

The Arctic Region - Geopolitics, Strategy and Challenges



with
Rear Admiral (Retired)
Simon Hardern

B
E
Y
O
N
D
|
T
H
E
|
P
O
D
I
U
M

ENRICHMENT
SERIES

When Does Celebrity APEX Cross into the Arctic Circle?



When Does Celebrity APEX Cross into the Arctic Circle?

Arctic Circle Plunge Ceremony - Resort Deck at 5pm





Honouring Arctic Voyagers

Recognition for mariners who cross into the Arctic Circle





The Blue Nose Ritual

Sailors are marked with the legendary blue nose





Marking the Crossing

Ships ceremonially paint fittings blue



Entering the Arctic Realm

Beyond 66.56° North — into polar waters





The Arctic is No Longer a Distant Wilderness

BEYOND
THE
PODIUM
ENRICHMENT SERIES

It is a region where climate change, energy security, global trade and great-power politics are converging

What happens at the top of the world ...
increasingly shapes what happens everywhere else

Who Owns the Arctic?

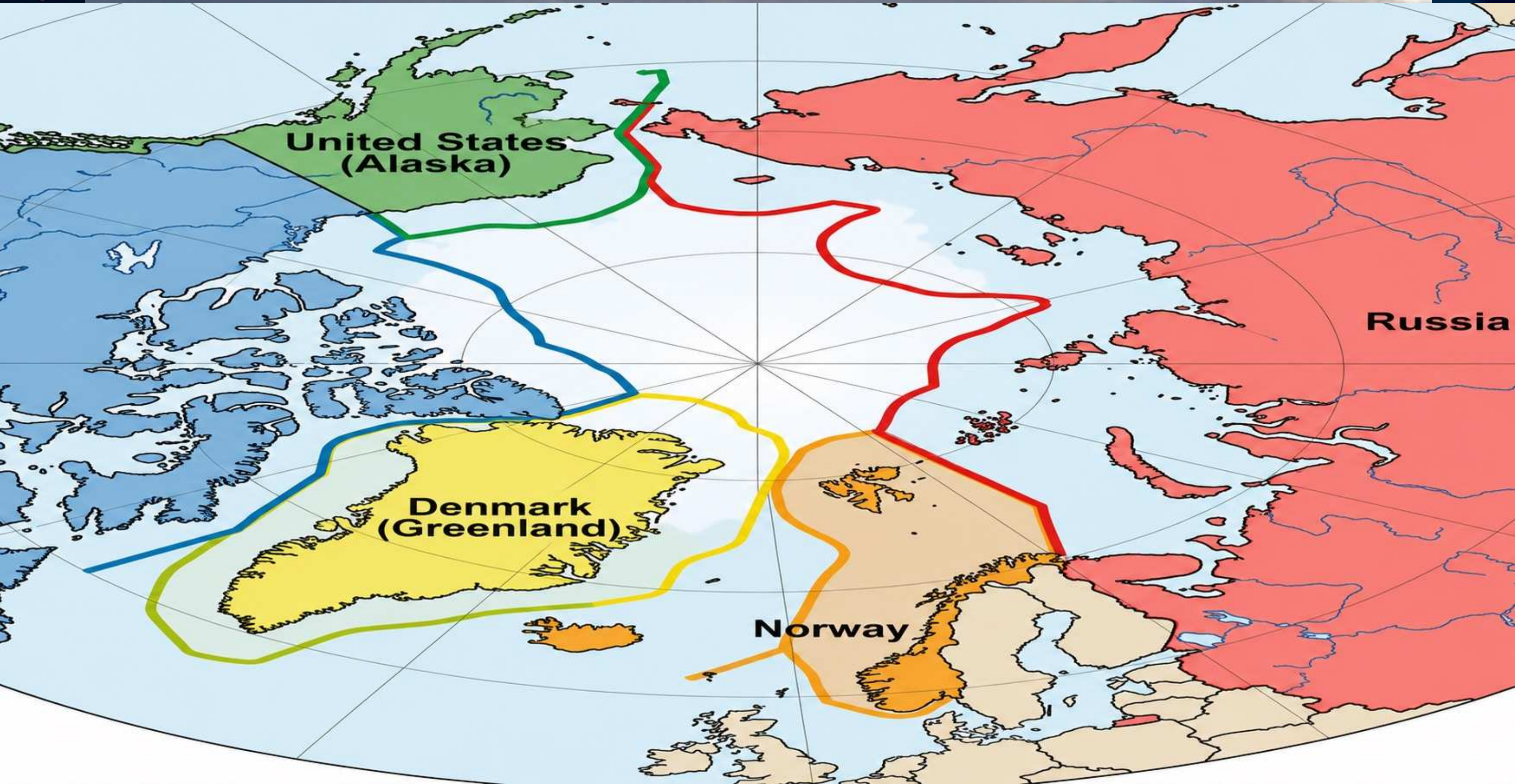
The Arctic is not governed by a single treaty

- It is a region free of sovereign control
- Eight nations hold territory within the Arctic Circle, managing land, coastal waters and economic zones
- Under international law, states can extend seabed claims where geology supports them
- Overlapping claims are resolved through diplomacy and law

This is not a global commons ...
it is a contested space shaped by national
interests



Arctic Territorial Claims



The World's Coldest Power Struggle

- Beneath the ice lie vast reserves of oil, gas, minerals and fish
- Melting sea ice is opening new global shipping routes
- Major powers are increasing their military and political presence
- Indigenous communities are fighting to protect their homelands and way of life

The future of the Arctic may be decided by cooperation, competition ... or confrontation

Warming Faster than Anywhere on Earth

The Arctic is heating up nearly four times faster than the global average

- Summer sea ice is shrinking, exposing open water for longer each year
- Thawing permafrost is releasing greenhouse gases and damaging infrastructure
- Melting glaciers and ice sheets are contributing to global sea level rise
- Longer ice-free seasons are making shipping and resource extraction more feasible

Climate change is not just an environmental story here ... It is the force unlocking the Arctic's geopolitical transformation

34.9°C

Peak temperature recorded within the Arctic Circle

Frosta, Norway - 2025 3-week record heatwave

139 Gt

Ice lost from the Greenland Ice Sheet in 2025

1.5x all European Alpine Glaciers combined

Climate Change Impacts



Resources Above and Beneath the Arctic

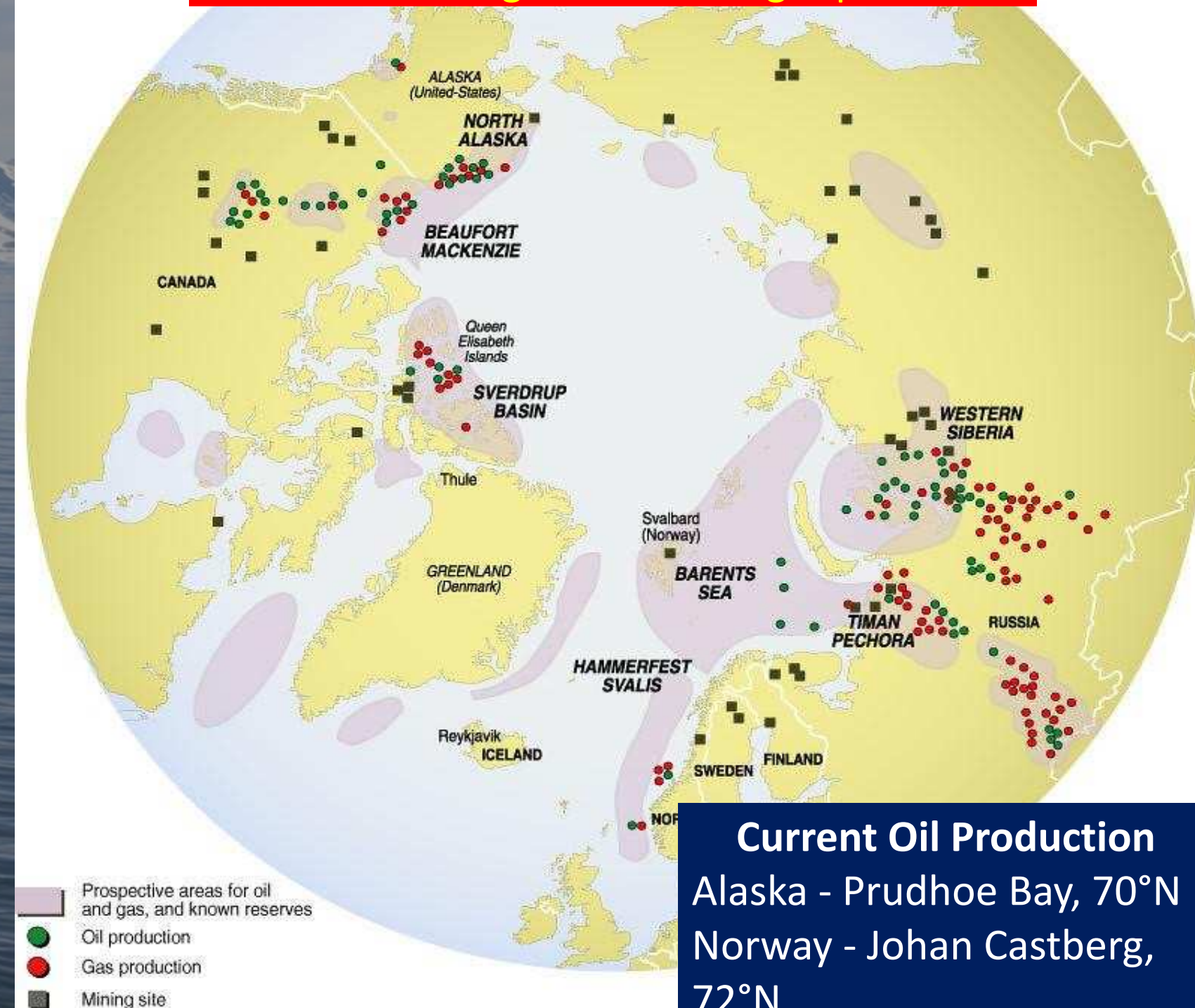
The Arctic is not just opening as a sea route -
- it is emerging as a vast storehouse of natural wealth -

This partially explain President Trump's interest in Greenland

- The region holds an estimated 13% of the world's undiscovered (and recoverable) oil and 30% of its undiscovered (and recoverable) natural gas
- Rich fishing grounds are expanding as waters warm and ecosystems shift northward
- The Arctic contains significant deposits of rare earth elements and critical minerals - these resources are vital for energy security, food supply and modern technology

Access to Arctic resources is a major driver of today's geopolitical competition

**≈ 10% of current global oil production
≈ 25% of current global natural-gas production**



Current Oil Production

Alaska - Prudhoe Bay, 70°N

Norway - Johan Castberg, 72°N

Russia - Yamal 67-73°N

Environmental Risks and Fragile Ecosystems

The Arctic is one of the most sensitive and fragile environments on Earth

- Oil spills, pollution, and industrial accidents are far harder to contain in icy, remote conditions
- Melting permafrost is destabilising buildings, roads and pipelines
- Wildlife and marine ecosystems are highly vulnerable to temperature change and noise disturbance
- Increased shipping raises the risks of accidents in poorly charted and harsh waters

Damage in the Arctic lasts longer, spreads further, and is far harder to reverse

The Arctic is already a substantial natural methane source. As permafrost thaws, methane emissions from wetlands and thermokarst lakes are expected to increase, creating an additional climate feedback

- 1,300–1,600 billion tonnes of carbon are also locked in the northern permafrost

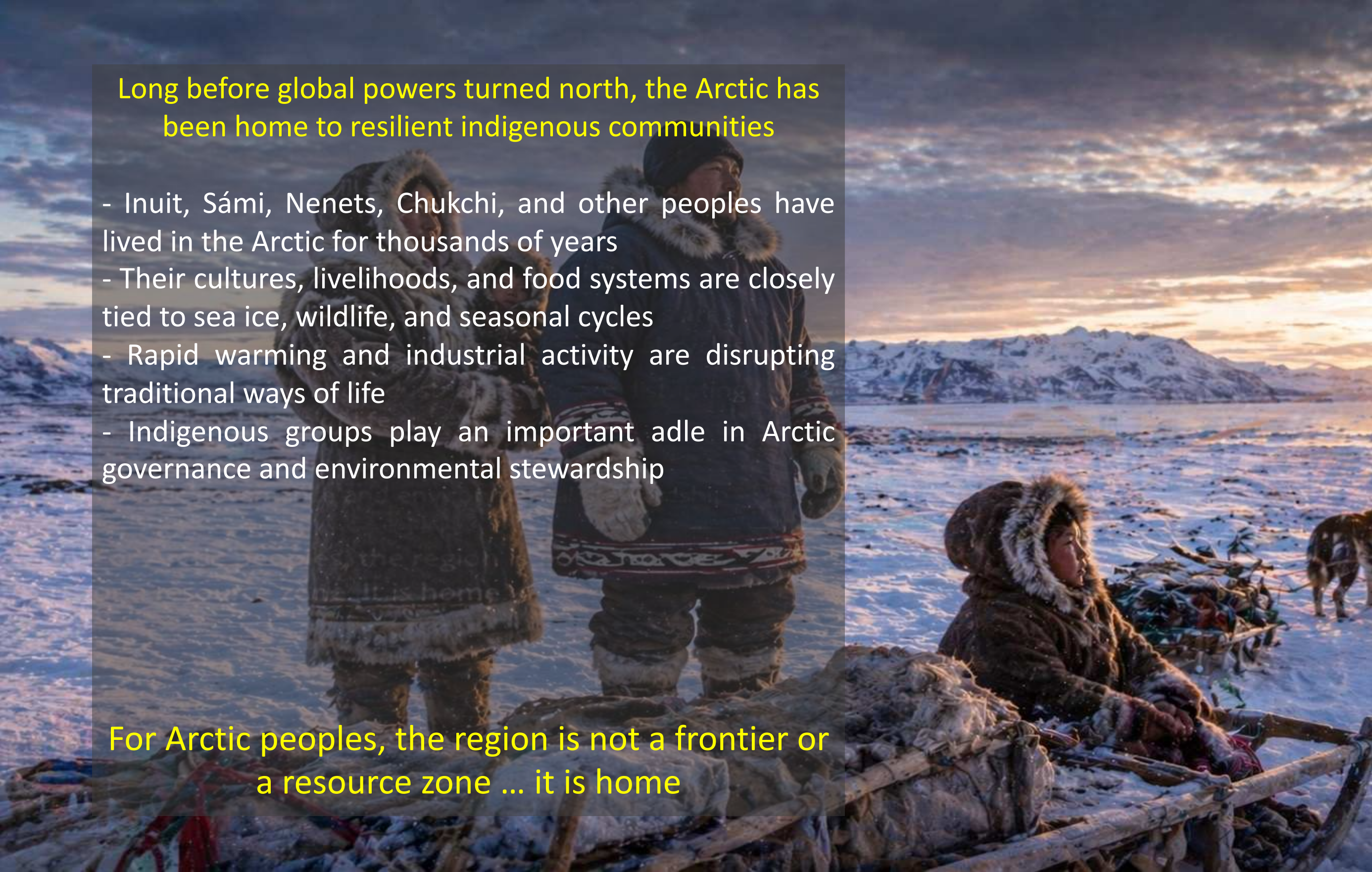


Indigenous Peoples and Arctic Survival

Long before global powers turned north, the Arctic has been home to resilient indigenous communities

- Inuit, Sámi, Nenets, Chukchi, and other peoples have lived in the Arctic for thousands of years
- Their cultures, livelihoods, and food systems are closely tied to sea ice, wildlife, and seasonal cycles
- Rapid warming and industrial activity are disrupting traditional ways of life
- Indigenous groups play an important role in Arctic governance and environmental stewardship

For Arctic peoples, the region is not a frontier or a resource zone ... it is home



Arctic Governance and Sovereignty

The Arctic is not governed by a single international treaty
It is shared and claimed by sovereign nations

Canada - Vast Arctic archipelago with strong sovereignty claims

Denmark - Controls Greenland, a critical Arctic territory

Finland - Strong Arctic technology and infrastructure (icebreakers) expertise

Iceland - Strategically located at the gateway to the Arctic

Norway - Key North Atlantic and Arctic maritime power

Russia - Largest Arctic coastline and extensive infrastructure

Sweden - Advanced scientific and environmental role

United States - Arctic presence through Alaska and growing strategic focus

The Arctic is shared in geography
.... but divided by national interests



The Arctic Council and Cooperation

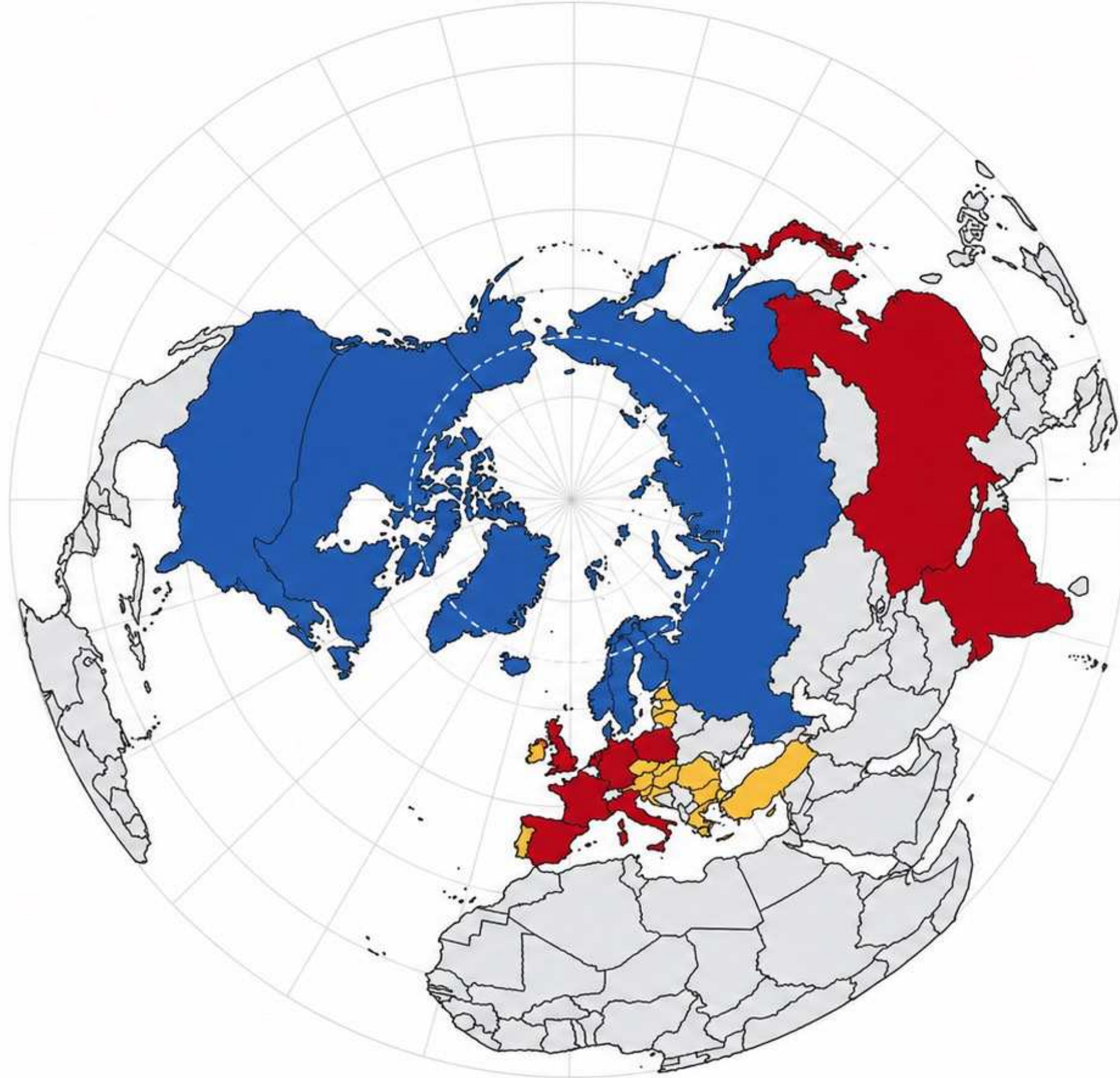
The Arctic Council is the principal forum for cooperation in the Arctic

- Established in 1996 under the Ottawa Declaration (not a Treaty), it brings together the eight Arctic States, Indigenous representatives, and Observers
- Focuses on Search and Rescue, Environmental Protection Oil Pollution Response), Sustainable Development, and Scientific Cooperation
- Decisions are made by consensus and are non-military in nature
- Remains a key channel for dialogue despite rising geopolitical tension

A platform where cooperation continues despite strategic rival



Arctic Council Members And Observers



Member States



Permanent Observers



Ad Hoc Observers

The Arctic's Indigenous Peoples

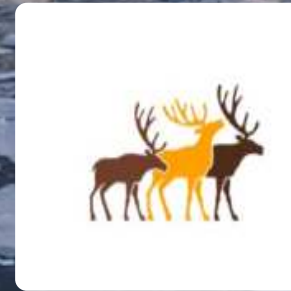
500,000 of the Arctic's 4 million inhabitants are indigenous peoples, represented by six organisations with permanent participant status at the Arctic Council



Aleut
International
Association



Arctic
Athabaskan
Council



Gwich'in
Council
International



Inuit
Circumpolar
Council



Russian
Association Of
Indigenous
Peoples Of
The North



Saami Council

- Canada considers the Northwest Passage to be internal waters under its sovereignty
- The United States and several others view it as an International Strait open to transit
- Melting ice is making the route more navigable for commercial and military vessels
- Control of the passage carries implications for trade security, and environmental protection

What was once an explorer's dream route is now a modern sovereignty debate



New Sea Routes

As Arctic ice retreats, shipping routes that were once impossible are becoming viable

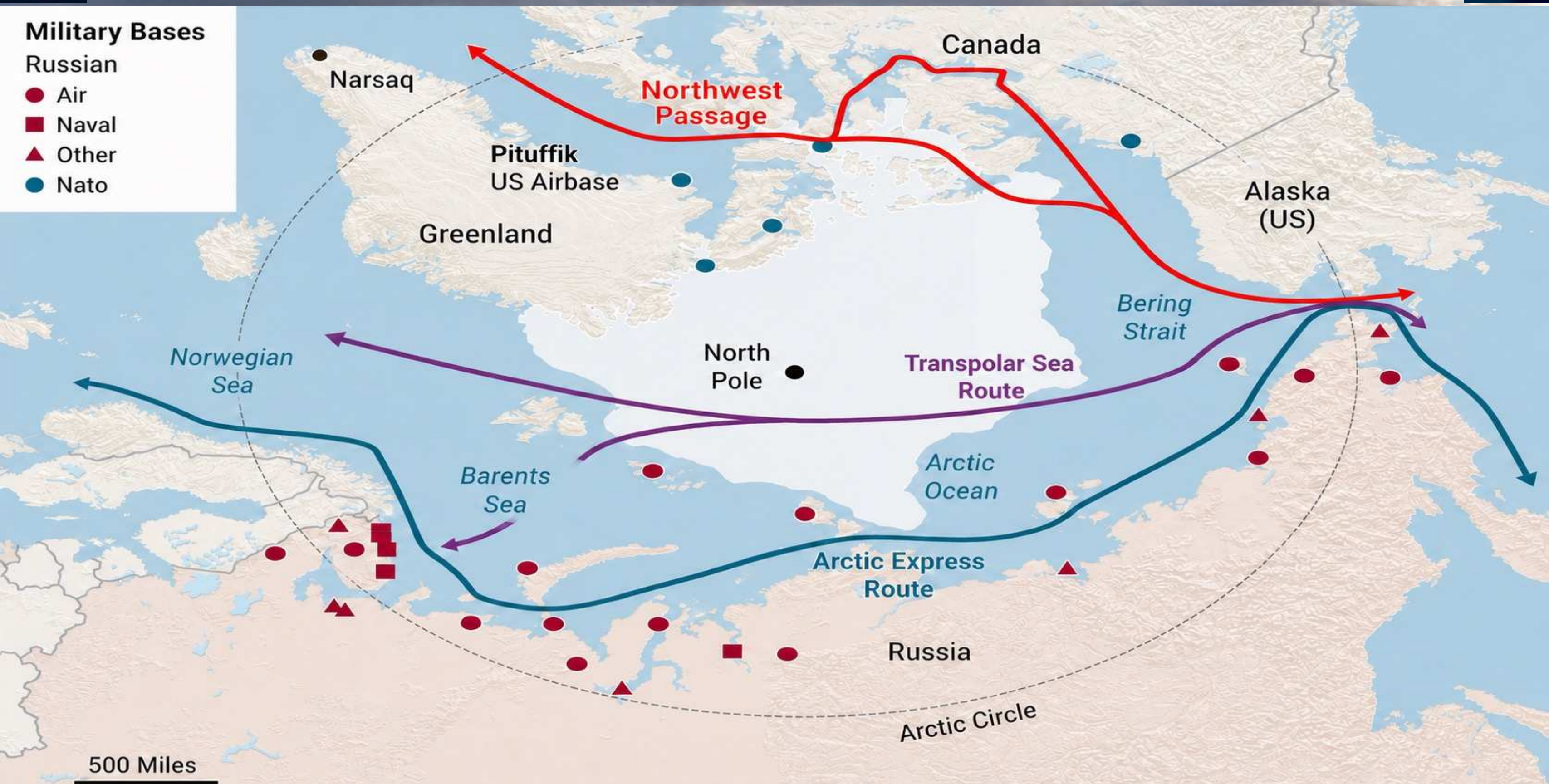
- The Northern Sea Route runs along Russia's Arctic coast, linking Europe and Asia
- The Northwest Passage cuts through the Canadian Arctic Archipelago
- These routes can reduce voyage distances between Europe and Asia by up to 40%
- Shorter routes mean lower fuel costs, faster delivery, and major strategic advantages

For the first time in modern history, global trade may shift north





Explaining the Interest in Greenland!

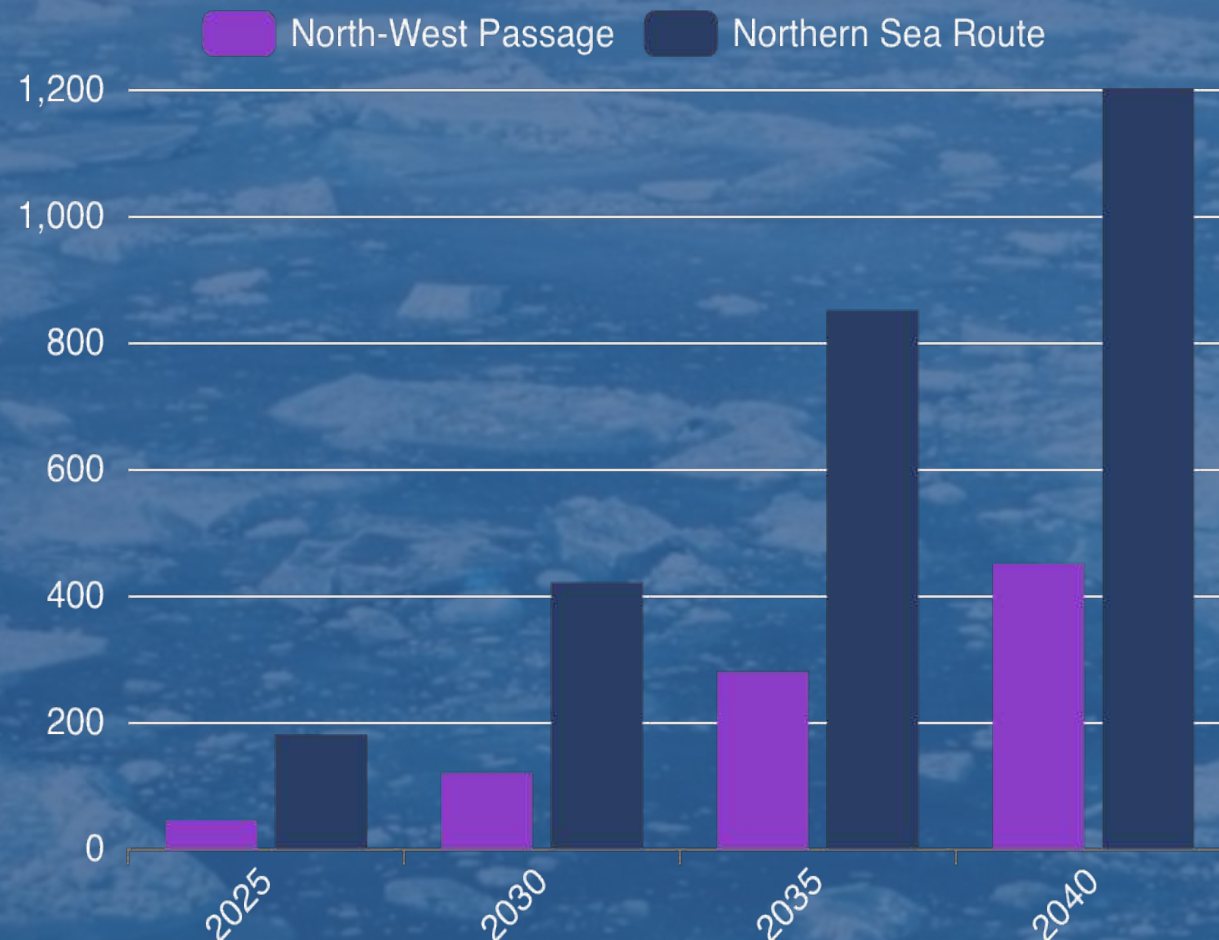


North-West Passage-Future Gateway

Economic Impact

Projected \$500B in trade value by 2040, with Canada estimating \$100B+ in Arctic infrastructure investments

Projected Arctic Shipping Growth



Time Savings

Reduces Asia-Europe journey by about 6-7 days compared to Suez Canal, cutting fuel costs by 20-30%



Canada's Investment in Arctic Infrastructure

Building Presence, Prosperity and Protection in the Arctic



\$1 Billion Arctic Infrastructure Fund

New money for ports, airports and roads across the north



\$35 Billion Defence and Infrastructure Strategy

Airfields and all-season roads doing double duty for communities and defence



New Icebreakers on the Way

Keeping shipping lanes open and supporting search and rescue year round

Canada is Turning the Arctic from Map Space Into Lived Space

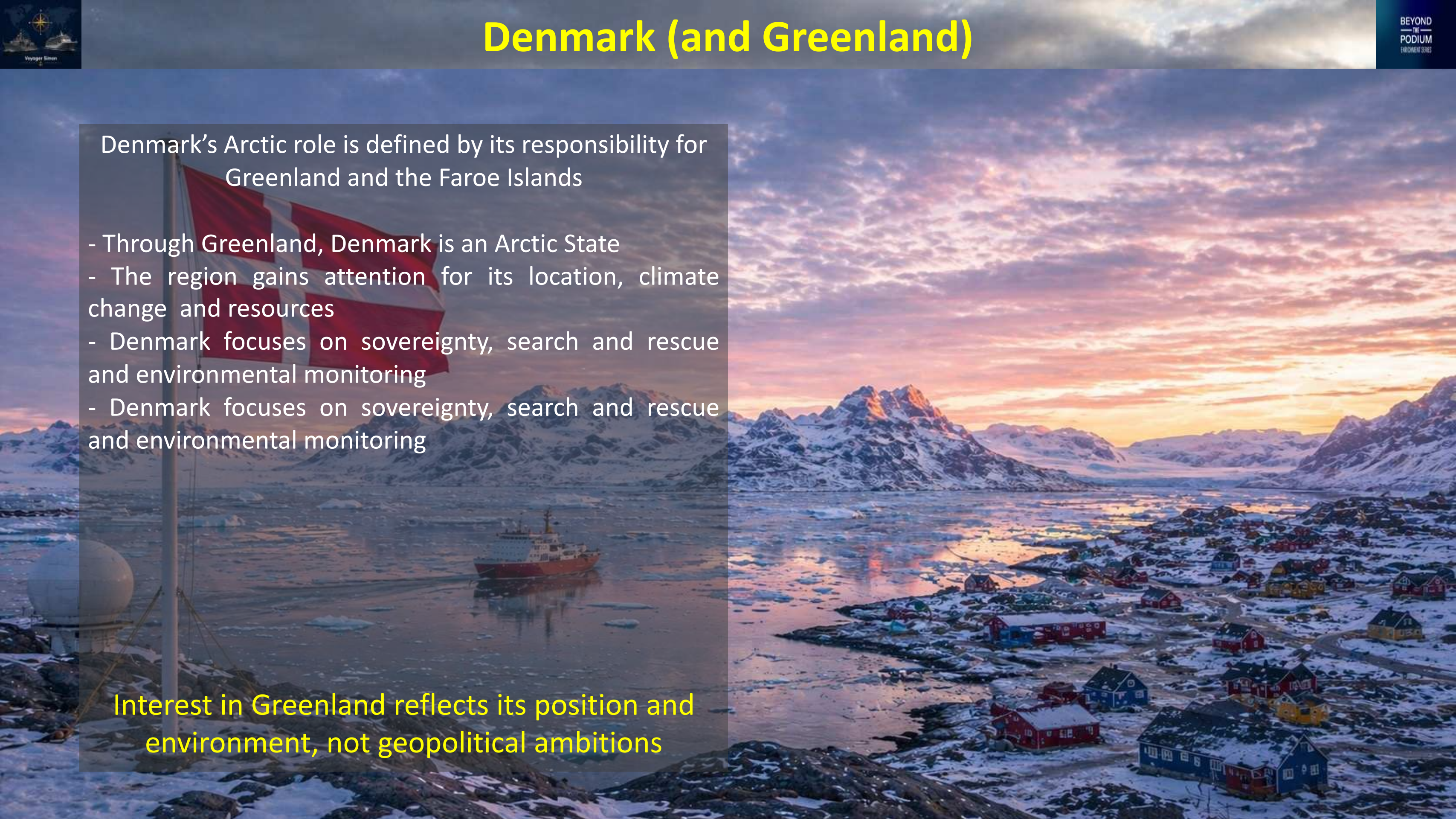


Denmark (and Greenland)

Denmark's Arctic role is defined by its responsibility for Greenland and the Faroe Islands

- Through Greenland, Denmark is an Arctic State
- The region gains attention for its location, climate change and resources
- Denmark focuses on sovereignty, search and rescue and environmental monitoring
- Denmark focuses on sovereignty, search and rescue and environmental monitoring

Interest in Greenland reflects its position and environment, not geopolitical ambitions



Geography

Greenland is the world's biggest island and sits in the North Atlantic Ocean, between North America and Europe

Most of the island is in the Arctic Circle and is covered by a permanent ice cap



Changing Arctic

Melting ice, due to climate change, means shipping routes are opening up in the waters around Greenland

The warming waters could also unlock access to minerals and fishing areas



Population

There are about **57,000 residents** of the sparsely populated territory, with the majority being indigenous Inuits

Most live in the slightly milder areas of the south west, near the capital **Nuuk**



Resources

Greenland has potential **oil, gas and key mineral reserves** but the Arctic climate makes extracting them difficult

The minerals include some seen by the US as **critical** to its national security

Niobium, Which Is Used In Jet Engines And Pipelines



● Deposits Of Minerals Defined As Critical By US

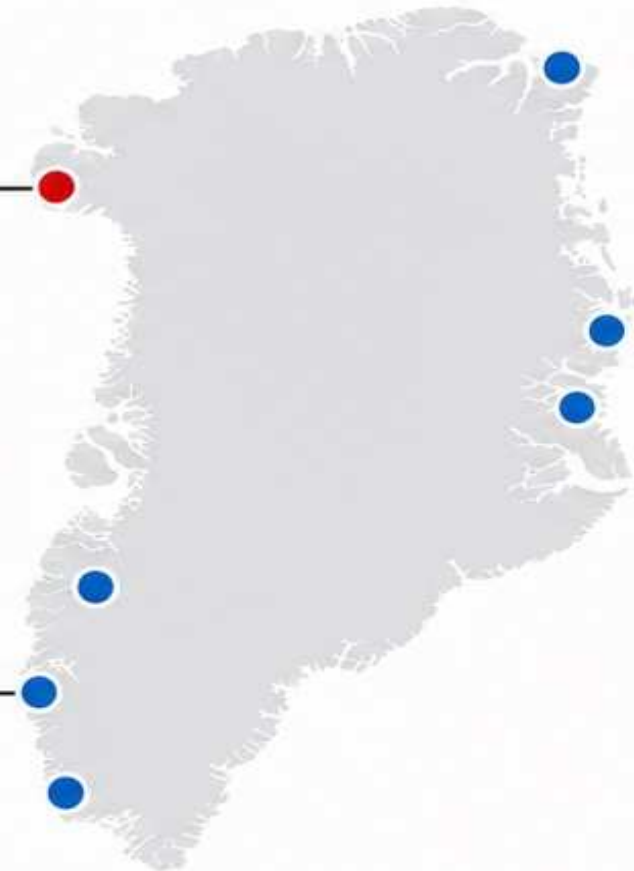
Military

The US has had a military presence on the island since World War Two, when Nazi Germany occupied Denmark

Its only current base is **Pituffik**, while Denmark also has several military sites

Pituffik US Space Base

Nuuk Danish Joint Arctic Command



Military Presence: ● US ● Denmark

Denmark's Investment in the Arctic and Greenland

Strengthening Sovereignty, Supporting Development and Securing The Future



Sovereignty and Presence

Arctic Command, patrol vessels and surveillance keep watch across the region



Infrastructure and Community Support

Investment in airports, ports, telecoms and energy connects communities



Resource and Economic Development

Backing responsible mining and fisheries while protecting the environment

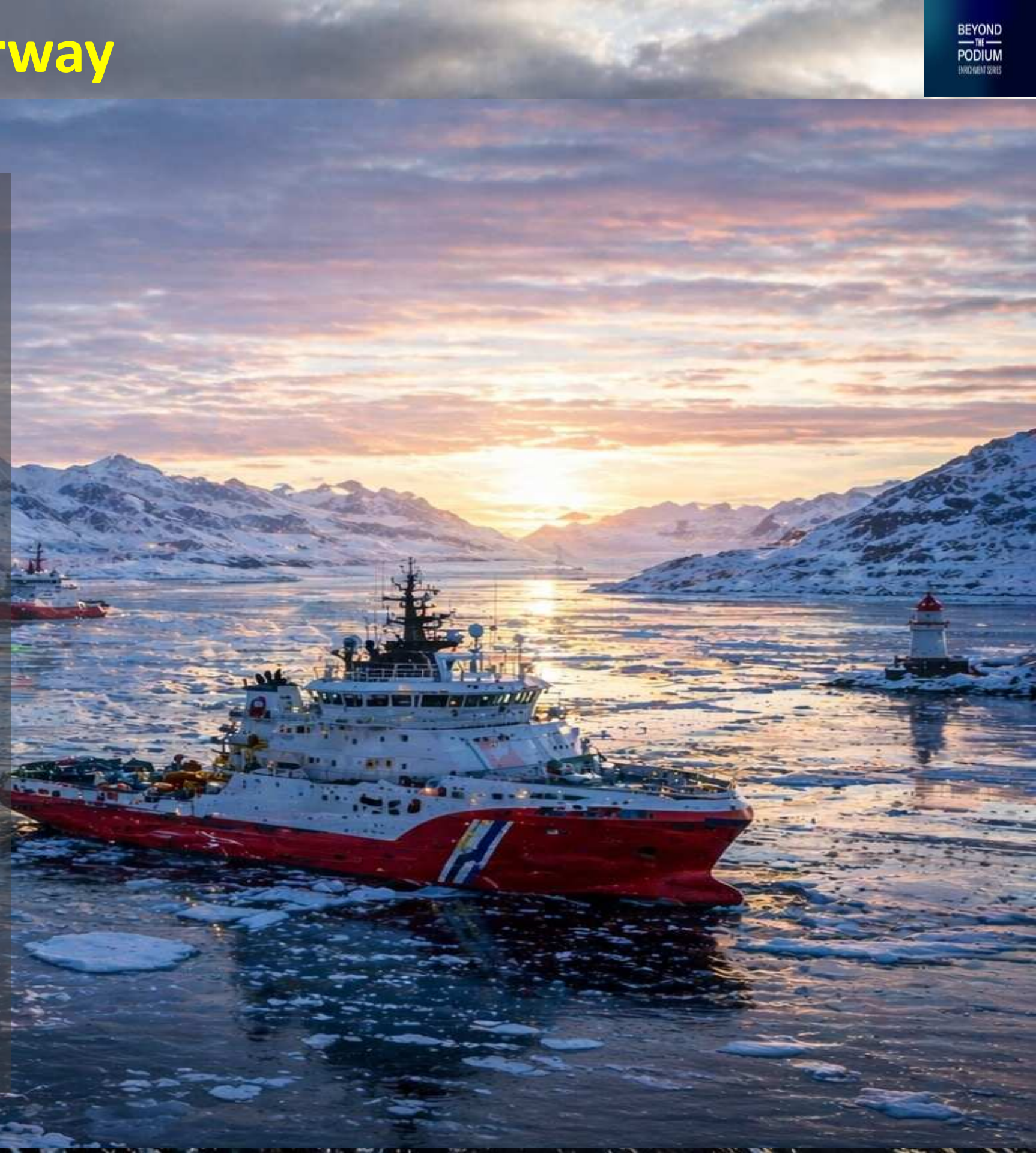
Greenland is not for sale ...
its future is Greenland's to shape



Norway is one of the most active and experienced Arctic nations

- Large areas of Norway lie above the Arctic Circle
- Svalbard gives Norway a unique Arctic responsibility under international treaty
- The Barents Sea is central to Norway's economy, fisheries, and energy production
- Norway combines strong environmental regulation with offshore resource development
- Long experience in cold-weather operations underpins search and rescue and maritime safety

For Norway, the Arctic is not a frontier ...
it is a working region balancing security,
economy, and environment

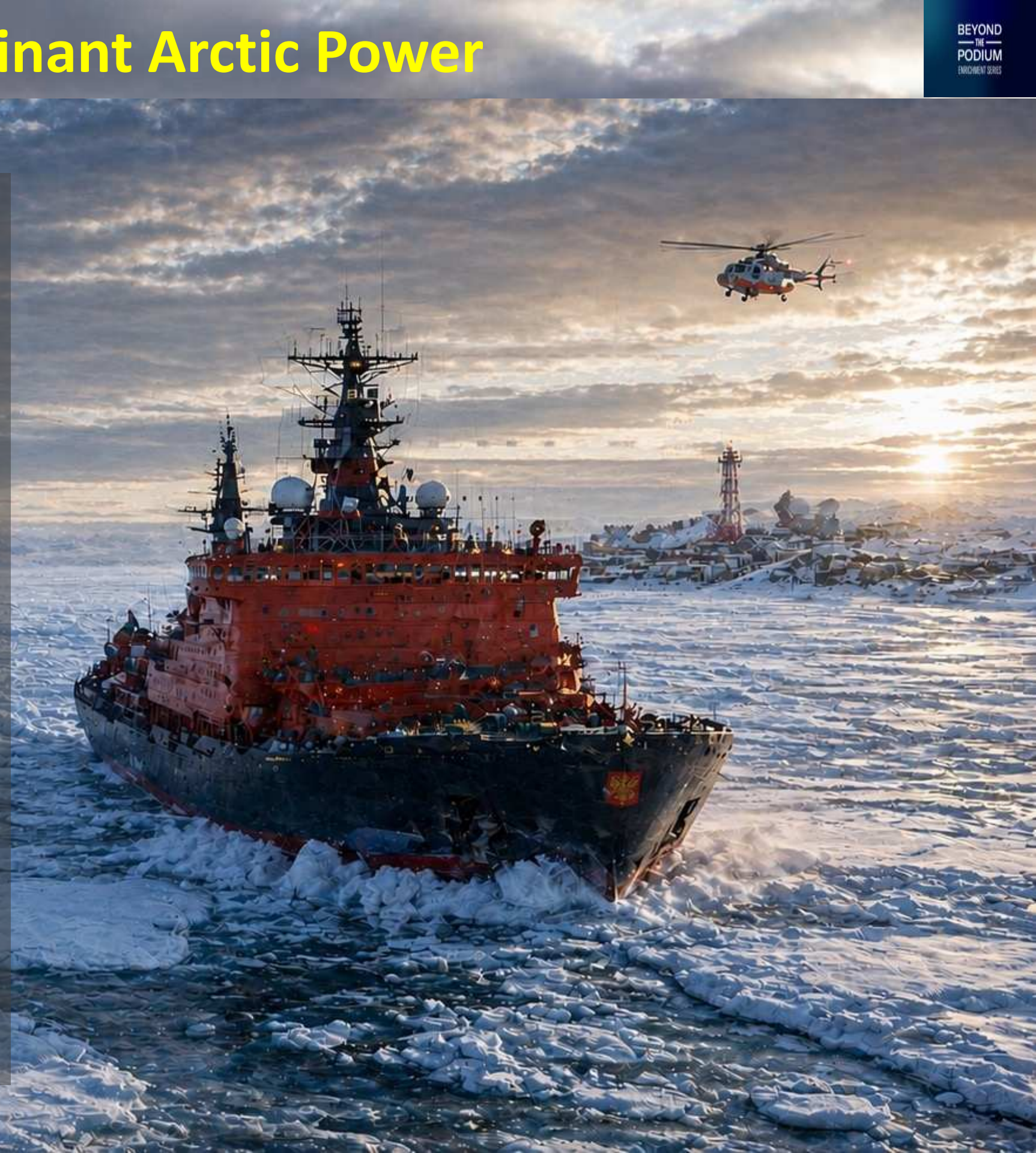


Russia - The Dominant Arctic Power

No country has invested more in the Arctic than Russia

- Russia controls over half of the Arctic coastline
- It operates the world's largest fleet of icebreakers, including nuclear-powered vessels
- Dozens of Arctic military bases and airfields have been reopened or modernized
- Moscow views the Arctic as vital for energy production, national security, and global influence

For Russia, the Arctic is not a frontier ...
it is a Strategic Heartland

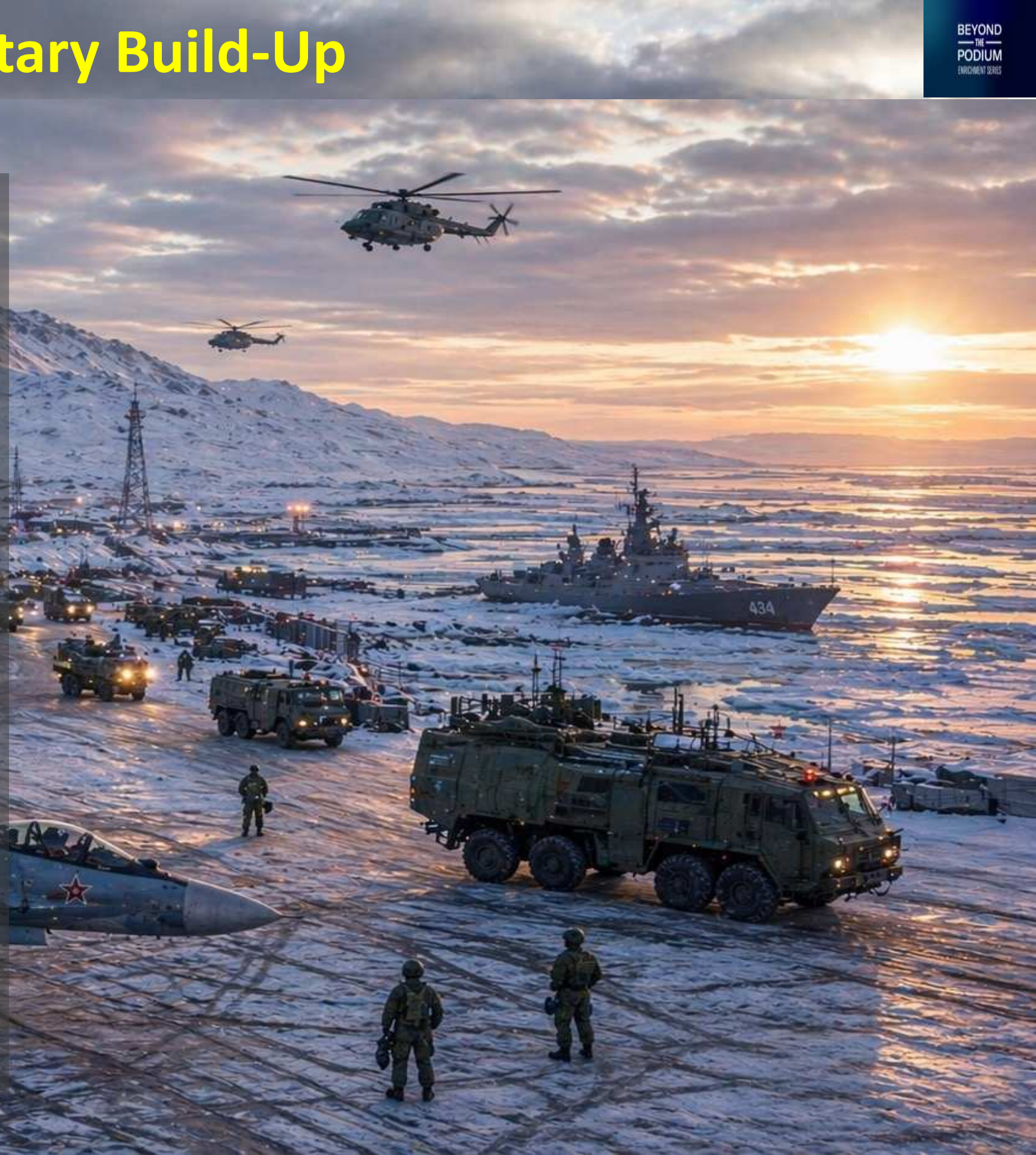


Russia - Military Build-Up

In recent years, Russia has significantly expanded its military footprint across the Arctic

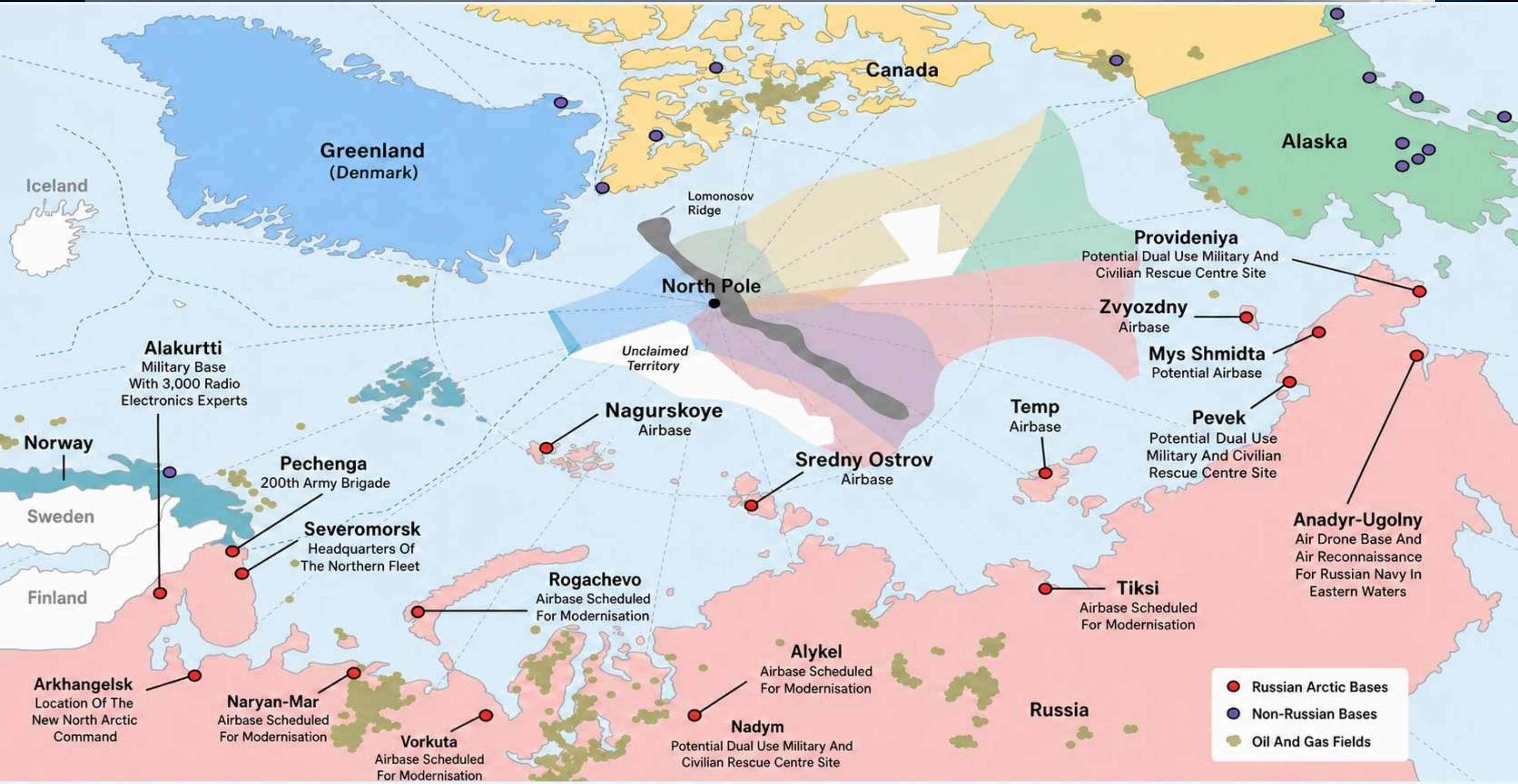
- Former Soviet-era bases have been modernised and new facilities built
- Advanced radar, air defence systems, and early-warning sites cover the region
- Arctic-capable ground forces, aircraft, and naval units now operate routinely
- Military build-up underpins Russia's control of its northern coast and Arctic sea lanes

For Moscow, military presence in the Arctic reinforces sovereignty, deterrence, and access to a rapidly changing region





Russian Military Installations in the Arctic



The US sees the Arctic as a growing strategic and economic priority

- The US is an Arctic nation through Alaska
- Ensures freedom of navigation and access to sea routes
- Security is the top concern
- (Generally) backs rules-based governance and international law!
- Seeks to invest more in science, infrastructure, and icebreakers

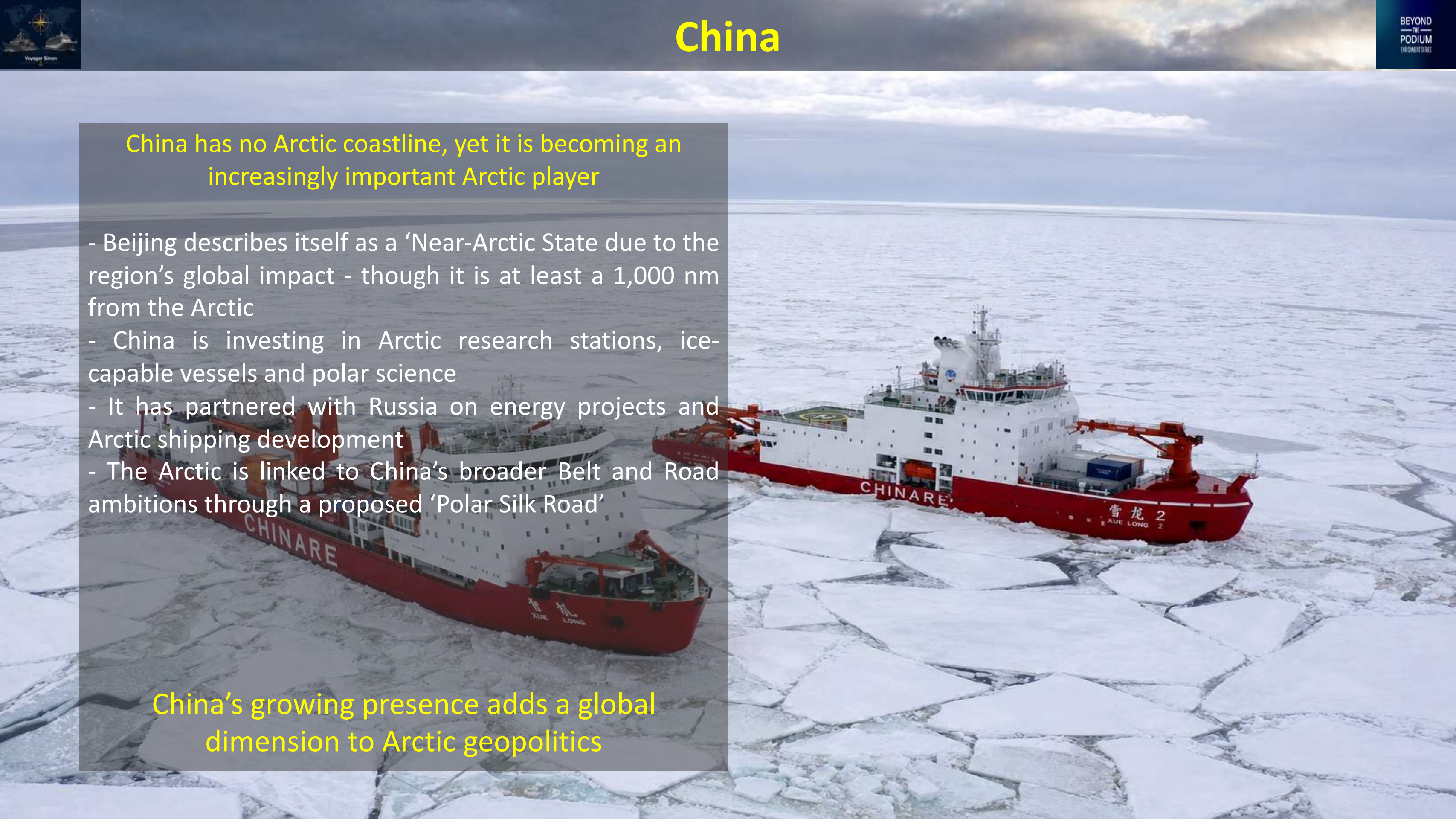
The Arctic is now part of America's strategic landscape



China has no Arctic coastline, yet it is becoming an increasingly important Arctic player

- Beijing describes itself as a 'Near-Arctic State due to the region's global impact - though it is at least a 1,000 nm from the Arctic
- China is investing in Arctic research stations, ice-capable vessels and polar science
- It has partnered with Russia on energy projects and Arctic shipping development
- The Arctic is linked to China's broader Belt and Road ambitions through a proposed 'Polar Silk Road'

China's growing presence adds a global dimension to Arctic geopolitics



China's Arctic Research Station

Access without Ownership, Influence or Sovereignty!



Yellow River Station

Opened in 2004 in Ny-Alesund, Svalbard, researching climate and glaciers



Partnerships and Expansion

Growing reach through Arctic nations, icebreaker expeditions and new science posts



Limited But Strategic

China has no Arctic coastline, so it builds influence through research and presence

Part of China's Wider Polar Silk Road ambitions



US Concern over Russia and China



U.S. Senators Propose Arctic Spy Ship Ban Amid Rising Chinese, Russian Activity Near Alaska

Malte Humpert

Total Views: 96
June 15, 2026

Two U.S. senators introduced bipartisan legislation on Monday aimed at barring Chinese and Russian government-linked vessels from conducting research operations in U.S. Arctic waters, reflecting growing concern in Washington that scientific missions are increasingly being used to support intelligence gathering and strategic competition in the High North.

The Arctic Security and Diplomacy Act, introduced by Republican Senator Mike Lee and Democratic Senator Jeanne Shaheen, would prohibit vessels from adversarial nations from conducting research in the U.S. Exclusive Economic Zone (EEZ) and on the U.S. continental shelf.

“The United States must not tolerate China’s increasing incursions into U.S. waters under the guise of surveys and research,” Lee said in a statement announcing the bill. He said the legislation would “shut the door to foreign adversaries attempting to commit espionage and exercise influence at our doorstep in the Arctic.”

Svalbard (or Spitsbergen)

Svalbard is one of the most unusual territories on Earth

- Svalbard is part of Norway, but governed by an International Treaty signed in 1920
- The Treaty allows citizens of signatory states to live and work there without visas
- Military activity is prohibited, making Svalbard a demilitarised zone
- Russia maintains a permanent settlement alongside Norwegian communities
- The islands host the Global Seed Vault a safeguard for the world's food supply

In an Arctic defined by rivalry ... Svalbard remains a rare experiment in cooperation!





Global Seed Vault

The Global Seed Vault stores duplicates of seeds from around the world to protect our food supply from disaster, conflict and climate change

A Global Safety Net - It safeguards the diversity of crops and helps countries recover if their own seed collections are lost or destroyed

Diversity for Resilience - More than 1 million seed samples represent thousands of crop varieties, from staple foods to rare and ancient strains

Built for the Long Term - Housed deep in Arctic permafrost, the vault is designed to keep seeds safe for centuries, even without power

A Symbol of Cooperation - Governed by an international agreement, the Seed Vault reflects our shared responsibility to future generations



Russia's Arctic buildup has prompted increased attention from NATO and its northern members.

- NATO countries are expanding Arctic training, exercises and cold-weather readiness
- Norway and Canada play key frontline roles in Arctic security
- The United States is modernising Arctic infrastructure and ice-capable forces
- Sweden and Finland's NATO membership strengthens the Alliance's Arctic presence

The Arctic is becoming an area of renewed strategic focus for the Transatlantic Alliance



NATO - Stood-Up ARCTIC Sentry on 11 Feb 26



Coordinated NATO Arctic Security Presence



Strengthens Surveillance, Exercises, and Readiness



Builds on Allied Operations Like Arctic Endurance



Aims to Deter and stabilise High North security ©



Command and Control Norfolk, USA



Surveillance and Patrols



Allied Exercises and Training



Strategic Deterrence





Icebreakers - Big Changes

Icebreakers enable year-round access, supply, and emergency response

- Allied nations are expanding and modernising their icebreaker fleets
- United States, Canada, and European Arctic nations are closing long-standing gaps
- New multi-mission designs support research, rescue, security, and sovereignty
- Icebreakers are tools of access and resilience, not symbols of aggression

In the Arctic, icebreakers are tools of access, resilience, and influence





The Arctic Icebreaker Race

BEYOND
THE
PODIUM
ENRICHMENT SERIES

Who controls the ice... controls the future



Russia

In service

~46

Building / ordered

+3

8 nuclear-powered (world's only) | New-build Arktika class are world's largest icebreakers | Chukotka due Dec 2026, Leningrad 2028, Stalingrad 2030



Canada

In service

~18

Building / ordered

+8

World's 2nd largest fleet | 2 polar icebreakers building (Arpatuq 2030, Imnaryuaq 2032) | 6 programme icebreakers contracted Aug 2026



USA

In service

3

Building / ordered

+14

Polar Star (heavy, 50 yrs old) + Healy + Storis (medium) | 11 Arctic Security Cutters contracted 2025-26, first due 2028 | 3 heavy Polar Security Cutters also on order



Denmark

In service

4

Building / ordered

+1

Controls Greenland - most contested Arctic territory | Joint Arctic Command, Nuuk | New Arctic patrol vessel due ~2029



Norway

In service

2

Building / ordered

—

KV Svalbard + RV Kronprins Haakon | Kronprins Haakon reached the North Pole Sept 2025 | No new building programme planned



China

In service

5

Building / ordered

+1

Xuelong, Xuelong 2, Jidi + 2 research vessels | 4 ships deployed to US Arctic, July 2026 | First heavy icebreaker under construction



UK

In service

1

Building / ordered

—

RRS Sir David Attenborough (2021) | Research only - no military icebreaker programme | Stepped up Antarctic ops as US withdrew in 2025

Key fact Russia's fleet is larger than all other nations combined. Nato has ~45 icebreakers vs Russia's ~57. As the Arctic melts, icebreakers = geopolitical power



The Future - Cooperation, Competition or Conflict?

The Arctic's transformation presents both opportunity and risk

- **Cooperation** could see shared governance, environmental protection, and safe navigation
- **Competition** is already visible through military build-ups, legal claims, and economic rivalry
- **Conflict** remains unlikely, but miscalculation in a crowded and changing region is possible

How nations choose to act in the Arctic will shape global security, trade, and climate stability for decades to come



The Future - Cruising in the Arctic

Expedition cruising in the Arctic is growing rapidly as ice retreats and interest in unique experiences rises

- Longer open-water seasons allow more transit days and varied itineraries
- New Arctic routes (northern Norway, Greenland, Canadian Arctic) attract global travellers
- Scientific interest, wildlife viewing, and cultural visits to indigenous communities drive demand
- A peace agreement between Russia and Ukraine could expand access to northern Russian ports and the Northern Sea Route for tourism
- Enhanced infrastructure, search and rescue capacity, and regional cooperation support safer Arctic cruising

The Arctic is transitioning from a remote frontier to a sought-after destination - with attendant opportunities and responsibilities





Thank You

BEYOND
THE
PODIUM
ENRICHMENT SERIES

