

## HIGHLIGHTS OF

**THE INTEGRATED ARCTIC CORRIDORS FRAMEWORK:  
PLANNING FOR RESPONSIBLE SHIPPING IN CANADA'S  
ARCTIC WATERS**

[Clear Seas](#) is an independent, not-for-profit organization that provides impartial and evidence-based research to inform the public and policy makers about marine shipping in Canada.

We are providing this digest on The Pew Charitable Trusts' report: [The Integrated Arctic Corridors Framework: Planning for responsible shipping in Canada's Arctic waters.](#)

This short digest is not meant to be inclusive of all the Review's commentary and/or recommendations, nor are the items mentioned necessarily in the same order as the original report.

**MESSAGE FROM THE EXECUTIVE DIRECTOR**

Canada's Arctic is one of the world's most pristine yet potentially most challenging areas to operate in, particularly from an environmental point of view.

Climate change is having a substantial impact on this part of the world. In fact, "The Arctic is warming twice as fast as other parts of the planet, which has ramifications for global security, climate, commerce and trade", according to a recent comment from the National Oceanic and Atmospheric Administration concerning its recent Arctic Report Card.

If this trend continues, ship passage throughout the Arctic, along with the potential for industrial activity, can only increase.

In addition, there is so much we still don't know about the region. Our hydrographic data, modern charting, and icebreaker capacity are under-resourced and our nautical knowledge of the area is woefully inadequate to meet safe ship travel in the future.

Such challenges are not insurmountable. This report offers one solution by making the case for the Canadian Coast Guard's Northern Marine Transportation Corridors Initiative to be expanded to integrate the issues of shipping, environmental, and human impact policies into a complete Arctic-specific national shipping policy.



DR. RICHARD WIEFELSPUETT  
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## Background

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Canada's Arctic Ocean encompasses more than 150,000 km of coastline – connecting all four settled Inuit land claim territories and touching 53 northern communities. It provides habitat for the majority of the world's beluga and bowhead whales, narwhals, and polar bears and is a highway for some of the greatest marine mammal and seabird migrations on the planet.

In all ocean environments there is a confluence and conflict of interests. In the case of the Arctic there is a high degree of overlap among shipping, Inuit-use patterns, and environmentally significant areas, particularly in important passages such as Lancaster Sound, Hudson Strait, and parts of the Canadian Beaufort Sea. This situation will only be made more complex because global economic interests are beginning to intersect with national sovereignty and security, environmental protection, and Inuit rights.

Although the federal government is committed to the principle of balancing Arctic development within the context of conflicting interests, the existing state of affairs does not sufficiently account for the environmental and social complexity of Canada's Arctic Ocean.

Since 1990 no less than seven key government studies have issued more than 170 recommendations for reform. However, Canada still lacks a clear, cohesive vision for an Arctic shipping policy.

In 2012, the Canadian Coast Guard (CCG) began to address some of the systemic deficiencies in Canada's Arctic shipping policy by launching the [Northern Marine Transportation Corridors Initiative \(NMTCI\)](#). This initiative seeks to establish a system of voluntary marine corridors towards which the Coast Guard and other agencies could direct their resources to support vessel safety in the Arctic.

The Pew Report makes the case for widening the parameters of NMTCI to encompass the environmental and social complexity of Canada's Arctic – into The Integrated Arctic Corridors Framework (hereafter referred to as the "Framework"). It brings together government departments, Inuit organizations, and other stakeholders to develop and manage a series of Arctic shipping corridors designed to achieve the highest possible level of human and vessel safety, environmental protection, and safeguarding of Inuit rights.

## The Way Forward

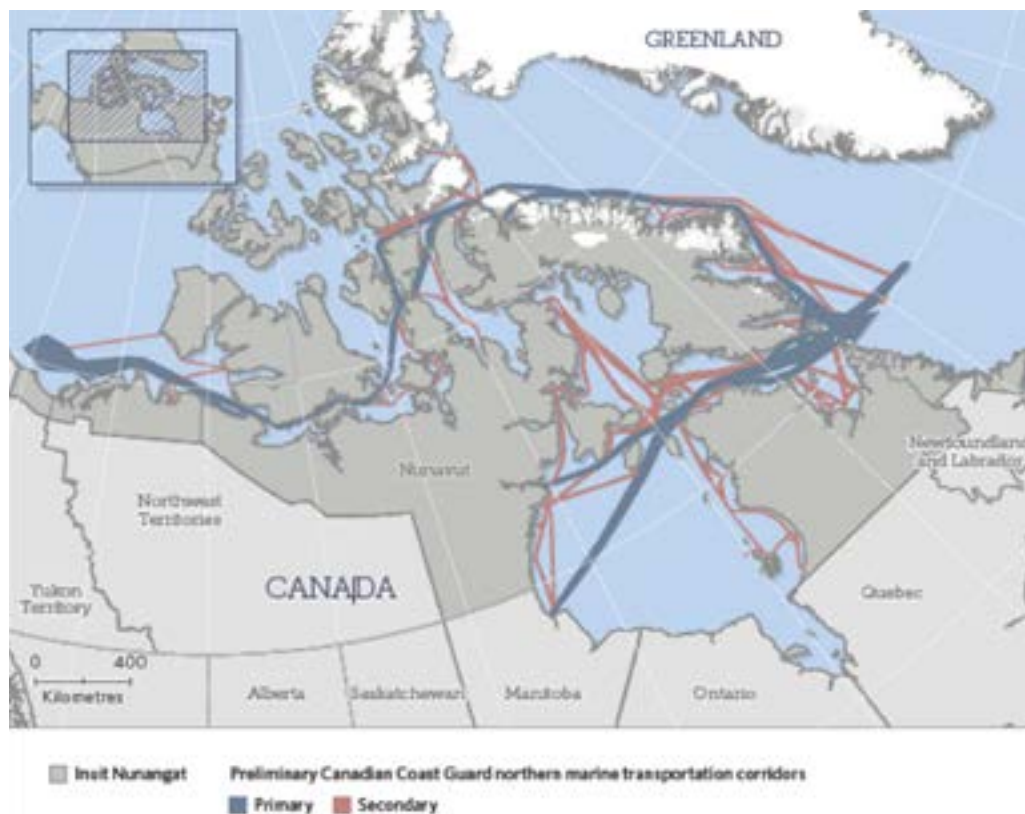
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The report believes that the NMTCI offers the most promising foundation for the development of a national Arctic shipping policy. As per the map below, the CCG has already identified primary



[major well known routes] and secondary [routes to communities] shipping corridors based on existing traffic patterns in conjunction with hydrographic information and proximity to Coast Guard services.

The CCG's proposed corridors would significantly limit each area available for shipping activity and provide a strong starting point for integration.



Canadian Coast Guard Identified Arctic Shipping Corridors Based on Existing Traffic Patterns

To become a complete Arctic-specific national shipping policy, the NMTCI must expand to account for environmentally significant areas and Inuit-use patterns.

The [Oceans Act](#) requires the Department of Fisheries and Oceans to designate ecologically and biologically significant areas across all Canadian marine areas. The large overlap of these areas with corridor designations illustrates a pressing need for greater study and integration of multiple environmental and Inuit-use information into corridor design. The Framework would address this gap – and, in doing so, would provide a more holistic approach to shipping management. If implemented, such a comprehensive integrated process – within a single national policy - will result in more informed decision-making and reduced risk for the shipping industry, Inuit communities, and Arctic ecosystems.



# Integrated Corridors: Toward a national policy for Arctic Shipping

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To build integrated Arctic corridors the Pew Report suggests a five-step process.

**Step 1** is for the CCG to establish a Canadian Arctic Corridors Commission<sup>1</sup> (hereafter, referred to as the “Commission”), co-chaired by Inuit and the Coast Guard. It would include representatives from Transport Canada, Environment Canada<sup>2</sup>, Fisheries and Oceans Canada, all three territorial governments and appropriate Inuit land organizations. The Commission’s mandate would have two phases: first to develop the integrated corridors, and then become their permanent administrative management body overseeing the system.

**Step 2** is to meaningfully engage the Inuit peoples who must be part of the designation, classification and management of corridors. To that end, the Commission must enter into formal consultations with all settled Inuit land claims regions to ensure meaningful participation that would provide for the opportunity for Inuit traditional knowledge about sensitive marine and coastal areas to shape corridor choices. It must also create a national process to gather Inuit views on shipping, develop effective communication and linkage channels between the various stakeholders.

**Step 3** concerns the integration of information. To account for the complexity of the region, the Commission would collate all available data into a single [Arctic maritime atlas](#). This will allow the Coast Guard to verify and address information and planning gaps. The degree of overlap between designated environmental areas and the Coast Guard’s corridors – such as in the Hudson Strait, where vessel traffic, wildlife habitat, and Inuit activities intersect– demonstrates why such information needs to be considered in corridor design.

Building integrated corridors also requires the collection of new information. Major gaps exist in the data on Arctic offshore ecology, which is particularly relevant for shipping corridors. Another critical need is to improve the federal government’s understanding of oil spill sensitivity and response planning. This information is especially important given that the eastern and western Arctic both have extended periods when spill response is not possible because of environmental conditions.

To these ends the Canadian government must allocate sufficient funding to provide the Canadian Hydrographic Service and the Coast Guard with additional resources to carry out hydrographic surveys of all potential shipping corridors. Also necessary, are the synthesizing of existing hydrographic and related shipping data, regional risk assessments of shipping, ecosystem based scientific studies on marine mammals and habitat, and the implementation of an Arctic monitoring system to ensure the long term health of important ecological and biological areas.

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1 The report noted that the Canadian Senate already has recommended creation of such a body.

2 Now called Environment and Climate Change Canada.



**Step 4** is to designate shipping corridors based on the analysis of all relevant information. Once an integrated mapping and assessment process has identified the optimal shipping routes, the Commission should formally establish a system of corridors that excludes sensitive areas.

**Step 5** is to classify corridors based on three tiers: 1- low risk, 2 - medium risk, and 3 - high risk. Based on their tier designation, corridors would receive targeted investment and management, including environmental protected areas, enhanced service, site-specific contingency planning, improved charting, and enhanced regulation and oversight.

In its recommendations the report noted that the Commission must create local and regional maps of high-risk areas and use the risk assessments conducted during the information-integration stages to identify where shipping corridors pass through high, medium and low-risk areas.

## Managing Integrated Arctic Corridors

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**Targeting Resources:** Because knowledge about Canada's Arctic waters suffers from a lack of information, particularly related to safe navigation, the report recommended the Commission: request an infrastructure needs assessment; develop short-, medium-, and long-term strategies, including such funding potentials as public-private partnerships and fees for service; and build capacity to respond to a worst-case scenario ship-source oil spill.

**Supporting safe and responsible vessel traffic:** The Framework would advance NMTCI's goal of supporting safe and responsible vessel activity by:

- Building on protections in Canada's existing regulatory mechanisms.
- Providing a structure to revisit rules related to liability limits for ship-based pollution events.
- Identifying special areas for enhanced environmental management,
- Calling for site-specific contingency planning (including for worst-case scenarios) in designated areas, and by
- Developing permanent mechanisms for ongoing engagement and consultation with Inuit groups to ensure that their rights are being protected.

Accordingly, the report recommended appropriate management plans and regulatory controls to support the Framework, including establishing protections for sensitive areas within and adjacent to corridors including those with International Maritime Organization designations, such as Special Areas, Emission Control Areas, and Particularly Sensitive Sea Areas.



**Monitoring and adapting to change:** Because of the unprecedented rate of change in the Arctic and the need to optimize safety and environmental protection the report also recommended that the Commission:

- Support and integrate baseline environmental assessment and monitoring in vulnerable areas along designated corridors.
- Establish a vessel monitoring program that includes regular monitoring, ship inspections, corridor surveillance, and incident review.
- Periodically review and reassess designations, classifications, investments, and management approaches based on information from monitoring or on significant changes to shipping activities and patterns.

## Conclusion

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The Integrated Arctic Corridors Framework offers a blueprint for bringing together all stakeholders around a national policy for Arctic shipping that the Pew Report believes “.... would make shipping in the Canadian Arctic safer and more affordable while strengthening environmental protections and protecting Inuit rights. Importantly, the framework would be built to adapt as conditions change in this dynamic and complex area.” Further, its implementation “would solidify Canada’s position as a global leader in Arctic policy and diplomacy and could help to spark a new era of cooperation with Canada’s international Arctic partners.”