Canadian Coast Guard

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CANADIAN COAST GUARD

Integrated Business and Human Resource Plan

2021-2022 to 2023-2024

Canada

TABLE OF CONTENTS

Commissioner's Message

On behalf of the Canadian Coast Guard, I am pleased to present the *2021-2022 to 2023-2024 Canadian Coast Guard Integrated Business and Human Resource Plan*.

Over the next three years, the Canadian Coast Guard will be undergoing one of the greatest periods of change in its history. Currently, we find ourselves in unprecedented and challenging times in light of the COVID-19 pandemic. I have the utmost appreciation for the professionalism and dedication Coast Guard employees have shown in this unique period. As a first responder agency, everyone is doing their part and more throughout the organization. I commend you and stand with you.

Last year, the world witnessed a racial reckoning that was also felt here in Canada where we loudly heard Indigenous, Black, and other racialized peoples voicing their experiences of racism, discrimination, and inequality on a deeply personal and painful level. We are also acutely aware that it takes sustained leadership to challenge the status quo, address hard truths,

acknowledge lived realities, and tackle tough issues if we want to see profound, meaningful, and lasting change. As an organization, we understand that we need to do better at attracting and welcoming a more diverse workforce so that our organization is more representative of the Canadians we proudly serve and that we continue to be a workplace of choice well into the future. It is also simply the right thing to do.

As an organization, we are proud to celebrate what we accomplish every day, 365 days a year. We are also proud of our knowledge and expertise – whether in the Arctic, in search and rescue, and along the continuum of response, in icebreaking, or in relationship building with Indigenous partners – and we continue to build upon it. The Canadian Coast Guard College, as our centre of maritime training excellence for the Coast Guard and the foundation for our longstanding success in operations, is an example of how we share our knowledge and grow our expertise. I want our employees to know that I hear over and over when I interact with our international partners the great regard for our expertise and our ability to deliver on our mandate.

The Canadian Coast Guard also contributes to Government of Canada initiatives such as Economic Recovery, the Oceans Protection Plan, the Blue Economy Strategy, Canada's Reconciliation Agenda, and the Greening Government Strategy. The successful implementation of these initiatives will yield benefits to the Coast Guard and all Canadians and contribute to sustaining our partnerships across all levels of government, including Indigenous partners.

With this in mind, I want to convey my strong sense of optimism about the future.

While service excellence, recruitment and retention, and the renewal of our fleet are enduring priorities we require in order to fulfill our mandate and motto – Safety First, Service Always – we have also identified Canadian Coast Guard strategic pillars that link to broader Government of Canada priorities and will allow us to chart a course for all Canadians, including our employees.

Each strategic pillar in the Plan identifies objectives that need to be achieved, and each objective has at least one specific action-oriented commitment. Taken together, these strategic pillars, objectives, and commitments will hold the organization on a steady three-year course.

Our People: The Coast Guard must be inclusive and that means reflecting the population we serve. We must take care of and support each other, and create an environment where everyone can thrive. The Coast Guard will support every one of its employees in this priority area. Together, we will continue to make the Canadian Coast Guard an employer of choice, and support all our current and future employees to be the best that they can be. Included in the Canadian Coast Guard *Integrated Business and Human Resource Plan* is a link to an enduring people-focused plan – our *People Strategy.* This People Strategy continues to provide a picture of where we are today and a strategy for where we are heading.

Our Assets: With an average age of 39 years for the large vessels in the fleet, Coast Guard's aging vessels are in need of replacement in order to meet increasing operational pressures

> " As an organization, we are proud to celebrate what we accomplish every day, 365 days a year. "

and perform its mandated mission. Vessel repair, refit, and maintenance enable us to continue to provide critical services such as icebreaking and emergency response in Canadian waters, while providing economic opportunities for the Canadian marine sector. We remain energized by the substantial investments to renew the fleet with vessels that represent the Coast Guard of the future, including greener operations. Renewing the fleet effectively means making sure we also have the right people, skills, and shore-based assets to enable effective fleet operations and maintenance in support of program and service delivery well into the future.

Our Services: The Coast Guard is developing a strategy to advance the modernization of its marine navigation program and safety services. Following international trends to digitalize marine navigation tools and services, we will transform our service mechanisms to provide timely and standardized information to mariners, such as environmental data, ice and weather conditions, and vessel traffic. As we modernize our services, engagement with industry and Indigenous Peoples must be at the forefront of our approach. As stated in the 2019 Mandate letters of the Prime Minister, there remains no more important relationship to Canada than the one with its Indigenous peoples. Coast Guard has made progress in supporting self-determination, improving service delivery, and advancing reconciliation, and we must continue to engage with our Inuit, Métis, and First Nations partners. It will also be important to maintain strong internal and external engagement mechanisms with Coast Guard service users to ensure optimal service delivery.

Our Governance: The organizational changes we announced in national headquarters in 2019 have made us a stronger organization by better aligning our priorities, enhancing collaboration with both internal and external partners, and offering a more robust process for efficient and timely decision-making. The focus now is on ensuring that national policies, processes, procedures, and systems are clear and cohesive, remain up to modern standards, and have the foresight to leverage evolving technology and an evolving regulatory environment. This will enable the headquarters and the four regions of the Agency to function smoothly and seamlessly as one collaborative and united national institution.

Although we have many accomplishments to celebrate, we continue to push forward to meet the expectations of our service users and all Canadians. In 2022 we will be celebrating our 60th Anniversary. This is a key moment for our organization; it is a time to reflect on our rich history and celebrate our accomplishments. The theme of the 60th Anniversary is "Navigate the Future" – this represents not only a celebration of our proud and unique history, but also how we are charting a way forward in the years ahead.

This plan shows how we will navigate this future. I am proud of the course we are on.

Mario Pelletier
Commissioner
Canadian Coast Guard

Our Organization:
Who we are and what we do

Mission

Our mission is to ensure the safety of all mariners on our waters, protect the marine environment, and support economic growth through the safe and efficient movement of maritime trade in and out of Canada's waters.

The Canadian Coast Guard operates 24 hours a day, 7 days a week, 365 days a year in some of the world's harshest maritime conditions. Its area of operations covers 243,000 km of coastline and 5.3 million km² of ocean and inland waterways. The Coast Guard supports Canada's ocean economy by enabling the safe and efficient flow of $251 billion in maritime trade, the handling of more than 342 million tonnes of critical goods, and supporting tens of thousands of jobs across Canada.

People, Services and Mandate

We are over 6,100 employees strong. We are deckhands, engineers, marine communications and traffic services officers, cooks, community engagement coordinators, captains, pollution response officers, search and rescue specialists, technicians, administrators, program analysts, policy advisors, lighthouse keepers, officer cadets, and more. We fulfill the Coast Guard's role as the owner and operator of Canada's civilian fleet. Our employees support key maritime services that include:

- Aids to navigation
- Channel maintenance
- Marine search and rescue
- Response to wrecks and hazardous or dilapidated ships
- Marine pollution response
- Icebreaking and ice management services
- Marine communications and traffic services
- Procurement of vessels and helicopters and other marine services related to vessel life extension/refit of the current fleet
- Provision of ships and helicopters in support of other federal departments' mandates

The services we provide are mandated under legislation, including:

- *Oceans Act*
- *Canada Shipping Act, 2001*
- *Marine Liability Act*
- *Emergency Management Act*
- *Arctic Waters Pollution Prevention Act*
- *Wrecked, Abandoned or Hazardous Vessels Act*

Public Service/ Organizational Values

Respect for Democracy: The system of Canadian parliamentary democracy and its institutions are fundamental to serving the public interest. Public servants recognize that elected officials are accountable to Parliament, and ultimately to all Canadians, and that a non-partisan public sector is essential to our democratic system.

Respect for People: Treating all people with respect, dignity, and fairness is fundamental to our relationship with the Canadian public and contributes to a safe and healthy work environment that promotes engagement, openness, and transparency. The diversity of our people and the ideas they generate are the source of our innovation.

Integrity: Integrity is the cornerstone of good governance and democracy. By upholding the highest ethical standards, public servants conserve and enhance public confidence in the honesty, fairness, and impartiality of the federal public sector.

Stewardship: Federal public servants are entrusted to use and care for public resources responsibly, for both the short term and long term.

Excellence: Excellence in the design and delivery of public sector policy, programs, and services is beneficial to every aspect of Canadian public life. Engagement, collaboration, effective teamwork, and professional development are all essential to a high-performing organization.

Through innovation and excellence, we are a recognized leader in maritime services and safety. As federal public servants, Canadian Coast Guard members have a fundamental role to play in serving Canadians, their communities, and the public interest. By committing to our organizational and Public Service values, Canadian Coast Guard members strengthen the ethical culture of the public sector and contribute to public confidence in the integrity of all public institutions.

Diversity, Equity and Inclusion

The Coast Guard is an asset-rich organization, and that includes our people. We are collectively committed to creating and sustaining an equitable and inclusive workplace that strives to mirror the diversity of the Canadian public we serve. We must take care of and support each other, and create a nurturing environment where everyone can thrive. The Coast Guard will support its employees in carrying out these commitments, and those in the Clerk's January 2021 Call to Action on anti-racism, equity, and inclusion in the federal public service.

In response to the Clerk's Call to Action, and to the Truth and Reconciliation Commission's Call to Action #57, which calls for all levels of government to provide education to public servants on the history of Indigenous peoples, the Coast Guard will continue to improve its understanding of cultural contexts and systemic barriers within Canada by actively promoting cultural awareness training sessions and fostering learning to support a healthy, inclusive, and diverse workplace.

Commitments:

- In follow up to a 2020 Coast Guard Gender Parity Study, work with Women in Governance to develop an action plan addressing the recommendations.

- Launch quarterly national email and Fleet Communiqué updates to support diversity, equity, and inclusion across the Coast Guard.

- Develop a Diversity and Inclusion Hub on the Coast Guard Intranet to link and collect departmental and Public Service resources and communications as resources for all employees.

- Develop and pilot a Diversity and Inclusion Fleet Ambassador Program to support and highlight activities for and by seagoing personnel.

- Coordinate training opportunities to enhance awareness around inclusive and barrier-free staffing processes.

- Develop and pilot a student-centered learning series, with specific outreach to the National Indigenous Student Recruitment Initiative, to better support student integration and offer guidance for transitioning from student employment with career path-focused options to bolster retention.

- Create a Coast Guard Future Leaders Community, which among its required components will include the Canada School of Public Service courses on Unconscious Bias, to support greater cultural awareness and competency.

- Pilot and deliver an updated and redesigned work uniform, developed with a Gender-based Analysis Plus (GBA+) lens and incorporating diversity and inclusion elements where feasible.

Canadian Coast Guard Strategic Pillars

Canadians expect the federal government to ensure public safety on the water, protect the marine environment, support economic growth, and support the country's sovereignty and security by maintaining a strong federal presence in Canada's waters.

The Canadian Coast Guard has a key role as the marine operating arm of the Government of Canada, ready and able to assist in the realization of Canada's maritime priorities. As Canada's civilian marine organization and the owner/operator of the civilian fleet of Canada, the Coast Guard has a critical function as on-water responder and as a visible symbol of Canadian identity from coast to coast to coast.

The Canadian Coast Guard is uniquely placed to serve this function by providing maritime expertise, Canada's civilian maritime fleet, and a broadly distributed shore infrastructure.

The Coast Guard is one of the few federal agencies that provides direct, front-line services 24 hours a day, 7 days a week. Our programs and services have an impact on the daily lives of every Canadian by protecting and preserving our interests and priorities as a maritime nation.

> " **The Coast Guard is one of the few federal agencies that provides direct, front-line services 24 hours a day, 7 days a week.** "

In recent years, the Government of Canada has invested in the Coast Guard through initiatives such as Fleet Renewal and the Oceans Protection Plan. These investments demonstrate the value the Government of Canada and Canadians place in Coast Guard programs and services and the increasing demand for our services. The focus in the coming years will be to continue building on these investments and enhancing the Coast Guard's program and asset readiness and excellence in service delivery.

The introduction of the new fleet will bring significant changes to the Coast Guard. Ensuring the optimal fleet of the future is a priority that links closely to our other enduring priorities of service excellence and recruitment and retention. Ship operations and maintenance are integral elements of fleet renewal in order to ensure optimal operational performance throughout the vessel life cycle, and that includes addressing new requirements to effectively operate and maintain new vessels. Over the planning period, we will continue to focus on developing strategies to address existing and future operating and maintenance
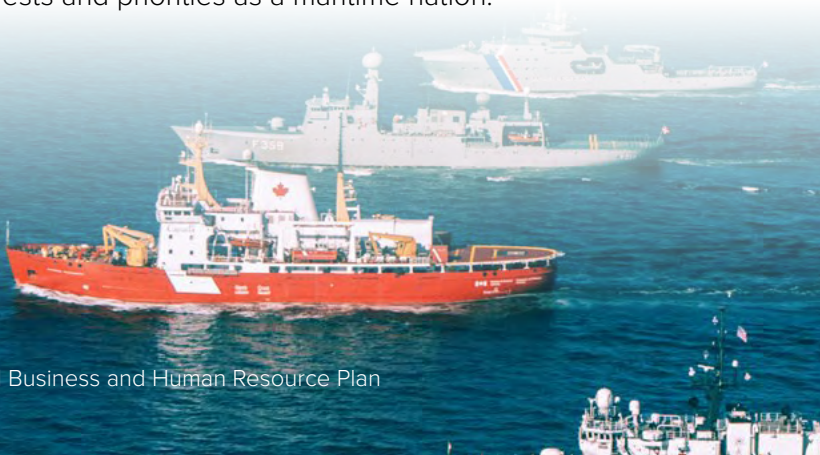
gaps for the new fleet, as well as the evolving skill sets associated with the operation of the new vessels.

In order to meet its obligations, the Coast Guard makes every effort to ensure that its organizational structure, processes, and procedures are optimized to support the effective and efficient delivery of services to Canadians, including its mandated programs and services, emerging government priorities, and the Minister's mandate letter commitments.

To this end, we have identified the following four strategic pillars to guide the delivery of our core responsibilities during the period covered by this plan and beyond, and to ensure that we achieve our mandate while maintaining excellence in service:

Our People

Our Assets

Our Services

Our Governance

Each strategic pillar in the Plan identifies objectives that need to be achieved, and each objective has at least one specific action-oriented commitment. Taken together, these strategic pillars, objectives, and commitments will hold the organization on a steady three-year course. Objectives and related commitments are described in each pillar. Further information on the commitments can also be found in Annex A.

The Coast Guard has taken guidance from Government of Canada priorities and the Minister's mandate letter priorities in identifying our strategic pillars.

Government of Canada Priorities	Minister's Mandate Letter Priorities	Departmental Core Responsibilities
Protecting public health;	Blue Economy Strategy;	**Fisheries** – managing Canada's fisheries, Indigenous fisheries programs and aquaculture activities, and providing support for commercial fishing harbours while applying relevant legislation;
Ensuring a strong economic recovery;	Pacific Salmon Strategy;	
Promoting a cleaner environment;	Support and protect workers;	
Standing up for fairness and equality;	Implement modernized *Fisheries Act;*	
A stronger, more inclusive, and more resilient Canada; and	Oceans Protection Plan;	**Aquatic Ecosystems** – managing, conserving, and protecting Canada's oceans and other aquatic ecosystems and species from human impacts and invasive species;
Advancing reconciliation.	Increase investments in small craft Harbours;	
	Full renewal of the Coast Guard fleet;	
	Creation of Defence Procurement Canada;	
	Conservation of Canada's land and oceans;	**Marine Navigation** – providing information and services to facilitate navigation in Canadian waters; and
	New investments in marine science and fighting invasive species;	
	Create a responsible plan to transition from open net-pen salmon farming in coastal B.C. waters by 2025 and begin work to introduce Canada' first-ever *Aquaculture Act*;	**Marine Operations and Response** – providing marine response services and operating Canada's civilian maritime fleet.
	Developing a boat-to-plate traceability program;	
	Use good scientific evidence and traditional Indigenous knowledge when making decisions affecting fish stocks and ecosystem management; and	
	Implement the Oceans Plastics Charter and the G7 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities.	

Strategic Pillar 1: Our People

The Canadian Coast Guard recognizes and is proud of the strength of its people. The organization attracts people who want to pursue a long-term, fulfilling career. Their commitment is at the core of our organization, and we feel a tremendous source of pride knowing that many of our employees put their lives on the line to deliver essential services to Canadians, 24/7/365 across the country.

We are fortunate to have knowledgeable, experienced, and well-motivated people across our ranks, and will continue to make our organization an employer of choice, and support all of our current and future members to be the best that they can be. The inherent challenge we face is to preserve this enviable standing by ensuring that the Coast Guard community is viewed as a desirable, rewarding, and inclusive place to work for those contemplating pursuing a career with us.

Effective professional development and assessment program activities are essential for helping us foster this environment and ensuring that all employees feel valued and equipped to perform their jobs. We will achieve this through a developmental and collaborative process that actively supports a culture that encourages us to monitor and discuss progress on a regular basis, to coach, mentor, and train others in a meaningful way, and to recognize the achievement of both personal development goals and organizational objectives.

The Covid-19 pandemic has been an accelerator for one of the greatest workplace

transformations of our lifetime, making working from home a viable option for some workers while adding new complexities and challenges to service providers on the front line. It is a testament to the professionalism and dedication of Coast Guard members that program and service delivery has continued unabated, and we will take best practices and lessons learned from the pandemic and apply them to continue to ensure a safe work environment for all employees.

We are also taking steps to improve support to all fleet personnel through the use of technology: first, by rolling out new software, eTimesheets, which enables fleet personnel to submit time and labour information electronically; and second, by launching a process to find a new crewing tool to replace Coast Guard's aging MariTime system to better fit the needs of the fleet. In addition to integrating crewing decisions with time and labour-tracking and management functionality, better reporting will help address the current chronic pay issues and enable the development of comprehensive training strategies to ensure we have seagoing employees with the certification and knowledge needed to fill new positions upcoming through the renewal of our fleet. An in-depth requirements analysis for crewing and certification will be completed,

in conjunction with a review of functionality currently available in the market, including within industries that are outside of the marine domain, which will provide us with a broader range of solution options to consider.

Due to the specialized nature of our work, it is essential that the Coast Guard has the right mix of people, capabilities, and resources to deliver our programs and services nationwide. As a special operating agency with a vast span of responsibilities vital for the safety and security of Canadian waterways, we need highly trained employees with specialized qualifications. This includes, for example, fleet officers and crew, Marine Communications and Traffic Services (MCTS) officers, who are the eyes and ears of the Canadian Coast Guard, and Rescue Coordination Centres personnel.

We have completed a review of key positions and at-risk groups across the Coast Guard, and advanced our capacity to use enhanced data, data analysis, and predictability. The identification of at-risk groups and key positions, combined with better data analysis capacity, will support the development of targeted recruitment strategies, targeted learning strategies to support retention and succession planning, improved processes associated with planning for training, and better informed annual intake at the Canadian Coast Guard College (the College) for the officer training program.

In 2021-22, the proposed at-risk groups and key positions, along with supporting demographic data and recommendations to address problem areas, will be presented to Coast Guard Management Board for approval and subsequent inclusion in recruitment, retention, and training strategies. These strategies will also incorporate updated crewing factors as well as future fleet crewing requirements.

The operational nature of the Coast Guard means that the organization relies on a number of highly specialized trade skills — from ships'

officers to certified support roles. Further complicating the need for specific roles, there are several fields of study related to these positions that have a limited qualified labour pool or a small number of graduating students each year. This creates potential supply issues, should the Coast Guard be required to fill a significant number of vacancies in critical areas. Accordingly, an at-risk staffing report is being created to identify the areas of highest risk, and support the development of potential mitigation strategies and longer-term human resources planning solutions.

Given the vast number of functions and positions within the Coast Guard, a methodology was developed to compile positions based on skill sets, competencies, and certifications. To evaluate impact risk, the groups were linked to their impact on operations, i.e. whether this affects a vessel's ability to operate. To evaluate the likelihood risk of vacancy issues, two key factors were examined: potential vacancy levels (from regular attrition, retirement timing, and existing vacancies) and difficulty in recruiting.

Recent attrition rates have necessitated the rapid career advancement of some junior officers within the fleet to more senior positions. This creates potential competency issues associated with the administrative and soft skills required of management and leadership roles. To address this need, the College is modernizing the delivery of Coast Guard command courses to provide the required and appropriate training to these individuals and others seeking to enhance their skills.

More information on this strategic pillar can be found in the Canadian Coast Guard People Strategy in Annex B, which also includes a status report on the Strategy. Annex C provides information on Canadian Coast Guard demographics.

Objective 1: Recruitment

Given a combination of attrition and organizational expansion, as well as the need for surge capacity for major incidents, recruitment is a critical priority, and requires the development of national recruiting strategies and tools.

Our specialized workforce requires targeted recruitment and promotional activities to attract new people with the right skills into the organization, as well as a focus on attracting employees from diverse communities. Recognizing the need for many specialized skill sets, the Coast Guard is targeting outreach activities to younger students to ensure awareness of the educational requirements needed to pursue various careers in the Coast Guard. We are also developing internal apprenticeship programs that complement targeted recruitment strategies as well as working with various colleges and universities to attract both co-op students and graduates to the Coast Guard.

The College is the Coast Guard's centre of maritime training excellence and the foundation for our long-standing success in operations. To be able to attract candidates with the necessary entry requirements to its programs, the College will continue to partner with various community colleges, universities, and organizations across the country to promote the Canadian Coast Guard as a meaningful career option.

Commitments:

- Develop a national recruitment strategy that includes plans to leverage technology as well as social media, and addresses diversity and inclusion objectives.

- Finalize the at-risk groups and key positions report and related demographic trends data, for inclusion in targeted recruitment, retention, and training strategies.

Objective 2: Training

As an operational organization, the Canadian Coast Guard is by necessity a training and learning organization. Training builds confidence and success, both personally and organizationally. It is key for some entry-level and many mid-stream positions, as is obtaining, maintaining, and retaining certain certifications. The Coast Guard's many levels of personnel, unique positions, and operational necessities require that the organization provide technical, skills-based, managerial, safety, and team training. This training is continuous and is delivered in many ways, including formal learning, experiential learning, computer-based training, and more. As a fundamental part of the 'life cycle management of our workforce', a continual focus on training products, quality assurance, and methodologies is crucial.

Commitments:

- Develop a strategy to address evolving skill sets associated with the operations of the new vessels and associated training requirements.

- Implement a national learning governance framework, reflecting the central role of the College.

- Create a library of training resources for employees to increase awareness around corporate commitments, including mental health, diversity, and inclusion.
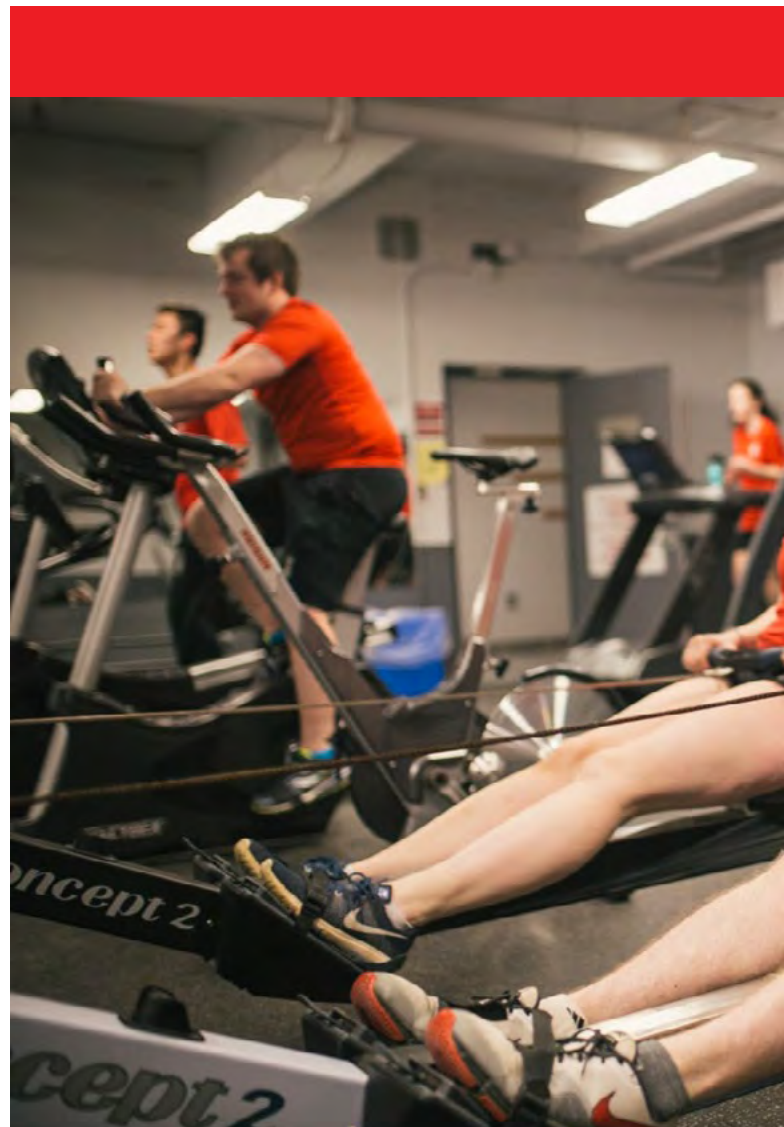
- Support employees in understanding the skills and knowledge required for their current roles and career aspirations through the use of tools such as on-the-job training programs, leadership development programs, and specialized training.

- Pilot a leadership training initiative to support employees in their development of key leadership competencies early in careers.

- Develop an integrated national training platform for all employees.

- Develop a concept of operations for a new centre for simulated learning.

Objective 3: Career Management

The Canadian Coast Guard values its employees and seeks to retain them by providing a rewarding and challenging career, and the People Strategy includes innovative ways to enable all employees at all levels to find their best fit and reach peak performance and satisfaction in their jobs. To support the continuous process of career management and development, 41 competency dictionaries covering every job in the organization have been constructed to enable any employee at any level to determine the competencies required of them in their current job and to view the competencies of all other jobs to which they may aspire. When the tool is launched later in 2021-22, employees will be able to update their learning plans with specific details in support of their short- and long-term aspirations within the Coast Guard. These competencies will also be used to support staffing tools, succession planning, and recruitment activities.

The Coast Guard has also created a career development team focused on support to all members as they seek to build their careers, with a focus on leadership development as well as talent management and succession planning based on a review of at-risk groups and key positions within the organization.

Commitments:

- Build an online competency-based career management tool for all seagoing and shore-based employees.

- Host career management learning events for employees.

Objective 4: Wellness

As a people-centred organization, the health, safety, and wellness of our members is the Coast Guard's top priority. Part of ensuring overall health and wellness is providing the necessary learning and support to enhance employees' personal resilience. Safety, morale, well-being, employee assistance, work-life arrangements, return-to-work processes, and awards and recognition programs are all essential elements of meeting the needs of our employees, our teams, and ultimately our organization. Put another way, readiness and retention of personnel for duty depends on how well employees are supported, and the recently created Personnel Directorate is working with the wellness teams in each region to ensure that these measures are strengthened and expanded.

Commitments:

- Develop a holistic wellness strategy, including the future of remote work/telework.

- Provide national access to mental health professionals and training to support Critical Incident Stress Management (CISM).

ships covers 243,000 km of coastline, the longest in the world, and 5.3 million km^2 of ocean and inland water.

Nowhere is the Coast Guard's approach to effective and efficient service delivery more evident than in the fleet. Most of our vessels are multitasked, and all are crewed with professionally trained mariners capable of delivering on-water programs. On any given day, for example, a vessel and its specialized crew can be optimized to support a science mission while at the same time deploying navigational buoys and serving as both a secondary search and rescue (SAR) vessel and a visible symbol of Canadian sovereignty.

This multi-mission operating philosophy offers significant economies of scope and provides the Coast Guard with a diverse fleet capable of operating in all marine areas of the country during the navigation season. The multi-tasked nature of Coast Guard operations also ensures that the organization has a coordination capability in place, on a 24-hour basis, to task the resources to the required area/program/priority.

While the fleet is undoubtedly Canadian Coast Guard's most recognizable asset, the Coast Guard also makes use of varied and complex physical shore-based assets to deliver services

Strategic Pillar 2: Our Assets

The Canadian Coast Guard owns and operates the federal government's civilian fleet. Located across the country, these assets provide a platform supporting a wide range of marine programs and services, and serve as a nationally recognized federal presence and symbol of service and safety. From coast to coast to coast, the fleet of red and white

to Canadians. The Coast Guard ensures their operation, maintenance, repair, and their eventual recapitalization to replace aging systems at the end of their useful service life. Doing so requires asset-management expertise that covers a wide range of functions from acquisition and maintenance to life extensions and replacement and ultimately disposal.

The Coast Guard must safeguard its assets in order to sustain its operational capabilities, fulfill its mandated programs and services, and meet Government of Canada priorities now, and in the future.

As we work to build new ships to replace our aging ones, we will be taking measures to extend the life of the current fleet through interim solutions, while also ensuring that the current fleet and the fleet of the future have the required shore-based infrastructure to support service delivery across Canada.

Renewing our assets means assessing many factors to ensure we get the requirements right, since new equipment and technology create the need or opportunity to develop new competencies and bring in new talent, as well as to look at innovation, including green technology. We need to broadly engage with stakeholders, assess outcomes of levels of service reviews and program readiness profiles, and set flexible future-looking requirements so that new assets are capable of meeting both current and emerging program and operational requirements. We must also take the opportunity to consider how our assets will be managed, operated and maintained throughout their lifecycle.

Objective 1: Delivering the New Fleet

Renewing the aging Coast Guard fleet has been a Government of Canada priority for more than a decade, and this priority will ensure the Coast Guard has the assets to deliver mandated programs and services to Canadians. With an average age of 39 years for the large fleet, Coast Guard's vessels are in need of replacement in order to meet increasing operational pressures and perform required statutory missions. With increasing shipping trade and the impacts of climate change already upon us, the demands on Canada's Coast Guard will continue to grow. A renewed Coast Guard fleet will maintain the confidence of Canadians – and the confidence of industries that rely on Coast Guard services to remain competitive. To make sure we have a flexible fleet capable of meeting future demands, we are setting flexible forward-looking requirements with a key principle of ensuring that, where feasible, ships can do a wide range of different missions.

Following the significant investments made by the Government of Canada, the Coast Guard now has fully funded plans in place for the entire large vessel fleet. Work is already well underway

to support full fleet renewal; funding announced in 2019 is being used to support procurement of up to 16 multi-purpose vessels, up to six program icebreakers, and two Arctic and offshore patrol vessels. This is in addition to advancing existing shipbuilding projects that were already part of the National Shipbuilding Strategy (NSS).

In addition, on May 6, 2021, Canada announced that it would move forward with the construction of two Polar icebreakers under the NSS. Both will have capacity and ability beyond that of our current largest icebreaker, the CCGS *Louis S. St-Laurent.* With their enhanced capabilities, these larger, more powerful ships will enable the Coast Guard to conduct year-round operations in Canada's Arctic. Their greater endurance will ensure they can operate at higher latitudes for longer periods, and will allow the fleet to better support Indigenous peoples and northerners, strengthen Arctic sovereignty, advance high Arctic science, and better respond to maritime emergencies. Canada's investment in the Polar icebreakers will have a lasting impact on the Canadian marine industry, its workers, and their suppliers. Through their construction and service, the Polar icebreakers will contribute to growing Canada's blue economy and create more opportunities in our coastal communities.

As the fleet renewal program advances, the Coast Guard will need to be well prepared to manage this program year-over-year. The multi-decade timeline associated with fleet renewal increases the complexity while also providing the Coast Guard with the opportunity to adjust goals and processes to ensure that we have the ships we need to carry out our work in the years to come. The objective is to continue to deliver new vessels currently under construction on schedule, while continuing to advance plans, design, and construction engineering on other vessels in the renewal pipeline.

Commitments:

- Continue to deliver new SAR lifeboats under contract.

- Advance design, construction engineering, and construction of a near shore fisheries research vessel.

- Advance construction and prepare for delivery of the offshore oceanographic science vessel.

- Finalize construction engineering efforts and start construction of both Coast Guard Arctic and offshore patrol vessels.

- Advance design and construction engineering for the multi-purpose vessels and the program icebreakers.

- Advance plans for a new class of mid-shore multi-mission vessels.

- Begin design engineering for the Polar icebreakers.

- Begin construction engineering and acquisition of long-lead items to prepare for the construction of the Polar icebreakers.

Objective 2: Operating and Maintaining the New Fleet

While building a ship can take several years, a ship will remain in service for several decades. Ship operations and maintenance are therefore integral elements of fleet renewal in order to ensure operational performance throughout the vessel life cycle. Over the planning period, we will continue to focus on developing strategies to address existing and future operating and maintenance gaps for the new fleet, as well as the evolving skill sets associated with the operations of the new vessels.

Appropriate shore-based infrastructure is necessary to support the efficient operation of Coast Guard ships, and to that end, supporting infrastructure is an important component of the fleet renewal strategy. Consequently, we are developing a Fleet Infrastructure Availability Verification program in order to establish what

Coast Guard's infrastructure requirements are and to assess the availability of current assets to determine how they will meet our existing and future requirements. Many of the current wharves and shore infrastructure sites are classified as critical and requiring attention before they can be safely used by Coast Guard ships. This program will verify and track the condition of the shore infrastructure assets as well as clarify necessary changes needed to meet future requirements.

A joint DFO Real Property/Canadian Coast Guard working group has been created to address requirements for future projects in support of shore-based infrastructure. Considering the shared responsibilities between Real Property as the custodian and the Coast Guard as the tenant, this working group will play a key role in guiding this program. Phase one of the assessment of wharf infrastructure to support a range of Coast Guard missions is currently underway.

performed to ensure the existing fleet remains operational until the new fleet is procured.

In 2019, the Government of Canada approved over $2 billion dollars in funding for VLEs to extend the operational life of more than 70 vessels over a 20-year period. The VLE program is working closely with fleet personnel to forecast VLE project timelines and ensure that the required scheduled work does not result in interruptions to operational programs and services. Other required non-VLE related vessel work packages are being incorporated into the VLE scheduled work periods in an effort to further reduce the time that vessels are out of service.

During this business plan cycle, the VLE program will continue to initiate new scheduled VLE projects using existing resources in order to meet the forecasted VLE timelines.

Commitments:

- Complete acquisition of one light icebreaker to assist with service continuity.

- Complete the conversion of the light icebreaker once acquired.

- Complete the conversion of the CCGS *Vincent Massey.*

- Continue to implement the comprehensive VLE program to increase both the reliability and availability of Coast Guard vessels. Planned work includes:

  - Complete the VLE of the CCGS *Kopit Hopson 1752*

  - Complete the bundled VLE of the CCGS *Cape Roger* and CCGS *Cygnus*

  - Complete the VLE of the CCGS *George R. Pearkes*

  - Complete the VLE of the CCGS *Amundsen* phase 1

Commitments:

- Undertake fleet renewal with a key principle of ensuring mission modularity.

- Commence operations on the CCGS *John Cabot* for the upcoming science season.

- Update the Coast Guard's multi-year maintenance plan to address any fleet maintenance gaps.

Objective 3: Vessel Life Extension

Older Coast Guard vessels are becoming more costly to maintain and are prone to be more frequently taken out of operation for unscheduled repairs, placing further strain on the existing fleet. To combat this growing operational risk, the Coast Guard is implementing interim measures, such as vessel life extension (VLE) work and acquiring used ships to sustain operational capabilities while VLEs are being

- Complete the VLE of the CCGS *Amundsen* phase 2

- Complete the VLE of the CCGS *Sir Wilfred Grenfell*

- Complete the VLE of the CCGS *Griffon*

- Complete the VLE of the CCGS *Sir Wilfrid Laurier*

- Complete the VLE of the CCGS *Louis S. St-Laurent* phase 1

- Complete the VLE of the CCGS *Louis S. St-Laurent* phase 2

- Complete the VLE of the CCGS *Louis S. St-Laurent* phase 3

- Complete the VLE of the CCGS *Louis S. St-Laurent* phase 4

- Complete the VLE of the 47' MLB class

Objective 4: Shore-Based Assets

The Coast Guard's non-fleet shore-based asset base may be less publicly visible, but these assets are no less important to realizing the "Safety first—Service always" motto of the Canadian Coast Guard. Such assets include fixed and floating aids to navigation, visual and aural aids, radar, radio, and terrestrial Automatic Identification System (AIS) networks, which are delivered through more than 300 remote installations. In addition, there are primary SAR stations and environmental response physical assets used for spill containment, collection, and storage.

Commitments:

- Determine the shore infrastructure requirements needed to support the future fleet's ship modularity concept.

- Update the Coast Guard's asset and inventory protocols and procedures to ensure the integrity of the information in the asset management systems.

- Implement the Coast Guard's asset and inventory protocols and procedures.

- Complete the implementation of the Oceans Protection Plan (OPP) SAR stations.

- Assess the condition of the Coast Guard's shore-based facilities required to support the future fleet.

- Complete the OPP environmental response equipment procurements.

- Complete the OPP Radar and OpNet projects.

- Initiate the full implementation of the lifecycle management program for environmental response assets.

- Complete the manufacturing of the four-season buoys (52 buoys) in the St. Lawrence sector.

- Renew the College's IT infrastructure to benefit students, increase bandwidth, and offer remote training over the internet.

- Add new operational oceanic forecast data from Environment and Climate Change Canada into the Coast Guard's Canadian Search and Rescue program system (CANSARP) to improve surface current prediction data.

By virtue of being a horizontal, multi-mission, multi-tasking organization, the Coast Guard is able to leverage the people, fleet, and shore-based assets that enable the delivery of our programs to provide a valuable contribution to other government departments and to new and emerging Government of Canada initiatives. We remain committed to implementing the OPP, supporting the Blue Economy and Greening Government Strategies, assisting partners in the science, environment, enforcement and security communities, and sustaining our partnerships with provincial, territorial, and municipal governments, and Indigenous partners, communities, and governments.

A blue economy is about harnessing the potential of our oceans, seas, lakes, and rivers — resources that Canada is privileged to have in abundance — to make life better for all. As the federal government works with valued partners and stakeholders to develop a comprehensive Blue Economy Strategy for Canada, the Coast Guard will develop a strategy to advance the modernization of marine navigation programs and safety services, including e-navigation/digital waterways initiatives, and guide investments in aids to navigation and marine communications and traffic services.

Strategic Pillar 3: Our Services

As the marine operating arm of the Canadian Government, the Coast Guard delivers a broad range of mandated maritime services to Canadians and those using our waters that are aimed at saving lives, enhancing maritime safety, supporting maritime commerce, and protecting the marine environment.

Under the updated Greening Government Strategy, the Government of Canada has committed to reducing its own operational greenhouse gas emissions to net zero by 2050. This means taking action to lower these emissions from its buildings, conventional fleet, national safety and security operations, procurement activities, as well as ensuring its operations and assets are resilient to a changing climate. The new strategy includes, for the first time, Canada's national safety and security (NSS) fleet, which directly implicates the Coast Guard.

The implementation of the Coast Guard's Arctic Region demonstrates our commitment to advancing reconciliation and working in collaboration with Inuit, First Nations, and Métis governments and organizations in the North. We are working collaboratively to identify the future of Coast Guard services in the Canadian Arctic as we continue to see important changes to the marine environment due to climate change, an associated increase in vessel traffic and international interest, and a longer Arctic navigation season.

Demands for our services continue to grow, and we are ever mindful of the need to listen to the various stakeholders we serve and assess how we respond to changing requirements and expectations within the context of our mandated

programs and services, including the provision of ships and helicopters in support of other federal departments' mandates. This requires exploring new ways of doing business with technological innovations such as e-Navigation and digitalization, and enhancing partnerships for program and service delivery.

Objective 1: Fulfilling Coast Guard's Contribution to the Oceans Protection Plan

Under the OPP, the Canadian Coast Guard received funding to advance a plan centering on four main priorities:

- Creating a world-leading marine safety system that improves responsible shipping and protects Canada's waters, including new preventative and response measures;

- Taking measures to address abandoned boats and wrecks;

- Strengthening partnerships and launching co-management practices with Indigenous partners, including building local emergency response capacity; and

- Investing in oil spill cleanup research and methods to ensure that decisions taken in emergencies are evidence based.

Over this business planning cycle we will continue to fulfill our contributions to the OPP, including strengthening Canada's MCTS centres by enhancing radar capacity and capability to monitor maritime traffic, which provides more complete and accurate maritime situational awareness and contributes to a stronger marine safety system.

With the aim of improving prevention of and response to marine pollution incidents, we will also continue implementing Alternative Response Measures (ARMs) in collaboration with key federal partners. This initiative – which is about expanding the Coast Guard's response toolbox – would

authorize the use of specific ARMs in Canada to respond to certain types of pollution events when there is likely to be a net environmental benefit. The legislative amendment process is underway, as is the development of a framework that will underpin science support for evidence-based decision-making on the appropriate use of ARMs. The interdepartmental ARMs team is working to launch public engagement on the initiative to raise public awareness on the science of ARMs and to address public questions on the appropriate use of ARMs in Canada.

The Hazardous and Noxious Substances (HNS) initiative has significant operational relevance and impact for the Coast Guard. In collaboration with federal partners, we will continue to work to strengthen Canada's marine safety system by establishing a national framework with key programming elements to improve preparedness and response for ship-source/mystery spill HNS releases. In parallel, we will begin training responders on HNS releases from a health and safety perspective.

We are also seeking to support increased participation of Coastal Nations and communities across the country in the marine response regime through development and implementation of a Communications Portal for Integrated Incident Response (CPIIR) to enhance collaboration during on-water emergencies, events and exercises, and provide a platform for standardized usage of the Incident Command System (ICS). As the Coast Guard continues implementing the regional response planning process developed through the OPP, CPIIR is intended to become the primary communication tool that will link the Coast Guard to its Indigenous and community partners, as well as other responsible authorities, through all stages of a marine incident. The Coast Guard will be engaging with regional Response Organizations to identify opportunities to support interoperability with systems that may be in place and consult with Indigenous partners on requirements.

Many of the projects under the OPP were conceived as a means of supplementing, enhancing or expanding existing services

and functions, while others were developed as pilots and prototypes. A major focus of this business planning cycle will be to assess the results of the projects to help inform next steps, including transitioning of some projects into ongoing, "in service" programs.

Commitment:

- Collaborate with partners to implement the multiple OPP and stimulus initiatives and investments.

    - Produce an annual activity report, provided at the end of fiscal year.

Objective 2: Major Resource Projects

The *Impact Assessment Act* and the *Canadian Energy Regulator Act* have established better rules for major resource projects aimed at protecting the environment and communities, advancing reconciliation with Indigenous peoples, and ensuring that sustainable projects can proceed. As a result of this strengthened federal governance, the Coast Guard now has an

important role to play in the process of assessing major resource project proposals when there is a marine shipping component.

We are currently monitoring or supporting the impact assessment and related processes for a number of proposed major resource and related infrastructure projects spread across each of the organization's four regions, such as the Laurentia Project, the Tilbury Marine Jetty Project, and the Roberts Bank Terminal 2 Project (RBT2). We continue to implement and support federal coordination and governance of the Trans Mountain Expansion (TMX) Project, which continues to be a federal priority.

A signature initiative under the TMX is the Co-Developing Community Response accommodation measure that seeks to address Indigenous groups' concerns about the risks of increased project-related tanker traffic to marine activities, the environment, and culturally important and sacred sites in their traditional territories. As part of this initiative, the Canadian Coast Guard identifies information, tools, and services with the objective to improve

information sharing with coastal Indigenous groups and response partners and help facilitate preparedness and response capabilities and safety for eligible coastal Indigenous groups.

Over the next few years, the Coast Guard will continue to be actively engaged in a number of impact and environmental assessment processes involving marine shipping associated with proposed projects or the potential environmental effects. This involves a range of work, such as assessing information requested from proponents about project impacts and proposed mitigation measures, providing expertise and examining the impacts to Coast Guard programs and levels of service, contributing to the whole of government responses, supporting Indigenous consultation processes, and identifying timely programmatic responses to mitigate project impacts and address impacts on Indigenous rights.

Commitment:

- Actively contribute to an NRCan-led whole of government TMX renewal approach, and continue to coordinate implementation of TMX.

Objective 3: Reviewing Levels of Service

The Canadian Coast Guard is committed to providing its many clients with the best services possible within its available resources.

Established levels of service (LoS) are a cornerstone of Coast Guard service delivery and provide our clients with a clear understanding of the services to be expected. The published LoS contribute to ensuring that services are delivered in a nationally consistent, integrated, predictable, measurable, and equitable fashion over time and under normal operating circumstances.

A multi-year initiative is currently underway to update LoS for the Icebreaking, Aids to

Navigation (AtoN) Waterways Management, MCTS, SAR, and Environmental Response (ER) programs. These reviews will enable us to update each program's LoS to better reflect changes in marine navigation technology and practices and provide an opportunity to understand current user/client needs. The review process will take place within the framework of internationally and nationally mandated commitments and include input from internal and external stakeholders, including DFO and other Federal departments and agencies who partner with the Coast Guard, United States Coast Guard service partners, industry, Indigenous partners, and the general public.

The LoS have undergone an internal review by Coast Guard program experts, with the next phase focusing on the external engagement phase of the review, which includes the use of a newly developed online survey tool to gather feedback from service users and the public. The

Coast Guard is seeking ideas and proposals surrounding ways to improve service delivery while balancing the needs and expectations of service users within available resources.

Commitment:

- Progress the LoS review for Coast Guard programs, including Icebreaking, Search and Rescue (SAR), Environmental Response, Marine Communication and Traffic Services (MCTS), Aids to Navigation (AtoN), and Waterways Management. The following steps will be undertaken:

    - Launch online survey;

    - Summarize feedback received;

    - Consult with internal and external stakeholders on proposed changes; and

    - Publish new LoS.

Objective 4: Program Readiness

Key to successfully meeting established LoS is maximizing Coast Guard program readiness, which is the organizational ability to meet program and service demands. As part of its LoS review, the Coast Guard is undertaking a readiness assessment to evaluate the potential gaps between current and anticipated future mission requirements and current resources, authority, capacity, and capability, and establish a readiness profile. This assessment will include people, assets, and governance.

- People readiness means having the right people, with the right competencies and experience, in the right place, at the right time and is a key component of our People Pillar.

- Asset readiness enables operational reach with operational sustainability and is a key component of both our Asset and Services Pillars.

- Separate from the people and assets, there are many intangible contributing factors to readiness, which govern both the relationships between, and the manner in which the other elements are used to drive program readiness. Strengthening national policies, processes, procedures, and other governance mechanisms to effectively support program readiness is a key component of our Governance Pillar.

Commitments:

- Develop a readiness profile for each response program (Environmental Response, Search and Rescue and Vessels of Concern) focusing on an assessment of the three principal elements of readiness (people, assets, and capacity demand) in order to identify gaps between current needs and anticipated future mission requirements.

- Develop a readiness profile for all marine navigation programs.

Objective 5: Modernizing Marine Navigation Program and Safety Services

In support of our program readiness objective, the Coast Guard will develop a modernization strategy for marine navigation programs and safety services. Following international trends to digitalize marine navigation tools and services, the Coast Guard will transform its service mechanisms to provide timely and standardized information to mariners such as safety, environmental data, ice and weather conditions, vessel traffic, channel depths, speed restrictions, and marine protected areas.

The modernization strategy will examine how to better deliver Coast Guard's core navigation programs — aids to navigation, waterways management, icebreaking, MCTS, and e-Navigation — including leveraging new technologies, using more sensor data, and advancing our ability to collect, process, synthesize and analyze data, and readily exchange it with our partners in an integrated and streamlined way. This will require integration of existing programs, systems, and tools to deliver seamless, efficient, and real-time services to maritime clients and federal, provincial, territorial, and Indigenous partners.

Part of this initiative will look at enhancing maritime domain awareness to ensure we are equipped to continue monitoring, detecting, identifying, and responding to incidents and events in Canadian waters and internationally, as well as to support the security and enforcement community's maritime domain awareness requirements.

The modernization initiative is comprised of four elements to effectively scope, plan and implement it:

1. Establish technical requirements and innovative solutions;

2. Engage and mobilize Coast Guard employees to develop, shape, and implement this initiative;

3. Develop and maintain strong and meaningful collaborations to ensure access to robust tools, data, and systems; and

4. Provide the necessary framework to shift to digitalization of services.

Digitalizing the Coast Guard's and other federal partner's services will make marine navigation information more readily accessible to those who need it - for marine safety and navigation, environmental and marine mammal protection, increased maritime domain awareness, and in support of local, regional, and national economies.

A roadmap has been created to lay out the path forward for all e-Navigation related sub-projects, a number of which have already yielded deliverables, including the e-Navigation portal now being fully operational. The Waterways Information System (WIS) and Automatic Identification System Application Specific Messages (ASM) are also in operation, with improvements planned and required to achieve full operational capability. The Collaboration Voyage Management System (CVMS) is funded and scheduled for delivery in Spring 2023. Other initiatives on the roadmap are either in design, in the planning stage, or in the implementation stage.

The Coast Guard is also undertaking efforts to update its "Système d'information de positionnement des aides" (SIPA) system, which was originally implemented 30 years ago and which supports the tracking and management of information related to more than 17,000 aids to navigation, design requirements, design and

review methodology, production of the List of Lights, Buoys and Fog Signals publication, and Notices to Mariners publication. The system software and interface have been modified over the years to maintain operability but are no longer compatible with current technologies and environments. The new system should have an architecture and design that would allow for exchange of information with other areas and systems specifications for aids to navigation, adhere to the International Hydrographic Organization's (IHO) requirements, and meet international shipping requirements in Canadian waters.

Considerable progress has been made to date with the next steps being to continue the efforts required to finalize the business requirements and work with other areas to establish a solution design that aligns with IHO standards, Canadian Hydrographic Services (CHS), and e-Navigation from a holistic marine navigation programs perspective.

Commitments:

- Develop a strategy to advance the modernization of marine navigation programs and safety systems including e-Navigation/digital waterways initiatives and guide investments in aids to navigation and MCTS.

- Complete the requirements analysis and preliminary design for renewing SIPA.

Objective 6: Enabling Innovation

It is critical to ensure that the Coast Guard can successfully adapt to a shifting operational landscape, meet future operational requirements, and ensure continuity of service. The Coast Guard is establishing a robust innovation and experimentation approach that will accelerate the adoption of effective technological advances within the organization, designed to address future capability and needs. The goal is to support the Coast Guard's long-term sustainable development and modernization aspirations and goals and ensure targeted investments towards tested technologies, systems, and processes, resulting in value for money for Canadians. The focus is on developing data and intelligence to support decision-making, drive strategic planning, and promote collaboration and coordination for innovation efforts across the Coast Guard and the whole of government, with investments in small-scale testing and experimentation guiding where larger investments can be made with greater confidence of success.

Innovating our program and service delivery where it makes sense to do so will increase our flexibility and capacity and provide stronger services to Canadians over the near and long term. We are deepening our efforts to foster innovation that provides practical solutions for a variety of known or emerging operational requirements that improve service delivery, reliability, efficiency, and emissions reduction.
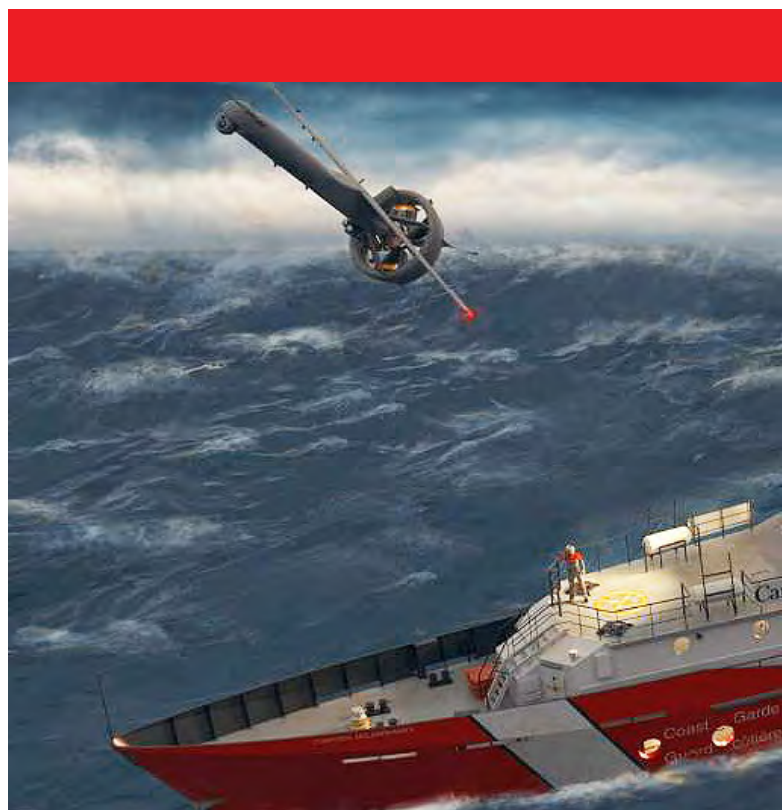
The Coast Guard is committed to reducing emissions and environmental impacts in the areas of: fuel procurement (including low-carbon fuels); fleet procurement (including energy-efficient platforms); operational efficiency; and net-zero research and innovation. The overarching goal driving these environmental considerations is Canada's target of net-zero emissions by 2050. The Coast Guard will work hard to contribute to the target.

Our contribution will come in various forms, including through a variety of innovative projects, research groups and task forces, and assessment of alternate power, which may contribute to the implementation of several key Government of Canada initiatives, particularly the United Nations Paris Agreement, the Federal Sustainable Development Strategy, and the Greening Government Strategy. A study on the operational impacts of liquefied natural gas (LNG) has been completed and is now in review. A fulsome study on low-emission fuels is in the planning stages.

Implementation of autonomous vehicles (including air, surface, and sub-surface) technology is a logical operational progression for the Coast Guard due to the ability of these systems to perform long-endurance missions in challenging environmental conditions. Their use increases personnel safety, reduces our carbon footprint, and allows for mission performance in conditions that may not otherwise be possible. The Coast Guard has several autonomous vehicles projects underway, including near-shore and off-shore operations supporting SAR, conservation and protection, maritime security, and icebreaking. In each case, coordination with the regulatory bodies is underway to ensure mission completion, and to better inform regulators of Coast Guard requirements. This year will see trials of a multi-sensor, rapidly deployable vertical take-off and landing drone surveillance system to be deployed on select Coast Guard vessels to test surveillance ranges for SAR and iceberg tracking missions.

Commitments:

- Develop a Coast Guard plan to contribute to the targets set out in the Greening Government Strategy. The following activities will be undertaken:

  - Support the development of a decarbonization plan; and

  - Support the collaborative work around Greening Government Fund projects.

- Continue to engage externally across a spectrum of areas in support of long-term sustainable development and climate change mitigation and adaptation opportunities.

- Continue to build capacity for internal experimentation, including:

  - Improve oversight and accountability of the Coast Guard's Innovation program by implementing a three-year planning horizon to identify, vet, and sequence innovation initiatives supported by detailed workplans and reporting.

  - Completion of an Artificial Intelligence (AI) readiness study involving multiple Coast Guard areas, designed to identify the current state of Coast Guard's capacity to potentially onboard AI and machine learning technologies over the next decade.

performance objectives while considering stakeholder interests. The Coast Guard believes that good governance is participatory, consensus-oriented, accountable, transparent, responsive, effective and efficient, equitable, and inclusive.

The organizational changes announced for national headquarters in 2019 have made the Coast Guard a more unified and stronger national institution, as did the creation of the Arctic Region. During this business planning cycle we will continue to strengthen national policies, processes, procedures, and systems to enhance decision-making, preparedness, delivery, and accountability, and enable our headquarters and four regions to function smoothly and seamlessly as one united Coast Guard.

Stakeholder interests are at the forefront of our decision-making, and strengthening stakeholder engagement both internally and externally will continue to be a priority in all our governance undertakings.

Objective 1: Strengthening National Policies, Processes, Procedures and Systems

The Coast Guard is a response organization and as such our fleet and regional front-line personnel often need to

Strategic Pillar 4: Our Governance

The international standard on social responsibility, ISO 26000, defines organizational governance as "a system by which an organization makes and implements decisions in pursuit of its objectives." Governance systems include the management processes designed to deliver on

take quick action in the field. Having nationally consistent policies, standards, methods, procedures, and systems provides clarity around decision-making, enhances the effectiveness of program and service delivery across the country, and provides a framework that fosters future-looking strategic thinking. This national consistency facilitates the development of internal planning capabilities that in turn ensures we remain well-positioned for current and future implementation.

Consistent with the Treasury Board of Canada Secretariat's Policy on Results, the Coast Guard has established a governance structure to promote results-based decision-making and clear accountabilities. Internal executive board committees and sub-committees have been established across all Coast Guard directorates and regions, all of which report to the Canadian Coast Guard Management Board, which is the senior advisory body to the Commissioner.

The need for a solid governance framework extends to external partnerships as well. As an example, the Response Directorate is currently engaged in the development of a Canadian Coast Guard Mass Rescue Operations – Maritime (MRO-M) framework document, which is based on information collected over years of consultation with internal programs and external partners, including the Canadian Armed Forces (CAF), and which defines the roles and responsibilities in the event of a mass rescue operation. The framework also seeks to further delineate the communication intervals and pathways required between the regions, national headquarters, and other stakeholders, to allow Coast Guard senior management and staff to carry out the swift and decisive actions needed in an incident of this scope. There is a need for common language and a mutual understanding of roles, responsibilities, intent, and reporting lines internally for the Coast Guard, and between

the Coast Guard and other SAR partners and stakeholders during a mass rescue operation, and to align the plan with existing large-scale incident plans within CAF, other federal SAR partners, regional plans within Coast Guard, and provincial consequence management plans. The first draft of the framework document has been completed and is currently being reviewed by other Coast Guard programs and SAR partners prior to validating the document through exercise and finalizing it. This will provide Coast Guard staff at the regional and headquarters levels with a better understanding of the reporting requirements and intervals for effective actions during a mass rescue operation in the maritime domain and align Coast Guard and CAF operations and expectations when responding to large-scale SAR incidents.

The Canadian Coast Guard is a data-heavy organization, and the successful two-year Business Intelligence/Business Analytics (BI/BA) pilot project showcased the value of optimizing the use of that data to guide decision-making. The emergence of low-cost self-service tools make business analytics possible without significant infrastructure investments, and while the pilot focused exclusively on using integrated business management services data, it clearly demonstrated that services to Canadians could benefit immensely from automation, predictive analysis, and artificial intelligence applications to Coast Guard programs.

A further BI/BA project was recently launched that focuses on seagoing personnel data. As a result, the Canadian Coast Guard is now equipped with internal, on-demand dashboards showcasing demographics that are automatically updated daily to help inform decision-making. These dashboards have provided insight into questions regarding crewing the fleet of the future, such as employee retention, costs of leave banks, training strategies, and retirement projections.

Given the advantages of enhanced BI/BA, during the cycle of this business plan, the Coast Guard will be furthering its BI/BA strategy with a view to:

- Digitize business processes: streamlining, digitizing, and automating business processes to meet the expectations and reap the benefits of new data policies;

- Data enablement: making data that Coast Guard generates or uses accessible, understandable, actionable, and secure;

- Solutions enablement: transforming the data into valuable business intelligence or predictive analytics to support program decision-making;

- Training and support: providing training and support to employees on general data literacy as well as more technical training on BI and analytics; and

- Data strategy and governance: Creating and leading the implementation of a Coast Guard data and analysis strategy to complement the departmental strategy.

Departmental Initiatives

As part of a departmental initiative, the Coast Guard has replaced its financial system with the Government of Canada standard SAP which went live in April 2021. This will enhance many of the processes the Coast Guard uses daily, including procurement, payments, managing assets and inventories, and developing budgets, and will provide valuable support to our strategic decision-making, as well as enable statutory reporting.

We are also moving ahead with GCdocs, the official electronic document and records management solution used to create, collect, and preserve information classified up to the level of "Protected B". As an enterprise-wide platform, GCdocs facilitates the digital approach to the way Coast Guard works, replacing the vast network of shared drives with a single repository. Accessed via both desktops and mobile platforms, GCdocs fully integrates with the Government of Canada Correspondence Management System, MS Office (including email), SAP, and GCCase, and enables the digital Access to Information and Privacy (ATIP) process.

The Coast Guard, in keeping with the rest of DFO, is also working towards adopting accrual budgeting as a mechanism to ensure long-term capital funding to support the investment and lifecycle management of all its asset portfolios. The adoption of accrual budgeting — which could occur during this business plan cycle — would position the Department to leverage its
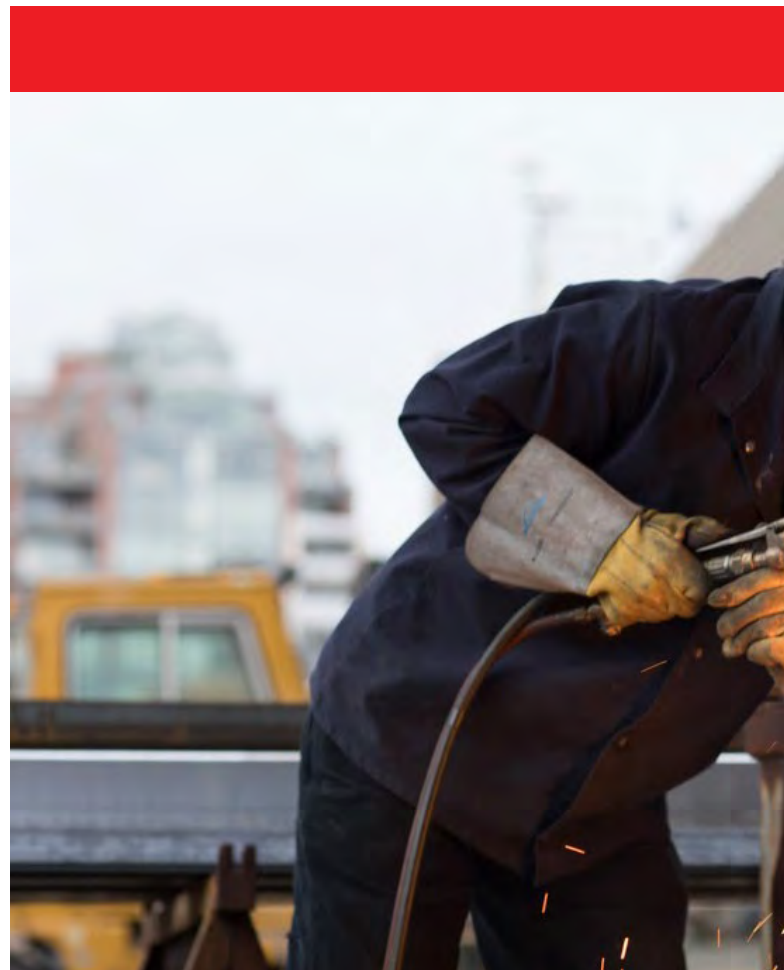
asset portfolio to better support the delivery of Government priorities across the spectrum of programs and services.

Commitments:

- Review and update key documents including interdepartmental Memoranda of Understanding (MOU) on response collaboration with key partners and the National Marine Spills Contingency Plan:

    - Transport Canada/Coast Guard MOU – Environmental Response (ER) Annex.

    - Environment and Climate Change Canada/Coast Guard MOU.

    - DFO Science/Coast Guard ER MOU.

- Complete the development of the Vessels of Concern program as identified under OPP and initiate the transition into service starting April 2022.

- Define the Coast Guard incident response and incident management strategy by updating the Incident Command System (ICS) Plan for Incident Management, including amongst other aspects, greater clarity for command and control structures to effectively respond to maritime incidents.

- Develop an ICS/Incident Management training strategy, building on the successes of the ICS training approach during ICS implementation to ensure enhancements are made to ICS/Incident Management training in both official languages.

- Develop a strategy to enhance continuous improvement/lessons learned processes and procedures to inform future exercises and training activities, thereby improving mission readiness.

- Optimize the helicopter program and develop a strategy and concept of operation for the inclusion of Unmanned Aerial Vehicles (UAVs) in Coast Guard operations.

- Work toward a more predictable costing model that incorporates a fixed salary cost for each vessel.

- Initiate a comprehensive MCTS workload analysis following the program's modernization and consolidation projects and explore additional force development opportunities for the MCTS program including innovative solutions and options to training.

- Develop a Canadian Coast Guard-specific Agency Risk Profile that aligns with the Agency's Integrated Business and Human Resources Plan strategic pillars and objectives.

Objective 2: Engaging with Industry and Other Coast Guard Stakeholders

The Coast Guard serves many different stakeholders, with varied, and sometimes competing, interests. Key stakeholders include:

- Fisheries and Oceans Canada;

- Other government departments;

- Other levels of government;

- International organizations;

- Indigenous partners;

- Coastal communities;

- Industry;

- The international shipping community;

- Academic institutions such as Cape Breton University, which grants degrees to Canadian Coast Guard College graduates;

- Non-Governmental Organizations (NGOs);

- The Canadian Coast Guard Auxiliary;

- The United States Coast Guard; and

- The general public.

The Coast Guard collaborates internally as well as externally with stakeholders through several engagement mechanisms in order to advance the Coast Guard's mandate and Government of Canada and international priorities.

To strengthen the Coast Guard's internal capacity to manage and benefit from engagement with industry, the Coast Guard will implement an Industry Engagement Strategy in the coming year. The strategy outlines a series of objectives to increase the Coast Guard's collective knowledge of the marine industry, improve prioritization of partnerships and activities, enhance information flow within the Coast Guard, and more effectively engage partners and networks. The establishment of an industry engagement working group and an annual process to set and review priorities will facilitate a more coherent, coordinated approach to our relationships with industry.

One of the main mechanisms for industry engagement is the National Marine Advisory Board (NMAB), which serves as a permanent forum for discussion between the Commissioner of the Canadian Coast Guard and Canada's shipping industry. Discussion is focused on the needs of marine transportation, the strategic plans and priorities of the Coast Guard, and the services the Coast Guard provides to its clients. NMAB meetings are held biannually in the spring and fall and are co-chaired by the Commissioner and an elected industry representative. NMAB currently has two subcommittees, which focus on Marine Navigation and e-Navigation.

The Regional Marine Advisory Boards (RMABs) bring together Coast Guard and industry to discuss issues of mutual concern related

to operations, planning, and Coast Guard services. The boards meet in the spring and fall and are co-chaired by the regional Assistant Commissioners and an industry representative. The regional boards are the Western Marine Advisory Board, Arctic Marine Advisory Board, Great Lakes Marine Advisory Board, Maritime Seacoast Advisory Board, and the Newfoundland and Labrador Advisory Board. The Coast Guard also attends meetings of the Groupe conseil maritime as observer.

The Coast Guard also actively engages with industry through the national and regional Canadian Marine Advisory Council (CMAC), a consultative body coordinated by Transport Canada (TC) that represents parties with an interest in shipping, navigation, and marine pollution matters. Through its standing committees and working groups, CMAC advises TC on matters related to its mandate, including regulatory and legislative issues, operations, and services. National-level CMAC meetings are held biannually, with five regional CMACs organized with varying levels of engagement with the Coast Guard.

The regulatory framework that supports Canada's marine safety regime is built on international and domestic agreements and commitments — all focused first and foremost on preventing accidents from occurring. In addition to supporting Transport Canada in the work of CMAC and the International Maritime Organization (IMO), the Coast Guard takes a lead role at the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) by contributing to the development of international standards for marine aids to navigation and related services through active participation at its four technical committees and supporting sub-groups.

The Coast Guard participates internationally in three regional coast guard fora and one global forum, namely: the Arctic Coast Guard Forum (ACGF), the North Atlantic Coast Guard Forum (NACGF), and the North Pacific Coast Guard Forum (NPCGF), as well as the Coast Guard Global Summit (CGGS). These multilateral fora bring together coast guard and maritime organizations from relevant regions to share expertise and best practices in support of a safer and more secure marine environment.

The Coast Guard is currently advancing three bilateral cooperation plans — the Danish Joint Arctic Command (JACO), the Norwegian Coastal Administration (NCA), and the Norwegian Coast Guard (NoCG). These cooperation plans, which are national in scope, are the result of previously agreed-upon initiatives and commitments made by the Commissioner to international partners and were developed based on extensive and comprehensive consultations throughout the organization.

The Canada-United States Coast Guard Summit is an annual meeting between the Canadian Coast Guard and the USCG that brings together representatives from across both organizations

to discuss issues of mutual importance. A cornerstone engagement for the Coast Guard, the summit is a unique opportunity to strengthen communication and cooperation at the senior, operational, and regional levels. Nationally, the two coast guards work closely throughout our shared waterways, including shared icebreaking duties on the Great Lakes; collaboration in marine environmental emergencies (guided by the Canada-US Joint Contingency Plan); SAR operations; vessel traffic management; and AtoN management.

On behalf of Canada, the Canadian Coast Guard is now chairing the Arctic Council's Emergency Prevention, Preparedness and Response (EPPR) Working Group from 2021 to 2023 and coordinates the participation of Canadian technical experts from eight federal departments and agencies. This is one of six working groups of the Arctic Council, which is the leading intergovernmental forum promoting cooperation, coordination, and interaction among the Arctic States, Arctic Indigenous peoples, and other Arctic inhabitants on common issues related to sustainable development and environmental protection. The EPPR Working Group's work to address gaps, prepare strategies, share information, and enable exercises for large-scale oil spill and SAR operations will be advanced via three expert groups – Marine Environmental Response, Radiation, and Search and Rescue.

In support of the Federal priority of keeping Canadians and Canadian interests secure, both at home and abroad, the Coast Guard is also strengthening its maritime security capacity-building assistance to developing countries. Coast Guard skills in maritime domain awareness empower partner nations to detect, monitor, and ultimately respond to activity in their waters, and information sharing allows for a multinational response and prevents maritime insecurity from spreading. These efforts are complemented by SAR training, enabling partner nations to mitigate heightened threats to human life stemming from illicit activity. Multinational

capacity-building deployments are supported by strategic international fora, with the value of our international presence and expertise now recognized by Global Affairs Canada, who have added Coast Guard to positions with the G7++ Friends of Gulf of Guinea, G7 Roma Lyon Group, and IMO working groups. These fora provide an opportunity to influence regional maritime codes of conduct in East and West Africa and advance Coast Guard's reputation as a credible, reliable security partner. Future engagements — strategically, bilaterally, and multilaterally — are becoming available as the Coast Guard continues to grow this influence internationally, with the goal of establishing this as an enduring program.

With almost all Coast Guard sectors engaging in international activities, the International Engagement Strategy (IES) is intended to identify coherent priorities and deliverables to guide and coordinate the organization's engagement with international partners towards activities that provide the most value to the Coast Guard. The IES represents the first organization-wide international priority-setting exercise and will enable us to pursue a more strategic and integrated departmental approach to international engagement. The IES will also support situational awareness of international activities across sectors, articulate specific opportunities to pursue international engagements that support our mandate and priorities, and highlight tools available to support international engagement.

Consultation, engagement, and co-management are at the heart of the Government of Canada's agenda and the Canadian Coast Guard's governance framework. It is therefore vital that we have the capability to provide an accurate account of stakeholder encounters and relationships with various stakeholders. The partners database, which is rolling out this year, is a client relationship management tool created to record stakeholder engagements and enable us to move from planning to managing stakeholder relationships in an

informed and efficient manner, ensuring continuity and relevance in its approach. It will also enable us to monitor and track progress against the International and Industry Engagement Strategies.

Commitment:

- Continue to engage Coast Guard stakeholders to inform Coast Guard's priorities so we continue to better serve our clients.

Objective 3: Engaging with Indigenous Partners

Meaningful relationships and dialogue with Indigenous groups are part of the foundation of various Coast Guard fora, particularly regional governance structures that promote ongoing collaboration to exchange information and discuss shared objectives.

The Coast Guard has made progress in supporting self-determination, improving service delivery, and advancing reconciliation. To accelerate and build on the progress we have made, we will continue to engage with Inuit, Métis, and First Nations partners to advance Canada's reconciliation agenda through practical partnerships with Indigenous peoples, and by enhancing capacity to support safety and security in Canadian waters.

Collaboration with Indigenous and coastal communities is key to strengthening marine safety and protection of the marine environment, including concerns raised in relation to proposed major resource and infrastructure projects. Our support to the Indigenous Community Boat Volunteer Pilot program and implementation of Canada's first Indigenous-led Canadian Coast Guard Auxiliary clearly demonstrate our commitment to increased participation of Indigenous communities and other partners across the country in marine incident response.

The Coast Guard has developed an evergreen Reconciliation Action Plan (RAP) pursuant to the larger DFO-Coast Guard Reconciliation Strategy and the Government of Canada's mandate to advance reconciliation. The objective of the RAP is to continue to build internal capacity to advance reconciliation through the Minister's mandate of helping to advance self-determination, close socio-economic gaps, improve service delivery, and eliminate systemic barriers facing Indigenous peoples in matters related to fisheries, oceans, aquatic habitat, and marine waterways. The Coast Guard's specific contributions to these endeavors involve building meaningful partnerships with Indigenous communities and finding new and innovative ways to engage with Indigenous partners to increase Indigenous involvement in core Coast Guard business lines and improving peripheral business connections through mutually beneficial agreements, procurement, and recruitment and retention initiatives. The RAP identifies concrete actions that contribute to creating an inclusive and welcoming work force and responds to the Clerk's Call to Action on anti-racism, equity, and inclusion in the federal public service.

The Coast Guard RAP highlights commitments made by all directorates and regions to both build our internal capacity to strengthen relationships with Indigenous partners as well as to support the relationships themselves. Priority commitments will be chosen annually based upon review of any mandate updates and alignment with Coast Guard's Strategic Framework and the Management Board-approved sequencing view, which identifies all Indigenous-focused priorities for the year.

For fiscal year 2021-2022, the Coast Guard's three priority commitments feature increasing procurement of Indigenous products and services, prioritized recruitment of Indigenous staff, and cultural awareness training for staff.

Commitments:

- Collaborate with Indigenous and coastal communities to address their marine safety and environmental response concerns, including those associated with proposed major resource and infrastructure projects, (e.g., implementation of TMX accommodation measures).

- Support negotiations of reconciliation agreements, arrangements, and frameworks.

- Create a Strategic Framework to guide how Coast Guard will continue to provide ongoing collaboration with Indigenous partners.

- Through relevant Coast Guard governance structures, ensure that Indigenous concerns and interests are widely understood across the agency and increasingly embedded in policies, programs, and activities.
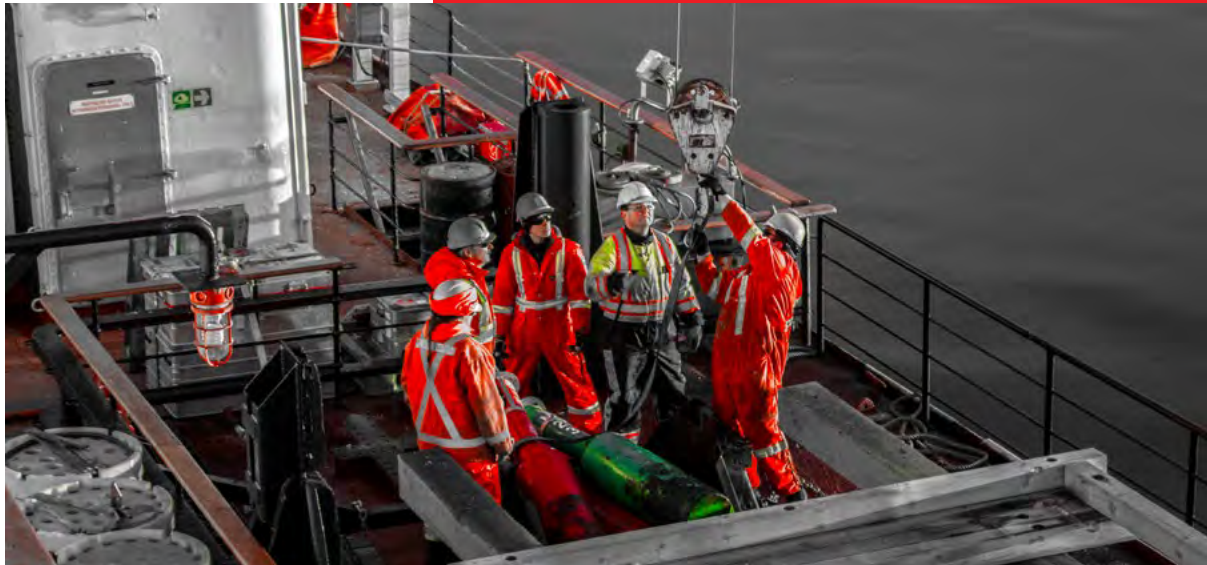
Objective 4: Supporting the Implementation of the Arctic Region

In a move to put Inuit, First Nations, and Métis in the North at the heart of decision-making in the Canadian Arctic, DFO and the Canadian Coast Guard created a new region focused specifically on the Arctic in 2018. This region is inclusive of all Inuit Nunangat regions in Canada, as well as the remainder of the Northwest Territories, and Hudson Bay and James Bay and the communities that reside along their shores.

One of the priorities of the Arctic Region is to advance reconciliation with its Inuit, First Nations, and Métis partners. To implement this mandate the Coast Guard is working with its partners to identify priorities, and take a distinctions-based approach to better align and enhance program and service delivery in the North.

The Canadian Arctic constitutes nearly half of Canada's landmass and a large portion of Canada's coastline, and is home to more than 120,000 inhabitants, the majority of whom are Inuit, with a smaller number of First Nations and Métis peoples. In support of Arctic community safety and protection of the Arctic marine environment, the Coast Guard works closely with partners to lead and support response in a variety of emergency situations. Demand for Coast Guard services in the Arctic and risk in the marine environment are increasing significantly due to melting ice, increased vessel traffic, increased population and local boating activity, and growing international interest in the Arctic.

As part of the priorities of the Inuit Crown Partnership Committee, the Coast Guard is establishing a governance framework in collaboration with Inuit organizations and governments to support program and service delivery priorities in Inuit Nunangat. The Coast Guard is also working in collaboration with Inuit, First Nations, and Métis organizations and government to advance the priorities under the Arctic and Northern Policy Framework, including safety and security in the Arctic.

Commitments:

• Develop a Coast Guard Arctic Strategy.

• Collaborate with Inuit organizations and government to support the implementation of service delivery priorities in Inuit Nunangat in alignment with the Inuit Nunangat Policy, under the Inuit-Crown Partnership Committee.

Budget: Daily Operations and Long-Term Investments

The Canadian Coast Guard's budget is determined annually. The Agency's budget of $1.775 billion (for 2021-2022) includes $779.54 million for day-to-day operations. These funds are primarily allocated to regions to deliver front line services to mariners in lakes, rivers, and ocean areas, as well as to grants and contributions to eligible parties to build capacity and support service delivery.

The remaining amount includes a capital budget of $950.27 million, which supports the Coast Guard's five-year integrated investment plan. This includes investments in:

New ships

Vessel life extensions

Refurbishing and replacing infrastructure, equipment, and systems

Implementing initiatives under the Oceans Protection Plan

Supporting major projects such as the Trans Mountain Expansion (TMX) Project
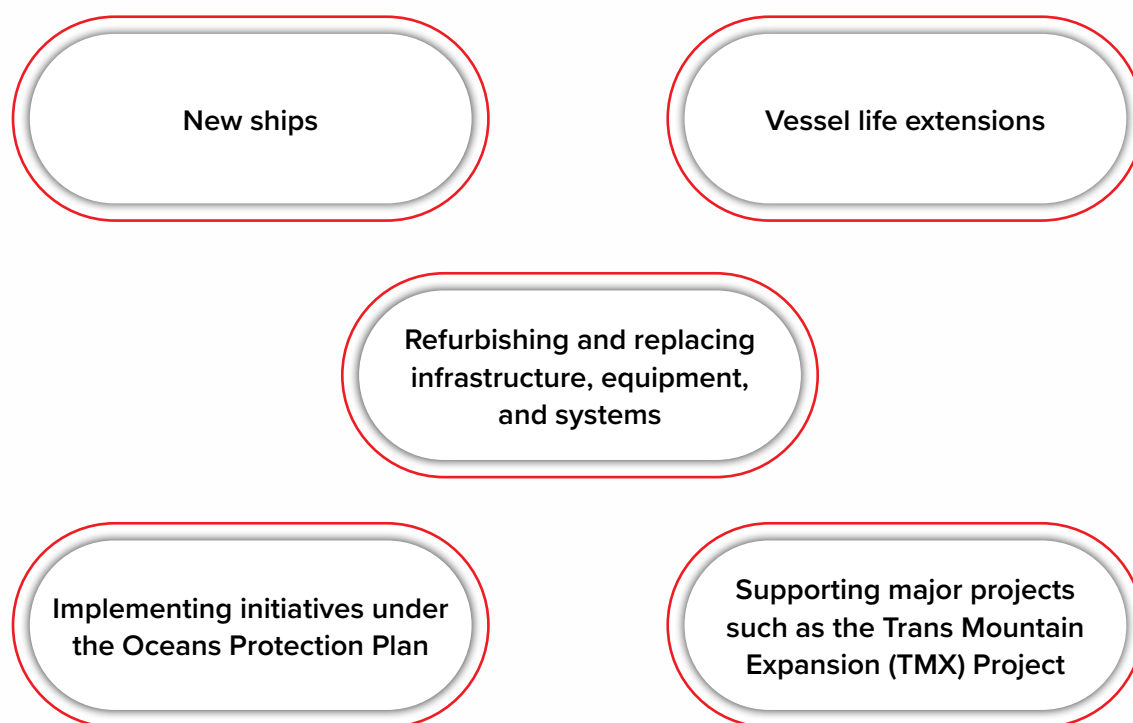
See Annex D, for additional information on Canadian Coast Guard financials.

Structure

The Coast Guard is a Special Operating Agency – the largest in the Government of Canada – within Fisheries and Oceans Canada.

The Coast Guard is led by the Commissioner of the Canadian Coast Guard who is supported by two Deputy Commissioners within headquarters (Shipbuilding and Materiel, and Operations), the Director General, Personnel, as well as Assistant Commissioners for each region (Atlantic, Arctic, Central and Western).

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                    Commissioner
                 Canadian Coast Guard


  Deputy Commissioner              Deputy Commissioner
Shipbuilding and Materiel              Operations


 Assistant Commissioner           Assistant Commissioner
    Atlantic Region                   Western Region


 Assistant Commissioner           Assistant Commissioner
    Arctic Region                     Central Region


   Director General
      Personnel
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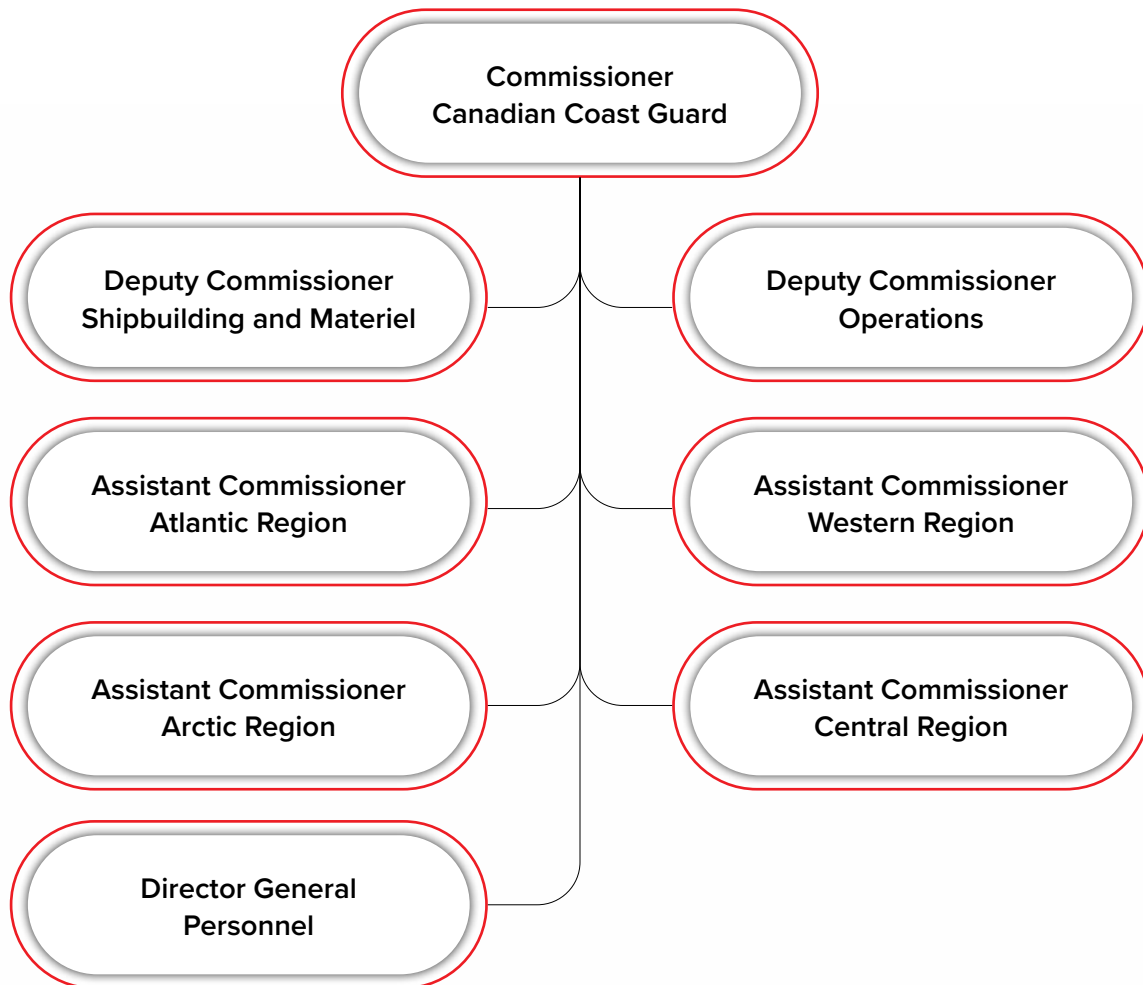
The organizational structure of the Canadian Coast Guard
and the senior management reporting relationships.

Coast Guard Sectors, Directorates, Programs and Regions

The Coast Guard organization includes its headquarters in Ottawa, Ontario, and four regions.

Headquarters is responsible to provide functional leadership to the regions in support of program delivery to ensure consistency in the design and delivery of programs nationally.

Regions are responsible for regional program delivery, in support of national program objectives, including the building and management of relationships with partners and other stakeholders, and the provision of regional expertise in the design and delivery of national programs. While all four regions deliver core Coast Guard programs, the focus in each region is different, depending on climate, geography, and client needs.

Operations Sector

Operations Sector Structure

The Operations Sector, headquartered in Ottawa, includes three Directorates: Fleet and Maritime Services; Response; and Innovation, Planning and Engagement.

The Fleet and Maritime Services (FMS) Directorate has national functional authority for the fleet, operational planning, maritime security — including maritime domain awareness, support to security partners, maritime cybersecurity, and international capacity building — and marine navigational programs, which includes management of aids to navigation, marine communications and traffic services (MCTS), and icebreaking.

The Directorate focuses on: developing operational requirements for the new classes of ships identified in Coast Guard's fleet renewal plan; ensuring operational capability and readiness of Coast Guard's fleet of ships and helicopters; ab-initio training, a national program that benefits all regions in recruitment for MCTS centres; stabilizing the work on e-Navigation within the Coast Guard; initiating a comprehensive MCTS workload analysis following the program's modernization and consolidation projects; progressing the levels of service review for Coast Guard's Icebreaking program; and the modernization of marine navigation and safety services, and implementing the Coast Guard's involvement in national maritime security efforts.

The Response Directorate has national functional authority for the response programs: Environmental Response (ER), Maritime Search and Rescue (SAR), and the implementation of the new *Wrecked, Abandoned or Hazardous Vessels Act* that aims to address Vessels of
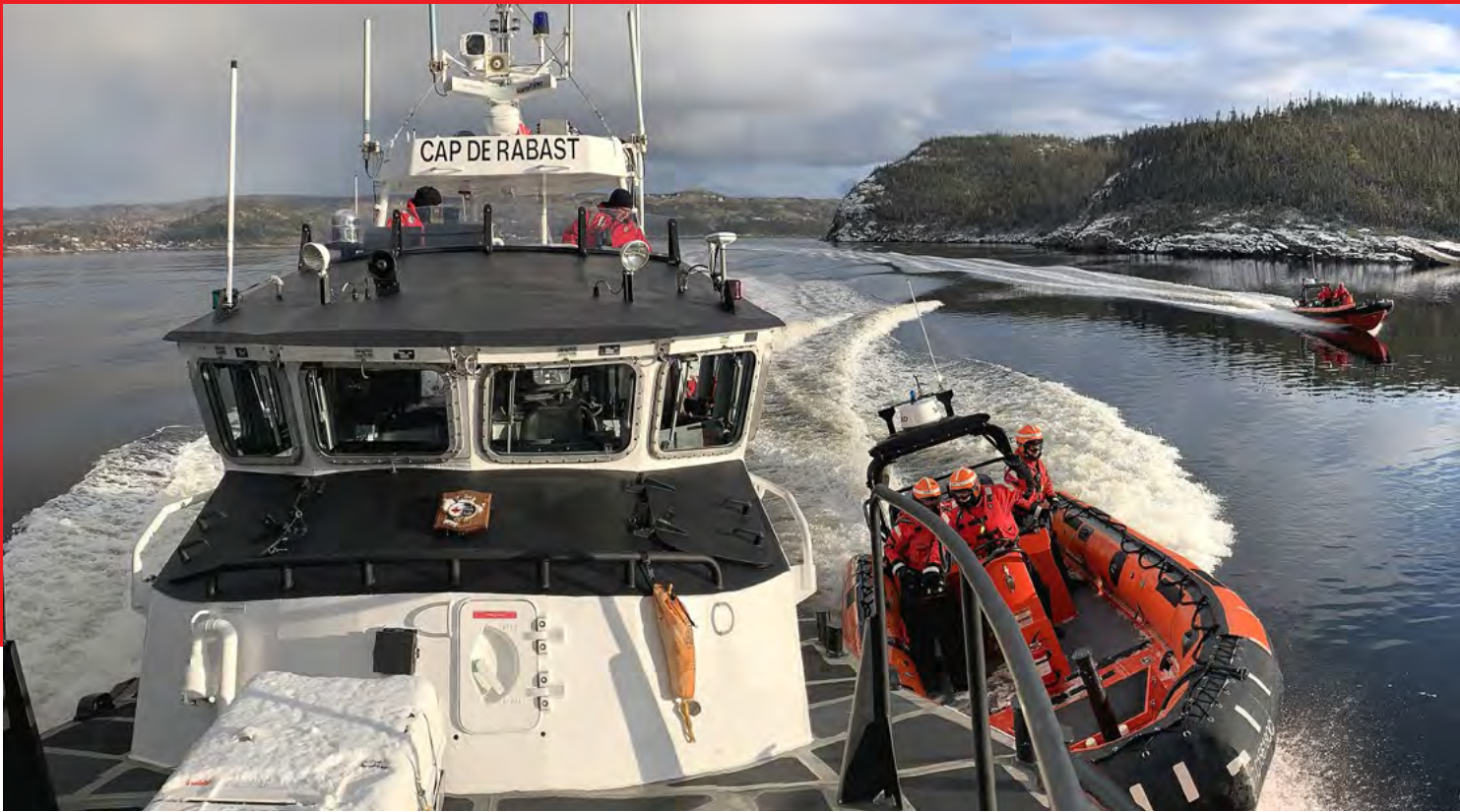
coordination of the Canadian Coast Guard's strategic and horizontal planning, which encompasses budget planning, corporate and performance reporting, and risk management. It also leads internal communications and public events, external engagement with domestic and international partners and service users and Indigenous partners, and innovation initiatives, both technological and process oriented.

Operations Sector Programs and Services

The delivery of Canadian Coast Guard operational programs and services involves seamless collaboration between the individual program centres of expertise and the Fleet Operational Capability program. The result of this collaboration is the optimal delivery of programs and services on the water using Coast Guard vessels, air cushioned vehicles and small craft, and in the air and on land using Coast Guard helicopters. It falls to the individual program areas to determine the service user needs, the required geographic coverage, and the appropriate prioritization of the service delivery. The front-line delivery of services on the water or in the air is the responsibility of the fleet.

To accomplish this, a key priority of the sector is to ensure that Coast Guard has the right people, equipment and training to meet growing expectations and respond effectively.

To build on that commitment, the Coast Guard must continue to strengthen the strong relationships we have developed with our partners to ensure interoperability and a common, consistent approach, both domestically and internationally. Domestically, this is accomplished through a variety of partnerships, including DFO Science and Conservation and Protection, Transport Canada, National Defence, the Royal Canadian Mounted Police (RCMP), the Canada Border Services Agency, and Environment and Climate Change Canada. Our Marine Security Operations Centres (MSOCs) are

Concern, and is the organizational lead on Incident Management. The Directorate focuses on: the safety and well-being of employees; stabilizing their organizational structure; developing and strengthening relationships within Response, the Coast Guard, external partners and other government departments; supporting the development/operationalization of the Arctic; advancing an emergency management structure within the Coast Guard; research and development to optimize the way we do business; and continuing to support, develop and implement Ocean Protection Plan initiatives.

While the Coast Guard regions deliver the Response and Fleet and Maritime Services programs, the headquarters Response, and Fleet and Maritime Services teams support them through strategies and problem solving to support effective and efficient delivery.

The Innovation, Planning and Engagement Directorate provides national leadership for the consistent integration, management, and

representative of our collaborations with other departments and agencies, where we work together to share information and intelligence in support of a whole-of-government response to potential marine threats and incidents. Internationally, the Coast Guard is enhancing its leadership at both the Arctic Council via the Emergency Prevention, Preparedness and Response Working Group and at the various Coast Guard fora.

The emergence of the global COVID-19 pandemic has illustrated the importance of preparing our organization for a dynamic, unpredictable future. This includes developing scenarios for fleet needs in 10, 20, 30 years and beyond. To do that, Coast Guard Operations will continue to evolve as an agile, innovative sector aligned with operational requirements and practical applications.

These complex, uncertain times require an unprecedented level of leadership, cooperation, and forethought. Now, and in the coming years, Coast Guard Operations will take proactive, decisive action to address whatever challenges lay ahead.

Fleet Operational Capability

The Fleet Operational Capability program includes fleet operations, fleet management, and the staffing of fleet personnel. The program ensures that certified professionals safely operate vessels, air cushioned vehicles, helicopters, and small crafts and are ready to respond to on-water and marine-related needs.

The program is guided by a number of international conventions and domestic marine-related regulations such as the International Safety Management Code,
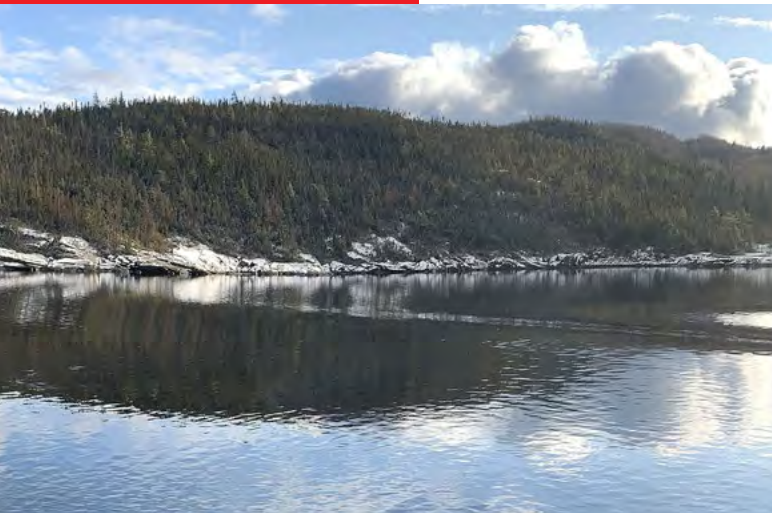
the International Ship and Port Facility Security Code, and the International Labour Code (applicable to seafarers).

Search and Rescue

The Canadian Coast Guard's maritime SAR program leads, delivers, and maintains preparedness for the maritime component of the federal SAR system. The Coast Guard's international responsibilities include a 5.3 million km^2 area including inland waterways, the high Arctic, as well as the mid-Atlantic and Pacific. This is accomplished with the support of stakeholders and partners, including the Canadian Coast Guard Auxiliary and the Canadian Armed Forces (CAF). In addition to dedicated primary Coast Guard SAR vessels and a seasonal inshore rescue boat program, every Coast Guard vessel has a secondary responsibility to support maritime SAR. Through communication, coordination, and the delivery of maritime SAR response and operational awareness, the program increases the chances of rescue for mariners caught in potentially dangerous on-water situations.

The Coast Guard's SAR program:

- Jointly operates with the Canadian Armed Forces (CAF) three Rescue Coordination Centres located in Victoria, British Columbia, Halifax, Nova Scotia, and Trenton, Ontario;

- Operates two Coast Guard Maritime Rescue Sub-Centres located in Quebec City, Quebec, and St. John's, Newfoundland and Labrador. All maintain an around-the-clock watch, poised to coordinate a joint Coast Guard/CAF response;

- Assists the Department of National Defence and other agencies in response to aeronautical and humanitarian incidents; and

- Maintains contribution agreements with six volunteer Coast Guard Auxiliary not-for-profit corporations, supporting a cadre of over 1,000 vessels and more than 4,000 volunteers.

Environmental Response

The Coast Guard's Environmental Response program ensures an appropriate response to marine pollution incidents within 200 nautical miles of the coast of Canada. Its objective is to minimize the environmental, economic, and public safety impacts of marine pollution incidents.

As lead for the federal government responsible for marine ship-sourced and mystery spills, the Environmental Response program:

- Works with polluters and partners, including Indigenous partners, provinces and territories, response organizations, and other government departments, to coordinate responses to marine pollution incidents;

- Ensures there is an appropriate response to ship-source and mystery-source marine pollution incidents in Canadian waters, including oil and other pollutants; and

- Manages a response when polluters are unknown, unable or unwilling to respond.

Icebreaking Services

Canada is a maritime nation with two icebreaking seasons – the Canadian Arctic in the summer and Southern Canada (Atlantic Ocean, Gulf of St. Lawrence, St. Lawrence River and Great Lakes) in the winter. Given the challenges and extremes of Canadian geography and climate, icebreaking services are essential to facilitate safe and accessible navigation by Canadian and international commercial marine transportation sectors, keep Canadian Southern ports open during the winter, and to support community re-supply in the summer, and fishers through and around ice-covered Canadian waters.

The Icebreaking Services program:

- Provides ice-related information, operational awareness, and icebreaking support to vessels transiting through Canadian waters;

- Escorts ships through ice-covered waters and frees vessels beset in ice;

- Monitors, prevents, and breaks up ice jams for flood control;

- Facilitates the transportation of goods/ supplies to northern communities; and

- Advances Arctic scientific research by providing support to government agencies, and industry operating in Canada's Arctic.

Aids to Navigation

Canada's aids to navigation system is the backbone of marine safety, accessibility of waters and efficiency of vessel movements. The program includes visual aids (such as buoys, lighted beacons, and light stations); aural aids (fog horns); radar aids (reflectors and beacons); and the testing of Automatic Information System (AIS) aids to navigation. The program is also responsible for the publication of marine safety information for public and industry consumption.

On a day-to-day basis, the Aids to Navigation program helps mariners navigate safely and efficiently by:

- Operating a robust system of floating, fixed, and digital aids to navigation;

- Monitoring and reviewing the reliability and relevance of the Canadian aids to navigation system;

- Designing aids to navigation systems to mitigate risks based on volume and type of traffic;

- Ensuring the application of national standards for aids to navigation;

- Providing marine safety information that pertains to the Aids to Navigation and Waterways Management programs, such as the Notices to Mariners (NOTMAR) and Canada's List of Lights publications; and

- Regularly engaging with clients to gather data and discuss concerns or potential changes to any aids to navigation system to ensure that users' input is taken into account.

Waterways Management

Canada's waterways and maritime channels are the trade routes that ensure the safe, secure, and efficient movement of goods to Canadian and overseas markets. This program:

- Reduces marine navigation risks;

- Conducts channel maintenance and monitors channel beds;

- Manages water depth of commercial channels;

- Produces guidelines to ensure safe design and use of commercial navigation channels, based on international standards from the Permanent International Association of Navigation Congresses (PIANC); and

- Strengthens environmental protection for the commercial navigation.

The Waterways Management program supports the Canadian Coast Guard's efforts for channel maintenance, as stated in the *Oceans Act*, by:

- Managing channel bottom surveys and providing information related to bottom channel conditions including depth of channels;

- Maintenance dredging of the St. Lawrence River shipping channel, on a cost-recovery basis, and portions of the Great Lakes connecting channels; and

- Provision of information on channel bottom conditions and available water level and forecasts, to ensure optimal and safe use of the available water depth in the commercial navigation channels.

The Waterways program is also a member of the International Joint Commission's Operations Advisory Group that contributes to the international control of water levels in the St. Lawrence River. Operations of the Waterways Management are working towards addressing industry ambitions to use larger vessels and supporting Canadian industry to remain competitive with global markets.
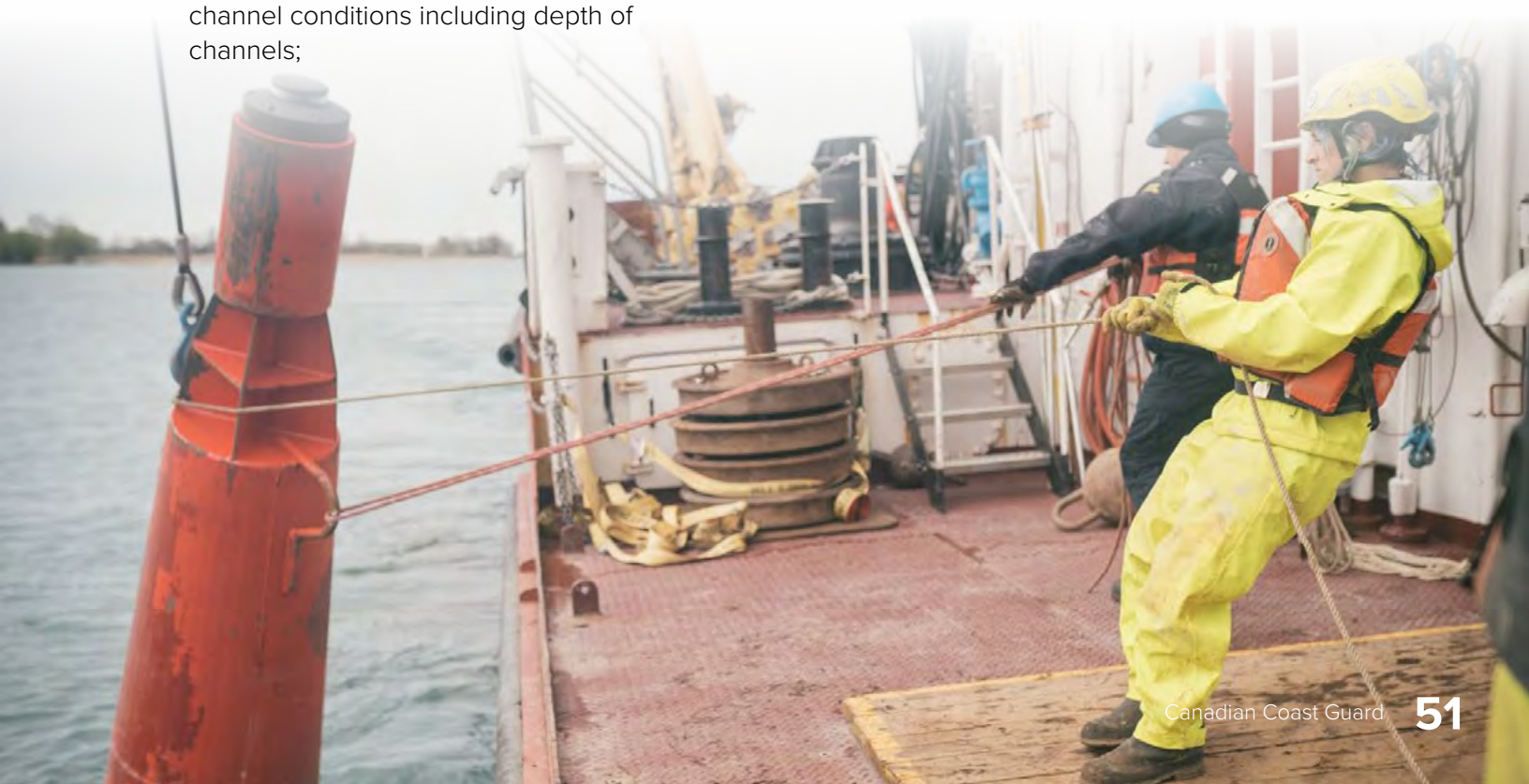
Maritime Security

In 2004, the Government of Canada identified the Coast Guard's on-water resources and maritime information collection capacity as having a key role in the support of national security. Under the *Oceans Act*, the Minister of Fisheries, Oceans, and the Canadian Coast Guard has the mandate to support other government departments and agencies by supplying ships, aircraft, and marine services. This includes Coast Guard support to federal security and law enforcement organizations.

As a maritime security partner within government, Coast Guard's Maritime Security program:

- Contributes to national maritime domain awareness by providing and analyzing data from the Coast Guard's Long-Range Identification and Tracking (LRIT) system, terrestrial Automatic Identification System (AIS), MCTS radar, and radio and observations made by its vessels and aircraft;

- Supports law enforcement by providing crews and vessels to the joint RCMP – Coast Guard Marine Security Enforcement Teams (MSETs) and in support of DFO Conservation and Protection;

- Provides strategic situational awareness and command, control and communications support to Coast Guard leadership through the 24/7 National Command Centre (NCC);

- Works collaboratively with other Canadian government maritime stakeholders and international partners to advance maritime cybersecurity in the face of ever-increasing threats;

- Manages the Coast Guard contribution to Canada's three marine security operations centres (MSOCs); and

- Supports maritime security capacity-building initiatives to develop skills, abilities, and processes to exercise power at sea to assist nations in developing maritime skills ranging from small boat operations and maintenance to SAR and environmental response procedures, while advancing Government of Canada international priorities.

Marine Communications and Traffic Services

Marine Communications and Traffic Services (MCTS) is a national program that provides communication for ships in distress, reduces the probability of vessel collisions and groundings through the monitoring of vessel traffic movements and is the cornerstone infrastructure for the collection and dissemination of marine information in Canadian waters. The MCTS program ensures a reliable communication system is available 24/7/365 to contribute to the safety of life at sea, the protection of the marine environment, the safe and efficient navigation of shipping in Canadian waterways, and maritime domain awareness.

Services include:

- Providing distress and safety communications and coordination to detect distress situations, and ensure timely assistance;

- Managing vessel traffic by providing timely information and assistance to vessels;

- Providing vessel screening to prevent the entry of unsafe vessels into Canadian waters;

- Managing an integrated marine information system that initiates the emergency response network and supports other government departments;

- Providing data on vessel positional information to the Coast Guard MSOCs, where it becomes an important component of maritime domain awareness used to enhance Canada's maritime security; and

- Monitoring the Canadian NORDREG zone on behalf of Transport Canada.

e-Navigation

e-Navigation is defined by the International Maritime Organization (IMO) as the "harmonized collection, integration, exchange, presentation, and analysis of marine information on board and ashore by electronic means to enhance berth to berth navigation and related services for safety and security at sea and protection of the marine environment."

The Canadian Coast Guard is the lead government agency for the implementation of the Canadian eNavigation initiative, which includes:

- Leading and collaborating with marine industry and government partners through the National Marine Advisory Board national and regional e-Navigation Subcommittees to ensure Canadian e-Navigation initiatives are in line with international objectives and Canadian e-Navigation priorities;

- Enabling Canadian Coast Guard digitalization of Coast Guard Marine Services;

- Testing e-Navigation solutions and providing guidance and expertise to Coast Guard programs and fleet;

- Coordinating and implementing pilot initiatives at national and regional levels to bring new technology to Full Operational Capability (FOC) status within existing Coast Guard programs;

- Staying current with emerging maritime technologies and collaborating with other government departments (OGDs) to evaluate how digitalization may enhance and improve government marine services; and

- Maintaining a leadership role in international work related to e-Navigation standards, strategies, implementation, technology, and development, always considering potential impact and usage in Canada.

Vessels of Concern

The Coast Guard's Vessels of Concern program manages risks posed by various hazards represented by vessels and wrecks in Canadian waters. In so doing, the program contributes to the health and safety and socio-economic interests of the Canadian public, as well as to protecting physical infrastructure and the marine environment. As laid out by the *Wrecked, Abandoned or Hazardous Vessels Act*, the Coast Guard Vessels of Concern program works closely with Transport Canada, which is responsible for abandoned and dilapidated vessels and those that represent obstructions to navigation, and with Small Craft Harbours, which is responsible for vessels of concern within their operational domain.

As part of the Coast Guard's incident response continuum, the Vessels of Concern program operates closely with Search and Rescue and Environmental Response programs, but can also

proactively take action to prevent, mitigate or eliminate hazards posed by vessels or wrecks found anywhere in Canadian waters.

The program:

- Under the new *Wrecked, Abandoned or Hazardous Vessels Act,* addresses all hazards associated with problem vessels or wrecks in Canadian waters;

- Manages an evergreen national Vessels of Concern inventory which tracks problem vessels and wrecks across Canada, and applies a risk-based approach to their remediation; and

- Provides comprehensive Coast Guard-specific training to ensure our officers are appropriately prepared and designated to utilize new *Wrecked, Abandoned or Hazardous Vessels Act* authorities to hold owners responsible for hazards posed by their vessels.

Innovation, Planning and Engagement

The Innovation, Planning and Engagement (IPE) Directorate provides national leadership for the consistent integration, management, and coordination of the Canadian Coast Guard's:

- Strategic and horizontal planning, which encompasses budget planning, corporate and performance reporting, and risk management;

- Internal communications and public events; and

- External engagement with domestic and international partners and service users.

Services include:

- Innovation, Reconciliation and Program Integration: leading innovation, long-term planning, relationships, and alignment with federal initiatives, while providing national direction, guidance, and oversight on reconciliation policy.

- External Relations and Industry Engagement: Advising and supporting senior management on strategic engagement of corporate, international, domestic, and industry partners to strengthen relationships and assist decision making.

- Integrated Business Planning: Delivering strategic business advice through business and financial planning to support senior management decision-making. Also responsible for corporate planning and reporting.

- Major Resources Projects: Working across the Coast Guard and with other government departments to support Coast Guard priorities as they relate to major resource and related infrastructure projects.

- Internal Communications, Event Management and Publications: Leading internal communications, internal and public events, multimedia projects, and publications (general and technical) to support our people and fulfill our mandate.

Shipbuilding and Materiel Sector

Shipbuilding and Materiel Sector Structure

The Shipbuilding and Materiel Sector, located in headquarters, includes two directorates: Vessel Procurement and Integrated Technical Services.

The Vessel Procurement Directorate is responsible for the acquisition and delivery of large vessels, helicopters and small vessels, as well as the development of new classes of vessels, vessel design, program management, business analysis, and policy support.

The Integrated Technical Services Directorate delivers technology integration solutions in order to ensure that the Coast Guard's complex and varied physical assets — managed at optimal life-cycle costs — are capable, reliable, and available to deliver Canadian Coast Guard programs to Canadians.

Shipbuilding and Materiel Sector Programs

Operational excellence demands technical readiness. The Shipbuilding and Materiel mandate is the "cradle to grave" materiel responsibility for fleet and shore-based Coast Guard assets to generate operational capability. This important mission spans the spectrum from building new classes of ships to effecting on-going maintenance for a varied fleet and shore-based asset base to enhancing life-cycle management practices to disposing of surplus materiel in a responsible manner. In the execution of this mandate the sector works closely with

headquarters and regional operational staffs to understand the requirement as well as with the support of a wide range of other government departments stakeholders. The sector links naturally with Public Service and Procurement Canada contracting managers and Transport Canada regulatory officials and relies on the expertise of domestic ship building and ship repair industry, always mindful of the requirement to derive value for money for Canadian taxpayers.

Now more than ever Coast Guard has the resources and expertise to recapitalize its fleet assets to support an Agency mandate that continues to grow in terms of scope and demand. Billions of dollars have been committed for new Coast Guard vessels and helicopters and the Coast Guard will be building ships for the next 20 to 25 years. This generational opportunity involves not simply replacing aging ships with the same capability and similar technology, but introducing "multitaskable" ships with emerging and environmentally sensitive technologies such that the new ships serve the Coast Guard for the next 40 years.

The Sector is also responsible to manage the resources available to maintain the current fleet until new ships are delivered into service and for lifecycle management of fleet and shore-based assets, which requires understanding their condition, analyzing the risks, and proactively addressing identified risks to promote safe operation and generate technical readiness. In doing so, it has a commitment to working diligently and collaboratively to further institutionalize the concepts of technical risk management, project and program management, life-cycle management, and stewardship of public funds.

Fleet Procurement

The Fleet Procurement program is responsible for the management of the design and construction of new large and small vessels, air cushioned vehicles, and helicopters. It is also responsible for
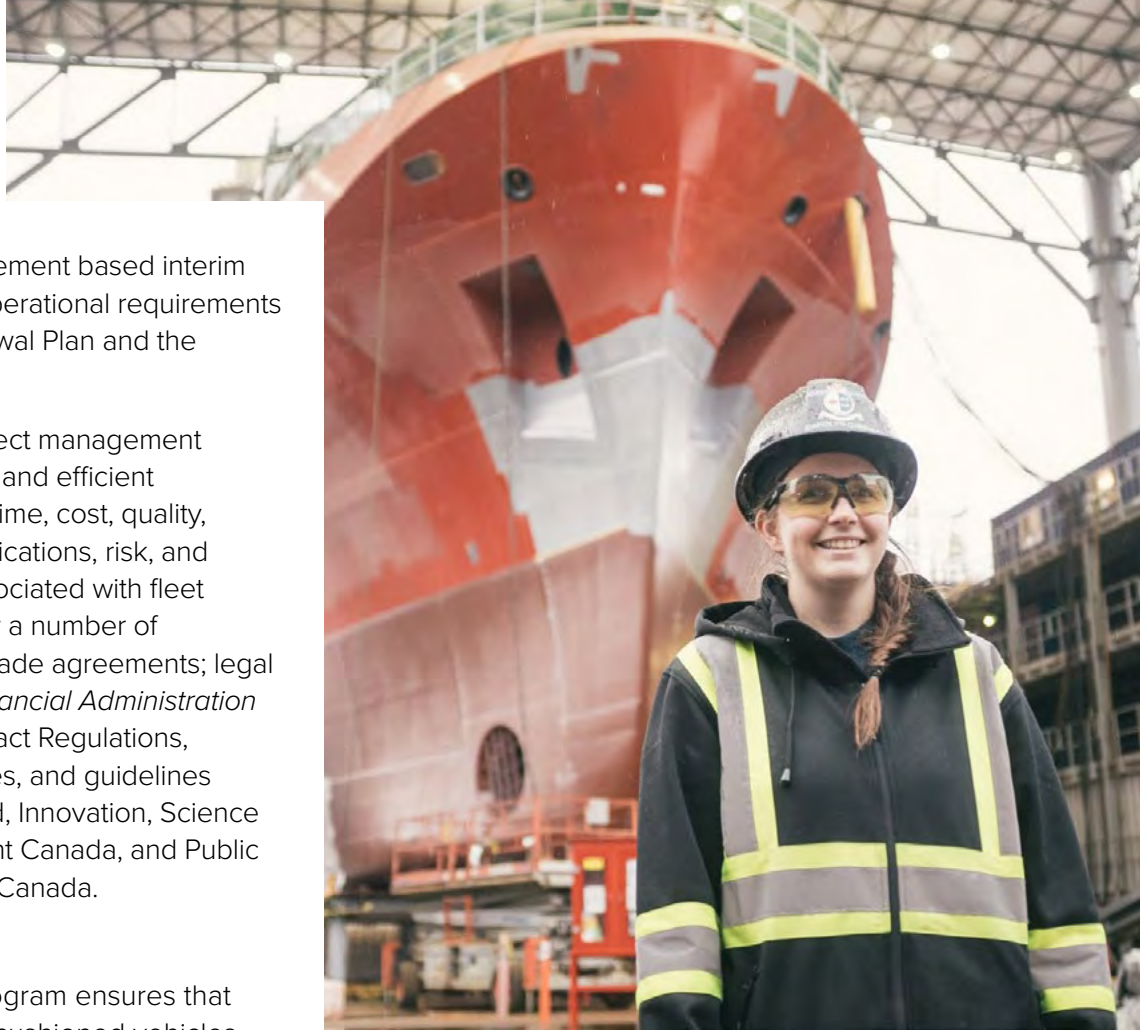
the management of procurement based interim measures to support the operational requirements identified in the Fleet Renewal Plan and the Integrated Investment Plan.

The program provides project management support to ensure effective and efficient project integration, scope, time, cost, quality, human resources, communications, risk, and procurement. Activities associated with fleet procurement are guided by a number of international and national trade agreements; legal instruments such as the *Financial Administration Act* and Government Contract Regulations, as well as policies, directives, and guidelines provided by Treasury Board, Innovation, Science and Economic Development Canada, and Public Services and Procurement Canada.

Fleet Maintenance

The Fleet Maintenance program ensures that Coast Guard's vessels, air cushioned vehicles, helicopters, and small craft are available and reliable for the delivery of Coast Guard programs. The program also ensures the availability and reliability of these assets through life cycle investment planning, engineering, maintenance, and disposal services.

Activities associated with fleet maintenance are guided by a number of international and national trade agreements, legal instruments such as the *Financial Administration Act* and Government Contract Regulations, as well as policies, directives, and guidelines provided by Treasury Board, the Treasury Board of Canada Secretariat, Innovation, Science and Economic Development Canada, and Public Services and Procurement Canada.

Shore-Based Asset Readiness

The Shore-Based Asset Readiness (SBAR) program ensures that the non-fleet assets are available and reliable to deliver Coast Guard programs. The programs supported by SBAR are Aids to Navigation, MCTS, Icebreaking, and Environmental Response.

These non-fleet assets include fixed and floating aids to navigation, such as visual aids (e.g. buoys and daymarks), aural aids (e.g., fog horns) and radar aids (e.g., reflectors and beacons), and long-range marine aids, such as the Differential Global Positioning System. They also include the electronic communication and navigation systems delivered through a network of radar, microwave dishes, radios, the information technology tools delivered via more than 300 remote installations and environmental response physical assets used for spill containment (e.g., boom), collection (e.g., skimmers), and storage (e.g., barges).

The Shore-Based Asset Readiness program ensures the availability and reliability of these assets through life cycle investment planning, engineering, acquisition, maintenance, and disposal services.

Personnel Directorate

Based on the recognition of the dedicated planning and resources that are needed to support our people, the Personnel Directorate was created to integrate the College, Operational Personnel and Certification, and Career Development and Wellness. The Personnel Directorate has been hard at work building a system within the organization that supports the recruitment, retention, career development, and wellness of employees.

Personnel Directorate Structure

The Personnel Directorate includes three branches: the College, Career Development and Wellness, and Operational Personnel and Certification:

- The College, located on Cape Breton Island, Nova Scotia, is the national centre of training excellence for the Coast Guard and the foundation for our longstanding success in operations.

- Career Development and Wellness works to support the recruitment, retention, career development, and wellness of employees.

- Operational Personnel and Certification includes force generation and outreach, operational personnel management, personnel development and certification, MariTime solutions, and uniform implementation.

Personnel Directorate Programs

The Coast Guard is a people-focused organization; dedicated to recruiting and developing a diverse, highly-trained, professional at-the-ready workforce — for today and tomorrow.

The role of the Personnel Directorate is to support the Coast Guard's more than 6,100 employees, wherever they work, and no matter how long they've served. That means understanding their current and long-term needs, and anticipating how to best serve future generations of employees that will enter the ranks of the Canadian Coast Guard.

Over the next three years, the Directorate will strive to meet the needs of Coast Guard employees across the regions and at national headquarters and continue to prioritize all the essential components of a supported workforce — safety, morale, well-being, employee assistance, work-life arrangements, return-to-work processes, awards and recognition programs, and supporting physical and mental health and wellness.

The Personnel Directorate is responsible to monitor trends and ensure that Coast Guard is nimble enough to adapt and re-tool skillsets if, and when, those changes are required. This work takes into account ongoing needs to maintain older technologies that continue to serve the organization well and ensure knowledge transfer from experienced employees to the future officers of the organization. At the same time, the Directorate is continuing to investigate and adopt new technologies, training, and processes, such as software that helps fleet employees receive their pay on-time and accurately.

During this business plan cycle, the Personnel Directorate will continue to support the Coast Guard to increase diversity and inclusion through all aspects of recruitment, retention, training, mentorship and sponsorship, healthy workplaces, and more. The Coast Guard is working to address systemic barriers to ensure all Canadians are given an equal opportunity to be welcomed as employees of the Canadian Coast Guard family.

Canadian Coast Guard College

The College has been a centre of maritime training excellence since 1965. It is a national, bilingual, degree-conferring training institution offering a multitude of training regimes, including the officer training program, a comprehensive four-year training program to develop marine engineers and marine navigation officers for the Coast Guard Fleet. Located on Cape Breton Island, the College was established to ensure a reliable source of professional marine officers and crew for the Coast Guard. The College has been training qualified and professional Coast Guard marine officers and operational personnel for more than 55 years.

In addition to the officer training program, the College trains MCTS officers, who receive 24-week intensive training programs consisting of mixed theory, practical, simulated, and virtual learning. It also offers operational training to personnel in electronics and informatics, environmental response, and SAR.

As the national training organization for the Coast Guard, the College is committed to delivering the highest quality training to support our operational personnel. With new modernized learning platforms, such as OnCourse, the College is poised to meet the evolving training needs of the organization. This is essential to ensuring that our people receive the operational training they require to better serve Canadians for years to come.

Regional Overview

While the Coast Guard plans and sets policies at a national level to ensure consistency in the delivery of its services, it is the fleet and shore-based personnel in our regions who deliver Coast Guard services. While all four regions deliver core Coast Guard programs, the focus in each region is different depending on climate, geography, and client needs.

This directly impacts food security, marine safety, cultural, and harvesting activities of Arctic communities. There are increased demands to improve marine infrastructure and Coast Guard services, and implement climate change adaptation measures to mitigate increased risk and potential impacts.

Coast Guard is working closely with Inuit, First Nations, Métis, and Northern partners in the Arctic Region to develop innovative and alternative approaches to service delivery that best meet the needs of communities.

Arctic Region

The Canadian Arctic environment is vast, with 162,000 km of coastline and a harsh and challenging climate. Interest and activity in the Arctic continue to rise with growing populations in many of the isolated and remote communities, increased ship traffic, and growing international interest. This leads to a challenging operational environment where less than 14 percent of navigable waters have been surveyed to modern standards. The effects of climate change, including extreme weather and melting permafrost, are leading to increased navigation risk, while Canada is seeing more vessels in the Canadian Arctic.

In addition to contributing to the delivery of national priorities, including reconciliation, the region will focus on continued engagement with local partners, the development of alternative service delivery models, developing plans for the expansion of Coast Guard services, developing an Indigenous recruitment strategy with Fisheries and Oceans Canada, and reflecting Northern priorities in policy and program design and implementation.

Increases in Arctic vessel traffic, especially from cruise ships and adventure tourism, international attention on the Canadian Arctic, a growing domestic Arctic population, interest in resource development projects, marine conservation

targets, and a rapidly changing climate are all having a profound impact on the Canadian Arctic and Coast Guard services.

We expect the demand for marine services in the Canadian Arctic to grow significantly in the coming years. The implementation of our Arctic region is meant to help us address these important issues, while advancing reconciliation with our Inuit, First Nations, and Métis peoples in the Arctic, through a collaborative approach to increasing the Coast Guard's presence in the Arctic.

The Canadian Arctic is vast and diverse, and meeting shared safety, security, environmental, and economic goals requires cooperation. The Coast Guard has a deep, ongoing commitment to working with Inuit, First Nations, Métis peoples, provincial and territorial governments, mariners, and international partners to support marine safety and the protection of the environment on Arctic waters. In the Arctic, we work with partners on a nation-to-nation basis, and from the lens of how to support implementation of settled land claims, which apply to most of the region.

Arctic communities have expressed their concerns about increasing vessel traffic and its impacts on wildlife, habitat, and traditional activities. Communities also want to be empowered to participate with the Coast Guard in search and rescue and environmental response activities.

In the coming years, the Coast Guard is committed to:

- Including Indigenous knowledge in decision-making;

- Leading the planning of future services from the North with Northerners;

- Removing employment barriers and creating job opportunities for Northerners;

- Co-developing climate change adaptation strategies; and

- Infrastructure development.

The Coast Guard is developing and implementing a human resources plan that ensures Inuit, First Nations, Métis, and Northerners join the Coast Guard and guide the Arctic region's operations and future program development. The Arctic Region is increasing diversity though the establishment of the Arctic Youth Council, the hiring of Community Engagement Coordinators, and building internal capacity on the applicability and principles of local and Indigenous knowledge in service delivery and corporate culture. The Arctic region is implementing cultural learning into its training and development plans to build an inclusive, dynamic and diverse team, and attract new talent in the Arctic.

Priorities for the next three years include:

- Development of a collaborative governance framework that seeks to enhance the delivery of programs and services to better serve Arctic communities;

- Planning for the future of Coast Guard services by geographic area and community;

- Continued implementation of a fully operational Arctic Region; and

- Continued implementation of Oceans Protection Plan initiatives including the low impact shipping corridors, the Canadian Coast Guard Auxiliary in the Arctic, and the Inshore Rescue Boat North in Rankin Inlet.

Atlantic Region

The Atlantic region operates in a vast geographical area comprising the four Atlantic provinces, and it encompasses JRCC Halifax's Area of Responsibility for SAR, which for this program includes the eastern half of Quebec, and the northwest quadrant of the Atlantic Ocean. The region delivers services covering more than 29,000 km of shoreline, 2.5 million km^2 of continental shelf, and 5 million km^2 within the Northwest Atlantic Fisheries Organization Regulatory Zone (2.3 million km^2 inside the 200 nautical mile limit, and 2.7 million km^2 outside the 200 nautical mile limit).

The Atlantic region includes many small coastal communities, and everyone has a connection to the water. The Coast Guard is well known and is embedded in every community – this is one of our strengths in the region. Another is that we have a long history of working organically with community members and leaders, as you do in smaller communities. For example, some of the

local leaders we work with are also members of the Coast Guard Auxiliary. They have a depth of understanding of what we do, and this is incredibly valuable.

Now and in the future, we are formalizing community engagement and continuing to build these relationships. Whereas in the past we engaged primarily on operational concerns – and we continue to do so – we are also focused on strategic priorities that range from reconciliation and building our partnerships with Indigenous peoples to advancing the oceans economy and economic recovery.

The demand for our services is increasing and the expectations of what the Coast Guard can and should do are high. There is a strong demand for the Coast Guard to be part of decision-making tables. Whether it is helping to protect marine mammals such as North Atlantic right whales or addressing vessels of concern, we are part of the marine conversation with leaders in each of the Atlantic provinces, whether that is Indigenous leadership, mayors and city councillors or with provincial or federal representatives and groups.

Like other regions, our workforce needs are top of mind. During the planning period we will focus on recruitment and retention, find ways to build up a qualified workforce pipeline and address issues that are deeply important like the pay system, workload management, classifications and staffing delays.

From an operational perspective, in each of the provinces we operate in marine environments that have their own challenges. In Newfoundland and Labrador, this includes Placentia Bay and Strait of Belle Isle; in Nova Scotia, the Strait of Canso; in New Brunswick, the Bay of Fundy; and in Prince Edward Island, the Northumberland Strait. Some of our regional risks are ongoing due to a massive and varied operational area — one that faces extreme weather. We operate in an environment that includes year-round commercial activity and seasonal traditional use. We continue to plan and implement measures that address these risks.

Central Region

The Central region operates in a unique context covering the Great Lakes, the St. Lawrence waterway, and the northern half of the Gulf of St. Lawrence, which includes maritime movements impacting one hundred million people who receive goods by sea. This is a vital transportation network for goods traded between North American and more than 59 overseas markets. More than 100 commercial ports and wharves are operational within the region. These activities represent $35 billion in economic activity and 238,000 jobs in Canada and the United States.

The Central region encompasses more than 50 coastal Indigenous communities and organizations in Ontario and Quebec, with a wide range of priorities and concerns related to Coast Guard's mandate. The region operates within a context of significant heritage, social and ecological value, and a unique ecosystem of great biological richness.

Some of our biggest risks are related to the increase in the density of vessel traffic, in part driven by major projects, and increasing vessel size. In addition, there are ongoing demands from industry for an extended shipping season, and for more icebreaking, as well as to effectively maintain dredging volumes.

These risks are being mitigated in a number of ways. Operationally, we are maximizing the zonal approach to icebreaking, and supplementing

our capacity through icebreaking contracts, as well as supporting increased use of electronic navigation. We are taking a proactive approach to communication and engagement with industry to ensure we work together on these issues.

We have also made progress in building relationships with Indigenous partners. There are a wide range of priorities and concerns that will require continued effort and collaboration, and we will continue to identify collaboration opportunities, such as training and exercising, and ways to better share information, and focus on contribution agreements and procurement opportunities that encourage and facilitate Indigenous participation.

Recruitment and retention will continue to be a challenge. In order to compete, it will be important to demonstrate the value in joining the Canadian Coast Guard and to ensure that we provide the support to our employees including providing a more family-friendly work environment and work-life balance.

The Central region is a bilingual region, which is both a challenge and a strength. Learning a second language requires an ongoing investment of time and a high level of commitment from the employee, both on and off the job. These requirements can create barriers to the internal development of the workforce and adversely affect employees' motivation. Our region will continue to support bilingualism by encouraging language training.

As more than 25 percent of the shore-based workforce is eligible to retire in the next five years, it will be a priority for the region to implement robust knowledge transfer before those employees leave the organization and to develop remaining and new staff through talent management plans. We are in a period of growth and increasing professionalization. What is already in motion for the Coast Guard of the future is a more robust structure, processes, and governance that build organizational maturity. More than ever, we are strongly focused on regional operations, and on fully supporting our operational posture.

Western Region

The Western region comprises a large landmass (four provinces and the Yukon Territory) as well as 27,000 km of coastline and international search and rescue obligations out to the mid-Pacific. The Western region does not experience large swings in on-water seasonality like the other regions (sea ice is non-existent) and therefore experiences a consistently high volume of activity on the water. Almost 50 percent of all Marine Communications and Traffic Services (MCTS) national vessel traffic movements take place in the Western region.

The recognition of Coast Guard's efforts, value, and consequently our morale has grown exponentially. In part, this has been part of the national and international spotlight put on Coast Guard in Western region in recent years. This includes emergency situations and major development projects where Coast Guard had a critical role to play, not only in operational aspects, including planning and preparedness, but also in public awareness, and confidence in our ability to respond.

Over the next few years, the region will continue working with Indigenous and other coastal communities as partners in the marine safety system. We have an opportunity to continue to build and expand lasting relationships and partnerships with the more than 60 First Nations along the coast, and personnel in the Region are committed to building on aspects such as joint training opportunities, the community boats program, and much more.

In terms of operational concerns and priorities, the region is focused on the Portland Canal and mining exports, including how that will affect big ship traffic and the concerns and rights of Indigenous partners.

For the inside passage, the region is looking at what assets are needed related to tug traffic. In the Kitimat Corridor, areas of concern include the impacts of liquid natural gas (LNG) developments and route management. Seymour Narrows is an area where there is substantial cruise ship and tug traffic thus increasing operational risks. We will continue to assess and respond to these risks, and to integrate an all coast/all hazards review of gaps and mitigation.

One of our greatest advances in Coast Guard is learning and building on how we can work together to expand our delivery of services and meet shared goals. Adopting the Incident Command System is one of those methods, as the Region has experienced firsthand how including Indigenous, provincial partners, and others into the shared decision making of Unified Command makes for a much more effective response.

The coming years will include increasing the diversity and inclusion of the workforce and leveraging the ingenuity of all Coast Guard personnel. These are essential to the Region's mission, as is the promotion of innovation. There is a lot of attention paid to how the public service can and should be innovative, willing to take risks, and learn from those endeavors. Our skilled tradespeople in the Coast Guard, and in our mariner community, are and will continue to be masterful in that regard.

Annex A – Canadian Coast Guard Commitments

Diversity, Equity and Inclusion

Commitment	OPI	Due Date
In follow up to a 2020 Coast Guard Gender Parity Study, work with Women in Governance to develop an action plan addressing the recommendations.	DG, Personnel	Q3 2021-22
Launch quarterly national email and Fleet Communiqué updates to support diversity, equity, and inclusion across the Coast Guard.	DG, Personnel	Q1 2021-22
Develop a Diversity and Inclusion Hub on the Coast Guard Intranet to link and collect departmental and Public Service resources and communications as resources for all employees.	DG, Personnel	Q1 2021-22
Develop and pilot a Diversity and Inclusion Fleet Ambassador Program to support and highlight activities for and by seagoing personnel.	DG, Personnel	Q3 2021-22
Coordinate training opportunities to enhance awareness around inclusive and barrier-free staffing processes.	DG, Personnel	Q2 2021-22
Develop and pilot a student-centered learning series, with specific outreach to the National Indigenous Student Recruitment Initiative, to better support student integration and offer guidance for transitioning from student employment with career path-focused options to bolster retention.	DG, Personnel	Q2 2021-22
Create a Coast Guard Future Leaders Community, which among its required components will include the Canada School of Public Service courses on Unconscious Bias, to support greater cultural awareness and competency.	DG, Personnel	Q3 2021-22
Pilot and deliver an updated and redesigned work uniform, developed with a Gender-based Analysis Plus (GBA+) lens and incorporating diversity and inclusion elements where feasible.	DG, Personnel	Q4 2021-22

Strategic Pillar 1: Our People

Commitment	OPI	Due Date
Objective 1: Recruitment		
Develop a national recruitment strategy that includes plans to leverage technology as well as social media, and addresses diversity and inclusion objectives.	DG, Personnel	Q1 2021-22
Finalize the at-risk groups and key positions report and related demographic trends data, for inclusion in targeted recruitment, retention, and training strategies.	DG, Personnel	Q3 2021-22
Objective 2: Training		
Develop a strategy to address evolving skill sets associated with the operations of the new vessels and associated training requirements.	DG, Personnel	Q4 2021-22
Implement a national learning governance framework, reflecting the central role of the College.	DG, Personnel	Q1 2022-23
Create a library of training resources for employees to increase awareness around corporate commitments, including mental health, diversity, and inclusion.	DG, Personnel	Q3 2021-22
Support employees in understanding the skills and knowledge required for their current roles and career aspirations through the use of tools such as on-the-job training programs, leadership development programs, and specialized training.	DG, Personnel	Q2 2022-23
Pilot a leadership training initiative to support employees in their development of key leadership competencies early in careers.	DG, Personnel	Q1 2022-23
Develop an integrated national training platform for all employees.	DG, Personnel	Q4 2022-23
Develop a concept of operations for a new Centre for simulated learning.	DG, Personnel	Q3 2021-22
Objective 3: Career Management		
Build an online competency-based career management tool for all seagoing and shore-based employees.	DG, Personnel	Q3 2021-22
Host career management learning events for employees.	DG, Personnel	Q2 2021-22
Objective 4: Wellness		
Develop a holistic wellness strategy, including the future of remote work/telework.	DG, Personnel	Q3 2021-22
Provide national access to mental health professionals and training to support Critical Incident Stress Management (CISM).	DG, Personnel	Q2 2021-22

Strategic Pillar 2: Our Assets

Commitment	OPI	Due Date
Objective 1: Delivering the New Fleet		
Continue to deliver new SAR lifeboats under contract.	DG, VP	2024
Advance design, construction engineering, and construction of a near shore fisheries research vessel.	DG, VP	2024
Advance construction and prepare for delivery of the offshore oceanographic science vessel.	DG, VP	2024
Finalize construction engineering efforts and start construction of both Coast Guard Arctic and offshore patrol vessels.	DG, VP	2023-2024
Advance design and construction engineering for the multi-purpose vessels and the program icebreakers.	DG, VP	2024
Advance plans for a new class of mid-shore multi-mission vessels.	DG, VP	2024
Begin design engineering for the Polar icebreakers.	DG, VP	2021-22
Begin construction engineering and acquisition of long-lead items to prepare for the construction of the Polar icebreakers.	DG, VP	2022
Objective 2: Operating and Maintaining the New Fleet		
Undertake fleet renewal with a key principle of ensuring mission modularity.	DG, VP	2024
Commence operations on the CCGS John Cabot for the upcoming science season.	DG, FMS	Q1 2021-22
Update the Coast Guard's multi-year maintenance plan to address any fleet maintenance gaps.	DG, ITS	Q3 2021-22
Objective 3: Vessel Life Extension		
Complete acquisition of one light icebreaker to assist with service continuity.	DG, VP	2021
Complete the conversion of the light icebreaker once acquired.	DG, ITS	Q2 2023-24
Complete the conversion of the CCGS Vincent Massey.	DG, ITS	Q1 2022-23
Continue to implement the comprehensive VLE program to increase both the reliability and availability of Coast Guard vessels. Planned work includes:	DG, ITS	
• Complete the VLE of the CCGS *Kopit Hopson 1752*		Q3 2021-22
• Complete the bundled VLE of the CCGS *Cape Roger* and CCGS *Cygnus*		Q4 2021-22
• Complete the VLE of the CCGS *George R. Pearkes*		Q1 2023-24
• Complete the VLE of the CCGS *Amundsen* phase 1		Q1 2021-22
• Complete the VLE of the CCGS *Amundsen* phase 2		Q2 2022-23
• Complete the VLE of the CCGS *Sir Wilfred Grenfell*		Q3 2021-22
• Complete the VLE of the CCGS *Griffon*		Q3 2024-25
• Complete the VLE of the CCGS *Sir Wilfrid Laurier*		Q1 2024-25
• Complete the VLE of the CCGS *Louis S. St-Laurent* phase 1		Q2 2022-23
• Complete the VLE of the CCGS *Louis S. St-Laurent* phase 2		Q2 2023-24
• Complete the VLE of the CCGS *Louis S. St-Laurent* phase 3		Q2 2024-25
• Complete the VLE of the CCGS *Louis S. St-Laurent* phase 4		Q3 2027-28
• Complete the VLE of the 47' MLB class		Q4 2027-28

Objective 4: Shore-Based Assets		
Determine the shore infrastructure requirements needed to support the future fleet's ship modularity concept.	DG, VP and DG ITS	Q4 2021-22
Update the Coast Guard's asset and inventory protocols and procedures to ensure the integrity of the information in the asset management systems.	DG, ITS	Q3 2021-22
Implement the Coast Guard's asset and inventory protocols and procedures.	DG, ITS	Q1 2022-23
Complete the implementation of the Oceans Protection Plan (OPP) SAR stations.	DG, ITS	Q4 2022-23
Assess the condition of the Coast Guard's shore-based facilities required to support the future fleet.	DG, ITS	Q4 2021-22
Complete the OPP environmental response equipment procurements.	DG, ITS	Q4 2022-23
Complete the OPP Radar and OpNet projects.	DG, ITS	Q4 2022-23
Initiate the full implementation of the lifecycle management program for environmental response assets.	DG, ITS	Q1 2022-23
Complete the manufacturing of the four-season buoys (52 buoys) in the St. Lawrence sector.	DG, ITS	Q4 2021-22
Renew the College's IT infrastructure to benefit students, increase bandwidth, and offer remote training over the internet.	DG, ITS	Q4 2022-23
Add new operational oceanic forecast data from Environment and Climate Change Canada into the Coast Guard's Canadian Search and Rescue program system (CANSARP) to improve surface current prediction data.	DG ITS	Q4 2021-22

Strategic Pillar 3: Our Services

Commitment	OPI	Due Date
Objective 1: Fulfilling Coast Guard's Contribution to the Oceans Protection Plan		
Collaborate with partners to implement the multiple OPP and stimulus initiatives and investments.	DG, IPE	Q4 2021-22
• Produce an annual activity report, provided at the end of fiscal year.		
Objective 2: Major Resource Projects		
Actively contribute to an NRCan-led whole of government TMX renewal approach, and continue to coordinate implementation of TMX.	DG, IPE	Q4 2021-22
Objective 3: Reviewing Levels of Service		
Progress the LoS review for Coast Guard programs, including Icebreaking, Search and Rescue (SAR), Environmental Response, Marine Communication and Traffic Services (MCTS), Aids to Navigation (AtoN), and Waterways Management. The following steps will be undertaken:	DG, FMS	
• Launch online survey;		Q1 2021-22
• Summarize feedback received;		Q2 2021-22
• Consult with internal and external stakeholders on proposed changes; and		Q3 2021-22
• Publish new LoS.		Q4 2022-23
Objective 4: Program Readiness		
Develop a readiness profile for each response program (Environmental Response, Search and Rescue and Vessels of Concern) focussing on an assessment of the three principal elements of readiness (people, assets, and capacity demand) in order to identify gaps between current needs and anticipated future mission requirements.	DG, Response	Q4 2021-22
Develop a readiness profile for all marine navigation programs.	DG, FMS	Q3, 2021-22
Objective 5: Modernizing Marine Navigation Program and Safety Services		
Develop a strategy to advance the modernization of marine navigation programs and safety systems including e-Navigation/digital waterways initiatives and guide investments in aids to navigation and MCTS.	DG, FMS	Q3 2022-23
Complete the requirements analysis and preliminary design for renewing SIPA.	DG, ITS	Q4 2021-22

Objective 6: Enabling Innovation		
Develop a Coast Guard plan to contribute to the targets set out in the Greening Government Strategy. The following activities will be undertaken:	DG, IPE	
• Support the development of a decarbonization plan; and		2023
• Support collaborative work around Greening Government Fund projects.		2022/23 - 2024/25
Continue to engage externally across a spectrum of areas in support of long-term sustainable development and climate change mitigation and adaptation opportunities.	DG, IPE	Q4 2022-23
Continue to build capacity for internal experimentation, including:	DG, IPE	
• Improve oversight and accountability of the Coast Guard's Innovation program by implementing a three-year planning horizon to identify, vet, and sequence innovation initiatives supported by detailed workplans and reporting		Q4 2021-22
• Completion of an Artificial Intelligence (AI) readiness study involving multiple Coast Guard areas, designed to identify the current readiness state of the Coast Guard's capacity to potentially onboard AI and machine learning technologies over the next decade.		Q4 2021-22

Strategic Pillar 4: Our Governance

Commitment	OPI	Due Date
Objective 1: Strengthening National Policies, Processes, Procedures and Systems		
Review and update key documents including interdepartmental Memoranda of Understanding (MOU) on response collaboration with key partners and the National Marine Spills Contingency Plan:	DG, Response	
• Transport Canada/Coast Guard MOU – Environmental Response (ER) Annex		Q3 2021-22
• Environment and Climate Change Canada/Coast Guard MOU		Q4 2021-22
• DFO Science/Coast Guard ER MOU		Q1 2022-23
Complete the development of the Vessels of Concern program as identified under OPP and initiate the transition into service starting April 2022.	DG, Response	Q1 2022-23
Define the Coast Guard incident response and incident management strategy by updating the Incident Command System (ICS) Plan for Incident Management, including amongst other aspects, greater clarity for command and control structures to effectively respond to maritime incidents.	DG, Response	Q4 2021-22
Develop an ICS/Incident Management training strategy, building on the successes of the ICS training approach during ICS implementation to ensure enhancements are made to ICS/Incident Management training in both official languages.	DG, Response	Q3 2022-23
Develop a strategy to enhance continuous improvement/lessons learned processes and procedures to inform future exercises and training activities, thereby improving mission readiness.	DG, Response	Q4 2022-23
Optimize the helicopter program and develop a strategy and concept of operation for the inclusion of Unmanned Aerial Vehicles (UAVs) in Coast Guard operations.	DG, FMS	Q3 2021-22
Work toward a more predictable costing model that incorporates a fixed salary cost for each vessel.	DG, FMS	Q3 2021-22
Initiate a comprehensive MCTS workload analysis following the program's modernization and consolidation projects and explore additional force development opportunities for the MCTS program including innovative solutions and options to training.	DG, FMS	Q4 2021-22
Develop a Canadian Coast Guard-specific Agency Risk Profile that aligns with the Agency's Integrated Business and Human Resources Plan strategic pillars and objectives.	DG, IPE	Q1 2022-23

Objective 2: Engaging with Industry and Other Coast Guard Stakeholders		
Continue to engage Coast Guard stakeholders to inform Coast Guard's priorities so we continue to better serve our clients.	DG, IPE	2021-22
Objective 3: Engaging with Indigenous Partners		
Collaborate with Indigenous and coastal communities to address their marine safety and environmental response concerns, including those associated with proposed major resource and infrastructure projects, (e.g., implementation of TMX accommodation measures).	DG, IPE, DG, Response, DG, FMS	Q4 2021-22
Support negotiations of reconciliation agreements, arrangements, and frameworks.	DG, IPE	Q4 2023-24
Create a strategic framework to guide how Coast Guard will continue to provide ongoing collaboration with Indigenous partners.	DG, IPE	Q4 2023-24
Through relevant Coast Guard governance structures, ensure that Indigenous concerns and interests are widely understood across the agency and increasingly embedded in policies, programs, and activities.	DG, IPE	Q4 2023-24
Objective 4: Supporting the Implementation of the Arctic Region		
Develop a Coast Guard Arctic Strategy.	AC, Arctic, DG, IPE	Q4 2021-22
Collaborate with Inuit organizations and government to support the implementation of service delivery priorities in Inuit Nunangat in alignment with the Inuit Nunangat Policy, under the Inuit-Crown Partnership Committee.	AC, Arctic	Q4 2021-22

Annex B – Canadian Coast Guard People Strategy

Link to the Canadian Coast Guard People Strategy:

https://www.ccg-gcc.gc.ca/publications/corporation-information-organisation/ibhrp-piarh/index-eng.html

Canadian Coast Guard People Strategy – Status Report on Commitments

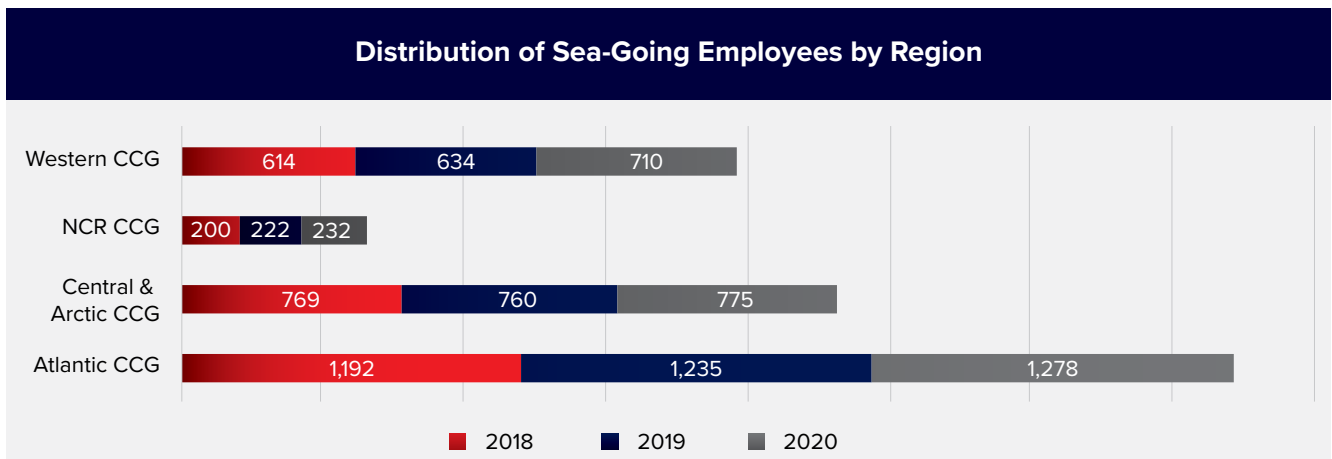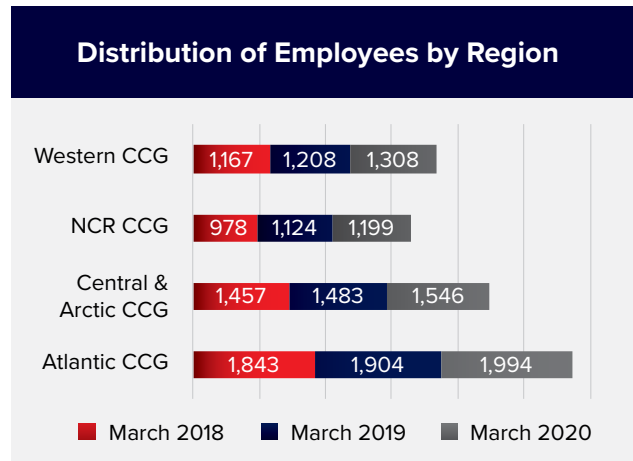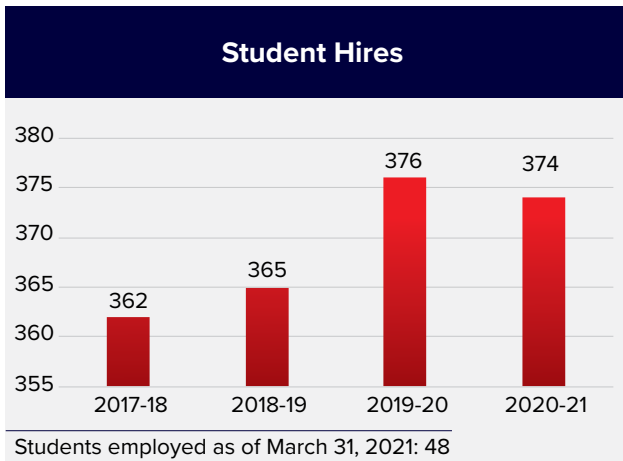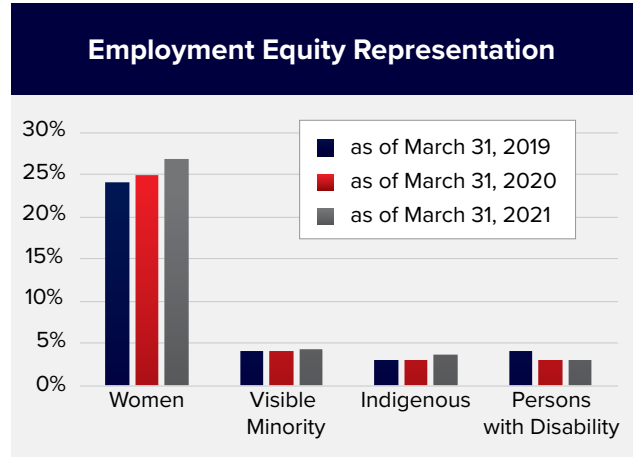| Commitments	Expected Deliverable Date per the IBHRP	Q1 – Q4 Achievements	Status (Complete, On-Track, Delayed)
Recruitment – Pillar I			
Launch a CCG Lesson Plan for Secondary school and an "Adopt a Ship" pilot with the Canadian Geographic Teachers' network	Summer 2020 and Winter 2020-21, respectively	English and French lesson plans were launched in June 2020 (Q1). "Adopt a Ship" was successfully piloted with two grade six classes (Victoria, BC and Drummond, NB), and the CCGS *John P Tully* and CCGS *Martha L Black*.	Complete
Launch a gender parity study	Winter 2020-21	A gender parity study was conducted through Women in Governance from May through to November 2020. Results and recommendations were delivered in December 2020. CCG achieved silver status. Results were shared at Management Board in January 2021.	Complete
Commence consultations on uniform redesign for gender/diversity/functionality	Winter 2020-21	Q2: introduction of Style A and Style B, replacing male and female in the uniform ordering system. Q4: reinstated national uniform working group.	Complete
Training – Pillar II			
Develop a Coast Guard Training Governance	Winter 2020-21	The end of Q4 marked the development and acceptance of the College Training Governance structure. The documentation associated with the Governance document continues to evolve.	Complete
Develop and commence implementation of a plan to modernize and expand modes of training delivery as well as support a Learner-Centred culture	Winter 2020-21	Q1 of FY20/21 marked the successful implementation of OnCourse, the College's online learning management system and teaching platform.	Complete

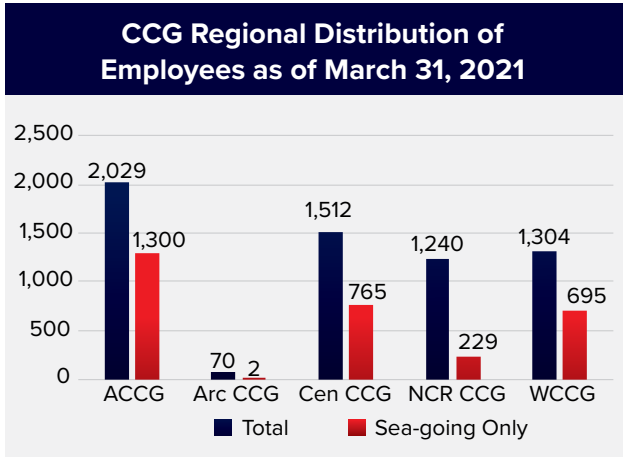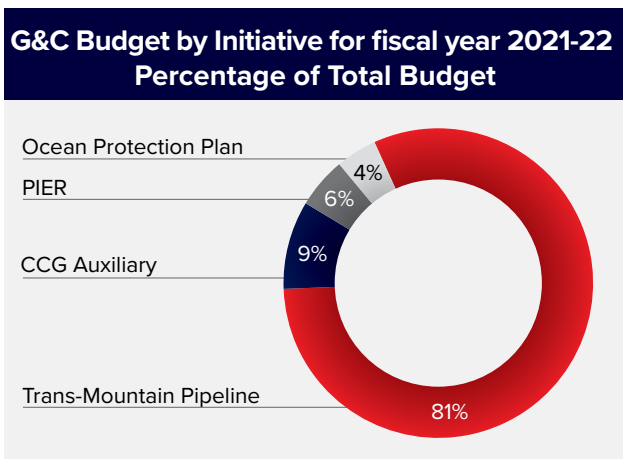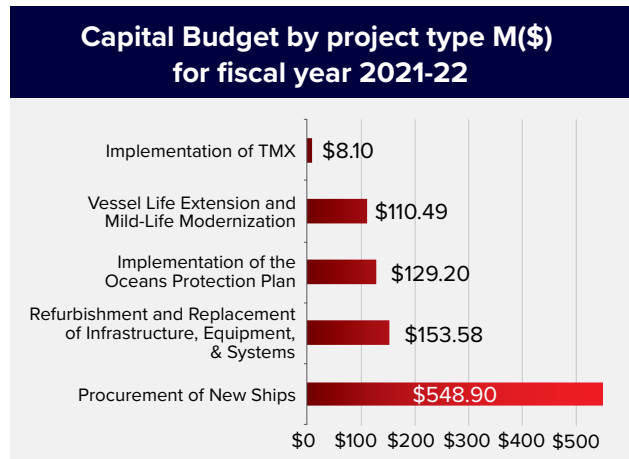| Career Management – Pillar III			
Launch the online Fleet Career Portal	Fall 2020	Q3: the online Fleet Career Portal was completed.	Complete
Commence technical development of a competency-based career management tool for launch in 2021-22	Winter 2020-21	Q4: development of the tool is 75% complete User acceptance testing will begin in Q1 of 21/22 and the CCT is estimated to launch in August 2021.	Complete
Wellness – Pillar IV			
Continue training (e.g., The Working Mind, Trauma Resiliency Training, etc.), support "Train the Trainer", and implement Critical Incident Stress Management (CISM), including access to Mental Health Professionals (MHP)	Ongoing through Fiscal 2020-21	A new national CISM MHP contract was put up for bidding. CISM Privacy Impact Assessment is proceeding. CISM Directive is at the final stage of development. Wellness Training provided in 2020-2021: 160 completed sessions; and Total # Trained - 1169	Complete
Pilot an enhanced fitness project for seagoing personnel	Summer 2020	Q1: • Environmental scan. Q2: • Electronic launch of Monthly Fitness Challenges for DFO/CCG personnel. • Arctic Pilot Project trial. Q3: • Formation of Partnership with Canadian Forces Morale Welfare Services (CFMWS) via MOU. Q4: • Development and procurement of Fitness Kits. • Fitness Case Study aboard CCGS *Tanu*. • Final summary report for phase 1 of the project leadership.	Year One project deliverables completed as modified for COVID-19.
Renew the Awards and Recognition intranet page	Fall 2020	The Awards and Recognition section on the intranet was published in October 2020 (Q3).	Complete
Launch the new uniform contract and electronic storefront	Summer 2020	Q1: uniform contract was signed in March 2020. Q2: Electronic Storefront went live in July 2020 for registration. Ordering began in August 2020. Q4: began work with the supplier and SAP team to transition store front to SAP (ongoing).	Complete

Annex C – Canadian Coast Guard Demographics

CCG Regional Distribution of Employees as of March 31, 2021

Bar chart with values by region:

Region	Total	Sea-going Only
ACCG	2,029	1,300
Arc CCG	70	2
Cen CCG	1,512	765
NCR CCG	1,240	229
WCCG	1,304	695

Legend: Total, Sea-going Only

Employment Equity Representation

Bar chart (percentages) by category:

Category	as of March 31, 2019	as of March 31, 2020	as of March 31, 2021
Women	~24%	~25%	~27%
Visible Minority	~4%	~4%	~4%
Indigenous	~3%	~3%	~3.5%
Persons with Disability	~4%	~3%	~3%

Student Hires

Year	Students
2017-18	362
2018-19	365
2019-20	376
2020-21	374

Students employed as of March 31, 2021: 48

Distribution of Employees by Region

Region	March 2018	March 2019	March 2020
Western CCG	1,167	1,208	1,308
NCR CCG	978	1,124	1,199
Central & Arctic CCG	1,457	1,483	1,546
Atlantic CCG	1,843	1,904	1,994

Distribution of Sea-Going Employees by Region

Region	2018	2019	2020
Western CCG	614	634	710
NCR CCG	200	222	232
Central & Arctic CCG	769	760	775
Atlantic CCG	1,192	1,235	1,278

Annex D – Canadian Coast Guard Financials

Current Year:

CCG Total Budget by Program M($) for fiscal year 2021-22

Program	Amount
Aboriginal Programs & Treaties	$1.0
Maritime Security	$5.3
Icebreaking Services	$6.8
Waterways Management	$15.9
Aids to Navigation	$18.1
Coast Guard College	$25.9
Search and Rescue	$32.9
Marine Communication & Traffic Services	$40.7
Environmental Response	$91.0
Shore Based Asset Readiness	$140.4
Internal Services	$149.9
Fleet Maintenance	$283.7
Fleet Operational Capability	$334.3
Fleet Procurement	$629.1

Operating Budget by Region M($) for fiscal year 2021-22

Region	Amount
Arctic Region	$12.98
CCG College	$30.15
Western Region	$126.09
Central Region	$169.27
HQ	$199.54
Atlantic Region	$241.50

Capital Budget by project type M($) for fiscal year 2021-22

Project type	Amount
Implementation of TMX	$8.10
Vessel Life Extension and Mild-Life Modernization	$110.49
Implementation of the Oceans Protection Plan	$129.20
Refurbishment and Replacement of Infrastructure, Equipment, & Systems	$153.58
Procurement of New Ships	$548.90

G&C Budget by Initiative for fiscal year 2021-22 Percentage of Total Budget

- Ocean Protection Plan — 4%
- PIER — 6%
- CCG Auxiliary — 9%
- Trans-Mountain Pipeline — 81%

Notes:

All Votes:

1. Total CCG references levels of $1,775M excludes Vote Netted Revenue budget of ($40M). The exclusion of revenue allows the reader to see the funding used by CCG to cover operating, capital and contribution expenditures.

2. New in this year's reporting is the breakout of direct Internal Services budgets. In previous reports, these budgets were within the Fleet Operational Capability program as they represent the direct overhead costs to maintain CCGs programs.

Vote 1: Operating budget is based on FY 21-22 initial allocations.
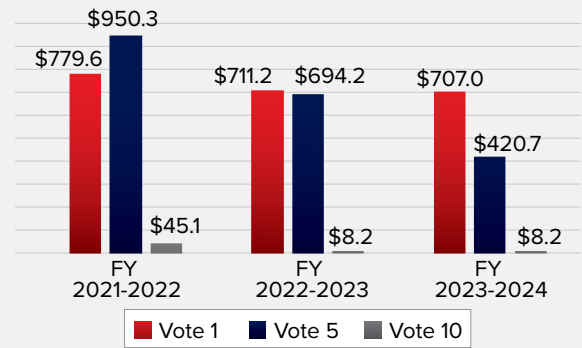
Vote 5:

1. Capital budget is based on FY 21-22 initial allocations.

2. Procurement of new ships is for all major vessel projects, including the National Shipbuilding Strategy (NSS).

3. Funding for OPP and TMX are related to specific TB Submissions, as per FY 21-22 ARLU (including any prior year Reprofiles).

4. VLE budget includes all funding for life extension projects planned for CCGs existing fleet.

5. Refurbishment and replacement includes funding for all shore based assets and other assets outside the CCG fleet (example: floating aid, towers, sites, etc.)

Vote 10:

1. CCG's contribution funding is larger than prior years, and future years, as TMX funding is for a limited time.

2. CCG Auxiliary funding is ongoing (permanent).

Three Year Outlook:

CCG future Reference Levels by Vote M($)

Notes:

1. Vote 1 budget drops by $68M from FY 21-22 to FY 22-23. This is due to sunsetting portions of programs like OPP ($30M), OFSV ($21M), TMX ($6M), and PIER ($2M).

2. Vote 5 and 10 budgets are subject to change in future years depending on future Treasury Board submissions and reprofiles that may be requested.

Historical Overview:

Historical Spending by Vote and Core Responsibility M($)
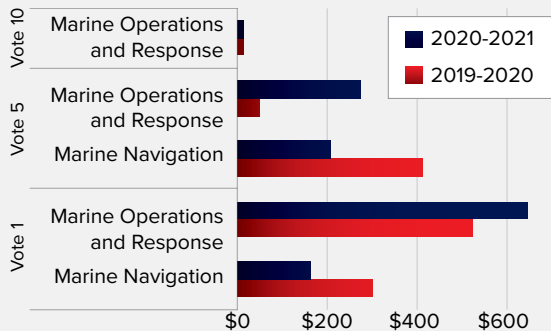
Historical Spending by Core Responsibility and Vote M($)
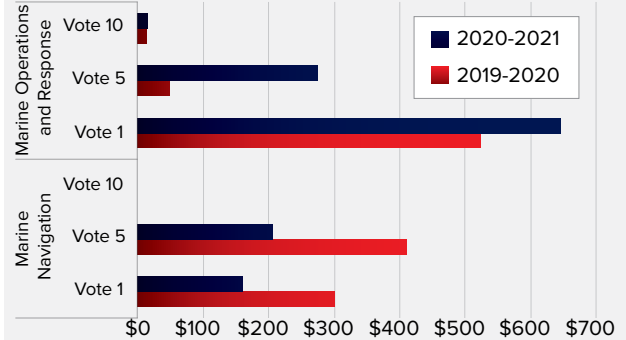
Showcase Items

Canadian Coast Guard to celebrate 60th anniversary

The Canadian Coast Guard will celebrate its 60th Anniversary on January 26, 2022. The anniversary theme of "Navigate the Future" was selected not only to celebrate the past accomplishments and rich and unique history of the Organization, but also to convey a sense of the work we are undertaking to chart our course for the future and ensure we do all we can to continue to meet the service expectations of Canadians and all who use Canadian waters, from coast to coast to coast.

The graphic identifier for the anniversary that will be used to help promote and celebrate this important milestone was selected by vote by Coast Guard employees. It includes a number of key elements from the Coast Guard badge, including: blue, white, and red to symbolize water, ice, and the red maple leaf; the two golden dolphins that represent Coast Guard vessels; and the rope frame with a knot tied at the base, which signifies a proud maritime organization.

Celebrating Canadian Coast Guard's history

While the Canadian Coast Guard was officially formed on January 26, 1962, its origins can be traced to as far back as the 1700s when the first lifeboats and lighthouses were established in Eastern Canada. The various governments that preceded a unified Canada had their own patrol vessels, which began to appear along the eastern seaboard and in the Great Lakes in the 1800s.

In 1868, one year after Confederation, the federal government established the Department of Marine and Fisheries. This department assumed responsibility for marine affairs, including the operation of government vessels, and for various elements of marine infrastructure. In 1936, responsibility for marine transportation shifted to the Department of Transport.

The official organization was created on January 26th, 1962, when the Honourable Leon Balcer, Minister of Transport, rose in the House of Commons and announced that the Department of Transport fleet of ships would, in the future, be known as the Canadian Coast Guard.

In 1995, the Coast Guard transferred to the Department of Fisheries and Oceans (DFO) in order to gather the two largest civilian fleets within the federal government under one department. DFO Science vessels and the Fisheries Conservation and Protection Fleet were incorporated with the Coast Guard Fleet.

To better serve Canadians, the federal government began investigating the possibility of giving the Coast Guard more independence by transforming it into a separate agency within DFO, and in 2005, the Canadian Coast Guard was officially declared a "special operating agency" of DFO.

Today, the Canadian Coast Guard is not only responsible for the longest coastline of any given country, but it is also responsible for the safe circulation of international commercial ships who cross our borders, the Canadian citizens who take pleasure in navigating our lakes and oceans during boating season, and for providing services to our Northern communities.

Learn more about the History of the Canadian Coast Guard.

> **"**
>
> **While the Canadian Coast Guard was officially formed on January 26, 1962, its origins can be traced to as far back as the 1700s when the first lifeboats and lighthouses were established in Eastern Canada.**
>
> **"**

Showcase Items

College is on course for distance and simulated learning

The Canadian Coast Guard College reacted quickly as the COVID-19 pandemic swept the globe, pivoting from in-person to distance learning.

OnCourse, the College's learning management system, has evolved from its launch in May 2020 to a robust online learning platform that now hosts courses from a variety of Coast Guard College departments, including the Officer Training program, Marine Communications and Traffic Services, Operational Training and SAP. Given these successes, the College is prepared to assist other areas of the Coast Guard that are looking to collaborate with the OnCourse team in the design, development, and hosting of their training requirements. In particular, OnCourse is proving to be a key tool in the development and delivery of a number of organizational training offerings including, but not limited to, Search and Rescue, Emergency Response, Aids to Navigation, Maximo integration, logistics, the Coast Guard Auxiliary, and ship's crew certification studies.

Instructors have been instrumental in the development of the online curriculum, working with the instructional design team to ensure that course material is structured to support an online delivery method that meets course learning objectives. Solutions include: instructor-delivered synchronous fully online courses; blended face-to-face and online learning courses; fully online, self-paced courses; and interactive online study guides that assist trainees in preparation for certification exams. The College continues to work closely with both national headquarters and regions to develop priorities associated with the training needs of the Coast Guard.

The College has also been actively engaged in the enhancement of simulated learning, with a number of new and planned training simulators for various operational disciplines. While this has already improved training opportunities, the ultimate goal is to create a simulated learning environment that enables the simulators to be housed together, and to interact with each other, making multi-level and integrated exercises and other training scenarios possible. Multi-mission/program scenarios are critical to replicating real-world scenarios which are complex, multi-dimensional, and often evolve along the continuum of response.

It's critical to remember that different teaching methodologies — such as in-class learning, distance, and simulation — are not standalone methods. The College is well placed to ensure that the organization has access to blended and modernized approaches to learning to help ensure that our personnel, from coast to coast to coast, are trained to the highest standards of excellence for years to come.

Showcase Items

Engaging with Arctic Communities

The Coast Guard is committed to continuing to build its partnerships with Inuit, First Nations, and Métis governments and organizations to ensure appropriate re-alignment of programs and services to better serve communities, provide new opportunities to participate in decision making, and increase representation of Indigenous peoples in the Coast Guard.

Recognizing that community engagement is crucial to achieving these objectives,

DFO and the Coast Guard have recruited Community Engagement Coordinators (CEC), located in communities across the Arctic. The coordinators support capacity building and help the organization to better understand the priorities and capacity within the Arctic region and enhance the delivery of Arctic programs. The CECs are providing invaluable assistance to the Coast Guard Arctic Region in its ongoing efforts to include local knowledge in decision-making, remove employment barriers and create job opportunities in northern communities, and co-develop solutions to advance maritime safety and environmental priorities.

To date, there are seven CECs located across the Arctic. The CECs act as a liaison between the Coast Guard and communities in the north, and provide advice and recommendations to

DFO and Coast Guard Arctic Region on northern programs and service delivery, as well as recruitment and retention, and reconciliation. They have also delivered presentations on Inuit Qaujimajatuqangit (Inuit Traditional Knowledge) to Coast Guard Management Board and Extended Regional Management Board to educate and build knowledge of cultural values and support diversity in the Department.

Inuit Qaujimajatuqangit — which is often abbreviated as IQ — is often translated as "Inuit traditional knowledge" or sometimes "Inuit traditional technology." Some key concepts of IQ include:

- ᐃᓅᖅᑲᑎᒌᑦᓯᐊᕐᓂᖅ (respecting others);

- ᑐᖖᒐᓇᕐᓂᖅ (being open);

- ᐱᔨᑦᓯᕐᓂᖅ (serving);

- ᐊᖏᖅᑲᑎᒌᖕᓂᖅ (consensus decision making);

- ᐱᓕᒻᒪᒃᓴᕐᓂᖅ (skills and knowledge acquisition);

- ᖃᓄᖅᑑᕐ�ᓂᖅ (being resourceful to solve problems);

- ᐱᓕᕆᖃᑎᒌᖕᓂᖅ (working together for a common purpose); and

- ᐊᕙᑎᒃ ᑲᒪᑦᓯᐊᕐᓂᖅ (environmental stewardship).

DFO and the Coast Guard are also establishing an Arctic Youth Council (AYC) to promote and increase Indigenous recruitment and retention in the department. An AYC Coordinator, located in Iqaluit, is leading the initiative, which will bring together young people in local communities to promote opportunities within the department, supporting the department's inclusion and diversity initiatives.

Showcase Items

The CCGS *John Cabot*

This year will see the first science mission of the new offshore fisheries science vessel, the CCGS *John Cabot*, which travelled more than 7,500 nautical miles during its four-week journey from the Seaspan Shipyards in Vancouver, British Columbia, where it was built, through the Panama Canal to its home port of St. John's, Newfoundland and Labrador.

The 208-foot-long vessel will carry out fishing and acoustic surveys, collect information on the amount and location of various species, and gather data on marine ecosystems and the impact of human activity on fish and habitats. While the vessel is primarily focused on science and research, it also has the capability to support search and rescue and environmental response operations.

The ship was named after John Cabot (c. 1450 – c. 1500), an Italian navigator and explorer recognized as the first European since the Norse colonization of North America to land on the continent, officially at Cape Bonavista on the island of Newfoundland, in 1497. The CCGS *John Cabot*, along with sister ships the CCGS *Capt Jacques Cartier* and the CCGS *Sir John Franklin*—which were both launched in 2019 and also named after former scientists and explorers who made a significant contribution to the history of Canada— were built as part of the federal government's National Shipbuilding Strategy (NSS).

The three ships are the Government of Canada's first vessels purposely designed and built for offshore fisheries science and monitoring, and have been designed to serve as state-of-the-art floating laboratories. Each is equipped with four types of labs and will enable Fisheries and Oceans Canada to collect key information necessary for the sustainable management of Canada's oceans and aquatic resources for the benefit of current and future generations.

The delivery of this third and final offshore fisheries science vessel marks the completion of the first class of large ships built under Canada's NSS. This is a significant milestone in the renewal of the Coast Guard fleet, and supports Canadian technological innovation, bringing jobs, and prosperity to many communities across the country.

The CCGS *John Cabot* entered into service in spring 2021, with Fisheries and Oceans Canada scientists and crew having an opportunity to train on the vessel and its science systems.

> "
> The ship was named after John Cabot (c. 1450 – c. 1500), an Italian navigator and explorer recognized as the first European since the Norse colonization of North America to land on the continent, officially at Cape Bonavista on the island of Newfoundland, in 1497.
> "

Showcase Items

Four-Season Lighted Buoys Project

The Canadian Coast Guard's successful project to replace seasonal navigation buoys in the St. Lawrence River between Traverse Nord downstream of Quebec City and Lake St-Louis upstream of Montreal with modern lighted four-season buoys (4SB) will continue during this business planning cycle, with a projected end date of March 2022.

The deployment of 4SB in place of traditional seasonal navigational buoys will reduce costs and enable the Coast Guard to operate more efficiently and effectively. Seasonal navigational buoys provide only six to eight months of lighted navigation, need to be deployed every spring and switched out every fall, and once out of the water must be inspected and repaired. The new 4SB, which remain in the water year-round and only require service and maintenance every two to four years, improve navigational accuracy and efficiency, as well as personnel and environmental safety.

The project is deploying 4SB on 183 positions using three buoy models — small, medium and large — each suited for different conditions. Both the large 1.3 metre and the small 0.7 metre buoys have already been manufactured and deployed on 152 positions, while the new medium 1.0 metre buoy is in the final stages
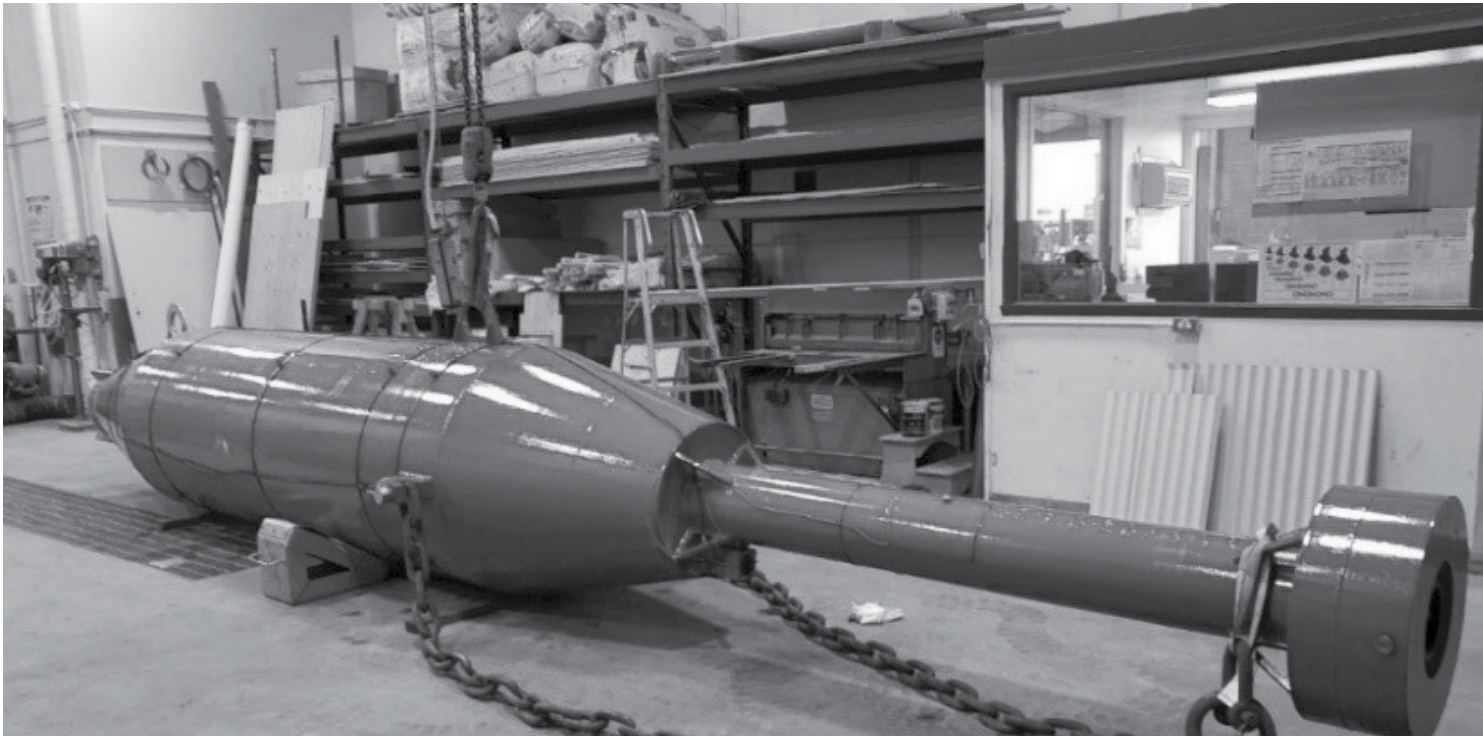
before its production, with several prototype buoys already in the water which have been monitored and measured to ensure optimal performance. Once delivered, the medium buoys will be deployed on the remaining 31 positions. The 1.0 m buoy has a lower weight-to-performance ratio than the large buoys, and the Coast Guard is awaiting the full results and analysis of the field trial data to determine whether the medium buoys may therefore be appropriate for use in other sectors in the future.

Given the success of the 4SB project in the St. Lawrence, consideration is being given to expanding the solution to the Great Lakes sector. A parallel study is also being undertaken to investigate options to improve the performance of the lantern technology, following feedback and consultations with many of the system users with whom the Coast Guard's Aids to Navigation program staff interact with on a regular basis.

> **The deployment of 4SB in place of traditional seasonal navigational buoys will reduce costs and enable the Coast Guard to operate more efficiently and effectively.**

Showcase Items

Partnering with Indigenous communities for enhanced emergency response

Under Canada's Oceans Protection Plan (OPP), the Canadian Coast Guard has been successful in supporting Indigenous communities along British Columbia's (BC) coast to build marine emergency response capacity through various projects. This continuum of support ranges from training for community members with little marine emergency response capacity to full integration into the system as responders.

One such effort is the Indigenous Community Response Training (ICRT) project, which provides hands-on, on-water training and experience to Coastal First Nations in BC, in areas including marine search and rescue (SAR), environmental response, and the application of the Incident Command System (ICS). This project has been well received by Indigenous communities throughout BC and has enabled communities to integrate into the Coast Guard's emergency response efforts. Documented cases include trainees saving lives in their communities and the hiring of one of the Coastal Nations' SAR graduates; a member of the Heiltsuk First Nation. Between 2017 and 2020 the Coast Guard's Indigenous community response

training initiative has trained more than 400 First Nation participants from more than 33 nations, in SAR, marine advanced first aid, small vessel operations, and ICS 100 (Introduction) and 200 (Basic ICS for Single Resources and Initial Action Incidents).

The national Indigenous Community Boat Volunteer Pilot program has funded successful Indigenous applicants to purchase vessels and other equipment that is required in order for applicants to become volunteer members of the Canadian Coast Guard Auxiliary. To date, eight First Nation communities in BC have been provided $2,117,791 in funding to integrate into the Coastal Nations Coast Guard Auxiliary (CNCGA).

The Coast Guard also provided additional funding under the Auxiliary program to support the incorporation of the CN-CGA, which commenced on-water operations in fall 2020 in the territorial waters of Ahousaht and Heilsuk First Nations, becoming the first Indigenous-led Canadian Coast Guard Auxiliary in Canada. This Auxiliary organization now has membership in

five Nations (Ahousaht, Heilsuk, Gitxaala, Nisgaa, and Kitasoo). The ICRT and Community Boat Volunteer projects have played an important role in providing training and equipment to aspiring members of the Auxiliary.

> **Between 2017 and 2020 the Coast Guard's Indigenous community response training initiative has trained more than 400 First Nation participants from more than 33 nations.**