

# ARCTIC MARINE SHIPPING ASSESSMENT

Scenarios of the Future



An Assessment Undertaken by the Protection of Arctic Marine Environment Working Group of the Arctic Council

# Scenarios on the Future of Arctic Marine Navigation in 2050

## Arctic Marine Shipping Assessment (AMSA)

The Arctic Council – an intergovernmental forum that addresses environmental protection and sustainable development issues, as well as challenges faced by the Arctic governments and people – is conducting an assessment of current and future Arctic marine activity. The lead countries for AMSA are Canada, Finland and the United States with the Arctic Council's working group on Protection of the Arctic Marine Environment (PAME) responsible for the assessment. A key element of AMSA is the creation of a set of scenarios, or plausible futures, for Arctic marine navigation.

## Scenario Framework

The high-level scenario summaries were created at two AMSA/PAME Scenarios Workshops held in San Francisco (April 2007) and Helsinki (July 2007). The workshops were designed and facilitated by Global Business Network of San Francisco. Through brainstorming, work in small groups and spirited plenary discussion, workshop participants collectively agreed that the two factors detailed below – Governance and Resources & Trade – are the most important and uncertain in shaping the future of Arctic marine navigation in mid-century. By crossing these two critical uncertainties, participants formed the scenario matrix illustrated to the right. This framework also allows the incorporation of many of the uncertainties explored at the workshops, while still creating four different scenario spaces that are plausible and relevant to the range of Arctic stakeholders. When completed, the scenario stories will be posted on the PAME website, [www.pame.is](http://www.pame.is).

### GOVERNANCE

This uncertainty axis describes the degree of relative *Governance stability*, both within the Arctic region and internationally.

- ← **Less stability** implies shortfalls in legal structure and transparency, as well as a propensity for stakeholders to work on a more unilateral basis rather than by collaborating in a cooperative, international fashion.
- **More stability** implies not only efficiently operating legal and regulatory structures, but an international atmosphere more conducive to collaborative and cooperative development.

### RESOURCES & TRADE

This uncertainty axis describes the level of demand for Arctic natural resources and trade. Framing this in a global context exposes the scenarios to a broader range of potential market developments, such as the rise of Asia or political instability in the Middle East.

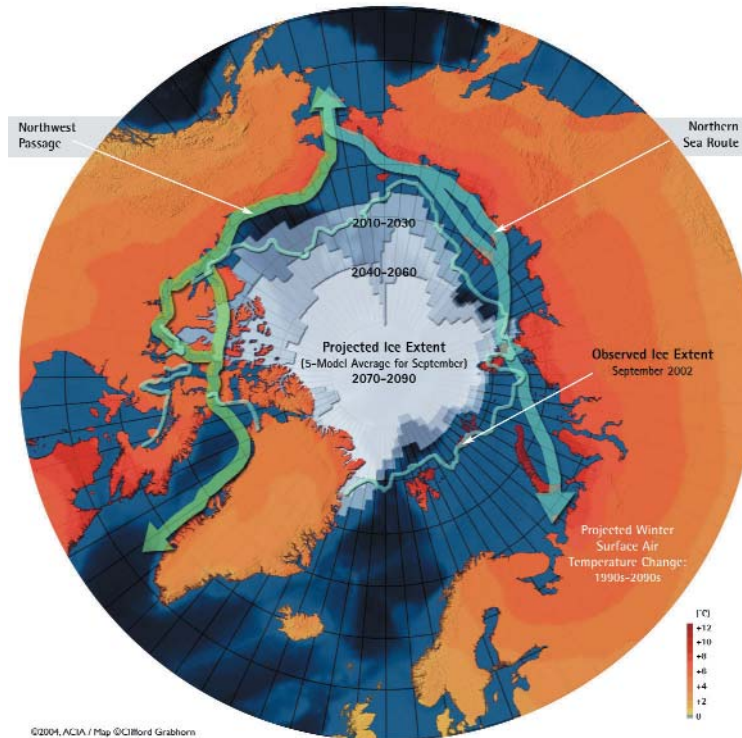
- ↑ **More demand** implies exactly that – higher demand from more players and markets around the world – for natural resources and commerce in the Arctic.
- ↓ **Less demand** is also straight forward, with fewer global players interested in utilizing Arctic commerce and natural resources.



*Development of the AMSA scenarios is being facilitated by Global Business Network of San Francisco. Support for this effort has been provided by: Aker Arctic Technology, BP Shipping, Finnish Ministry of Foreign Affairs, Institute of the North, Transport Canada, U.S. Arctic Research Commission, U.S. Department of State and U.S. National Oceanic & Atmospheric Administration.*

## Arctic Climate Impact Assessment Key Finding #6:

*"Reduced sea ice is very likely to increase marine transport and access to resources."*



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