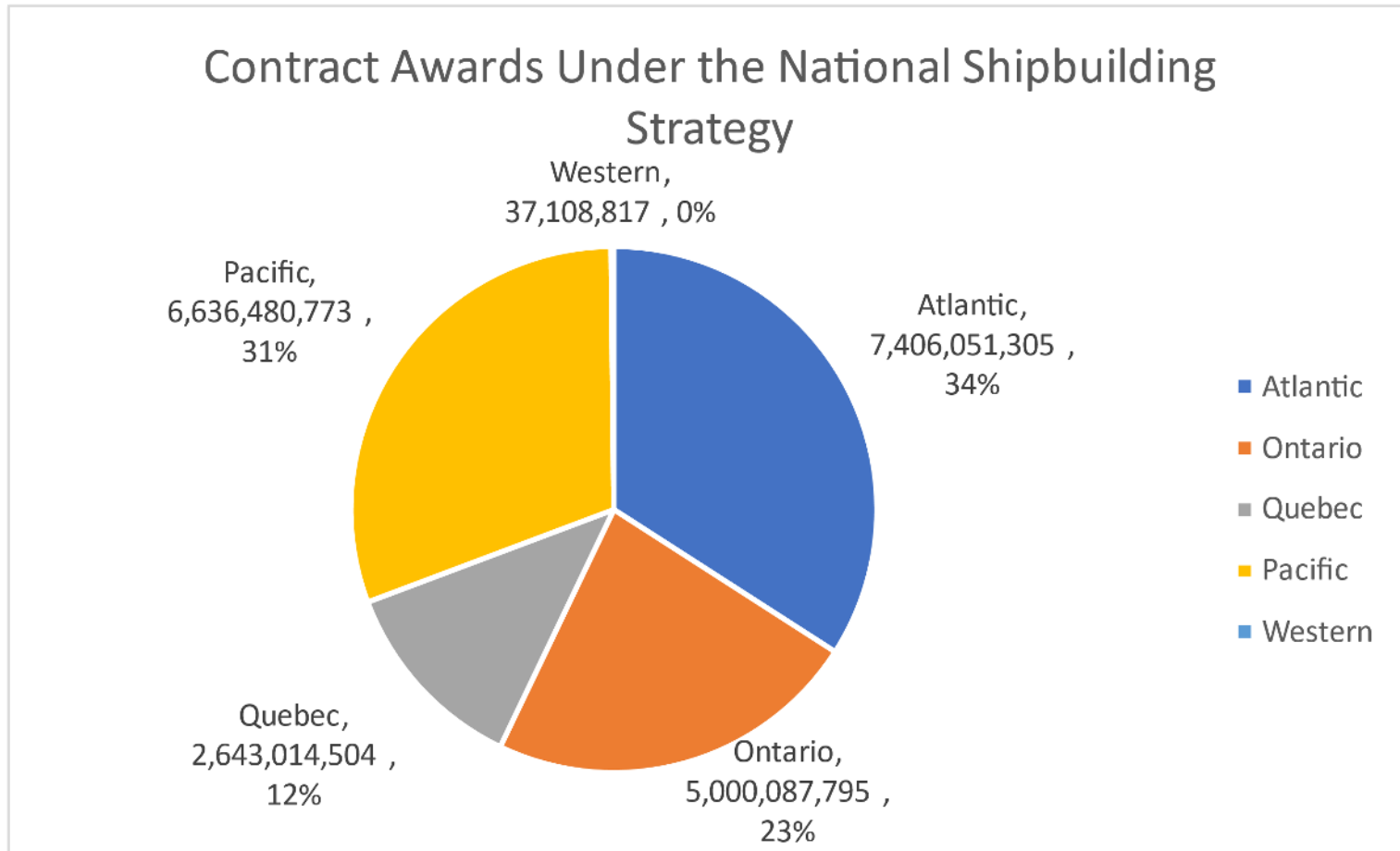


Performance Against Objectives: Generate Economic Benefits for Canada

- Contracts awarded across the country
 - From 2012 to June 2022, the Government signed \$21.72B in NSS contracts throughout the country.
- Canadian industry participation to date
 - \$4.91B in contracts were awarded to Canadian suppliers, by ISI and VSY
 - 1,039 Canadian firms have received economic opportunity through sub-contracting.
- Industrial and Regional Benefits (IRB)
 - NSS shipyards and major suppliers are required to undertake business activities in Canada equal to the value of the contracts they are awarded by Canada.



Performance Against Objectives: Generate Economic Benefits for Canada



VSY Program Update

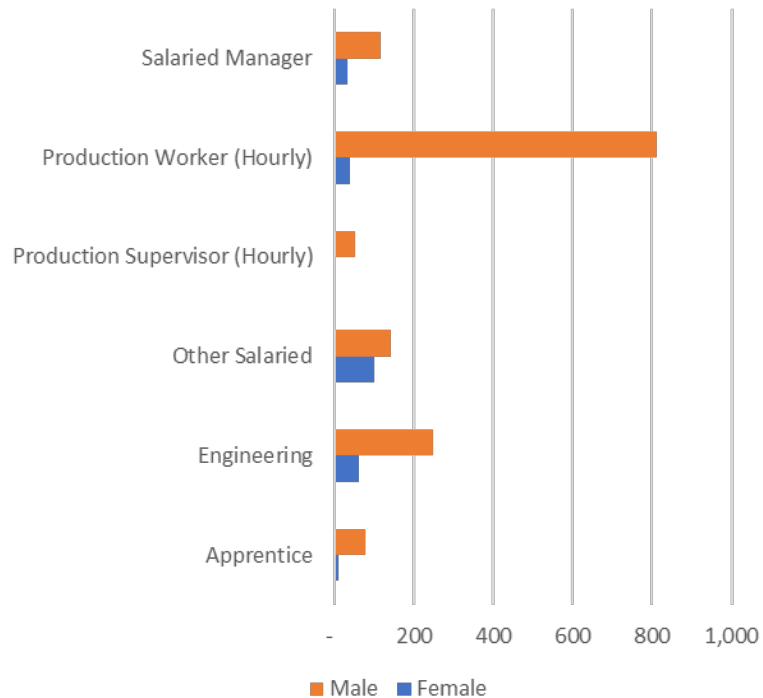
- Complex package of work consisting of three Offshore Fisheries Science Vessels (OFSV), one Offshore Oceanographic Science Vessel (OOSV), two Joint Support Ships (JSS) sixteen Multi-Purpose Vessels (MPV) and one Polar Icebreaker
- Since 2012, the Government has awarded \$5.31B in contracts to VSY for large ship construction and another \$8.14M for repair, refit and maintenance work.
- All three OFSV were delivered in 2019 and 2020 marking the completion of the first full class of ships under the NSS.
- JSS 1 has been under construction since 2018, the OOSV since 2021 and JSS 2 since 2022.
- Early design work for the Polar Icebreaker and MPVs is underway.



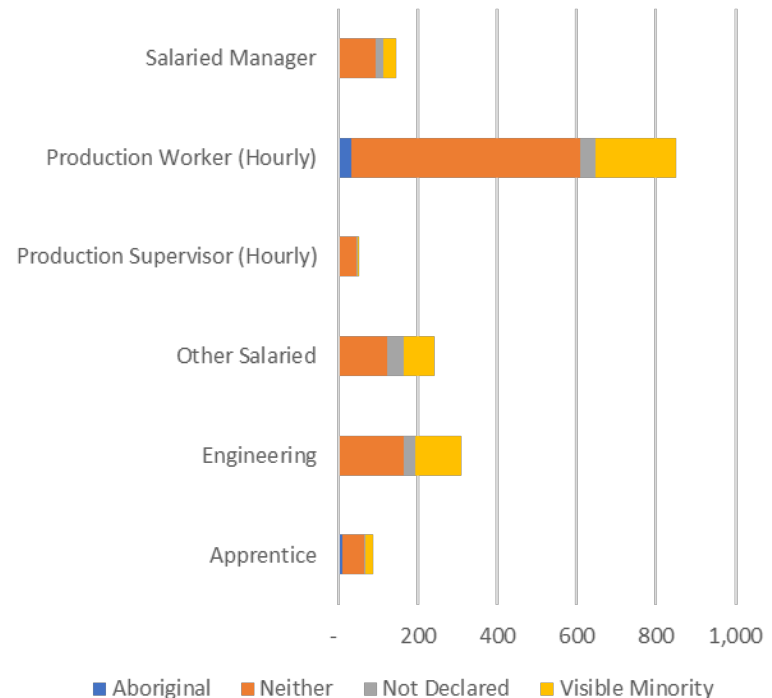
JSS1 under construction, October 2022

VSY Program Update

Vancouver Shipyards Emploment
Breakdown by Gender



Vancouver Shipyards Demographics by
Equity Group



ISI Program Update

- Complex package of work consisting of eight Arctic and Offshore Patrol Ships (AOPS) and fifteen Canadian Surface Combatants (CSC).
- Since 2012, the Government has awarded \$5.39B in contracts to ISI for large ship construction and another \$1.35B for repair, refit and maintenance work.
- The first three AOPS were delivered in 2020, 2021 and 2022.
- AOPS 4 has been under construction since 2019, AOPS 5 since 2021 and AOPS 6 since 2022.
- Design of the CSC is underway.



*AOPS 4 at Land Level,
August 2022*



BAE's Type 26 Frigate



Small Vessel Construction

Repair, Refit and Maintenance

Small Vessel Construction

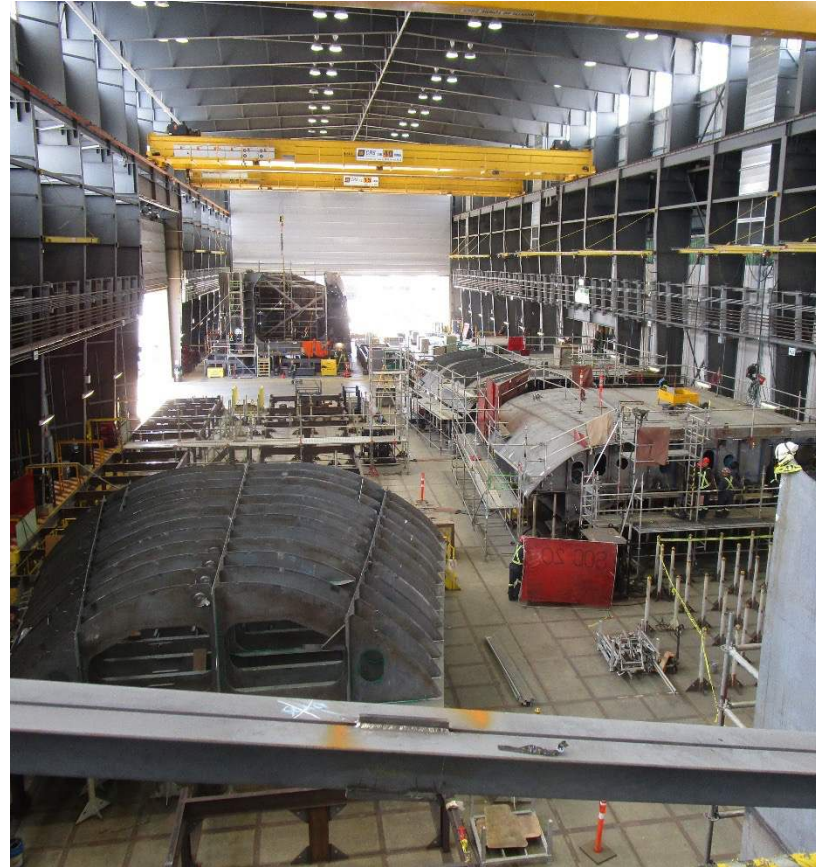
- Small ship construction contracts awarded between 2012 and 2021 are estimated to have contributed close to \$339.4 million (\$30.9 million annually) to the GDP, and created or maintained 296 jobs annually, through the marine industry and its Canadian suppliers, as well as consumer spending by associated employees during this period.
 - Examples: 20 CCG Search and Rescue Lifeboats (Chantier Naval Forillon, in Gaspé, Quebec, and Hike Metal Products, in Wheatley, Ontario) and four Naval Large Tugs (Groupe Ocean, in l'Isle aux Coudres, Quebec).

Repair, Refit and Maintenance

- NSS repair, refit and maintenance contracts awarded between 2012 and 2021 are estimated to have contributed close to \$10.09 billion (\$917.4 million annually) to the GDP, and created or maintained 8,663 jobs annually.
 - Examples: RCN Halifax Class Frigates In-Service Support (ISI, CDCI and Victoria Shipyards), an extensive CCG vessel life extension program (at various shipyards), inspection, repair and overhaul work on CAF inflatable rubber boats and rigid hull inflatable boats (Zodiac Hurricane Technologies, in Delta, B.C.).

What's Next

- Completion of the process to add a third shipyard for large ship construction.
- Award of Construction Engineering and Long Lead Items contracts for the VSY Polar Icebreaker and MPVs.
- Completion of the Preliminary Design Review and award of the Implementation contract for the CSCs.



Early block construction of JSS 1

Questions?

