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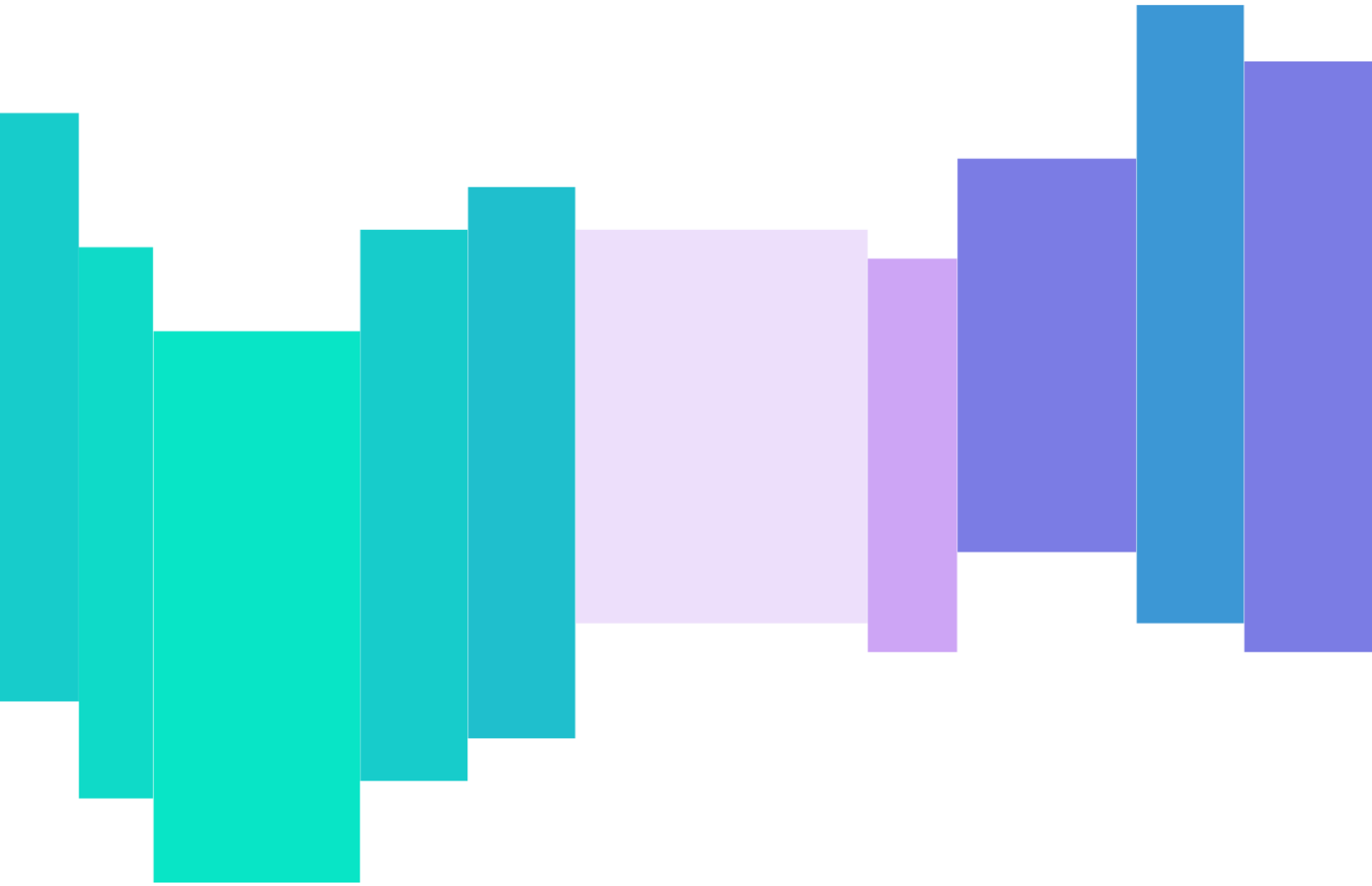
ACCESS

Geopolitical Forces Changing the Operational Environment

Preassessment findings from ACCESS regions



THE LOCAL FEDERATION OF EAST LAPLAND
Sustainable development

REGIONAL COUNCIL OF LAPLAND

naturpolis

ØST-FINNMARK RÅDET

1. INTRODUCTION

Organizations do not operate in a vacuum as they are influenced by external factors to which they have little or no possibilities to impact. External operational environments are changing constantly, and the only thing that organizations can take for granted is what is and what has been. The tame and the wicked problems are challenging public administrations and authorities especially in rural and already sparsely populated areas. These complex issues, such as diverging population development, unequal conditions for growth, threatened safety and security, and climate crisis are difficult to solve as new solutions are needed (Lang, 2025). For example, when a few years back the strategic question was about preventing climate change, the question now is how to adapt to its impacts. Radically falling birth rates, outward migration and only partial compensation through immigration, are lived reality in ACCESS regions.

A powerful force changing the operational environment is geopolitics (Lang, 2025). The recent shifts in geopolitics are affecting sectors ranging from trade and energy to defence, tourism and the everyday lives of individuals (Local Federation of East Lapland et al, 2025). Geopolitics describe how geography influences global power dynamics, international relations, and political decisions. The core elements of geopolitics include territory and borders, natural resources and trade routes, military positioning and strategic alliances, and political ideology and national interests. Geoeconomics are the economical tools, such as trade and sanctions, to achieve the geopolitical goals. (Geopol.uk, 2025.) We are living a geopolitical reset era where old alliances are shifting, and economical and geopolitical factors are interconnected. This era is highlighting economical tools achieving political means. In Eastern Lapland and North-East Finland, the same geopolitical reset materialises as geoeconomic disruption through tourism demand shifts, changing accessibility needs (air/road links), and supply-chain uncertainty for local lumber industry and SMEs. The geoeconomic transition is needed because the border shock visible not only at crossing points but across the everyday economy.

The scholars are referring to an era of polycrisis, where future is more and more unpredictable and where multiple, distinct crises, such as the Ukrainian War, are occurring simultaneously and interacting in ways that amplify each other (Lang et al, 2025). Russia's invasion of Ukraine constituted a clear breach of the norms of the European security order and posed such tangible threats to

Finland's own security that nation's well-established role as a "communicator" between the EU and Russia became untenable. Before February 2022, Finland had proceeded with caution on the European path keeping to its policy of military non-alignment as a decision to join NATO would have caused a definite break in the working relationship with Russia. However, after Russia's full-scale invasion of Ukraine, Finland quickly moved towards NATO membership. (Michalski, Brommesson & Ekengren, 2024.)

The changing geopolitical landscape is already affecting the Arctic region and its surrounding areas, and these changes will have cascading consequences on the operational environment of public actors in ACCESS regions. For example, it was highlighted in the European Parliamentary Research Service briefing on EU regional policy in the Arctic held in June 2022, that the East-Finnmark region is becoming an arena for geopolitical competition that has been sharpened by Russia's invasion of Ukraine: competition for natural resources, supremacy, shipping routes, tourism opportunities and for safeguarding the Arctic environment. The EU acknowledges that its presence in the East-Finnmark is a matter of geopolitical necessity, and that the suspension of cooperation with Moscow aggravates tensions. An increasingly challenging geopolitical situation is therefore foreseen, with the potential for military build-ups, further assertion of national interests, and a scramble for new economic and strategic opportunities opened up by climate change.

Expansion of NATO, border controls and closing borders against Russia, increased defence spending, and the EU's efforts to deepen economic integration and enhance strategic autonomy – the geopolitics are back into the political and economic discussions, decision making and media coverage. Shortly after the start of the Ukrainian war, the political discussion and concrete decision making in Europe have been about dividing the line between the West and the East. (The Local Federation of East Lapland, 2025; Suopajärvi et al, 2024.) However, let's not forget that the geopolitics are a wider viewpoint than the causal relations of Russia's invasion of Ukraine.

In consequence of this geopolitical change drivers, the Arctic will no longer be only an object of environmental and developmental policy; it will also be a theatre of geopolitical interaction that shapes investment flows, infrastructure corridors, service provision and the safety and security architecture. The rapidly changing operational environment highlights the regional and local authorities' knowledge and understanding of the situation and dynamic capabilities. To

provide tailored knowledge and tools for the authorities, the ACCESS – Aurora Cross-Border Coalition for Eastern Strategy and Solutions project implements a capacity building program. To address the current issues and future learning and performance needs arising from the operational environment, the project consortium conducted a needs assessment's preliminary scoping during November 2025 – January 2026. The purpose of the needs assessment is to answer that what are the dynamic capabilities needed in building resilient societies during the geopolitical reset era. Also, the needs assessment answers to question of what the current state of these dynamic capabilities in the research area is, and how should these be developed.

Thus, the assessment aims to answer the following questions:

- what kind of changes are foreseen in the operational environment due to geopolitical changes;
- what kind of dynamic capabilities are needed in public sector to navigate the geopolitical changes in operational environment;
- what is the current state of these capabilities;
- what is the understanding of operational environment and geopolitics within the regional and local authorities?
- how can these capabilities be built in cross-border cooperation?

By answering these questions, the project consortium can understand what is and what is needed conditions. The capacity building program is based on the learnings of the assessment and aims to fill the gap between current and desired state. This report summarizes the core findings of needs assessment's phase one, preassessment. The preassessment was conducted as desk research and it aims to identify issues and major areas of concern, and to arrive at understanding on what is already known about the needs. Ergo, this report aims to answer to questions of "what kind of changes are foreseen in the operational environment due to geopolitical changes" and "what kind of dynamic capabilities are needed in public sector to navigate the geopolitical changes in operational environment".

2. CLIMATE CHANGE – COSTS AND DAMAGES CHANGING THE GEOPOLITICS

Climate change is a reality, and we're experiencing its impacts now. Climate action is not only to reduce emissions, but also about adapting. Adapting to climate change, however, is not easy as it is impossible to say where the climate change is heading, and so, which scenario realizes. According to some scholars, the Earth's temperature may drop radically after a period of extreme weathers and increasing temperature. (Lang et al, 2025.) Risk is, that the climate change will affect to the AMOC – North-Atlantic current regulating the Europe's weather system. Climate change does not stop at borders and spares no country. Transnational cooperation is needed to prevent and adapt to its impacts before the point of no return. In Arctic this is already a lived reality, as the temperature has been increasing four times faster than anywhere else in the world (Ruuhela et al, 2025). As seen in table 1, the long-term deviation of annual mean temperature in Eastern Lapland has been rising significantly for the last couple of decades. Furthermore, year 2024 was the hottest year on record and the first in which global temperatures exceeded 1.5 degrees Celsius above pre-industrial levels (IEA, 2025.)

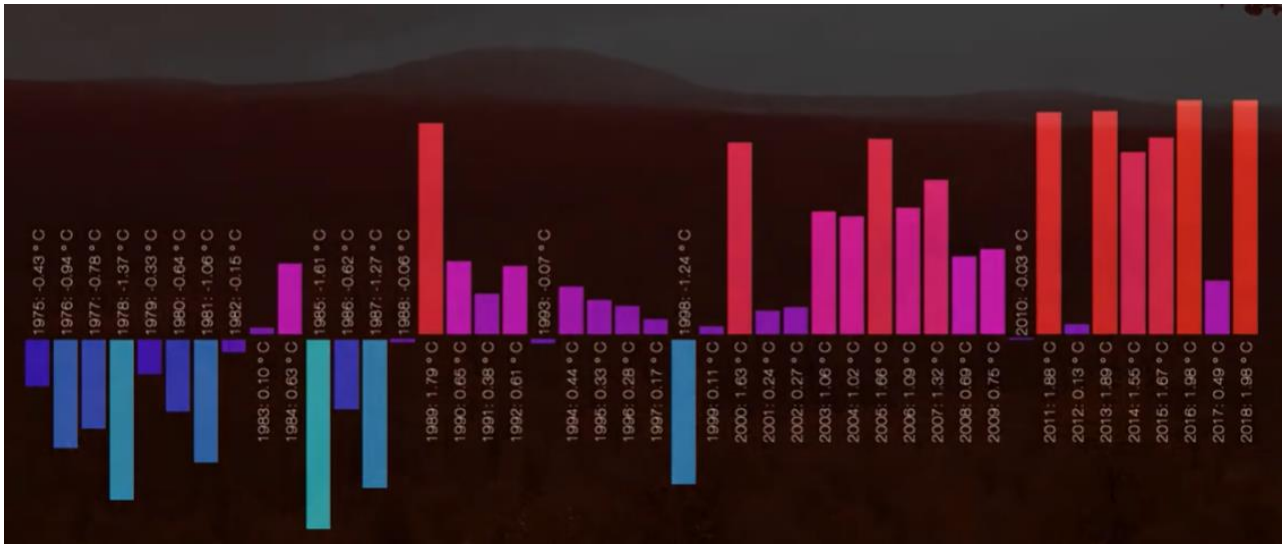


Table 1. Deviation of mean temperature in Eastern Lapland. Visualization by VÄRI project, data produced by VÄRRIÖ subarctic research station.

A Finnish consulting company MDI (n-d.a) maintains a climate risk database "Ilmari". Ilmari maps a risk profile for each Finnish municipality. These profiles

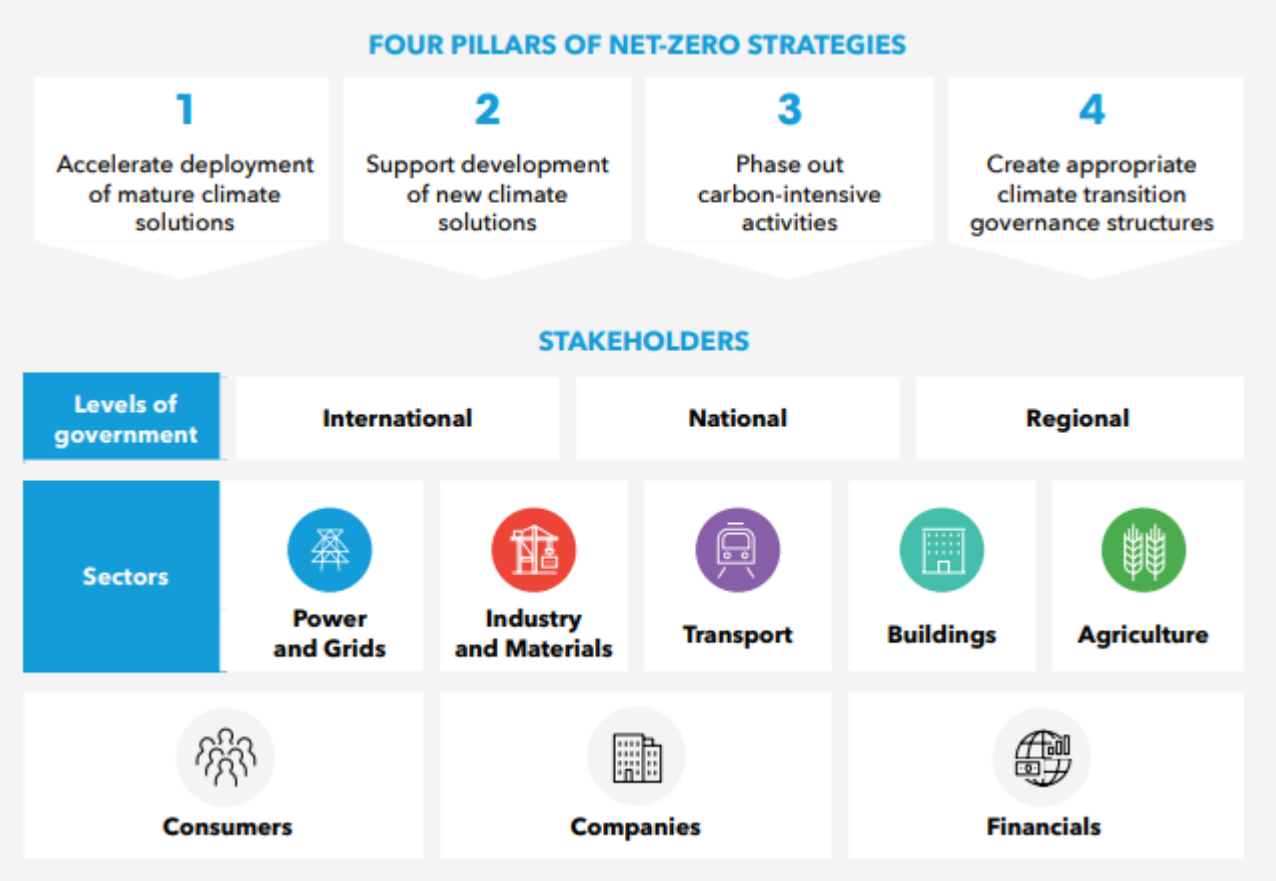
are based on IPCC framework where climate risks are composed of hazard, exposure and vulnerability factors. The hazard factor includes variables such as average temperature and rainfall and the trend of extreme weather conditions. The exposure factors; elderly population, low income levels, and a vulnerable economic structure, amplify potential climate risks. The vulnerability factors, in turn, include variables of vulnerable or valuable natural environments, built environments and dense settlements. Eastern Lapland municipalities have high climate risk profile – Savukoski (0.59), Salla (0.54) and Posio (0.54) are the top three municipalities in climate risk, and Kemijärvi (0.48) is in top 25. Pelkosenniemi has a much lower risk of 0.44. However, in North-East Finland research area the risk is below 0.50 (Taivalkoski 0.47 and Kuusamo 0.45). Even though the database includes only Finnish municipalities, the high risk factors are mainly common for all ACCESS regions.

”Save Salla – Save the Planet” stated the municipality of Salla’s application for 2032 Summer Olympics host city. The video raised awareness that if we do not act now to prevent climate change, it will be too late in year 2032. All EU member states are legally committed to fighting climate change by European Climate Law that aims to a 2050 carbon neutrality, and the European Green Deal aims to cut emissions by at least 55% by 2030, transforming EU into a modern, resource-efficient and competitive economy (European Commission, n-d.b). To support the transition, EU has allocated funds for programme period 2021–2027. The new programme period is around the corner, and instruments available, and Finnish National and Regional Partnership Plan (NRPP) remains still as questions (Osenius, 2025).

From Finland’s national point of view, the key pillar of national climate policy is the national Climate Act which lays down emission reduction targets for the next decades. Compared to the Union level, Finland has more ambitious goals as its emission reduction target for 2030 is 60% and the nation aims to be carbon neutral by 2035. In Norway the goal is even more ambitious, as the Norway submitted its new Nationally Determined Contribution (NDC) for 2035 under the Paris Agreement in summer 2025 aiming to reduce greenhouse gas emissions by at least 70-75 percent compared to 1990s (Government.no, 2025).

In 2022, the Finnish Climate Act was supplemented by obligation for municipalities to draw up climate plans. However, the obligation was abrogated in 2024 due to budget reasons. (Ministry of the Environment, n-d.c; 2022; 2024.) Although it is no longer obligatory for municipalities to draw up climate

plans, it doesn't mean that they shouldn't or couldn't do so. Based on a study of local plans in East-Finnmark, sustainable development is a common priority for municipalities, as the plans included dedicated chapters of environment, climate and sustainability with commitments to address climate change and preserve natural resources. Currently the Regional Council of Lapland is finalizing a regional strategy for climate change adaption and energy transition. A couple of years ago, a VähäC -project drafted a layout for climate plan for Eastern Lapland municipalities to utilize. Also BloombergNEF (n-d.d) has developed a framework for policymakers to be used as a tool in Net Zero strategies (picture 2). This framework provides stakeholder specific actions on sector-level.



Picture 1. Four pillars of Net-Zero strategies by BloombergNEF.

Until now, the relation between climate change and geopolitics has predominantly been on decarbonization – the shifting energy supply, new resource dependencies and mitigation finance. An equal focus should be on how its costs and damages are changing geopolitics. People across the globe are experiencing rising sea levels, record-braking heat, extreme weather events and biodiversity impacts and their consequences. An additional concern is that

Earth's warming would trigger several irreversible climate tipping points, altering many biophysical systems that human thriving has depended on. As these impacts are unevenly distributed around the globe, they will increasingly be a source of geopolitical tension. (Bosch, Thornton & Vinke, 2025).

In Arctic we already experience unpredictable winters affecting our tourism industry. The warming of the Arctic is also a competitiveness issue for major arctic nature- and winter-tourism destinations in ACCESS regions, where adaptation requires not only snow-reliability measures but also integrated land and water use choices that protect biodiversity and the experience economy. On the other hand, the shortening of snowy season in many European locations, the Arctic (semi-continental) highlands of are estimated to have longer period of "snow security" or even stronger snow falls due to the climate change than more western locales in the North. Furthermore, climate change is also extending our growth season (see table 2) and thus increasing self-sufficiency and opening possibilities for new production.

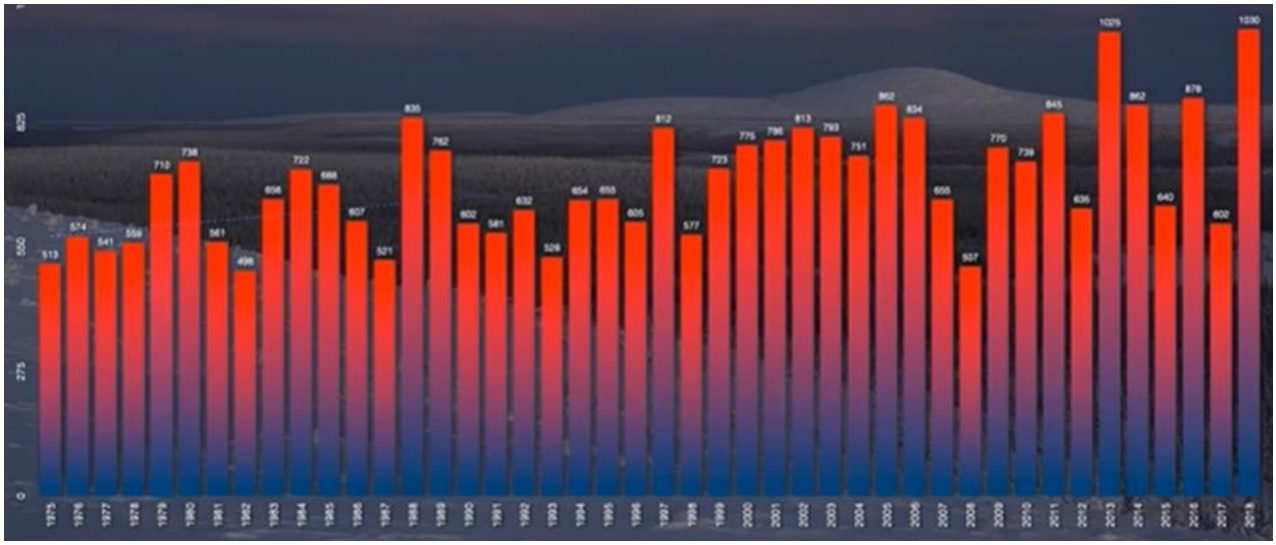


Table 2. Increase of heat sum in growing season in Eastern Lapland. Visualization by VÄRI project, data produced by VÄRRIÖ subarctic research station.

It is important to ensure, that short-term growth does not erode long-term ecological resilience (and attractiveness) especially in tourism as it has been one of the fastest growing industries in Lapland region. Local practical implication is to strengthen sustainable tourism planning through zoning, conservation, ecological restoration and public relations measures especially in high-traffic areas.

The issues of exceeding nature's carrying capacity and resource sufficiency are increasingly defining the boundary conditions for humanity's future. In 2009, a group of researchers introduced the framework of planetary boundaries to describe the safe operating space of human activity. These nine boundaries included: climate change, biosphere integrity, land-system changes, freshwater change, biochemical flows, ocean acidification, atmospheric aerosol loading, stratospheric ozone depletion and novel entities. Today, we have breached seven of them. Only stratospheric ozone depletion and atmospheric aerosol loading remain within the safe zone. The increasing frequency of extreme weather events is the result of crossing these planetary boundaries. (Sitra, 2026.)

3. GREEN TRANSITION – NO CARTELS IN RENEWABLES

The emphasis on the strategic importance of natural resources, their location, transportation routes, and chokepoints, constitutes a longstanding interest of geopolitics. As resource needs are shifting due to energy transition, the focus is to new players, such countries with rich endowments of so-called critical minerals and rare earth materials instead of monopoly countries possessing rich fossil resources. (Bosch, Thornton & Vinke, 2025.) Critical minerals are not only crucial for today's energy technologies, but they also play a pivotal role for broader economy as they are needed in AI chips, jet engines, defence systems and other strategic industries. For example, battery performance is dependent on lithium, nickel, cobalt, manganese and graphite; permanent magnets used in wind turbines and EV motors are dependent on rare earth elements. (IEA, 2025.) Hence, the critical minerals and rare earths are important for both energy security and economic resilience.

The key risk for critical minerals and rare earths are high levels of market concentration. A single country is the dominant refiner for 19 out of 20 energy-related strategic minerals, as table 3 shows. These minerals do not heat homes or run cars, so supply shortages are not that immediate as with gas or oil as a cut-off would cause an instant crisis. (IEA, 2025.) In a technology-based world you do not need a constant supply of new materials just to survive (Tilleard, 2025.) The disruptions in supply chains merely have consequences for economies and jobs. For example, in October 2025 more than half of these 20 strategic minerals were under some form of export controls. As exports fell remarkably, many automotive manufacturers struggled to secure rare earth magnets and were forced to cut utilisation rates or even shut down factories temporarily as a result to shortages. (IEA, 2025.) Table 4 visualizes the critical minerals and rare earths needed in clean energy and their manufacturing capacity by location.

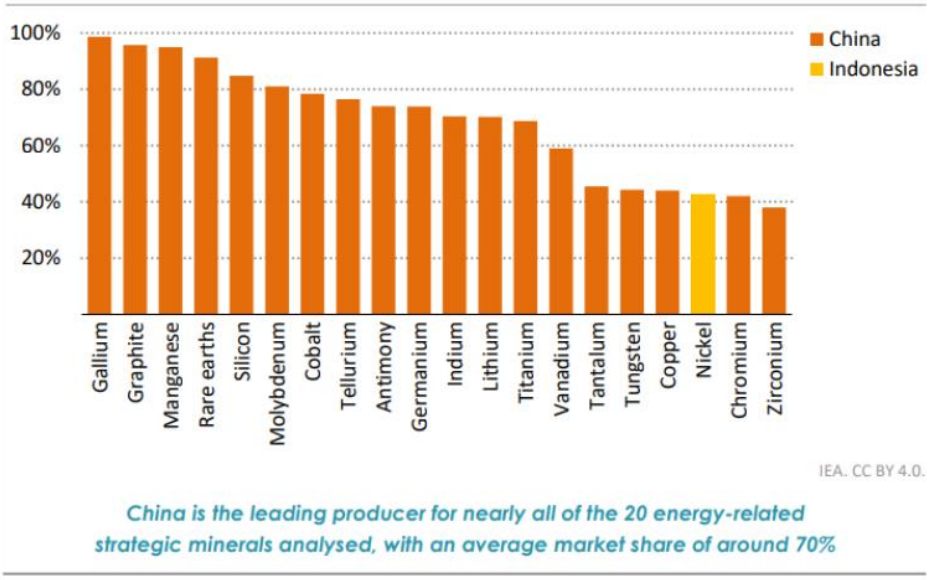


Table 3. Top refiner share of selected energy-related strategic minerals by country. Values refer primarily to 2024, or to the latest year for which data are available in certain cases. Visualization and data by IEA.

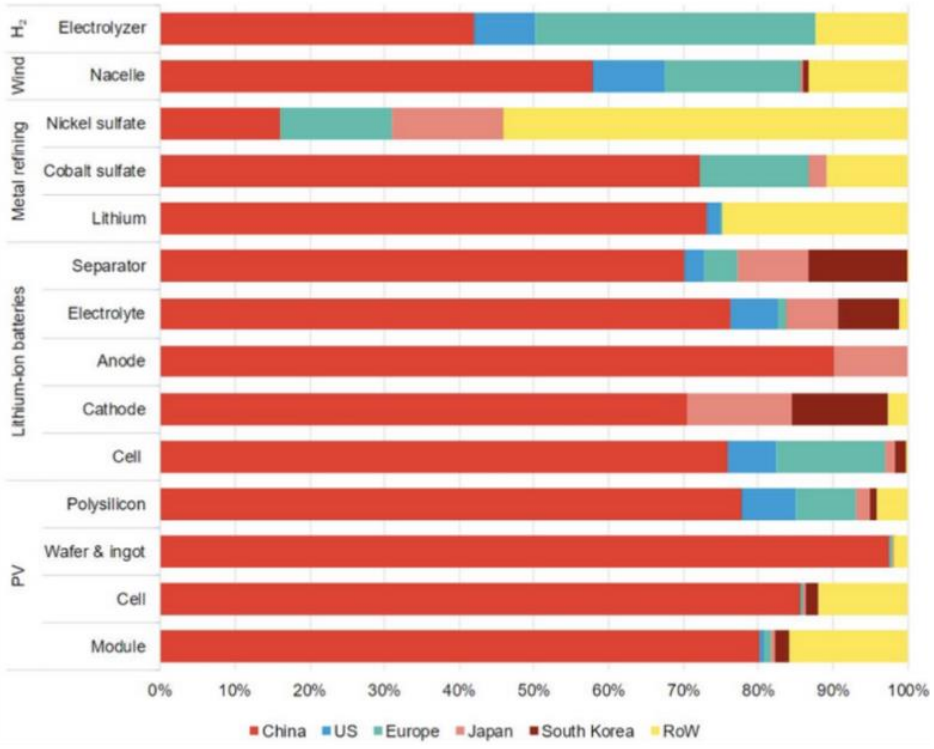


Table 4. Clean energy manufacturing capacity by location, visualization by Borrell (2023), data source BloombergNEF.

The EU has ambitious energy and climate targets that aim to meet EU climate goals as well as to improve energy security and competitiveness by reducing

dependence on expensive imported fossil oils. (IEA, 2025.) However, the green transition is creating new dependencies as the EU itself produces only a fraction of minerals needed in green transition. These dependencies may be leveraged to achieve favourable outcomes, as has often been the case in the age of fossil fuels. (Bosch, Thornton & Vinke, 2025; Ali-Yrkkö et al, 2025.) Therefore, the European Parliament accepted the Critical Raw Materials Act intending to increase the self-sufficiency of Europe in minerals production, which means increasing demand for mining in the ore-rich regions of Europe (Suopajärvi et al, 2024). In addition to EU level measures, Finland has its own national measure, Finnish Mineral Strategy, that aims to increase the sustainability and circularity of raw material supply chains, and to tackle the weaknesses and vulnerabilities in supply chains (Kangaspunta et al, 2024). Lapland Agreement 2026-2029 (Regional Council of Lapland, 2025) also acknowledges mineral sector as a crucial part of national and EU level supply security and self-sufficiency.

All the ACCESS regions are known for their extensive natural resources. A few years back, ILPO project studied mineral potential of Eastern Lapland, and the study revealed that the area has rich mineral resources and potential for the existence of ore deposits (e.g., Ni-Cu, Co-PGE and Ti-V-Fe-Cr, Au-Cu-Co, Au and Fe-Cu-Au ores) after area's bedrock represents a comprehensive cut in the geological history of Northern Finland (Konnunaho et al, 2021). The Sokli project located in Savukoski is known to be strategically important for the EU around 10 percent of rare earth metals needed in Europe (Gråsten, 2025). Sustainable mining and mineral exploration, and value chain related RDI are a part of Eastern Lapland's smart specialization (Local Federation of East Lapland & Federation of Northern Lapland Municipalities, 2023).

Europe is suffering from major vulnerabilities in value and production chains when it comes to critical minerals and rare earth materials. The vulnerabilities are mainly in low stream as the EU has strengths in final assembling and combining products into larger units. Based on the analysis of Carrara et al (2022) the EU is highly depended on China when it comes to five strategic sectors: renewable energy, electrified transportation, industry, digitalisation, and space/security. (Ali-Yrkkö et al, 2025.) China's power station in energy markets raises a difficult question of restraining the costs of energy transition for consumers and companies: China is able to produce energy technologies at very low cost, and increasing the level of European self-sufficiency will increase the costs remarkably.

Some minerals are crucial for total energy technology costs, so price spikes would inevitably have implications for manufacturing costs and ultimately for consumer prices (IEA, 2025). For example, the start of the Ukrainian War and the following shock in energy markets raised the question of energy security in the politics. Even though the energy prices have come down after the highest peak, the threats are not even close to being gone. When it comes to energy security, flexibility has become a critical element and in many nations investments to renewable energy sources decrease the geopolitical risks. (Ali-Yrkkö et al, 2025.) Dispatchable capacity will be crucial to balance the power systems and to meet seasonal flexibility needs. Hydropower or nuclear plants remain essential; not as a bulk energy generator but as an energy capacity and flexibility spotter. While batteries are going to be major contributors to system reliability supplying most of the needed short-term flexibility, other forms of longer duration storage (such as pumped hydro) are also needed. (IEA, 2025.) Investments in RDI are needed as the problems of green energy are also in weather conditions and energy storage (Ali-Yrkkö & Kuusi, 2025). Nevertheless, both Norway and Finland are well on in energy transition when comparing nation's share of renewables in energy consumption in regional and global ranking: in EU-level Norway holds 2nd place after Iceland and Finland holds the 4th place, globally Norway ranks 3rd and Finland 6th after Sweden and Uruguay (IEA, 2025c). But when it comes to ACCESS regions, limited electricity transmission capacity is a concrete bottleneck for renewable energy investments and energy-intensive projects; targeted grid upgrades and storage solutions therefore become enabling conditions for both resilience and growth. Growth in energy sector is a key enabler for other investments.

According to a study by the Lapland Chamber of Commerce (2023) the green transition investment potential in Northern Norway is up to 10,3 billion EUR whereas it is 64,7 billion EUR in Lapland. In Northern Norway the largest investments are directed towards the development of oil production in the Barents Sea, but it is seen that investments are turning from oil to renewable energy and battery production. In Finnish Lapland most investment projects are related to the green transition. However, as it became evident in OECD's (2025) report, the Eastern Border Regions have struggled to attract large-scale green investments. The ongoing geopolitical uncertainty, combined with reputational concerns, has made it more difficult for these regions to secure private sector financing for sustainability projects.

Despite the investment challenges, environmental innovations in green technologies and the circular economy offer potential pathways for regional development (OECD, 2025). Eastern Lapland and Lapland in general, has a great potential for windmills. The two Finnish ACCESS regions, Eastern Lapland and Koillismaa, are lobbying for a pilot area for windmills in Eastern border, as the military and defence policy reasons have been limiting renewable energy investments in the border area. In addition to wind power, solar energy investments are increasing. Alongside energy, mineral production is a major part of the region's investment potential. Bulk of energy transition related investment projects are still in planning phase but some, such as battery energy storage project in Kemijärvi, are in construction phase. The trend seems to be that the energy sector is becoming an important part of region's vitality and industrial renewal. (Tolonen, Bergman & Pylkkönen, 2025.) To fully unlock the power of green transition, improved investor confidence, stronger policy support, and targeted funding mechanisms are needed in ACCESS regions (OECD, 2025).

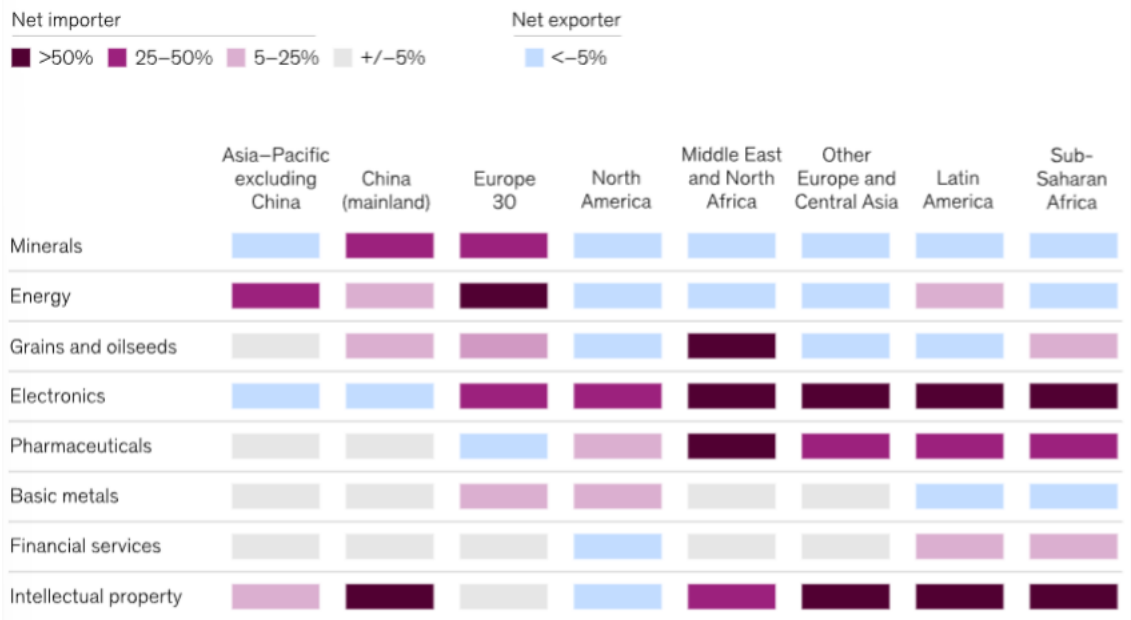
In a world where limited natural resources are overconsumed, "resource wars" may realise in trade in many forms, such as taxes, export and import restrictions, and embargos (Suopajärvi et al, 2024). If we want to build a low-carbon economy, we will need to mine a lot of different minerals. When discussing about mining, it should be noted that zero mining is not the baseline to compare to. The relevant comparison is what we already mine for current fossil fuel system. When the low-carbon energy mineral needs are compared to fossil fuels status quo, we find that moving to renewables or nuclear power actually reduces the material requirements for electricity. The move to low-carbon energy will shift what materials we extract and where this mining will take place. (Ritchie, 2024.)

"The great nations of tomorrow are not those that concentrate of controlling the materials and the growth of others – instead they are those that focus their competitive advantage to unlock the resources we all need and build and manufacture the resources we all need", stated renewables entrepreneur Matt Tilleard in TED Countdown Summit 2025. Tilleard argues, that by 2050 there could be so much recycled supply that the demand for new input materials could start to increase, as the 0% of oil can be recycled and 95% of technology can be. Therefore, the energy transition is actually all about digital transition. Hence the term "twin transition", as these two can potentially reinforce each other.

Overarching plans for ACCESS regions, such as Development Plan for Finnmark, Strategic Plan for East Finnmark, and Lapland Agreement, set the framework for the regions' development ambitions. All these frameworks are built upon three pillars of sustainable development: social, environmental and economic. Indeed, when regions act to ensure the realization of the investment potential in energy transition investments, it is crucial to take all these pillars into consideration. Bur are the investments in energy made to replace fossil energy sources or to increase energy supply? Well, there is food for thought for policymakers from Sisli Piisilä (2025).

4. FROM GLOBALIZATION TO DEGLOBALIZATION

The idea of the global economy – free flow of people, capital, and goods – has been a dominant ideology in the Western world since the middle of the 20th century (Suopajärvi et al, 2024). The new geopolitical era is stigmatized by superpower's geopolitical actions and concerns about dependencies (Ali-Yrkkö et al, 2025). We are heading into an era of a political economy, where separate politics and economy is less and less the case (Padhi et al, 2025). Trade binds economies around the world, and even in sectors for which a region is a net exporter, it may still be dependent on imports for many crucial products (Seong et al, 2025), picture 3 illustrating Europe's net imports as share of domestic consumption. The invisible hand orchestrating global markets is being replaced by game theoretical deliberations. (Ali-Yrkkö et al, 2025.) With a recent proliferation of export controls on key materials and technologies, the supply risks are no longer just a theoretical concern (IEA, 2025). Additionally, protectionism, safety politics, green transition, and questions of responsibility and reliability in production chains may have implications for global economy (Lang et al, 2025).



Picture 2. Net imports as share of domestic consumption, %, 2023 or most recent available. Source HIS Markit; WTO-OECD Balanced Trade in Services; FAOSTAT; International Energy Agency World Energy Balances. Analysis and visualization by McKinsey & Company.

After decades of globalization the markets are shifting to deglobalization – the international value chains are getting shorter, and businesses are moving their production chains closer to end markets. Now the value chains are examined more strategically instead of costs and availability – mitigating dependencies on individual producers and risky countries. The studies indicate that the geopolitical distance is nowadays more meaningful than geographical distance in trade and export markets (Wang, 2025). So, the markets are dividing into geopolitical divisions, dividing the world into separate blocks. The studies also show that international investments are rising faster inside these blocks than between the blocks. (Ali-Yrkkö et al, 2025.) Many scholars divided the markets into three blocks: the U.S. aligned democracies, an ”authoritarian axis” led by China, and the neutral block i.e. the ”others” (Wang, 2025). In Finland, the national markets are small, and both import and export are needed (Ali-Yrkkö & Kuusi, 2025). Operating in international markets is necessary for majority of Finnish SMEs. The main market areas for Finnish SMEs, that have some form of international operations, are Nordic countries, Europe, and the UK. (Suomen Yrittäjät, 2025b.) According to a study by VATT Institute, export firms have generally adapted better to trade disruptions subsequent to Russia’s invasion of Ukraine than import firms (Toikka, Laasonen & Toivanen, 2024).

With the new Trump administration, the United States of America has now abandoned its earlier hegemonic position as the leading power of the wider Western alliance. This shift calls for a new concept of European Strategic Sovereignty, as the once recent but already historical rhetoric of “yesterday’s allies and enemies” is coming under scrutiny, and major changes are afoot. The new geopolitical environment calls the west to build strategic east-west dual-use logistics routes linking the High North of Finland and Scandinavia. Solutions are needed to serve both military mobility and civilian economic transition. For Finnish ACCESS partners, connectivity priorities include strengthening its position in westward trade and mobility corridors, for example in Koillismaa Narvik-Rovaniemi-Kuusamo and Oulu-Kuusamo, addressing the constraints created by the lack of a railway connection in Kuusamo, and leveraging Kuusamo international airport connectivity to support sustainable tourism growth, digital nomad mobility and business development (OECD, 2025).

Aaltola et al (2014) highlight the emphasis on global flows and their potential insecurity, and the implications for the security of wide range of business sectors. To mitigate the potential risks related to dependencies, a critical

valuation of value chains should be conducted. In the study of Suopajärvi et al (2024) businesses identified that the threats and risks regarding Arctic industries were closely related to the negative spill-over effects of superpower conflicts. The interviewees were concerned about threats to the logistics of goods from the South, as northern areas are dependent on supply chains from southern areas. For example, in Finland, the entrepreneurs have reported that the Ukrainian War have caused disruptions for their businesses; 41% reported that general uncertainty has decreased the number of orders, and over 20% reported increases in operational costs (material, energy and logistics) (Suomen Yrittäjät, 2025). Interestingly, the VATT Institute's study revealed that the impact varied significantly by company size and type: large companies showed remarkable resilience, with minimal impact on their operations, and wholesalers and retailers were more negatively affected than manufacturing firms (Toikka, Laasonen & Toivanen, 2024). Furthermore, readiness needs also include cyber and population resilience and border-adjacent disruption risks, including practical measures such as monitoring against GPS disruption and linking preparedness planning and emergency services to critical infrastructure and logistical dual-use mobility in all ACCESS regions.

According to Ali-Yrkkö & Kuusi (2025) the national and regional capacities should be strengthened in sectors that serve both economic competitiveness and national resilience. In 2010 the European Commission called on national and regional governments to develop Smart Specialisation Strategies (S3) to encourage all European regions to discover their competitive advantage (European Commission, n.d-e). In Finland, smart specialisation takes place at the regional level, and in Finnish ACCESS regions the S3 is guided by Oulu Region's Smart Specialisation Strategy in the Koillismaa area, Lapland's Arctic Smartness Strategy in Eastern Lapland, and Shared Smart Specialisation Strategy for East and North Finland, tying together both Koillismaa and Eastern Lapland (Regional Council of Lapland 2023, 2023b; Council of Oulu Region, 2022). The thematics of circular economy, renewable energy and technologies, and digitalisation are common themes for all the S3 strategies. Eastern and Northern Lapland jointly developed a Growth Programme for Smart Specialisation in 2023, aligning with Lapland's strategic priorities while addressing the unique characteristics of these subregions (Local Federation of East Lapland & Federation of Northern Lapland municipalities, 2023). Several Norwegian regions have begun working with the smart specialisation concept, even though Norway is a non-EU member state. Although S3 does not bring

entirely new concepts to Norwegian regional development efforts, it continues to provide the country with a rationale to guide its innovation system. (Woien, Kristensen & Teräs, 2019.)

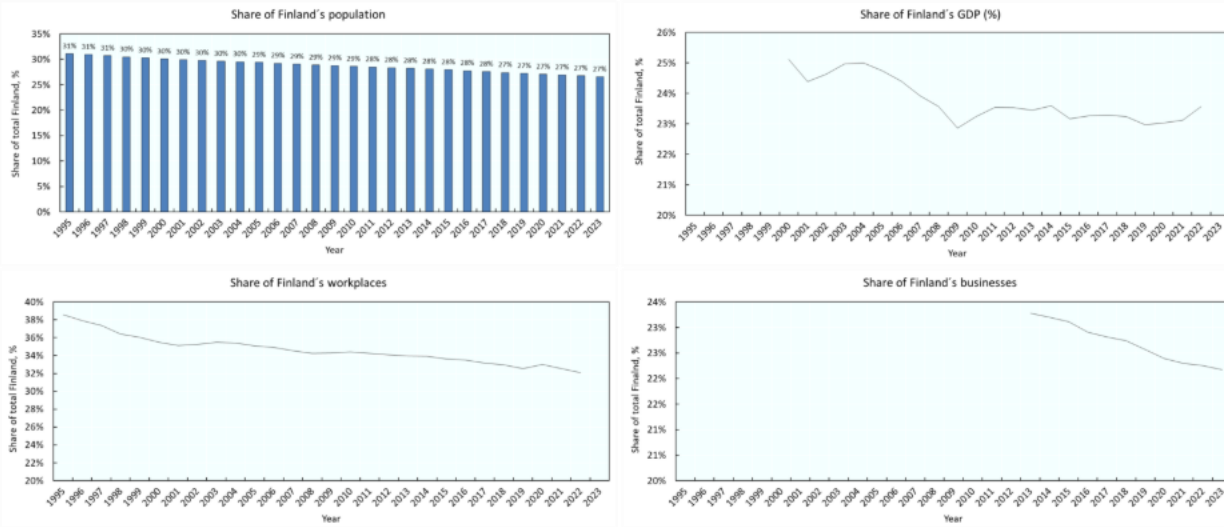
Moving towards a ”blocked economy” and increasing geopolitical tensions will be seen also in declining numbers of work-related immigration and technological isolation (Ali-Yrkkö et al, 2025). Finland is already falling behind in technological development when it comes to workforce productivity compared to Sweden and Norway. For example, Sweden has been investing to immaterials such as programs, data, and innovations. This has had remarkable positive effects to workforce productivity. In addition to immaterial investments, Finland is also far behind of its comparisons in the use of AI. (Lang et al, 2025.)

Due to structural deformation of population, the amount of working-age population available is decreasing notably in ACCESS regions. For example, in Finnish border regions the population declined by 2.6% between 2019 and 2024, with significant reductions in the working-age population. This raises a crucial question of the need to increase productivity. These generations can not be “fixed” anymore and therefore immigration is pivotal to ensure adequacy of the workforce, especially in rural areas as ACCESS regions. (Aro, 2025.) The availability of skilled labour remains a key bottleneck in realizing investment potential and improving value creation. Partial solution to lack of workforce is the development of technology, as some of the oldish professions, and simple jobs and tasks can be performed by AI and powered by digitalization and robotization (Lang et al, 2025). All the overarching plans setting the framework to develop ACCESS regions, sub-regions and municipalities include some direct or indirect priority on competence, education and work: the need to recruit, educate and retain qualified people; attractive schooling and work environments to achieve the strategic goals. However, all European countries are facing the same situation of low fertility and a rapidly growing older population. Over the next ten years, competition for foreign labour will further intensify, and both attractiveness and retention will become more important (Sitra, 2026).

5. CONCLUSIONS AND IMPLICATIONS

The last several years have been a period of extreme volatility and uncertainty; the worst pandemic since the 1920s, the worst energy crisis since the 1970s, rapid technological development, increasingly effects of climate change, and increasingly complex geopolitics (IEA, 2025). Shifts in the political, economic and strategic spheres during last years have brought challenges to Europe's Northeastern regions. However, the changes in operating environment can offer possibilities for cross-sector and cross-border development. Effectively managing these developments could reshape the economic realities of North-Eastern Europe, with far-reaching impacts on local communities through changes in trade, energy, defence, tourism, and everyday life. The vitality of the Arctic region is increasingly seen as part of overall security.

Vast counties with long distances, sparse settlements and low population describes all the ACCESS regions. The data in picture 4 illustrates trends in four key metrics of the eight border regions as shares of Finland's total from 1995 to 2022. This data highlights structural shifts where the relative demographic, economic and business importance of the region has declined compared to the rest of Finland. Furthermore, Finland and Norway share over 1,500-kilometre border with Russia. After becoming NATO's external border with Russia, Finland has gained renewed strategic importance. While Russian forces have been redeployed to Ukraine, the 2024 Government Defence Report notes that Russia plans to strengthen its military presence in its northwestern regions once resources allow, posing long-term security implications for Finland's eastern border and the broader EU. (Ministry of Defence, 2024.)



Picture 3. Trends in population, GDR, workplaces, and business shares of Finland's total in the eight obrder regions, 1995-2002. Source Statistics Finland.

This report was to summarize the results of preassessment phase. We reviewed nearly 70 documents outlining global trends and perspectives, studies and research papers, EU- and national level strategies and policies, and overarching plans setting the framework for areal development. When reviewing the regional strategies and other related documents, the main trends in strategic priorities were diversifying the economy, strengthening the labour market and competence, climate and environmental initiatives, increasing inclusion of all groups, modernising infrastructure and digitalisation, as well as close cooperation between municipalities and at the regional level. However, on local level plans global drivers and their spillover effects were rarely taken into consideration. Of course, to have a plan or strategy is not an absolute value itself, and more attention should be paid for implementation: robust action plans with measurable indicators, priority projects and tasks, assigned responsibilities, and active follow-up.

The objective of this extensive research was to conduct an understanding of changes foreseen in the operational environment due to geopolitical changes, and dynamic capabilities needed to navigate. The following sections are to summarize and reflect the findings from implications and dynamic capabilities point of view. The conclusions and implications are divided into four categories: policy implementation, resource management, adaptability, and community engagement. This is based on the ACCESS project application, where the themes of the capacity building program are divided into these four above mentioned themes. The fifth theme "local knowledge" is seen as a cross-sectional theme.

Policy Implementation

There is a pressing need for the ACCESS regions to adapt and evolve, and this transition will be more productive if we can develop effective cross-border strategies in collaboration with Northeastern regions. For example, the regional strategies of Finnmark emphasize the importance of cross-border and cross-municipal level cooperation: the sum of coordinated actions is greater than individual initiatives. As this report has showcased, there are a numerous count of policies, strategies and action plans on the EU-level, national level, regional level, sub-regional level, and local level. In Finnish Lapland the international security situation is a central framework for regional development, and the changed environment was also considered in the 2023 Smart Specialisation Strategy, with a focus on security of supply and self-sufficiency. The study of regional strategies in Finnmark reveal that a detailed appreciation of internal dynamics such as population change, economic diversification and infrastructure needs, but it discloses only limited awareness of the broader operational environment.

Local authorities are responsible for implementing these different level policies at the local level (Local Federation of East Lapland, 2024). However, the study has revealed, that explicit references to geopolitical actors, international security, the Arctic as a geopolitical space, and the spillover effects of global drivers are virtually absent from local level strategies and action plans. The local level documents focus predominantly on domestic challenges such as demography, infrastructure, economic diversification and social inclusion. To cite Päivi Ekdahl's speech in EUSBSR Annual Forum, "I want to stress that inside Lapland (-) we actually have several Laplands. We have five sub-regions that vary from each other both in size, number of inhabitants and in economic structure". And the same presumably applies to all ACCESS regions. This amplifies the need for sub-regional policies, strategies and action plans development that aligns with higher-ups.

Lack of external funding is hindering the development in ACCESS regions. In regions like the Arctic regions, where micro-enterprises dominate, growth companies are few, high dependence on few economic sectors, and capital is scarce, the role of municipalities and the regional government in supporting development is crucial. For example, the strategic documents in Finnmark define wishes for strengthening of the economic structure, with a strategic vision that East-Finnmark creates sustainable growth for people, business and society,

outlining that one should "seek funds to implement projects that make the region a leading area for sustainable societal development". Endless list of funding instruments, inadequate administrative capacity, too few personnel, and limited competence, are well known barriers to apply and receive funding in respective regions. To secure funds for areal development, it is crucial to enhance understanding and knowhow on national, cross-border, and EU-level funding instruments, and find new solutions to overcome the known barriers. One potential solution could be resource pooling where cooperation enables pooling of scarce expertise, data, and funding, thereby overcoming local capacity constraints and building a collective reservoir that can be mobilised when opportunities arise.

The round table discussions in Policy Learning Platform (2025a) highlighted the need for dedicated funding streams in Eastern Border Regions. The need of special, dedicated funding streams has also been acknowledged for example, in Transition Strategies for Finland's Eastern and South-Eastern Border Regions (OECD, 2025) and in Strong regions for a safe Europe (2026). Especially in Eastern Lapland, the loss of Kolarctic CBC was daunting, as the programme supported investments with low threshold. Eastern Lapland municipalities have been lobbying for replacement, but it remains to be seen whether this kind of instrument will be included to new programme period.

However, it has been said that more money will be allocated for Interreg programs in the next programme period. These programmes are to build for cross-border cooperation and exchange of good practice on such themes as resilience. This makes it pivotal for the ACCESS regions to reach for strategic cross-border alliances and to strengthen ties with existing ones to achieve strategic objectives. The capability to operate in cross-border and cross-sector networks, ecosystems, and network economies become more and more important. EU policy identifies continuation of cooperation with Arctic partners through mechanisms such as the Northern Dimension Environmental Partnership.

Resource Management

Local authorities manage many resources, such as land use, infrastructure, and the local economy, which are critical factors in geopolitics and geoeconomic transition (Local Federation of East Lapland, 2024). Firstly, this theme relates closely to policies, strategies and action plans, as the key dynamic capability is

to unlock the game-changing potential of renewable energies for local development. For example, in Kymenlaakso Region they have established a framework supporting renewable energy projects, hydrogen economy, and circular economy solutions to attract new (green) industries (battery production, data centres et cetera) (Policy Learning Platform, 2025c).

Secondly, the strategic foresight becomes more important: policymakers need to be aware of the fact that even if they are not implementing any strategy (such as invest in) while making decisions – every decision is a strategic one as it is paving the path for the next one, hence making a trade-off. This, once again, highlights the need for local level action plans and roadmaps to support the implementation of higher-level strategic objectives. Thereby policymakers need to address questions such (Santala, 2025):

> What kind of invest-in strategy are we implementing?
> What is the political mindset here?
> What is our potential and realistic capability?
> What about the supporting infrastructure needed in these industries?
> What is our roadmap to achieve the objectives?

As this report has showcased, the question is more about adapting to climate change than preventing it. This is very much connected to resource management, as it is crucial to enhance climate resilience and environmental protection in the Arctic and fragile region while boosting new infrastructure and investments. In case of ACCESS regions, the needs to improve infrastructure is not only energy related but also transportation routes, digital accessibility, housing, and municipal services. These are well-known bottlenecks hindering areal development.

Yet, the ACCESS regions do not have economic capability to answer these infrastructure needs, and external financing for investments needs to be secured. As it became evident in policy implementation, the understanding and knowhow of EU- and national level funding and triple-P financing possibilities needs to be addressed as a dynamic capability in resource management as well. It is highly recommended that in accordance to strategic foresight, local level action plans should include financial strategies for applying funds from various sources, joint financing, and realistic budgets and scenarios to identify gaps.

The emphasis on the strategic importance of natural resources, their location, transportation routes, and chokepoints, constitutes a longstanding interest of geopolitics. ACCESS regions are known to have a great potential for green energy investments, furthermore especially the area of Eastern Lapland is known to have potential for critical minerals needed in green transition and sustainable development. However, combining traditional livelihoods and emerging industries is not straightforward, which brings us to our next thematic objective.

Community Engagement

When combining traditional livelihoods and emerging industries one has to take into consideration the usage of natural resources and resource nationalism, questions of land use, and locals' cultural environment. To navigate the transition and to build more resilient and sustainable societies, dialogue with stakeholders is needed. Stakeholder dialogue is not only part of the broader spectrum of social responsibility but also pivotal in the context of social acceptance. It is about building mutual understanding and trust and understanding each other's objectives. For example, ALDA has 4 pillars for societal dialogue "anchor everything in trust – build around the four trusted pillars: institutions, people, information, and places" (Policy Learning Platform, 2025b). Furthermore, stakeholder dialogue should also concern orchestrating the torrent of information; mis-, mal- and disinformation, and of course, reliability.

Building inclusive dialogue is also a central part of community engagement. For example, in Finland, the citizens have the right to participate and influence on municipal activities based on the Constitution of Finland. The city councils are obliged to ensure diverse set of tools for participation. Citizens can also make initiatives for city councils. Municipalities Act also states that all municipalities must have youth council, council for older people, and council for people with disabilities for societal dialogue. It was suggested in round table discussions in Policy Learning Platform, that municipalities should have proactive plans for community engagement, especially when planning on larger development projects such as land use planning or investments. In case of Eastern Lapland, many local level strategies include engagement to be either a strategic objective itself or a way to achieve the strategic goals.

It is pivotal that local and regional authorities hold the skills for mainstreaming Arctic and geopolitical matters into existing dialogues at municipal, regional and international level, and engage citizens, indigenous people and stakeholders to

build legitimacy and common purpose. While the inclusive dialogue is strong in social terms, it rarely contemplates the inclusion of geopolitical topics, leaving a blind spot in public deliberation and crisis preparedness.

Divergent and often conflicting expectations between stakeholders, contextual complexities, and the challenge to identify the best practices create challenges in stakeholder dialogue. Not all the stakeholders can be included in the dialogue, and one cannot get consensus with all the relevant stakeholder groups. It is crucial to ensure equality and avoid apparent dialogue when deciding on to whom we are socially responsible and how far that responsibility extends. The peers in the Policy Learning Platform (2025b) heightened the importance of dialogue as a long-term process: dialogue is a constant loop of two-way feedback and different structures for involvement. One local politician stated it well "in these small municipalities issues are closer to citizens' everyday lives, and they are willing to engage more".

The symposium of Arctic Futures in Brussels (East & North Finland, 2026) highlighted that the resilient future of the Arctic area requires genuine engagement of local communities. Over the next ten years, the political future will be shaped largely by how democracies manage to operate in this turbulent environment. In Finland, people's confidence in the future is under strain. At the heart of this wavering confidence is a discrepancy between the future people hope for and the future they consider likely. (Sitra, 2026.)

Adaptability

Local authorities need to respond quickly and flexibly to changing conditions and needs, which are crucial in dynamic operational environment (Local Federation of East Lapland, 2024). As this era is characterized by unpredictiveness, the boards and leaders should have a greater knowledge of geopolitical matters and their potential implications. Geopolitics shouldn't be seen as stand-alone topic, as this report shows. Boards and leaders should be more invested in scenario planning and multi-disciplinary workshops that help build capacities and improve awareness. Developing fact-based, detailed scenarios are essential in understanding the implications of external events. Risk assessment, internal risk management processes and geopolitical/geoeconomic matters should be regularly on boards agendas. Designing systems and plans that are robust to disruption and that can recover quickly from shocks (such as geopolitical shocks,

supply chain disruptions or climate events) are needed to build sustainable, resilient societies.

The above mentioned also relates to fact-based leadership. It is important also to be able to identify issues that truly matter to one's region as not all geopolitical risks are created equal. There is so much variability, questions and new information – there is so much more information that could be relevant to future scenarios that anyone has had to comprehend before. Today, the local authorities need to absorb and make sense of large amounts of change – what is noise, what is signal, what you should act now, what you should wait to act on. The key persons should think how multiple drivers are evolving, and the interplay between them. One good implication is to have "geopolitical risk units" integrated to other functions or advisory councils – multipolar world requires multipolar perspectives. Many institutions provide us detailed topic specific information, and hence the question relies on who takes the leadership in navigating all this data and translates it to sub-regional framework to support the fact-based leadership.

A clear mechanism for strategic foresight has not been institutionalised in the local or regional authorities. Similarly, while cooperation features prominently as a priority area, it is typically framed in terms of inter-municipal and Nordic cooperation rather than as an instrument for responding to geopolitical competition. The limited references to foreign relations or international instability suggest that understanding of the operational environment beyond the Nordic and domestic sphere is embryonic or absent in the local planning discourse.

Leveraging innovation and digital transformation for agility is also a dynamic capability in adaptability, as AI tools build more agile and cost-effective solutions. AI tools empower forecasting, and they are able to perform predictive risk analysis. Dynamic capability of leveraging digital transformation also enhances efficiency, as some simple duties and tasks could be made by AI. Finland has already been left behind in productivity compared to neighbouring countries Norway and Sweden, as the before mentioned countries are far much better in using AI.

The study revealed that insufficient resources (both financial, knowledge and physical) appear in most plans as an underlying reason why ambitions are not realised. The absence of geopolitical matters from especially local level strategies

and action plans suggests that local authorities may lack comprehensive instruments for scanning and interpreting global trends and events beyond their immediate sphere of influence. Whilst regional ambitions align with narratives of sustainable development and cooperation, the texts do not systematically link these goals to a changing geopolitical environment. More strategic foresight is needed to sense emerging risks and opportunities, and to be able to respond adaptively with such actions such as reconfigure resources, rapid deployment of projects, and updating rules or procedures. Many plans contain minutes on cooperation with partners in neighbouring territories and cross-border, but they frame this cooperation largely in terms of social cohesion, joint service provision and shared development projects rather than as tools to build situational awareness or resilience in the face of geopolitical disruption. It follows that the understanding of geopolitics within the regional and local authorities would benefit from explicit capacity building and awareness raising, embedding geopolitical literacy into the planning departments and elected bodies.

ACCESS regions could benefit from cross-border solutions in these capacity gaps. A couple of solutions discussed were shared foresight platforms and mutual learning. The first is to establish joint horizon scanning and early warning systems with neighbouring jurisdictions to improve the detection of emerging geopolitical risks and opportunities, and hence, improve fact-based leadership. The latter is to execute joint exercises, projects and regular dialogues, supporting sharing of best practices for resilience, adaptation and inclusive governance, and transferring lessons across boundaries and cultural contexts.

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