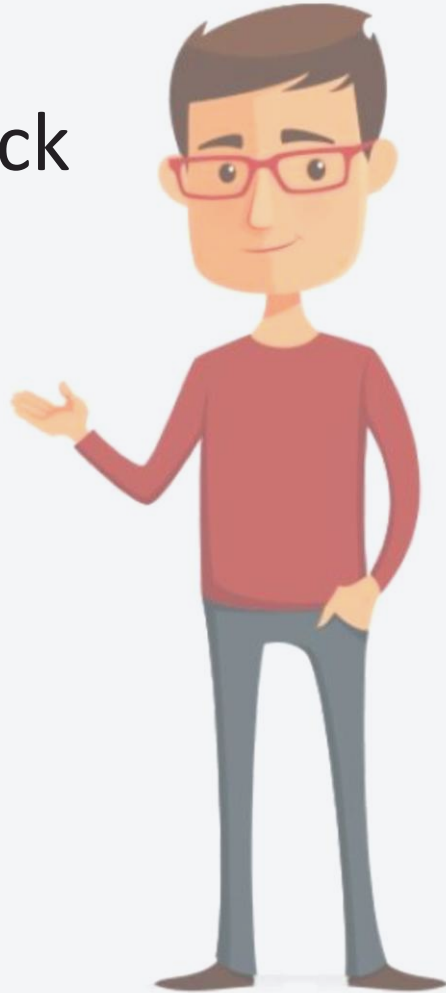




What is Next for Sustainable Arctic?

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Where should our
resources go to fast-track
Nordic Arctic
development?



ARCTIC
INVESTMENT GAME

Decide how to invest 10 million
NOK across 7 different
investment opportunities.

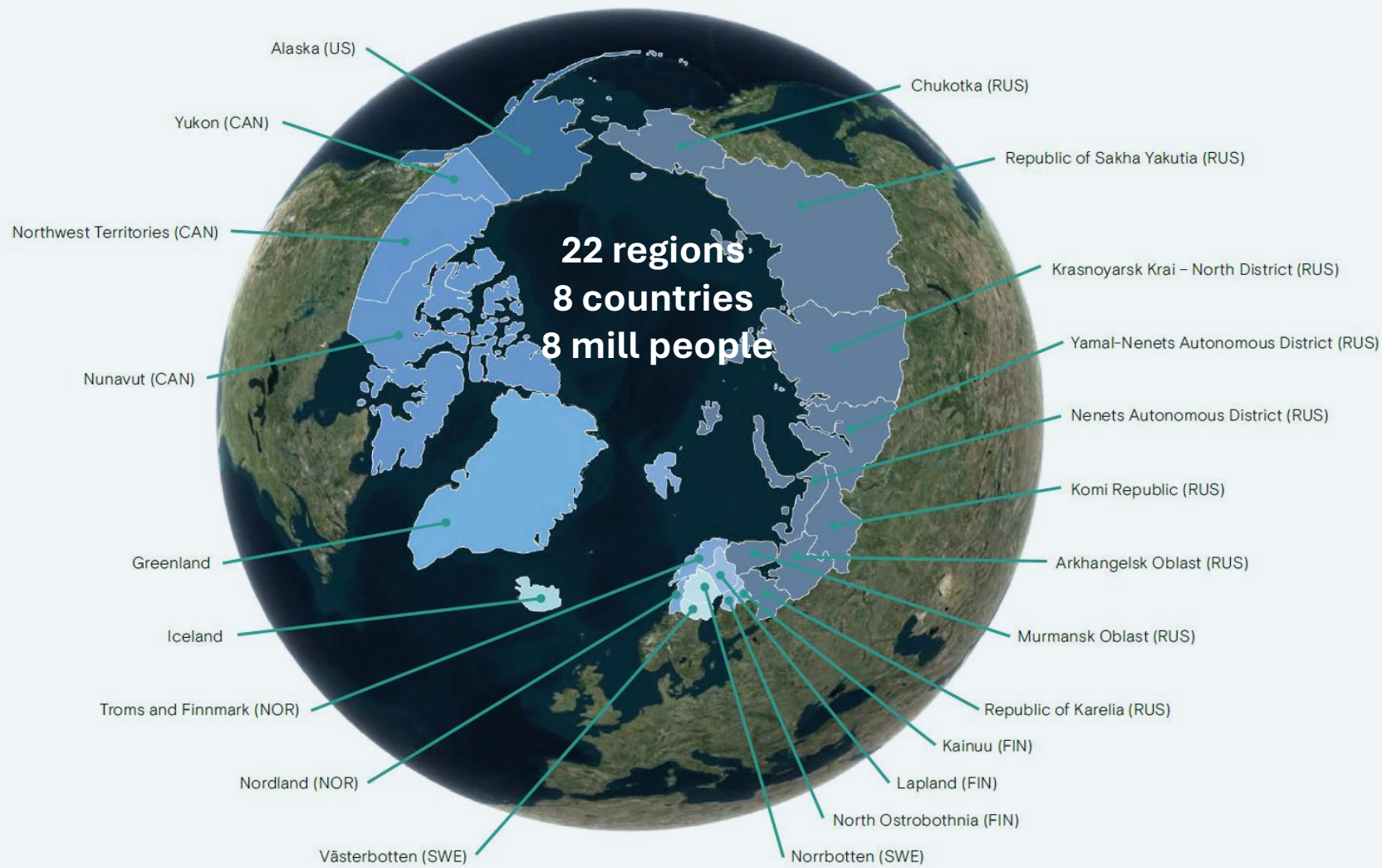
Voting closes at 1:30

Join at menti.com | use code 2211 2647



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Scope of the project



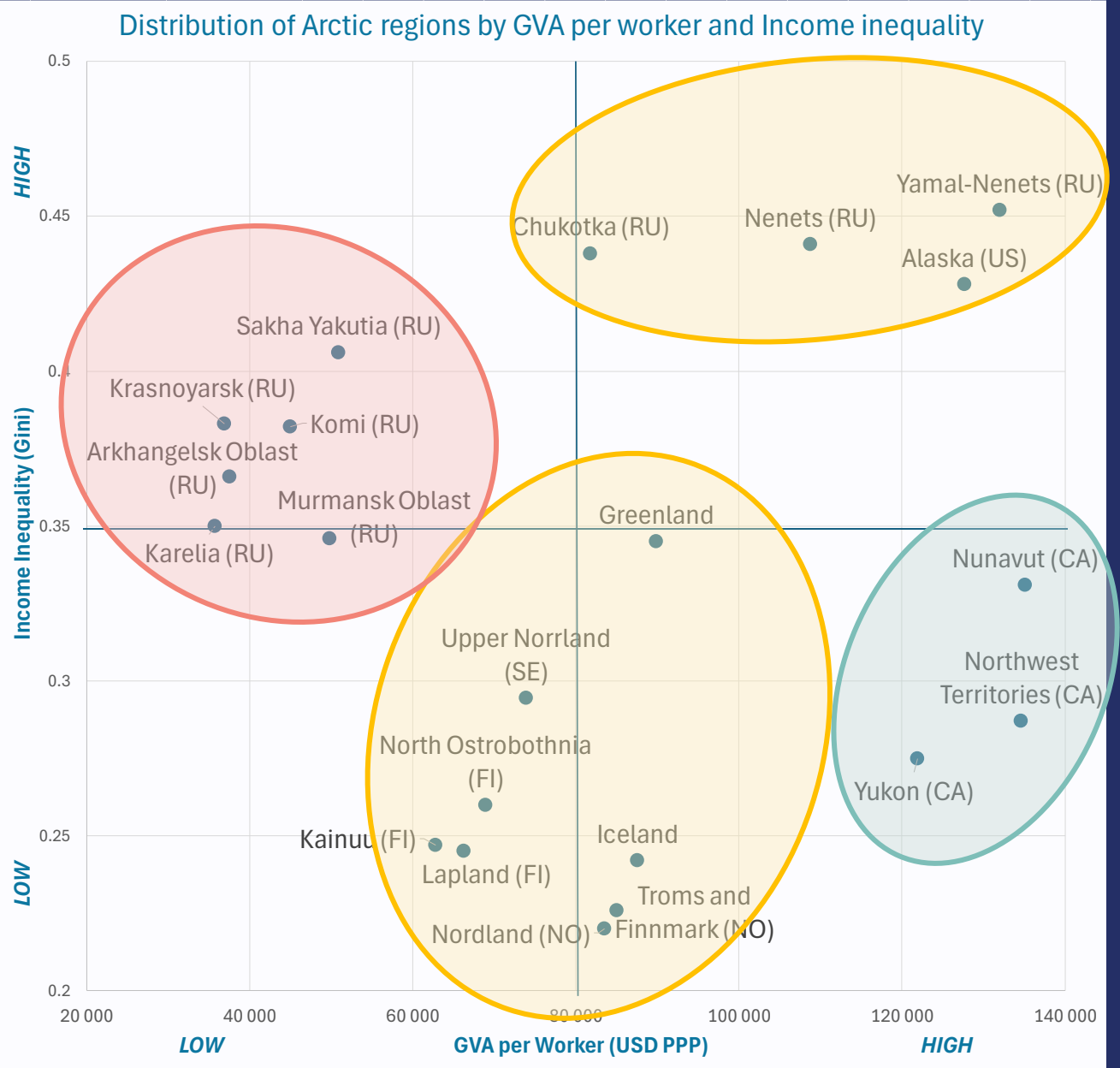
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Region	Total change	Above working age	Working age	Below working age
Yukon (CA)	27.2%	10.3%	13.4%	3.4%
Iceland	20.3%	6.1%	13.0%	1.3%
Nunavut (CA)	19.0%	2.3%	11.6%	5.1%
Västerbotten (SE)	6.5%	4.1%	0.3%	2.1%
Troms (NO)	6.0%	5.8%	2.3%	-2.1%
North Ostrobothnia (FI)	4.6%	7.1%	-0.9%	-1.6%
Sakha Yakutia (RU)	4.1%	4.2%	-1.7%	1.6%
Northwest Territories (CA)	3.4%	5.3%	-0.8%	-1.1%
Nordland (NO)	2.2%	5.2%	-0.9%	-2.1%
Alaska (US)	1.5%	5.9%	-3.0%	-1.4%
Finnmark (NO)	0.9%	5.1%	-1.0%	-3.1%
Greenland	0.9%	2.8%	-0.3%	-1.6%
Norrbotten (SE)	0.3%	4.0%	-4.2%	0.4%
Nenets (RU)	-1.7%	4.1%	-5.2%	-0.6%
Yamal-Nenets (RU)	-2.4%	4.8%	-7.8%	0.6%
Krasnoyarsk-North (RU)	-4.0%	2.6%	-6.5%	0.0%
Lapland (FI)	-4.2%	7.1%	-9.5%	-1.7%
Chukotka (RU)	-5.0%	2.6%	-6.1%	-1.4%
Kainuu (FI)	-10.4%	6.2%	-13.7%	-2.9%
Murmansk Oblast (RU)	-17.0%	-0.7%	-16.0%	-0.4%
Karelia (RU)	-17.9%	0.1%	-16.0%	-1.9%
Arkhangelsk Oblast (RU)	-18.5%	-0.2%	-16.4%	-1.9%
Komi (RU)	-19.2%	1.5%	-18.1%	-2.6%

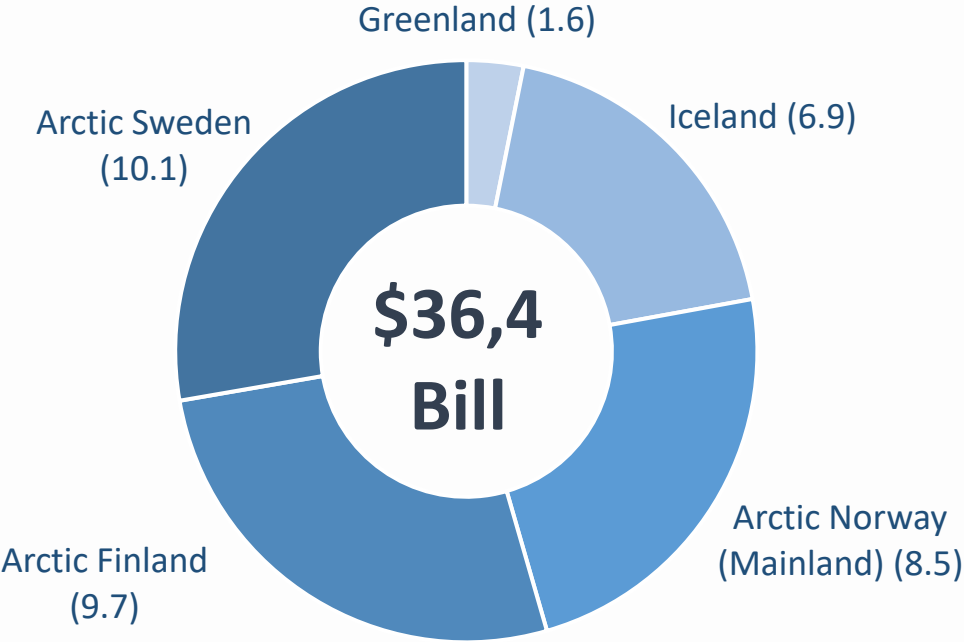
Arctic Demographics 2011-2023

Declining working age population – a risk of negative feedback loop?

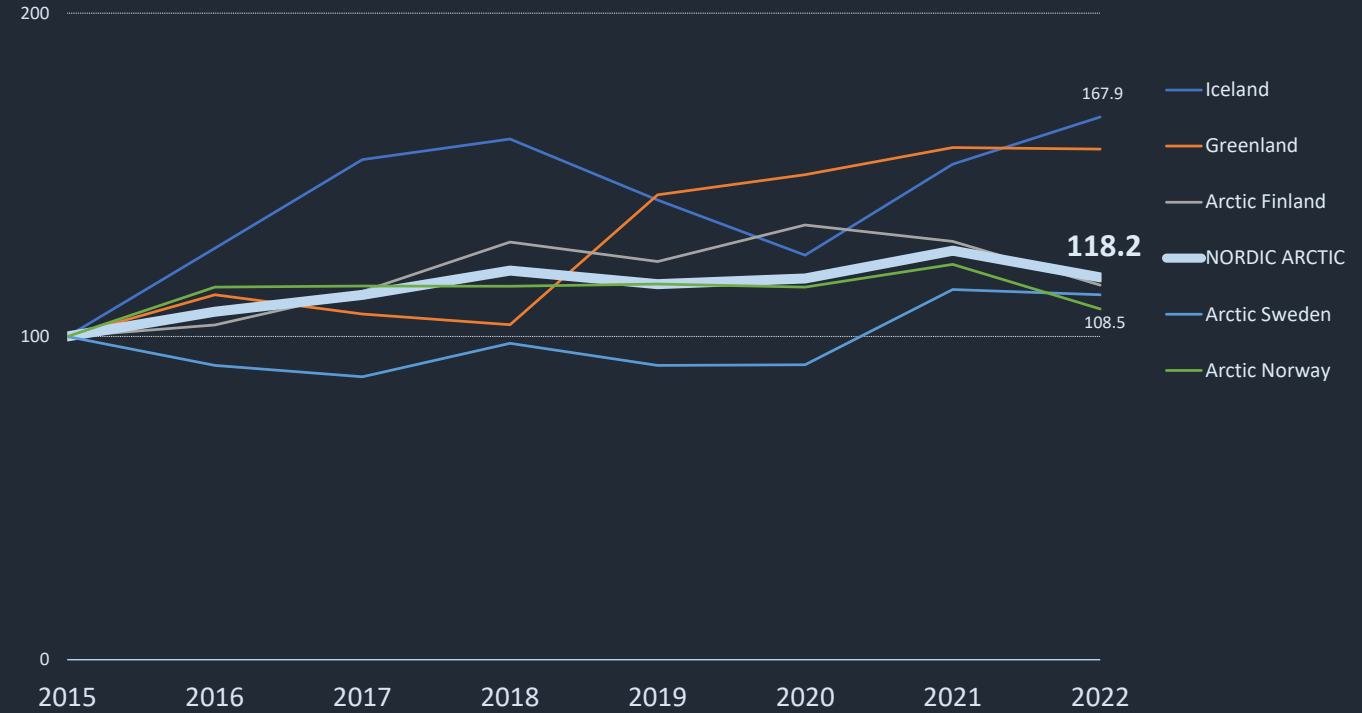
Economic value
creation and
income
inequality:
different profiles

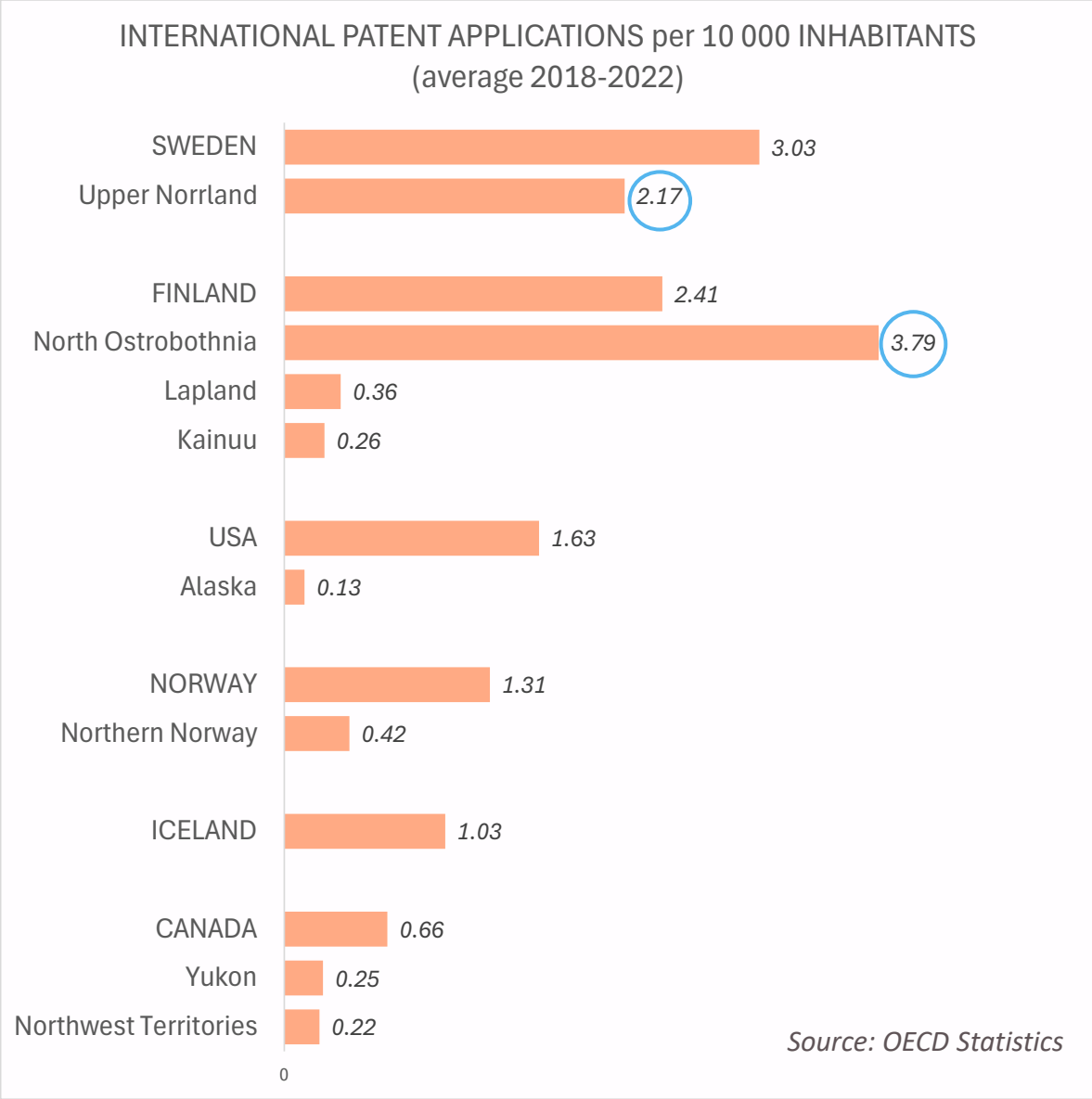


Investments in the Nordic Arctic (USD, 2022)



Nordic Arctic Investments Index (USD, Inflation adjusted, Index 2015 = 100)





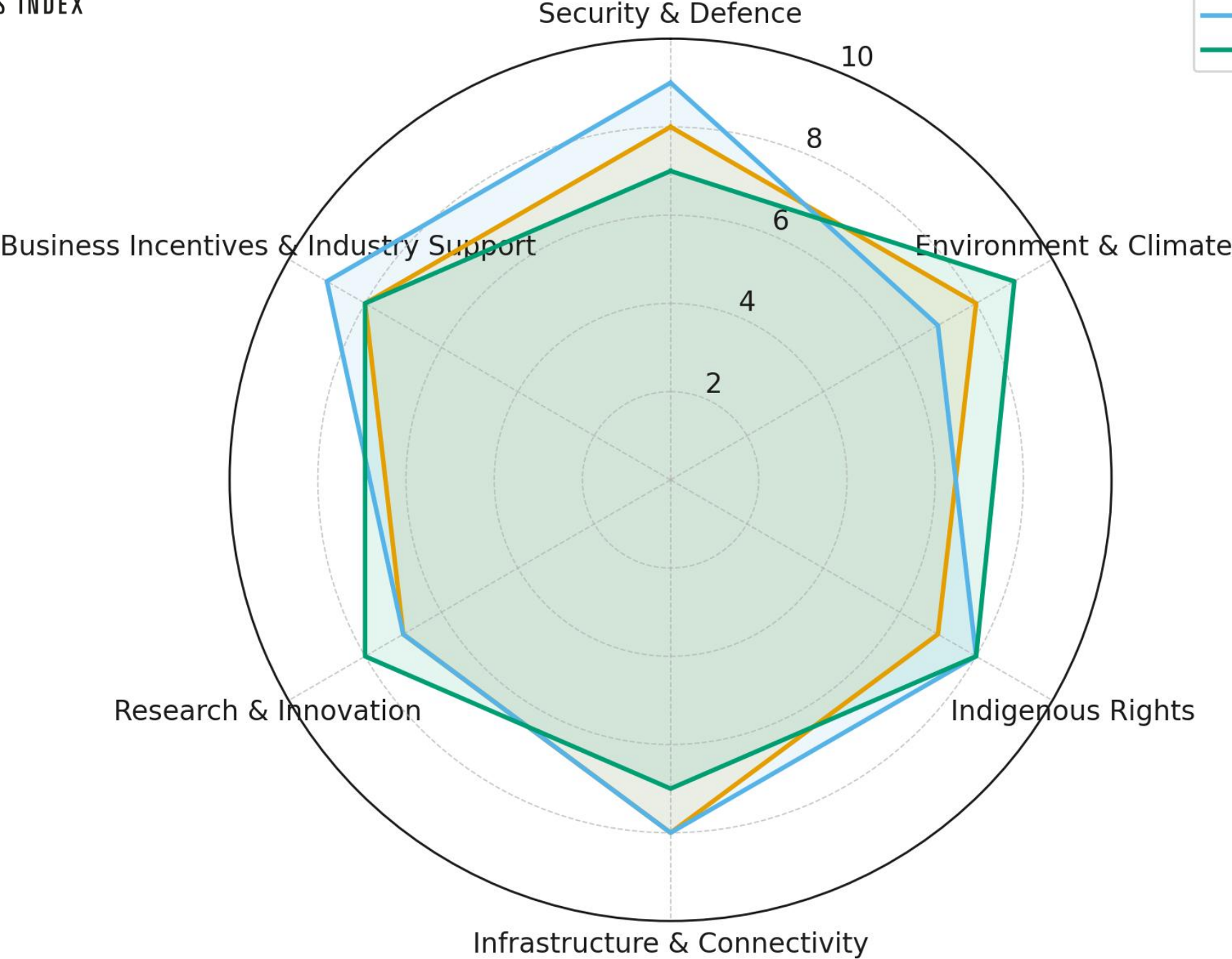
Relative Lack of
Innovations except
North Finland and North
Sweden

Arctic Strategies Timeline (2018-2025)

- Arctic
- Non-Arctic



Arctic Policy Comparison (with Business Incentives Axis)



Business growth impact potential from Arctic policies

Cross Nordic growth sectors	Norway	Finland	Sweden
Green transition industries: hydrogen, renewables, batteries, green steel. Sustainable resource use: forestry, aquaculture, mining. Arctic technologies: cold-climate digital infrastructure, AI, resilient logistics. Tourism & culture: especially tied to Sámi heritage and Arctic landscapes. Security & defence-linked industries: construction, logistics, and dual-use tech supporting NATO and resilience policies.	Energy & Offshore - Oil & gas significant driver in the Barents Sea, - Windpower - Data senters Ocean Economy - Aquaculture (ocean and land, marine biotechnology). - Low-Zero-emission maritime technology (vessels, logistics). - Ocean surveillance and security Tourism - Arctic, adventure and cultural tourism (especially Sami culture). Construction & Defence-linked industries - Infrastructure for dual use, logistics, security installations tied to NATO Space through Andøya Space launch pad	Clean Energy & Green Transition - Wind power, solar in Lapland, and hydrogen production for fuel and metals Rare earth extraction. Mining and refining of battery minerals (nickel, cobalt, lithium). Digital & Arctic Technologies - Arctic data cables, ICT, smart cold-climate technology, healthscience ict. Forestry & Bioeconomy - Value-added wood products, sustainable bio-materials, circular bio systems Tourism & Wellbeing - Lapland tourism, year-round Arctic experience industry. Defence & Resilience industries - Logistics, dual-use infrastructure (civil + military). Strong infrastructure and local resilience and wellbeing	Mining & Critical Raw Materials - Expansion towards emission free iron ore mining (LKAB), rare earths, and other strategic minerals. Green Industry & Steel - Hydrogen reduction green steel. - Batteries - Data senters Space & Research - Kiruna's Espace Space Center, satellite launches, Arctic research hubs. Forestry & Bioeconomy - Sustainable forestry and biomass industries. Tourism - Eco-tourism, winter tourism, Sámi cultural tourism.
	Missing: People, resource extraction and access to land for wind power strategies. Stronger University and innovation system	Missing: Stronger University systems and commercialisation of health related ICT	Missing: People. Bridge building efforts between Norway and Finland

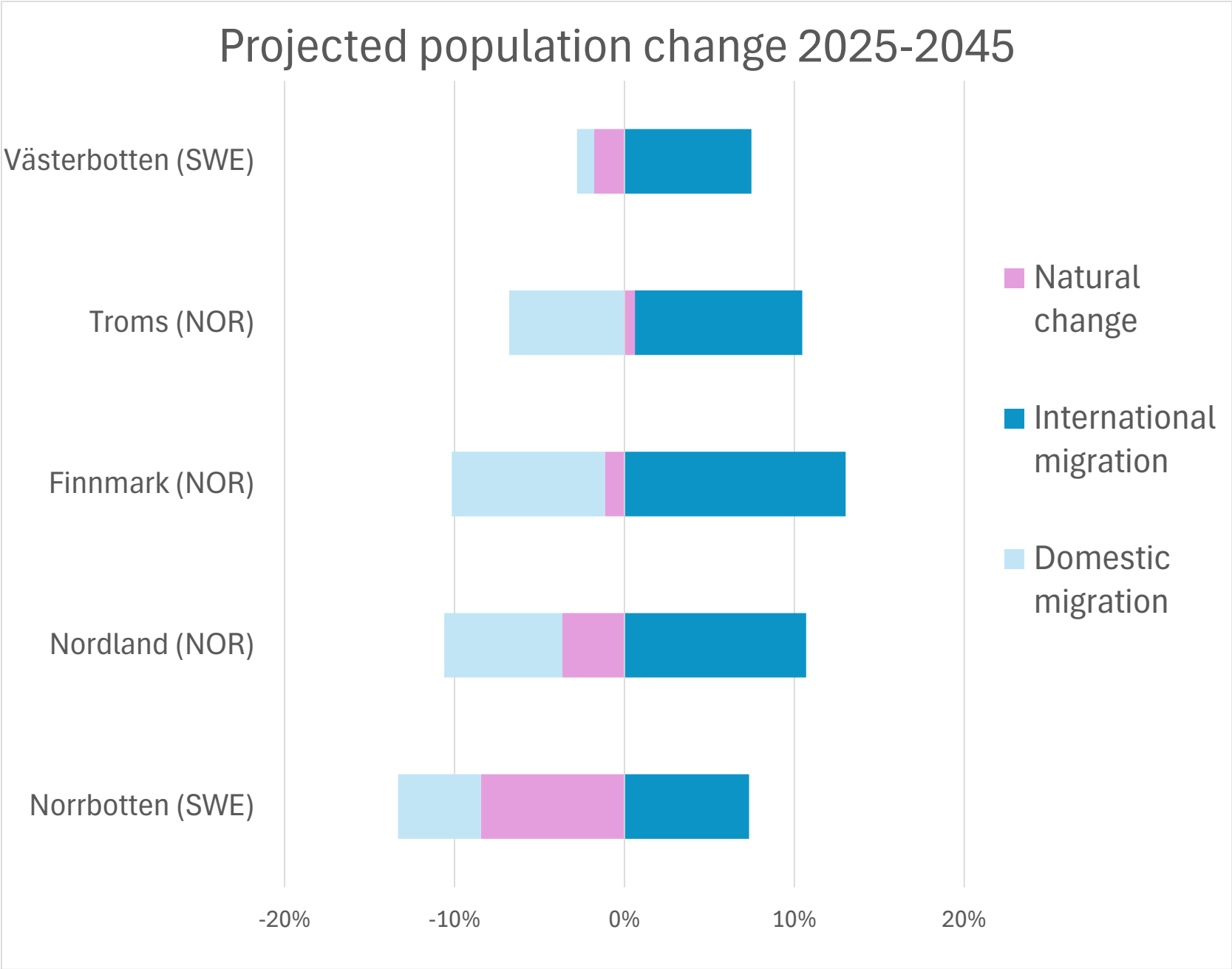
Major drivers across the Nordic northern areas

- **Norway** The maritime leader: ocean economy & offshore/energy/arctic security.
- **Finland** The technology hub: clean energy, minerals, digital Arctic tech/infrastructure.
- **Sweden** The green industry spearhead: mining, green steel, batteries, space industry.

All countries will see **tourism and population-supportive industries** more vital if we can increase attractiveness of living in the North.

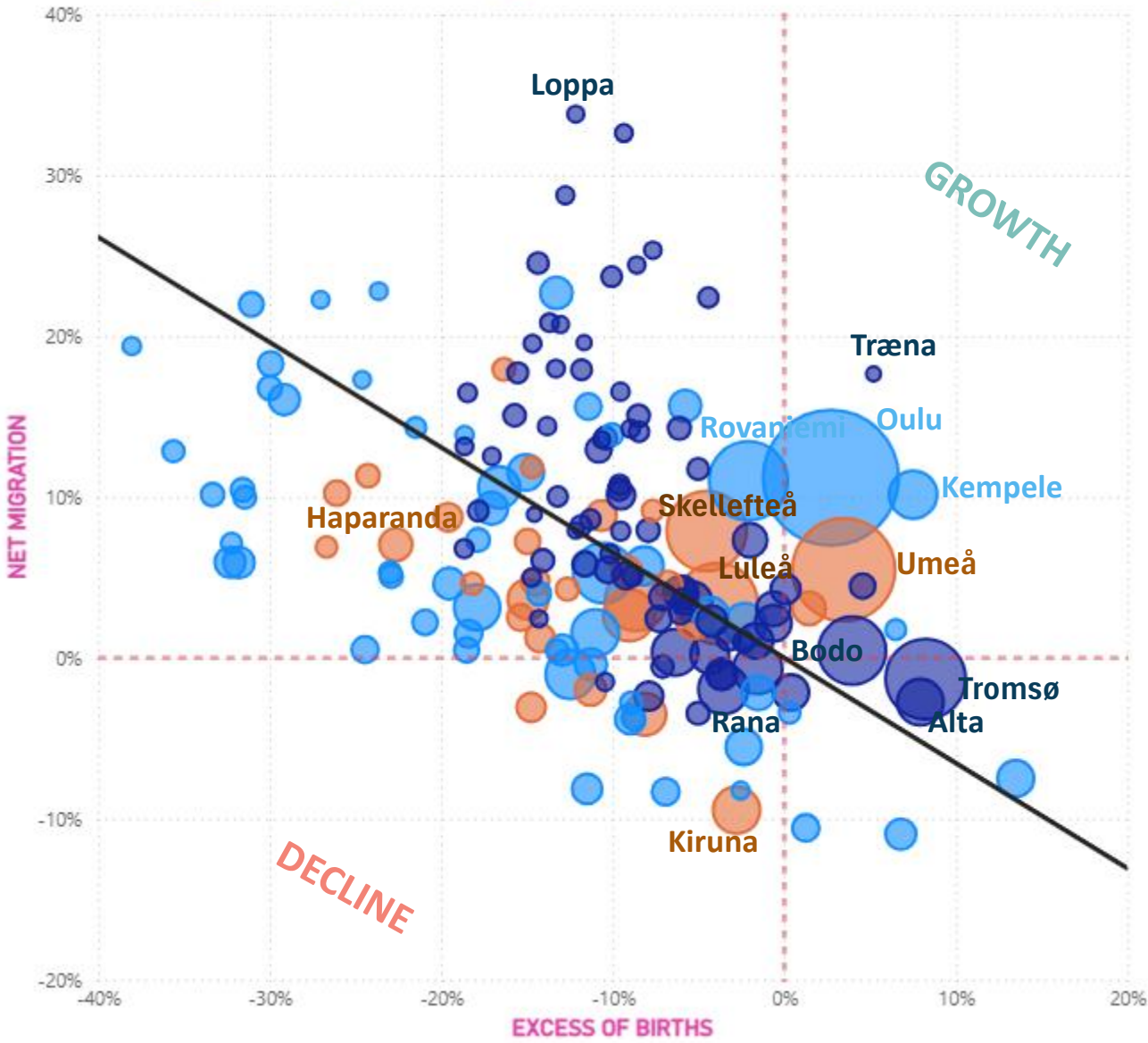
How to innovate beyond the security and natural resources?





Arctic Nordic Population Change, 2025-2045, %

NORTH OF ● Finland ● Norway ● Sweden



Business Scenarios North-Norway 2040



North-Norway 2040

*Commuter
Society?*



North-Norway 2040

*Petroleum
and
Rorbuer?*



North-Norway 2040

*Raw material
supplier 2.0 ?*



North-Norway 2040

Most is North?



The Nordic Arctic needs a coordinated strategy

People

Energy

Knowledge

Connectivity

Security

How to facilitate for a bottom-up approach?

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www.businessindexnorth.com