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What are the business opportunities and development challenges in the Arctic?

he Arctic is attracting attention from the business community. The opening of the sea ice creates a business case offering improved accessibility of Arctic natural resources. The Arctic needs sustainable business solutions that are respectful of the environment and ecosystems in the Arctic. Natural and environmental sciences currently dominate discourse on the Arctic. Decision-makers lack systemized and reliable businessrelated information that covers the Arctic countries.

The Business Index North (BIN) project financed by the Norwegian Ministry of Foreign Affairs, Norland County Council and implementing partners fills this business information vacuum. The BIN report is a knowledge-based, systematic information tool for stakeholders such as businesses, academics, governments and regional authorities, as well as media in the Arctic states. The partners contributing to the project are familiar with local conditions at first hand. The report covers eight northern regions of Norway (Finnmark, Troms, Nordland), Sweden (Norrbotten and Västerbotten), Finland (Lapland, Northern Ostrobothnia and Kainuu) and two Russian regions (Murmansk and Arkhangelsk regions).

To understand preconditions for business development in the Arctic, investors and business need to have a clear picture of socioeconomic trends the region. BIN provides a set of indicators and indices that measure socio-economic development in the Arctic. These indicators reflect demographic and human capital trends, employment, business, innovation potential, maritime transportation and connectivity in the North.

The population in the north of Norway, Sweden and Finland has experienced disproportionately slow growth the last ten years, being 2.7 times slower than in the respective countries overall. Cohorts of youth (0-19 years) and working age population (20-64 years) have declined in the North, while the elderly population aged 65+ is on the increase. This reflects the growing share of baby -boomers in the population and inability to increase population through domestic and international migration mechanisms. The Russian regions of Murmansk and Arkhangelsk are experiencing shrinking population as a consequence of post-1990s socio-economic transformations. Who will be living and working in the North in the next decade if the same trend continues?

Human capital measured in terms of tertiary education attainment predicts future earnings and the health of individuals. In the north of Norway, Sweden, Finland, male population with tertiary education lags by 6 and female by 3 percentage points behind the respective national averages. Murmansk and Arkhangelsk regions are experiencing the same trends. Is this a problem? In future automation will require more high-skilled workers, so the discrepancy in tertiary education attainment may lead to an insufficient pool of job seekers in the north. This constitutes a risk for business activity in the Artic. It is policy-makers' role to address this issue by providing competitive and diversified education in the Arctic.

Employment in the north of Norway, Sweden, Finland has shifted

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from traditional sectors of mining, quarrying and manufacturing, agriculture, forestry and fishing to a service economy dominated by human health and social work activities that accounts for 22.1% of all employment. In the Russian regions of Murmansk and Archangelsk the mining, quarrying and manufacturing industries served as the second biggest employment provider, but experienced job losses during the period 2012-2014. The Norwegian, Swedish and Finnish North experienced a loss of nearly 5,000 jobs in mining, quarrying and manufacturing during the period 2012-2016.

The report demonstrates that innovative businesses build upon the Northern identity and values often associated with fresh and clean water, air and food, majestic nature, outdoor activities and active lifestyle. Examples of innovative clusters include aquaculture in the north of Norway, data centres in Kajaani and Luleå, health technology in Oulu and a growing sector of Arctic tourism in Northern Russia.

The BIN report analyses the development of maritime transportation via the Northern Sea Route (NSR). The total volume of cargo transported along the NSR grew by 42% from 2016 to 2017, dominated by Russian internal traffic. Transport of natural resources out of the Arctic is expected to be the main driver for NSR development.

Reliable and fast internet connections are vital for businesses. The North of Norway, Sweden, Finland and Russia is performing well in terms of basic broadband availability, while lagging behind in highspeed broadband. Mobile broadband coverage is insufficient in the unpopulated areas in the Arctic. The European and Russian Arctic lacks direct subsea data cable connections with the rest of the world.

The Finnish Chairmanship in the Arctic Council 2017-2019 sets the following priorities: environmental protection, connectivity, meteorological co-operation and education. All equally important, we shall remember people and concrete sustainable business opportunities when addressing development in the Arctic.



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