

# Business Finance in the Arctic

*Analysis of access to finance for SMEs and start-ups in the Arctic region*

Oxford Research in cooperation with Nordregio and Lauritzen Consulting – November 2018



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Report prepared by Oxford Research in cooperation with Nordregio and Lauritzen Consulting for the Danish Ministry of Foreign Affairs

The views, thoughts, and opinions expressed in this report are those of the authors and do not necessarily reflect the views of the Danish Ministry of Foreign Affairs.

Front cover photo by Henri Louma  
(Polar Bear Pitching, Oulu – Finland)

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## **Business Finance in the Arctic at a glance**

Cracking the code to an efficient, sound-working, and well-coordinated business financial ecosystem in the Arctic is key to enabling businesses to grow. The main aim of the study is to gain a better and deeper understanding of the situation regarding small and medium sized enterprises' (SMEs) and start-ups' access to finance in the Arctic region and to develop recommendations on how to improve the investment climate across the Arctic.

### **Main findings**

- One of the main tasks of the study has been to undertake a mapping exercise of the public programmes and bodies that provide business finance to start-ups, micro-firms and SMEs located in the Arctic. The objective was to create an easy to access register of the available funding programmes for these businesses. The mapping results available in Annex 1 is a tool that can be used, and perhaps further developed, by businesses and other actors.
- The study also investigates the demand, the advantages, and disadvantages more generally for the establishment of an Arctic Investment Fund. It has not been possible to recommend one specific route, organisation or modus operandi of such a fund, but a set of recommendations have been developed in this regard (see pages 14-16).
- In general, the study finds that access to public funding and support for business development in most of the Arctic seems to be at the level of other developed countries. The supply of public business promotion programmes, including EU programmes, meets the demand in most parts of the Arctic.
- The study points toward some challenges related to bank lending and mortgage markets. Competition between banks is limited, particularly in some rural areas. This means that finance to some projects that might have received finance in other areas is denied, and/or the lending rates are higher than elsewhere. In areas outside the biggest towns without bank offices, it can be more difficult for SMEs to obtain credit and bank loans. Mortgage lending is, especially in rural areas, not common in the Arctic, due to low real estate prices. These issues underline the importance of having in place public loan and guarantee schemes.
- The biggest challenge concerning access to finance for SMEs is a lack of venture capital – especially for the early expansion and scale-up phase. Lack of venture capital impedes growth in all Arctic regions. The problem is not only an insufficient supply of venture capital but also a lack of venture competence, and a lack of tradition among SMEs of receiving and accepting venture capital. Although some initiatives to expand the provision of venture capital have already been taken in several parts of the Arctic, the creation of a stronger venture capital ecosystem remains an important but also long-term task.

### **Recommendations**

As the findings of the study point to, it will be especially important to improve start-ups' and SMEs' access to venture capital. This is where the need seems to be highest, where Arctic conditions differ most significantly from elsewhere, and where the impacts on scaling businesses and creating growth and jobs are the greatest. From this background we recommend that relevant Arctic stakeholders including governments, business and investment promotion agencies and international institutions and organisations:

- Collaborate on common marketing of Arctic investment possibilities.
- Establish an Arctic investment platform that can facilitate investor network and experience sharing.
- Develop an Arctic lighthouse start-up and investor event to attract international investors and strengthen the start-up community.
- Increase the promotion of youth entrepreneurship to strengthen entrepreneurial skills among the Arctic youth.
- Ensure better access to crowdfunding by pan-Arctic collaboration and alignment of existing crowdfunding platforms.
- Engage large enterprises in the start-up communities – they are potential investors, mentors and clients for many SMEs.
- Develop the Arctic Investment Protocol to make it more practically applicable.
- Strengthen public-private synergies and collaboration in promoting start-ups.

Finally, we recommend the Arctic governments to work together with the private venture industry to expand the supply of venture capital. This may be done through the establishment of an Arctic Investment Fund or through providing capital to existing regional and national venture funds.

# 1. Summary and Recommendations

## 1.1 INTRODUCTION

The prospects for business development in the Arctic are evolving and the many Arctic business and economic development opportunities have been well-documented in recent years. One of the key projects documenting the business development prospects in the Arctic was the comprehensive knowledge base launched by the Nordic Council of Ministers (NCM) and the Arctic Economic Council (AEC) in January 2018 in four sectoral reports under the common headline ‘Arctic Business Analysis’.

The reports provided a much-needed overview of the business opportunities in the Arctic but also shed light on the major challenges and prerequisites for business development in the Arctic region. One of important identified barriers hindering start-up, micro-, small- and medium-sized companies to succeed in getting new business projects started was the limited access of to finance. This barrier has so far received limited attention in the debate on the Arctic business development prospect.

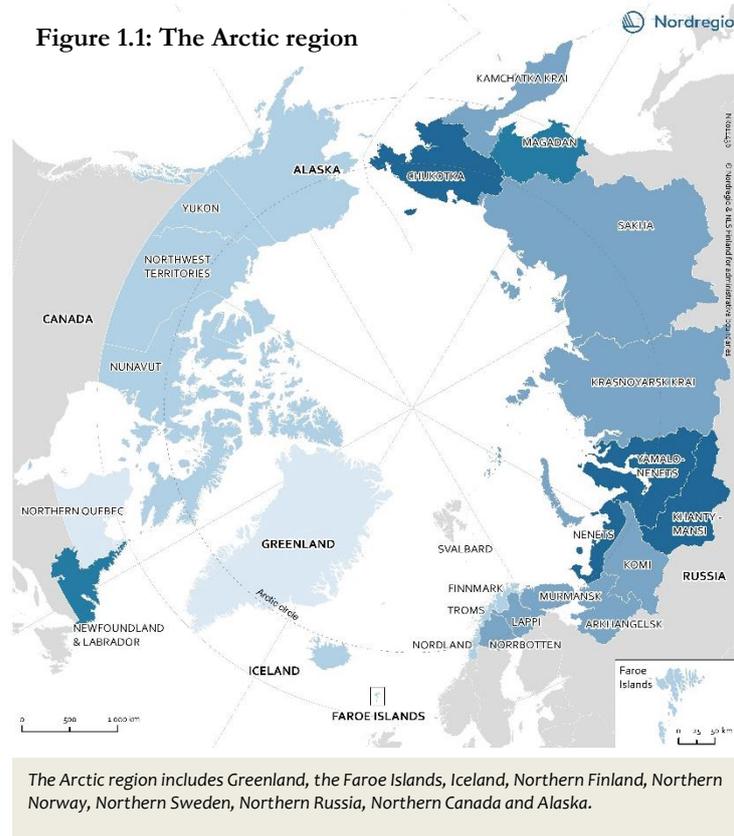
Cracking the code to an efficient, sound-working, and well-coordinated business financial ecosystem in the Arctic is key to enabling the Arctic businesses to grow and to access the huge untapped potentials following the increase in commercial transportation opportunities in the Arctic, closer integration of the Arctic business community with the world market, easier access to bioresources, increase in tourism, etc.

From this background the Danish Ministry of Foreign Affairs has commissioned the present study on business finance in the Arctic. The main aim of the study is to gain a better and deeper understanding of the situation regarding SMEs’ and start-ups’ access to finance in the Arctic region and to develop recommendations on how to improve the investment climate across the Arctic. The views, thoughts, and opinions expressed in this report are those of the authors and do not necessarily reflect the views of the Danish Ministry of Foreign Affairs.

The study provides:

- A mapping of the current Arctic landscape of institutions, initiatives and programmes offering finance possibilities for SMEs and start-ups (Chapter 2 and Annex 1).
- An analysis of the investment climate and SMEs’ and start-ups’ access to finance in the Arctic (Chapter 3).

Figure 1.1: The Arctic region



- A mapping and assessment of current cross-border cooperation on business finance as well as the possibilities for strengthening this (Chapter 4).
- A mapping and assessment of the current as well as potential future role of international funding agencies such as NIB and EIB in providing business finance for SMEs and start-ups in the Arctic (Chapter 5).
- Recommendations on how to improve the investment climate and SMEs' and start-ups' access to finance in the Arctic. As part of this, an assessment of the need and feasibility of setting up a cross-Arctic investment fund is presented.

We recognise that the development of a strong and coherent financial ecosystem across the Arctic is not easily achieved. First, the Arctic areas are all sparsely populated. This means that economies of scale are difficult to reach, adding high transportation and communication costs to the challenges. Secondly, even though the geographical area is huge, total population sizes are small and divided between different parts of the Arctic – with different business cultures and financial regulations and governance systems. These factors are difficult to fundamentally change, especially in the short term. But as the study demonstrates there are several actions and tools that can be applied to improve access to finance for SMEs and start-ups across the Arctic, especially if collaboration across the Arctic regarding access to finance is increased.

Arctic businesses are, on average, small. The EU definition of an SME is a company with 10 to 250 employees. In practice many Arctic companies are micro firms with less than 10 employees. In this report micro firms are encompassed under the reference to SMEs.

The study has been prepared by Oxford Research in cooperation with Nordregio and Lauritzen Consulting. Data for the study have primarily been collected through desk research and online mapping of existing programmes, initiatives and organisations providing funding for start-ups and SMEs and a comprehensive interview programme covering all Arctic territories. Around 70 in-depth interviews have been carried out with representatives from business communities, regional and national authorities, regional development and business support agencies and financial institutions.

## 1.2 MAPPING OF FUNDING POSSIBILITIES FOR SMES

As part of the analysis we have found evidence that many SMEs find it difficult to gain an overview of possibilities for funding and support, and that this may be a problem. It was therefore decided to elaborate a comprehensive mapping of these possibilities and present them in an easily accessible form.

Chapter 2 introduces results from the mapping of institutions and programmes providing finance to SMEs across the Arctic. The mapping includes four types of institutions: international authorities and institutions, national authorities and institutions, regional authorities and institutions, and private banks. The first three categories are all subject to government finance and governance.

The mapping covers:

- 10 international programmes, with the funding primarily provided through EU-wide schemes that provide financial support directly to applicants or intermediaries;
- 78 national public programmes with the funding managed by authorities that principally target the businesses in the Arctic;

- 10 regional schemes, with the funding provided by organisations that are headquartered in one of the Arctic territories with the funding provided to two or more regions, either directly to businesses through public programmes or via intermediaries;
- 29 banks with branches based in the Arctic.

Overall, the number of programmes seems to be high and the Arctic countries well-supplied with public and private financial possibilities. On the public side programmes to support start-ups and SMEs are in place, ranging from subsidies and guarantees to business advice, programmes connecting SMEs to existing companies, research and education institutions, etc.

However, many respondents from the private side emphasise that access to capital is limited and that the public programmes and public support are needed, demanded and appreciated. Most respondents participating in public programmes indicate that they will allocate available resources to business projects by the end of the programme’s duration. This suggests that there is a significant need for the money offered by the public sector and opportunities to expand programme budgets going forward.

It is promising that there will be an apparent continuity in service provision, with most public authorities indicating that they will continue with the public support after their existing programmes have come to an end. Therefore, there are clear long-term opportunities in coordinating with public authorities to develop an Arctic-focused agenda.

In conclusion, the mapping results suggest that there is a well-established public sector business financing architecture that, where relevant, could be better coordinated and animated to address the specific concerns of start-ups and SMEs in the Arctic region.

### 1.3 INVESTMENT CLIMATE IN THE ARCTIC

Chapter 3 provides an analysis of the investment climates of each of the Arctic territories, including structures for public-private cooperation. We focus on the climate for entrepreneurship/start-ups, the system for promoting access to finance, and the role of foreign capital for SME finance.

The study points toward some challenges related to bank lending and mortgage markets. Competition between banks is limited, particularly in some rural areas. This means that finance to some projects that might have received finance in other areas is denied, and/or the lending rates are higher than elsewhere. In areas outside the biggest towns without bank offices, it can be more difficult for SMEs to obtain credit and bank loans. Mortgage lending is, especially in rural areas, not common in the Arctic, due to low real estate prices. These issues underline the importance of having in place public loan and guarantee schemes.

The biggest challenge concerning access to finance for SMEs is a lack of venture capital for the early expansion and scale-up phase. The problem is not only an insufficient supply of venture capital but also a lack of venture competence, and a lack of tradition among SMEs of receiving and accepting venture capital. Although some initiatives to expand the provision of venture capital have already been taken in several parts of the Arctic, the creation of a stronger venture capital ecosystem remains an important but also long-term task. This includes the need for “competent capital”, i.e. investors that not only invest but also participate in the development of the enterprise with their sector knowledge and business experience.

Perhaps because of the limited venture capital there is, in some Arctic regions, also a shortage of supply for more sophisticated financial products such as subordinated capital, which may be a

good supplement to bank loans and venture capital in some cases. Investments by foreign venture capital funds are not yet commonplace in the Arctic.

Access to foreign capital is important, and in general more international investments are welcomed in the Arctic. With a few exceptions in the areas of fisheries we have found no regulatory barriers to foreign investments, and in almost all territories large enterprises which are subsidiaries of foreign companies or conglomerates are present. In some instances, there can be local or regional concerns about the effects of larger projects (both when undertaken by national and by foreign investors) about the effects on the environment or on local living conditions. These concerns can be accommodated through stringent investment principles such as those described in the Arctic Investment Protocol.

#### **1.4 TRANSNATIONAL COOPERATION AND INTERNATIONAL INSTITUTIONS**

In Chapter 4 we introduce important international institutions and policies, including the Arctic Council, the Arctic Economic Council, the North Atlantic Cooperation (NORA), the Northern Sparsely Populated Areas cooperation (NSPA), Nordic Council of Ministers and European Union policies. In Chapter 5 we introduce the key international financial institutions the European Investment Bank, the Nordic Investment Bank and NEFCO.

The strategic focus by intergovernmental organisations on business development in the Arctic has grown during recent years. Programmes to support cooperation projects for business development through grants are in place in the Arctic, principally through EU and Nordic programmes. Many transnational and cross-border cooperation projects have been implemented during the past two decades and relations have been built between authorities, institutions, organisations and SMEs across borders. The transnational and cross-border cooperation projects concerned with business development are managed by business support organisations, cluster organisations, business incubator environments, education institutions, public authorities, etc. Over time, the cooperation projects have developed from building networks to resulting in more concrete business development and growth.

Both the European Investment Bank (EIB) and the Nordic Investment Bank provide opportunities to improve framework conditions for SMEs through co-investments in infrastructure projects. The financial institution NEFCO has a focus on sustainable infrastructure development, particularly in Russia. Today, the EIB group provides the strongest possibilities for improving SMEs' access to finance, through financial intermediaries, and mechanisms are to some extent being utilised in the Nordic Arctic today. There is no international financial institution covering all the Arctic.

#### **1.5 SETTING THE FRAMEWORK**

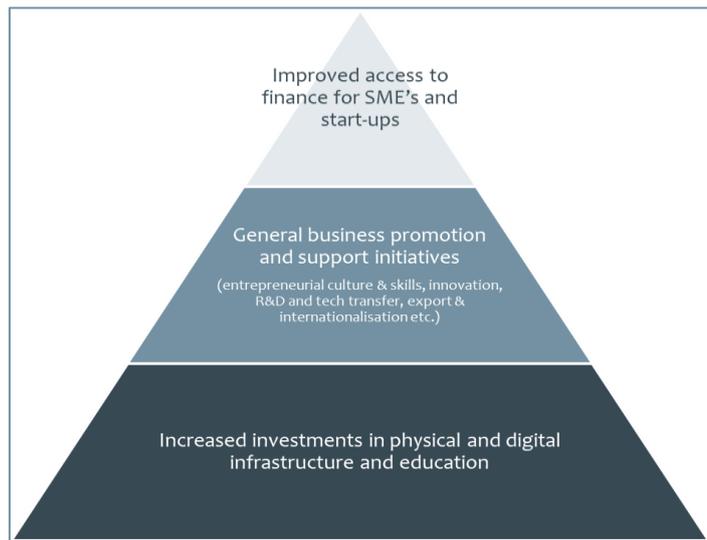
Improved access to finance for SMEs and start-ups is important with regard to promoting business growth in the Arctic. As the findings of the study indicate, it will be especially important to improve access to venture capital in the early expansion and scale-up phases. This is where the need seems to be biggest, where Arctic conditions differ most significantly from elsewhere, and where the impact for promoting economic growth and jobs is the greatest.

Based on the analysis we have developed recommendations and ideas on how the investment climate and access to finance for SMEs and start-ups across the Arctic can be improved. Some of the recommendations may be possible to implement relatively quickly. Other recommendations will need more significant investments and take time to fully develop and implement. We recom-

mend a dual focus on the short term (to sustain momentum and encourage stakeholders to maintain an interest in Arctic development in the coming years) and on the long term (to demonstrate the endurance and patience necessary to keep on working with long-term Arctic development despite possible setbacks).

Finally, it is important to state that improving access to business finance is only the ‘tip of the iceberg’ in fostering economic growth in the Arctic. There is still an urgent need to increase investments in infrastructure, education, entrepreneurial culture, etc. A clear message from most of the interviewees is that initiatives on business finance should go together with further investments in general economic growth and business promotion.

**Figure 1.2: Prerequisites for business growth in the Arctic**



Source: Oxford Research 2018

## 1.6 RECOMMENDATIONS

Based on our analysis we submit the following recommendations.

### 1.6.1 Develop common marketing of Arctic investment possibilities

The analysis points towards limited access to both export markets and financial markets as a problem that can be reduced through combined efforts. Arctic companies are, on average, small, and often find internationalisation difficult. They can benefit from support in reaching potential customers and investors worldwide.

Investment from foreign investors is a necessity if the Arctic economies are to keep track with other economies. It is necessary to promote increased awareness and knowledge about the Arctic to potential international investors.

#### **Recommendation: Develop common marketing of Arctic investment possibilities**

To increase international awareness and knowledge about Arctic possibilities we recommend that:

- Arctic governments agree to fund an effort to market Arctic investment possibilities.
- Professional international intermediaries are commissioned to collect, process and disseminate information about Arctic investment possibilities internationally.
- Current activities such as the Arctic Yearbook should be incorporated in these efforts.

Several initiatives to market Arctic prospects have already been taken. Examples of these include the Arctic Yearbook (created by the Northern Research Forum and the University of the Arctic Thematic Network (TN) on Geopolitics and Security).

Gathering, processing and disseminating information about investment opportunities in the Arctic through international media, international financial communities and centres, and through social media, will require the assistance of professional international intermediaries. This will, in turn, require funding from Arctic governments, but we believe that this would be a good investment.

### **1.6.2 Create an Arctic Investment Platform**

Our analysis demonstrates a gap, evident across the Arctic, in access to private venture capital investments when start-ups or established SMEs need to scale up their businesses. In some parts of the Arctic start-ups in ICT, biotechnology and other knowledge-intensive industries attract equity investments from venture capital funds in the capital areas and in some cases from abroad. In this process there is a tendency that some industries relocate their business to the national capital to be close to investors, and to gain better access to networks and markets. Furthermore, our analysis has pointed to issues with venture capital investors outside the Arctic being challenged to see the potential in start-ups in new areas of biotechnology, cold climate or large-scale industry related technologies. Initiatives to establish a pan-Arctic investment platform thereby naturally link to common marketing of Arctic investment possibilities. An investment platform would consist of a network across the Arctic bringing together public venture funds, private venture funds and angel investors, and other interested parties such as crowdfunding platforms.

The first step would involve establishing the network. This may start with public/semi-public venture capital funds and key business support organisations across the Arctic. In Northern Sweden, Northern Norway and Northern Finland cooperation to establish an Arctic investment platform is already underway. In the autumn of 2018, a feasibility study is conducted exploring possibilities to align public funds as well as private capital. Stakeholder workshops to discuss the demand is a significant part of this process. Once these cross-border partners have identified a form in which to launch and operate a platform, they could invite stakeholders from elsewhere in the Arctic to participate in the network and/or to facilitate establishing parallel and collaborating networks elsewhere. Stakeholders can consider whether an Arctic investment platform would benefit from a specific sectoral focus or sub-networks that focus on different sectors. The ongoing work to explore possibilities to establish a platform in Northern Norway, Northern Sweden and Northern Finland operates with a focus on enterprises with “Arctic Added Value”.

Attracting private investors to consider potential investment cases would require looking outside the Arctic and for the investment platform to connect with interested international venture capital funds. The network can approach this through identifying private investors that can act as ambassadors, utilising their networks and inviting international investors for investor meetings/events that bring together the potential investment cases with the private investors.

### ***Recommendation: Create an Arctic Investment Platform***

To strengthen public-private investor networks and to strengthen access to venture capital in the Arctic we recommend:

- Establish an investor network building on the structures in place across the Arctic. Public or semi-public funds/institutions can take the lead in bringing together investors and to serve as coordinators in the Arctic Investment Platform. Build on the experiences from the ongoing initiatives in Northern Norway, Northern Sweden and Northern Finland to create an Arctic Investment Platform.
- In parallel, public institutions can promote the continued development of a culture for business angel investments, creating awareness about the benefits and inviting potential investors, women and men, to familiarise themselves with business case opportunities. This can also be promoted through exchange of experience through the Arctic Investment Platform.
- Use the platform to exchange experiences on methods for establishing public-private venture funds.

In parallel, the public/semi-public partners in the investment network will benefit from continued efforts to build up a culture for angel investors. Significantly, like venture funds, angel investors not only contribute with finance, but also experience and networks, e.g. they can assist entrepreneurs when applying for bank loans and use their networks to ensure further investment. In several places, stakeholders highlight that potential investors are present locally, but that they tend to invest either only within the same (traditional) industry, the stock market or in real estate. Establishing a business angel culture involves creating awareness about the possibilities for potential investors, developing good examples, and communicating the good results and benefits of investing locally/regionally. As part of the analysis, we have identified good practices for public-private co-investment schemes to establish business angel funds and venture capital funds. Stakeholders in the Arctic would benefit from exchanging experiences of establishing co-investment funds.

Finally, the platform will naturally contain digital components to facilitate communication. This could include an overview of companies that have already received angel financing and other sources of funding. The European Commission has recently launched the Innovation Radar, which is a data-driven online tool providing easy access to innovations supported by EU funding and the innovators behind them<sup>1</sup>. This can be a portal from where to seek inspiration.

#### **1.6.3 Develop a cross-Arctic lighthouse start-up and investor event**

Large-scale events gathering start-ups, large companies and investors are increasingly used as a tool to improve start-ups' access to potential investors and finance and to brand countries, regions or cities as attractive start-up ecosystems. The advantage of large-scale events is that it becomes easier to attract investors internationally. They also function as platforms to engage local business champions and business angels in the start-up community. Events such as Slush in Helsinki and

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<sup>1</sup> <https://www.innoradar.eu/>

TechBBQ in Copenhagen have helped strengthen the start-up ecosystems in the respective regions and put the two cities on the map in terms of international tech investors and start-ups.

To gain critical mass and increase the attraction of international investors, an annual joint Arctic start-up and investor event could be organised in collaboration with national and regional development and business promotion agencies and the public-owned investment funds. Preferably, such an event would take place in the Arctic and could rotate between the largest cities/towns across the entire Arctic region.

***Recommendation: Develop an Arctic lighthouse start-up and investor event***

To gain critical mass and ease the attraction of international investors and strengthen start-up communities in the Arctic we recommend that:

- Relevant regional business promotion agencies and public-owned investment funds should collaborate in developing an annual joint Arctic start-up and investor event.
- The event should be built around existing organisations and start-up events in the Arctic countries such as the Polar Bear Pitching event.
- Regional and national business promotion agencies should consider providing competitive travel grants to ensure participation from start-ups across the Arctic in such an event.

Due to travel time and logistics it can be more difficult to attract crowds of investors and start-ups to an event situated in the Arctic. As a beginning, an Arctic start-up and investor event could therefore be held as a side event to one of the existing large-scale events in the Nordic capitals, i.e. Slush or TechBBQ. However, the annual Polar Bear Pitching event in Oulu shows that it is possible to attract people to events in the Arctic, and this could be considered as the next step. The Polar Bear Pitch has succeeded in attracting international awareness and has started to attract participants from abroad. A larger pan-Arctic start-up and investor event could, to start with, possibly be arranged around the Polar Bear Pitching concept, which has already proven successful. To ensure participation from start-ups across the Arctic in an Arctic start-up and investor event, business promotion agencies could also consider providing competitive travel grants for their most promising start-ups to participate in the event.

#### **1.6.4 Promote youth entrepreneurship**

Outmigration and an increasingly aging population in the Arctic call for measures to create attractive living conditions and jobs for young people. We have observed examples of programmes in place to specifically promote youth entrepreneurship, most often focusing on individuals in the age range of 18-30 years. The purpose of designing programmes/projects specifically for young people is to create awareness about the opportunity to start up a business, to bring together the young entrepreneurs and build networks, and to provide additional advisory support. The young people have limited or no work-life experience and will generally be more insecure and benefit from mentoring and discussing issues with other young entrepreneurs. One of the key areas of focus of the programmes in place is to provide pitch training for the entrepreneurs to prepare them for meeting the bank and potential investors.

***Recommendation: Business support structures to promote youth entrepreneurship***

To support diversified job creation and the attractiveness for young people to remain or return to the Arctic, business support systems should pay attention to youth entrepreneurship. We recommend that:

- Business support organisations can benefit from building networks and exchanging experiences on approaches to promote youth entrepreneurship in the Arctic.
- Developing an Arctic network for business support organisations also provides a basis for collaborative projects bringing together young entrepreneurs from across the Arctic.

Already there is an example in place of a transnational cooperation project being implemented on the topic, namely the RYE Connect project funded by the EU Northern Periphery and Arctic Programme. Building on the experiences of partners in this project, the network can potentially be expanded or inspire new transnational cooperation projects. Arctic cooperation between business support organisations and incubator environments can serve a three-fold purpose. First, the business support actors can exchange experiences and improve current approaches to supporting youth entrepreneurship. Second, the young entrepreneurs will build international networks. Third, collaboration, for example around pitching events, provides opportunities to utilise communication channels to demonstrate, also to potential investors, the growing entrepreneurial culture of young people in the Arctic.

### **1.6.5 Ensure better access to crowdfunding through pan-Arctic collaboration**

Crowdfunding has traditionally mostly been used for obtaining donations for philanthropic non-profit projects. However, crowdfunding for business ideas and start-ups is developing increasingly rapidly and has, according to the international crowdfunding platform Crowdfunder.com, now surpassed the global market for angel investments. Crowdfunding for businesses can come from lending, selling of shares (equity) and pre-selling of products and/or services that are not yet finally developed/in production. In some cases, there are synergies between the marketing of investment prospects to possible investors and the marketing of the new product or service to a broader audience. Since the amount of money that can be raised through crowdfunding is still limited, i.e. in comparison with larger venture investments, crowdfunding as a finance source seems most relevant for entrepreneurs, smaller start-ups and micro companies. Moreover, crowdfunding seems to be especially strong as a financial tool for companies/business ideas offering a first-mover advantage (especially designed/innovative consumer products) or with a higher purpose (supporting the community, improving the environment etc.). Especially the latter seems to fit well with the agenda on promoting sustainable business development in the Arctic.

***Recommendation: Better access to crowdfunding through pan-arctic collaboration***

Internationally, crowdfunding is increasingly becoming a key funding tool for entrepreneurs, smaller start-ups and micro SMEs. Some Arctic regions are already experimenting with crowdfunding platforms, but to gain the needed critical mass of both projects and investor we recommend that existing crowdfunding platforms operators and involved public bodies explore the possibilities of:

- setting up a pan-Arctic crowdfunding platform and/or;
- increasing collaboration and alignment between the local/national platforms giving access to both investors and projects across the Arctic;
- how public funds could be used for matching investments with crowdfunding platforms

Some experiments with crowdfunding platforms are evident in the Arctic today. However, most of these are small and seem to have difficulties in attracting enough critical mass both in terms of projects and funders. A pan-Arctic crowdfunding initiative could therefore be developed. Interviewed stakeholders have emphasised that the local aspect and anchoring of the actual platforms will be important, since local relations and the community aspect still seem to be a fundamental pillar in promoting crowdfunding in the Arctic. However, increasing collaboration and alignment between the different local platforms promoting projects and giving access to funders across the different platforms would increase the possibility for creating the needed critical mass. Naturally, crowdfunding initiatives should be well-regulated and have strong filtering and control mechanisms to avoid dubious projects. This will be especially important if public funds are involved in the establishment/running of such platforms.

Also, public authorities and crowdfunding platforms could explore how public funds could be used for matching investments with crowdfunding platforms. In Europe, some public authorities have already set up their own crowdfunding platforms and/or co-invest with the ‘most recognised’ crowdfunding platforms in the region. In the short run, a seminar could be organised with the European Crowdfunding Network and other similar organisations in the Arctic to understand good practices on partnerships between public authorities and crowdfunding platforms, to stimulate the replication of match-funding schemes in the Arctic.

Crowdfunding will probably remain a subsidiary and minor source of capital, especially when it comes to providing equity which is legally a complex matter, but it can be a good instrument to make the international communities more aware of Arctic possibilities.

### 1.6.6 Engage large enterprises in the start-up communities

Internationally, we see a tendency that large enterprises increasingly engage in start-up communities and collaborate with, invest in or acquire start-ups. This way they gain access to new innovations, new technologies, knowledge and talent and they build up reputation and brand awareness by investing in local communities. In a global survey sent to large corporations conducted by Crowd Companies in connection with their annual report ‘The Corporate Innovation Imperative’, 50 of the respondents have answered that they invest in start-ups as part of their innovation strategies. Similarly, start-up events such as Slush and TechBBQ are increasingly focusing on partnering with large companies and bringing the companies and start-ups together.

#### *Recommendation: Engage large enterprises in the start-up communities*

Large companies increasingly play a key role as investors, mentors and collaboration partners for start-ups and new innovative SMEs, we therefore recommend that:

- Local start-up labs, incubators, accelerators and business support organisations increase and systematise relation-building activities between large established companies operating in the Arctic and the local start-up communities.
- Local stakeholders, as well as cross-border and international bodies in the Arctic, such as the Arctic Economic Council, explore the possibilities of pan-Arctic collaboration on the topic, i.e. through thematic/sectoral networks, experience sharing, matchmaking events and business delegations. This could also be in the form of challenge-based platforms where large companies’ challenges are matched with solutions proposed by start-ups.

Some of the large companies operating in the Arctic are already investing in start-ups and SMEs. But there seems to be a potential for boosting and systematising the engagement of large companies in the Arctic start-up communities much more than is currently seen. It is first and foremost a job for start-up labs, incubators, accelerators and business support organisations to facilitate the relation-building between the large established companies and the local start-up community. However, there is also a potential in enlarging both the corporate and the start-up base if incubator and accelerator programmes enter into pan-Arctic collaboration. This could be through thematic/sectoral networks, physical and/or virtual matchmaking events and business delegations, where large companies and start-ups across the Arctic can meet and build relations. The Arctic Economic Council, which has a solid base of established business among their members, could also consider if they could promote increased corporate engagement in the Arctic start-up communities. This could be done through experience-sharing on the topic among members, reaching out to business promotion organisations, being present at start-up events, etc. We recommend that stock is taken from such practices across the Arctic.

It can also be considered to develop a pan-Arctic challenge-based platform where large corporates from different sectors would be invited to present their challenges and Arctic start-ups could present solutions to those challenges. The finalists could be granted money to facilitate further corporation developing and implementing the proposed solution.

### 1.6.7 Consider the potential of an Arctic Investment Fund

Part of our mandate from the Danish Ministry of Foreign Affairs has been to investigate support, demand and the advantages and disadvantages more generally of the establishment of an Arctic Investment Fund (AIF). An AIF would be a relatively large fund (compared to the currently existing funds in the Arctic) covering the whole, or substantial parts, of the Arctic. An AIF could be

constructed, developed and governed in various ways. In our interviews and discussions with stakeholders in the Arctic we have primarily asked about general demand and needs for such a fund, and the general possibilities of attracting investors. Discussions on the specificities of such a fund have been secondary.

Concerning the potential demand or need for more capital, some respondents, not surprisingly especially from the side of business communities, welcome and support such a fund. When discussing in more detail where potential “holes” in financial markets currently exist, it is clearly the venture/equity area. It has been stressed that the most well-functioning venture funds should be able, in addition to equity, to supply foreign capital, e.g. in the form of subordinate loans.

Discussing the general prospects of attracting investors and capital, international financial institutions such as the European Investment Bank (EIB) and the Nordic Investment Bank (NIB) have an interest, and to some extent also an obligation, to provide capital to all EU member states and the Nordic countries, and the EIB can also to some extent invest in projects outside the EU. The business model of both these institutions, however, is low-risk lending, often achieved through guarantees from public authorities. This makes it difficult for the banks to provide capital for venture investments, both directly and through intermediaries. As an additional problem, some of the banks we have interviewed see cooperation with the EIB and NIB as difficult, requiring a substantial amount of administrative resources to comply with demands for documentation, agreements, evaluations, etc. We have, however, also spoken with banks that do not see these requirements as a major obstacle.

Discussing the structure and governance of an AIF, most observers point to a need for a two-layer structure, where an AIF would function as a fund-of-funds, or through financial intermediaries that have close contact with businesses that have received capital. Most interviewees also stress that a well-functioning AIF should have an obligation to invest in all Arctic regions, but not have specific quotas for provision of capital to each single region. In other words, competition between projects in different regions would be a necessary ingredient in the establishment of an AIF.

Regarding discussions on costs and potential business models for an AIF, interviewees point to a need for limiting administrative costs, primarily by not establishing a completely new financial institution, and of limiting investors’ risk. Besides prudent credit assessments, limiting risk in practice will require syndication with strong regional institutions and/or funding or guarantees from public authorities. It should also be considered how to attract private capital, taking into consideration the challenge that most private investors want to invest directly in larger projects or directly in regional funds rather than indirectly in a fund-of-funds.

Interviewees, especially in Iceland, have pointed to a specific need for vehicles allowing pension funds and other institutional investors to invest in non-listed companies. This is not possible in Iceland due to tightened regulations after the financial crisis. Pension funds can, however, invest jointly through investment funds. They prioritise long-term investments that can only be achieved through investing in long-term assets like infrastructure or through the pooling of smaller projects.

Other interviewees have questioned whether an AIF would be an appropriate organisation to deal with provision of capital to SMEs. Provision of capital to larger enterprises would be a more natural task for such a fund. These interviewees suggest that a fund could be created which initially, or perhaps as a permanent assignment, should invest in larger infrastructure and industrial projects, and subsequently expand into the SME segment.

Finally, some interviewees question whether there is enough political will and interest across the Arctic to jointly back the establishment of an AIF covering the entire Arctic region.

Therefore, we are not able to recommend one specific route, organisation or modus operandi of an AIF, but will limit ourselves to the following recommendations:

- Discuss with Arctic public authorities and governments and bigger international financial institutions whether there is political will to establish an AIF covering the Arctic.
- Discuss with public authorities and governments and international financial institutions whether there is political will to establish two or more Arctic funds covering different parts of the Arctic. One fund could, for example, cover Greenland, the Faroe Islands and Iceland, but also be open to all investors. Another fund could cover Northern Norway, Northern Sweden, and Northern Finland where cooperation is already close in many respects.
- Consider how to strengthen and supply more capital to existing venture capital funds. In Greenland and the Faroe Islands the Danish Growth Fund is already gradually expanding its activities, and this could continue or be accelerated without creating new institutions.
- Strengthen public venture funds so that they can better match the competencies of bigger or international venture funds. Venture funds are in place across the Arctic (both public and private). Many of these, however, are small, have limited investment capabilities and lack experience, and are therefore not able to fully match, cooperate with and syndicate with international institutions. An important mid-term objective for public authorities and governments would therefore be to develop existing institutions.

#### *Recommendation: Consider the potential of an Arctic Investment Fund*

To increase venture and equity investments, which are a very important step for the financial ecosystems in the Arctic to better support growth, we recommend that:

- Arctic governments discuss whether one larger or smaller pan-Arctic funds could be created through public funding and guarantees.
- Arctic governments discuss whether a more feasible initiative would be to strengthen existing venture funds.
- Arctic governments take initiatives to strengthen public venture funds to make them able to establish competencies and financial strength and hence be able to match and syndicate with larger venture funds.

#### **1.6.8 Develop the Arctic Investment Protocol**

The Arctic Investment Protocol (AIP) was developed by the World Economic Forum (WEF) Global Agenda Council on the Arctic and published in December 2015. The AIP has been endorsed by several international stakeholders. As the Global Agenda Council on the Arctic ceased to exist at the end of 2016, the World Economic Forum wished to transfer the AIP to the Arctic Economic Council for the latter to continue the efforts around responsible investments in the Arctic. The 2017 Arctic Economic Council (AEC) Annual Meeting decided to incorporate the AIP concept in the AEC structure and endorse the intent of the AIP.

The 10-page protocol includes references to standards and practices for investing in the Arctic. It is based on six core principles:

- Build resilient societies through economic development
- Respect and include local communities and indigenous peoples
- Pursue measures to protect the environment of the Arctic
- Practice responsible and transparent business methods
- Consult and integrate science and traditional ecological knowledge
- Strengthen pan-Arctic collaboration and sharing of best practices

The AIP has been developed with consideration for large-scale investments, which is not the focus of the stakeholders interviewed for this study, who are generally not familiar with the AIP. Many observers are, however, fully aware of the need for a guide to investors ensuring that investments contribute to a sustainable development of the Arctic with respect to environment, social cohesion and respect for local communities and interests. The guide should also be an instrument to assure sceptics, e.g. environmental organisations, that projects are properly and holistically scrutinised and hence also act as an assurance to investors that they have done what could reasonably be expected when investing in major Arctic projects. Stakeholders familiar with the Protocol propose that there is a need for it to develop into becoming more concrete and operational for potential investors, regional governments and communities.

*Recommendation: Develop the Arctic Investment Protocol*

To create a good investment framework, to “set the stage” properly for international investments and to strengthen the environmental and social sustainability of larger projects in the Arctic, we recommend that:

- The AEC discusses with members and Arctic stakeholders how best to develop the Arctic Investment Protocol.
- The AEC takes initiatives to strengthen awareness and knowledge about the protocol.

Other interviewees point to experiences where negotiations between possible investors and public authorities have failed, possibly due to a lack of experience with respect to what can be required in the cases of major investments, and at what time in the process requirements should be presented to these investors. Northern Canada is mentioned as an example with a long track record of investment cases, and where the public, politicians as well as civil servants and investors have built up procedures for such processes. The conclusion from our interviews is that there may be a need for a pan-Arctic exchange of experience in this field and a need for manuals on how to tackle such negotiations.

The AIP is a protocol for larger enterprises and investments, primarily foreign, and not for domestic SMEs. It is, however, a necessary and important instrument to create sustainable and profitable economic and financial ecosystems in the Arctic. We therefore recommend that the AEC discuss with members and stakeholders how best to continue the efforts to exchange experience in this area and how best to develop the AIP.

### 1.6.9 Strengthen public-private synergies in promoting start-ups

A prioritised part of the study has been to analyse whether a closer connection, or more synergy, can be created between the efforts taken by public business support organisations promoting entrepreneurship on the one hand and private financial institutions (mainly banks) on the other to assist or provide finance for start-ups.

#### *Recommendation: Strengthen public-private synergies in promoting start-ups*

To “streamline” current efforts taken by publicly-funded start-up advisory services and align them with initiatives and modus operandi of private banks, we recommend that:

- Public funded agencies with responsibilities to support SMEs and start-ups include more financial coaching in their programmes.
- Arctic municipalities continue to establish “growth houses” where start-ups can rent space and basic office services and benefit from the network.

Public start-up programmes are in place across the Arctic to provide competence development, advisory services and financial assistance to entrepreneurs. A problem in most economies as well as in the Arctic is that there is not always a proper link between the services and the requirements given and demanded by the public institutions on the one hand and the banks on the other. The relevant question is therefore, whether and how more synergy between the public and private services to start-ups can be created. As part of the analysis, we have found examples of approaching this problem that may serve as examples to other Arctic regions:

- In some areas financial training programmes are offered to entrepreneurs by public business support organisations, often by individuals with practical job experience from banks.
- Business incubators and start-up houses have been established across the Arctic helping start-ups to overcome obstacles with access to finance, including how to communicate with banks.

We recommend that stock is taken from good practices across the Arctic.

## 2. Mapping

### 2.1 METHODOLOGY

A key element of the research was to undertake an online mapping exercise of the public authorities that provide finance through public programmes to start-ups, micro-firms and SMEs located in the Arctic. The mapping exercise also covered the main private banks based in the Arctic region (please see Annex 1 for an overview of the mapping results). The organisations in the scope of the mapping activity included:

- International authorities that provide business finance in the Arctic;
- Regional authorities that provide finance to two or more Arctic countries;
- (Sub)National authorities based in the Arctic;
- Private banks based in the Arctic region.

To ensure the comprehensive implementation of the mapping procedure, the methodology was structured according to the following key features and steps:

- A mapping management team was set up by Oxford Research (Denmark) that provided guidance to and coordinated seven country researchers with the necessary language skills to cover the Arctic;
- A harmonised online mapping procedure was implemented using 10 search terms translated into relevant national languages; for each search term, the first four pages of Google results were screened;
- For each relevant public programme identified, key data were collected where available, including the name of the authority, the name of the programme, a web link to the programme, the duration of the programme, the programme budget, the type of business in the scope of the programme (start-ups, micro-firms and SMEs), and the type of finance provided (grant, loan, guarantee, venture);
- With the basic data collected, a series of three signposting interviews with relevant national organisations per territory were undertaken to check the completeness of the mapping results and to identify any missing programmes;
- A telephone survey was subsequently conducted that received 55 responses after contacting 70 organisations; the aim was to collect some further details on the public programmes and to gather data from public and private bodies about the lending conditions and investment climate in the Arctic.

### 2.2 OVERALL MAPPING RESULTS

As indicated in Annex 1, in total, the mapping procedure identified:

- 10 international programmes, with the funding mainly provided by the EU through EU-wide schemes that provide financial support directly to applicants or intermediaries, or through cross-border programmes that target small groups of countries;

- 81 national public programmes with the funding managed by national or subnational authorities that principally target the entire relevant business population of one of the Arctic territories but in some cases target specific northern administrative units;
- 10 regional schemes, with the funding provided by organisations that are headquartered in one of the Arctic territories with the funding provided either directly to businesses through public programmes or via intermediaries;
- 29 banks with branches based in the Arctic. In some cases, it was identified that the banks had signed agreements with international organisations such as the European Investment Bank to provide lending specifically to SMEs.

#### *International Programmes*

The 10 international programmes identified were those primarily managed by the EU that typically included within their geographical scope EU Member States, EFTA Member States or were open internationally in scope. For example, this included Horizon 2020, the EU's largest R&D programme, which has a budget of €80 billion and is open to applicants internationally. The programme provides grant funding for highly specialised research and innovation projects and requires that submissions for grant funding involve consortia with European partners. In some cases, the calls for proposals are focused on the Arctic region, particularly on climate research, and to date nine Arctic-specific funded projects managed by scientific bodies have been funded<sup>2</sup>.

Another key programme is the EU's COSME programme, which has a budget of €2.3 billion and is available to EFTA and EU countries. The programme includes a Loan Guarantee Facility available to financial institutions such as banks to enable them to provide more lending to SMEs, and an Equity Facility for Growth that provides equity funding to relevant investment funds providing venture financing to SMEs.

Some of the other programmes identified included EU regional or cross-border programmes that include parts of the Arctic, e.g. the Kolarctic CBC programme promotes cross-border cooperation between Northwest Russia and the regions in the North Calotte region (Northern Finland, Northern Norway and Northern Sweden); one of thematic objectives of the programme is to provide grant funding to co-financed SME projects to support cross-border business ventures.

#### *Cross-country regional Programmes*

A total of 10 regional programmes were identified that are financed by public authorities based in the Arctic and cover more than one Arctic territory. This includes organisations such as the Nordic Council of Ministers, Norwegian Barents Secretariat, Nordic Environment Finance Corporation and the Nordic Investment Bank.

An example is the Norwegian Barents Secretariat that has the role of strengthening public and business cross-border cooperation in the Barents region (Northern Norway and Northern Russia) in the form of grant funding for projects that meet the relevant project criteria. The issue of cross-border public programmes is further explored in Chapter 4.

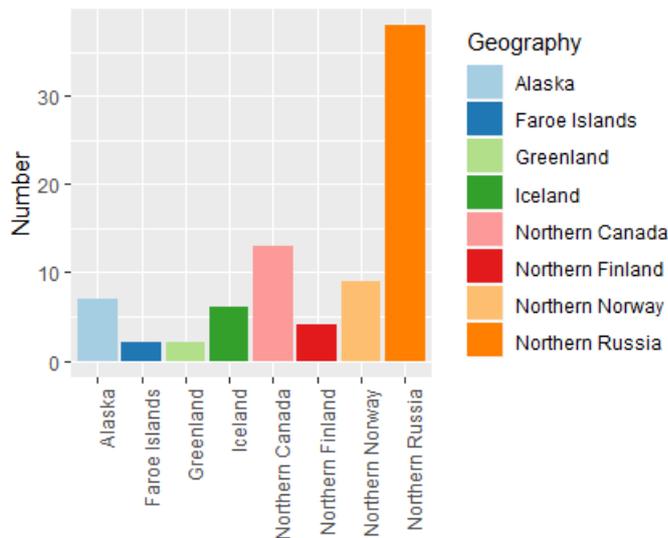
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<sup>2</sup> <https://www.eu-polarnet.eu/eu-arctic-cluster/>

### *National and sub-national programmes*

Using the study search methodology, a total of 81 national or sub-national programmes were identified that were available to either start-ups or SMEs.

**Figure 2.1: Number of public programmes**

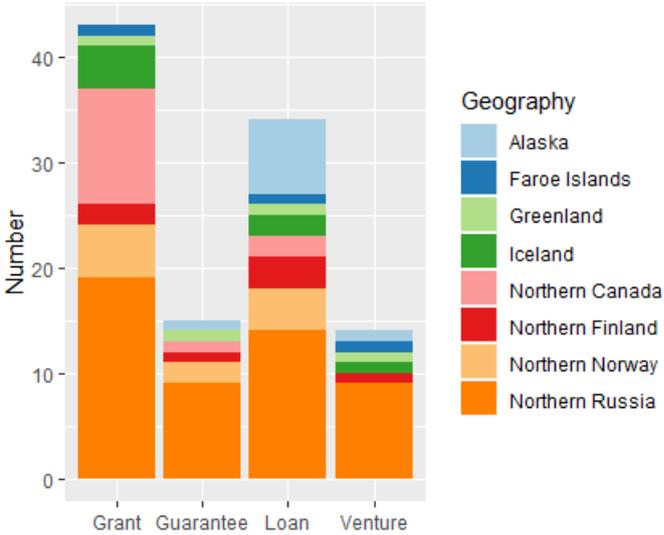


As Figure 2.1 indicates, over 30 of the programmes were identified in Northern Russia (with the online searches concentrated on the following regions: Arkhangelsk, Murmansk, Anadir and Chukotka Autonomous District, Yamalo-Nenets Autonomous Okrug, the Sakha (Yakutia) Republic and the Taymyr Dolgano-Nenets Autonomous Okrug). Typically, less than 10 national programmes were identified in the other Arctic territories.

An analysis was undertaken on the types of finance made available by each type of programme per territory. Please note that some of the programmes offered more than one type of finance, therefore the results of Figure 2.2 contain some double counting.

For example, the two programmes in Greenland cover Greenland Business A/S and Greenland Venture A/S, which both provide different schemes covering grants, loans and guarantees to SMEs as well as sector schemes, e.g. for agriculture and fisheries.

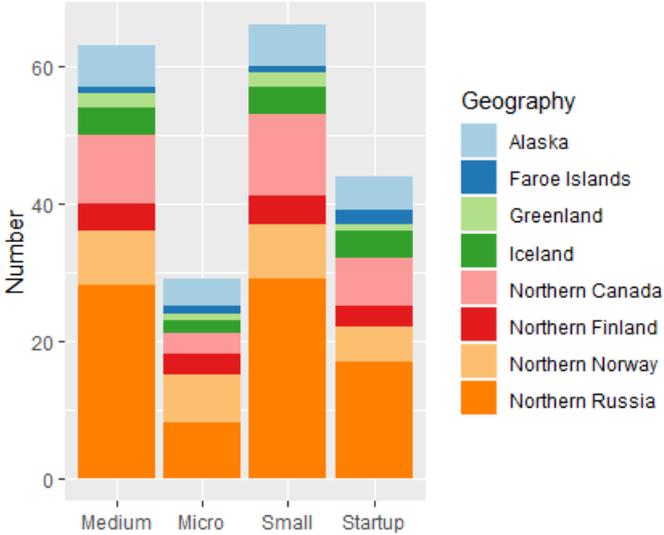
**Figure 2.2: Types of finance offered**



The results suggested that loans and grants were offered most frequently by the public programmes, with guarantees and venture capital provided to a much lower extent.

Similarly, an analysis was undertaken to identify the types of business in the scope of the public programmes. Please note that some of the programmes covered more than one firm size category, therefore the results of Figure 2.3 contain some double counting.

**Figure 2.3: Firm size categories in the scope of the public programmes**



The results suggested that SMEs are targeted more frequently by the public programmes when compared to micro-firms and start-ups.

Overall, the results suggest that there are numerous existing opportunities to access public programme finance for business growth throughout the Arctic region.

### 2.3 ARCTIC PUBLIC PROGRAMME INSIGHT

This section provides some brief insights into some of the public programmes providing finance to start-ups, micro-firms and SMEs managed by public authorities based in the Arctic.

Regarding Alaska, the mapping exercise identified seven public programmes in operation in this state

The Alaska Industrial Development and Export Authority (AIDEA) manages several programmes providing finance to businesses. This includes loans, guarantees and bonds for SMEs. Moreover, the telephone survey with the AIDEA also confirmed that support is provided to medium-sized firms that wish to access risk capital.

that mainly provided loans. These included programmes such as the Small Business Economic Development (SBED) Loan which offers loans of up to \$300,000 to businesses with fewer than 500 employees including start-ups. Moreover, two programmes identified were focused on providing micro-loans, including the Alaska Micro Loan Programme which provides finance for working capital, equipment, construction or other commercial purposes, and the Anchorage Women’s Business Solutions programme targeted at female entrepreneurs aiming to start-up in business.

The search methodology identified 13 public programmes in Northern Canada. These included those with a national scope such as the “Canada Small Business Financing Program” which enables companies with a turnover of \$10 million maximum to access loans of up to \$1 million. Moreover, it was identified that several programmes have been established at the subnational level within the Arctic regions of Yukon, Nunavut, and the Northwest Territories.

Strategic Investments in Northern Economic Development (SINED) is an economic development programme that strengthens key economic sectors in Northern Canada. SINED funding aims to help drive economic growth; support capacity development; and enhance economic infrastructure in the North. Financial support of up to \$3 million is available.

Most of the programmes identified offered grants to SMEs, although there was a specific subnational programme that offered guarantees (the Yukon Venture Loan Guarantee Program), and some national and subnational programmes were targeted at start-ups (e.g. the Support for Entrepreneurs and Economic Development (SEED) programme based in the Northwest Territory).

Two programmes were identified in the Faroe Islands. These included the Business Development Fund managed by the Vinnuframi foundation which offers grants of up to 500,000 DKK to feasible business projects submitted by micro-firms and SMEs. Another relevant organisation in operation is the Framtak foundation which manages a venture fund that provides loans and risk capital to start-ups of up to 3.2 million DKK.

In Northern Finland, a total of five programmes were identified providing grants, loans, guarantees

**TESI** (Teollisuussijoitus) is a state-owned venture capital company that aims to improve the venture capital market in Finland. The fund typically targets medium-sized firms with the possibility of investment of up to 50% of company shares.

and venture capital. Interestingly, the allocation of business funding is supported by a strong public administration set up for providing access to finance across the country including in the Arctic areas such as Lapland through the 15 regional Centres for Economic Development, Transport and the Environment (ELY Centres). These play a key role in regional business policy and ad-

minister ESF and ERDF grant funds to businesses. Another example is FINNVERA, a state-owned business lending company, which provides loans and guarantees to companies and specialised guarantees to mitigate against export risks.

A good mix of business financing opportunities were identified via six public programmes in Iceland

The **New Business Venture Fund** is a state-owned investment fund aiming to strengthen and develop the Icelandic venture capital market. The Fund only invests in seed and early stage company growth phases. To date, its portfolio consists of 25 companies.

which primarily included grant funding but also loan and venture capital investment opportunities were available. The grant funding was designated according to several strategic policy objectives including the programmes Grants for Women Entrepreneurs in Iceland and the Technology Development Fund.

At national level, Norway has established an active public administration providing grants, guarantees and loan finance to all sizes of businesses via eight public programmes available in Northern Norway. It is notable that a specific grant programme has been established, Arktis 2030, to provide grants to business-oriented projects in line with the purpose of the Arctic 2030 agenda to support the development of the private sector in the High North. In addition, a specific cross-border programme called ProRus has been established to provide grant funding for joint Norwegian Russian business ventures.

Innovation Norway's **Start-up loans** are a new loan product for companies in their early stages of development. The loans are tailored for innovative businesses that have operated for less than 5 years. Start-up loans are offered as part of matching capital, which means that it must be co-financed with private risk capital. The intention is that the risk exposure is split approximately 50/50 between private capital and Innovation Norway. The loan amount is a minimum of 500,000 NOK.

The online review of loan programmes in Northern Russia identified a total of 33 programmes, sug-

The Republic of Sakha (Yakutia) has established the **JSC "Venture Company"** aimed at promoting innovative and technological entrepreneurship. Business finance is allocated through several programmes including grant-based finance and risk capital investment.

gesting a high level of public sector recognition of the need to support Arctic businesses through policy interventions<sup>3</sup>. While most of the finance is provided in the form of grants, several other types were identified including loans, guarantees and venture capital. Specific examples included the programme Strengthening investment activity in small and medium enterprises

<sup>3</sup> The regions included: Arkhangelsk, Murmansk, Anadir and Chukotka Autonomous District, Yamalo-Nenets Autonomous Okrug, the Sakha (Yakutia) Republic and the Taymyr Dolgano-Nenets Autonomous Okrug.

which provides grants to SMEs in the Government of the Krasnoyarsk region, the Microcredit Company in the Arkhangelsk region, which provides lending to support self-employment, and the Murmansk region's Federal Corporation for the Development of Small and Medium-sized businesses which provides "soft loans" to SMEs.

Finally, the review of the public sector activity in Northern Sweden revealed a total of seven programmes providing business finance to start-ups, micro-firms and SMEs. Key examples include the Regional investment support programme which is aimed at Northern Sweden and provides grants for buildings, machinery and labour costs (due to new investments), and the Partnerinvest Norr which is a public investment fund and provides risk investments for private sector co-financed projects with a minimum value of SEK 2 million.

**Norrlandsfonden** is a trust fund that provides loans and guarantees to companies with ambitions for growth in the counties of Norrbotten, Västerbotten, Västernorrland, Jämtland and Gävleborg. Norrlandsfonden was established in 1961 as a foundation with the purpose of providing investment capital in Northern Sweden. The Swedish government appoints the foundation board.

## 2.4 SURVEY RESULTS

To gain further insight into the functioning of the national public programmes and the perceived views of the investment climate, a telephone survey was conducted to collect quantitative, multiple choice and Likert scale data from authorities managing the relevant programmes, private banks, business associations, business angels and investors.

A total of 70 organisations were requested to participate; of these, 60 organisations responded. An overview of the responses per country by organisation type is indicated in Figure 2.4.

Please note that while all respondents were asked to comment on the state of the investment climate in the Arctic region, only the public bodies were asked to comment on the public programmes. A consideration of the issues around the investment climate is provided in depth in Chapter 3. The results of the telephone survey are presented in this section.

In terms of the issues concerning the functioning of the public programmes, several questions were put to the 28 public authorities that manage public programmes that provide finance to businesses in the Arctic region.

Table 2.4: Number of respondents to the telephone survey by organisation type	
Organisation type	Number of respondents
National public authorities	8
Sub-national public authorities	9
Government agencies	11
Private banks	23
Business associations/network bodies	5
Business angels and investment bodies	4
Total	60

To begin with, we asked which of the public programmes offered the possibility of finance for cross-border business ventures or projects, and in response:

- 31% confirmed that this was the case and that they had received applications for such funding;
- 8% suggested that this was the case in principle but that they never received such applications;
- 62% confirmed that such applications would be non-compliant with their programme rules.

In most cases, the public authorities confirmed that they would use up approximately 100% of their funding by the end of the programme duration. Only 14% suggested that they would allocate 75% or less.

We also enquired whether the public programmes would be renewed or replaced at the end of their programme duration:

- 88% confirmed that their programmes would be renewed;
- 8% thought that this could be a possibility;
- 4% indicated that this would not be the case.

Further responses from the public authorities on the investment climate can be found in Chapter 3.

## 2.5 MAIN CONCLUSIONS ON THE MAPPING EXERCISE

Overall, based on an analysis of the public programmes alone, it seems that the Arctic is well-served by the provision of public money for start-ups, micro-firms, and SMEs from bodies operating nationally, regionally and internationally.

However, considering the national programmes alone, the results of the telephone survey suggest that the programmes are in demand and competitive (i.e. with more applications for funds than allotted),

with most survey respondents indicating that they will allocate their available budgets to business projects by the end of the programme duration. This suggests that there is a significant need for the money offered by the public sector and opportunities to expand programme budgets going forward.

It is promising that there will be an apparent continuity in service provision, with most public authorities indicating that they will continue with the public support after their existing programmes have come to an end. Therefore, there are clear long-term opportunities in coordinating with public authorities to develop an Arctic-focused agenda.

It may also be the case that there is growing demand for financial support for cross-border business ventures, where public programmes offer the possibility of funding for cross-border projects, over three quarters of respondents suggested that they receive applications for projects of this nature. Going forward, the 61% of national programmes that do not offer such support could experiment with their rules to see if they can finance projects that assist in the development of cross-border business activities. The issue of cross-border cooperation is addressed in greater depth in Chapter 4.

It may not be surprising that there are some imbalances in terms of the focus of the programmes; SMEs tend to be prioritised more often than start-ups and micro-firms, and grants and loans tend to be the main types of finance offered when compared to venture capital and guarantees. This suggests that there is scope for some repositioning of the programmes to ensure that new and emerging businesses are given an equal opportunity to access finance, and public programmes could be developed to help ease investments using venture capital from the private sector.

As an aside, the research team observed that it was sometimes difficult to easily collect data from the public programme websites, such as the type of the finance available (e.g. loan, grant, etc.), what types and sizes of firms were eligible for money, the nature of the funding rules, the application process, whether any advice for applicants was available, the timing of the next call for funding or whether applications could be made at any time, and whether cross-border projects were eligible for support. Where programme websites lack this information, we suggest that the online descriptions of the public programmes are clarified to help ease the decision-making and application process for potential applicants.

In conclusion, the mapping results suggest that there is a well-established public sector business financing architecture that, where relevant, could be better coordinated and animated to address the specific concerns of start-ups, micro-firms and SMEs in the Arctic region.

### 3. The Arctic Investment Climate

#### Arctic investment climate at a glance

- Overall, aspiring entrepreneurs have access to advisory services and support programmes with measures in place to reach the most remote areas. Incubator and start-up house environments are in place in many urban and university environments providing structures for access to finance and competence development.
- Access to credit and loans is a challenge in many rural areas in the Arctic, e.g. due to a lack of presence of banks, challenges of insufficient collateral, and comparatively higher interest rates.
- The key challenge across the Arctic is to gain access to private venture capital/equity investments. Once the start-ups seek to expand or existing SMEs want to scale up their business above a certain level, it is often not possible to attract enough venture capital locally.
- There is not a strong tradition for business angel investments in the Arctic. However, structures are emerging, especially in proximity to business incubator environments. Structures for developing public-private venture capital funds are also emerging.
- There are not yet systematic structures in place for attracting foreign venture capital.

This chapter provides an analysis of the investment climate of each of the Arctic territories. Based on the qualitative interviews we have held with stakeholders and document studies we provide insight into how the financial ecosystems are set up, including structures for public-private cooperation. We do not seek to provide a full account of business finance available. In the analysis we identify strengths and weaknesses about access to finance in the individual territories. For each, we focus on the climate for entrepreneurship/start-ups, the system for promoting access to finance, and the role of foreign capital for SME finance.

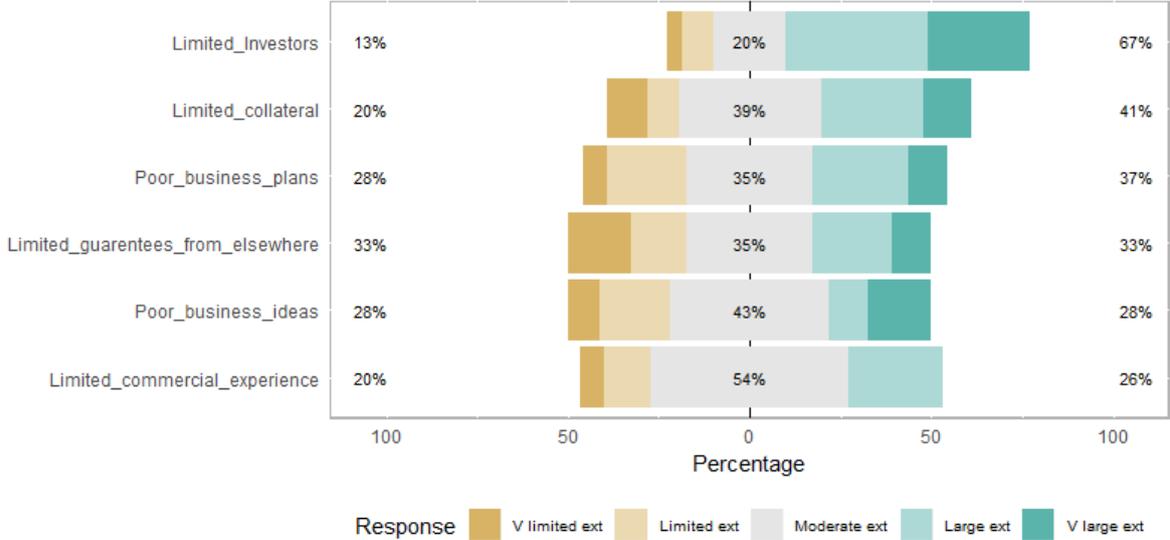
Across the Arctic, public and public-private business support organisations provide advisory services and have different programmes in place to support entrepreneurship. This also includes programmes specifically targeting youth entrepreneurship and women's entrepreneurship. Primarily in towns and in proximity to higher education institutions, start-up houses for entrepreneurs, science parks and business incubators have been established and provide environments for strengthening access to finance by bringing together public and private funds, in the form of grants, financial instruments, and private investors. Although obtaining credit or a loan can be challenging, the main challenges in terms of access to finance are not in the start-up phase where support structures are generally in place.

Across the Arctic, public schemes are in place to offer loans and guarantees to SMEs. In many cases they are implemented by state-financed business support organisations. The budgets vary, but, overall, the financial instruments in place facilitate growth and make it easier for the start-ups to obtain bank loans. However, to a varying extent across the Arctic, SMEs in rural areas face bigger challenges with the banks compared to SMEs in urban areas. Lack of collateral, high interest rates and a lack of bank offices in rural areas are some of the explanations for this.

As part of our survey (conducted as part of the mapping exercise), 41% of respondents reported that limited collateral to a large or very large extent negatively impacts the application process to access

finance and 33% stated that limited guarantees negatively impact the process. Notably, 37% of respondents stated that poor business plans negatively impact the application process, which underlines the relevance of a continued strong business-support system to provide the needed advisory and competence development services for entrepreneurs to develop sustainable business plans. The main issue impacting the application process to access finance involves limited access to finance from investors (venture funds and business angels), as reported by 67% of the respondents.

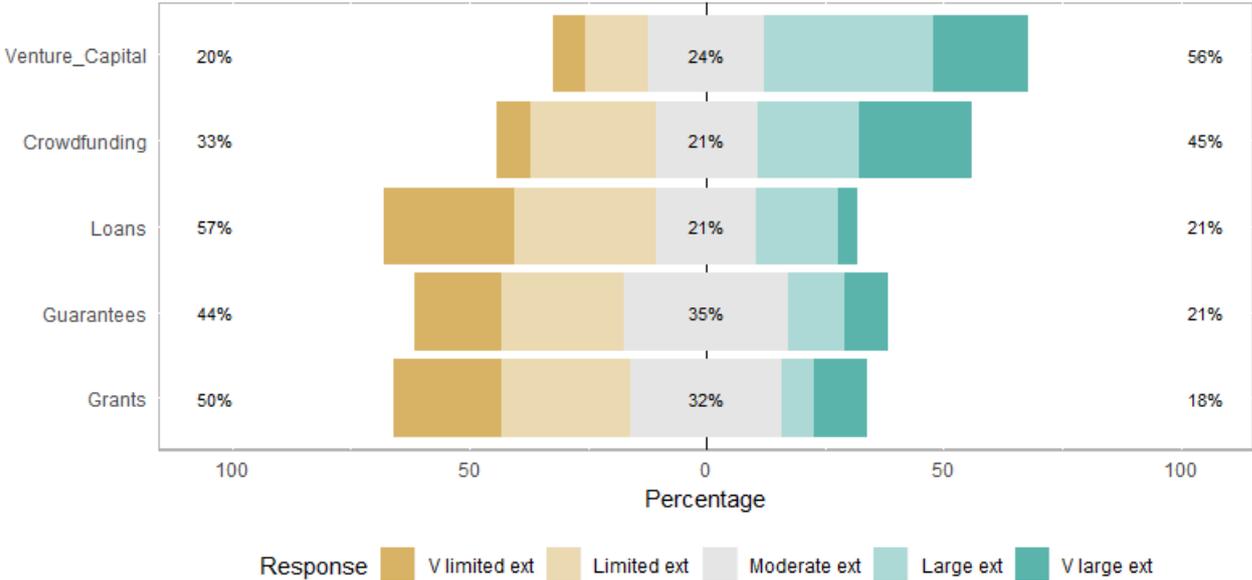
Figure 3.1: To what extent do the following items negatively impact the application process to access finance?



Overall, the key challenge is to gain access to private venture capital/equity investments. In most territories there is a good public support system in place for the start-up phase, where “soft” funding in the form of advisory services and programmes is available. Once the start-ups seek to expand or existing SMEs want to scale up their business above a certain level, it is often not possible to attract private venture capital. Typically, the venture capital funds that are in place locally do not have enough capital to provide the needed capital for business growth.

Figure 3.2, which also provides results from the survey, confirms this conclusion. Thus, 56% of the respondents stated that access to venture capital is a problem to a large or very large extent. Fewer pointed to access to loans and guarantees (21%) and grants (18%) as a problem. We have found only a few examples of crowdfunding measures in the Arctic. This may explain why many respondents have reported that access to this form of finance is a problem.

Figure 3.2: To what extent is access to the following types of business finance a problem?



Public (mainly state-funded) venture funds are in place in most of the Arctic. Generally, they co-invest with private venture capital funds and angel investors. In some regions, however, interviewees point to a lack of a local fund management structure as an issue. In some cases, public venture funds are available but are not utilised to their full potential due to a lack of co-investment of private capital. Overall, there is not a strong tradition for business angel investments in the Arctic. However, structures have developed and are developing, especially in proximity to business incubator environments. We have identified a need across the Arctic to promote a culture for business angel investments. In some places interviewees state that there are potential investors based in the region, but typically they invest within their own industry, on the stock market or in real estate. There is a need to raise awareness, which can be done by illustrating good business cases about the potentials for angel investors.

The role of foreign capital for SMEs’ access to finance has been part of the analysis. University incubator environments today see examples of “born global” type companies that attract foreign equity investments. The ICT sector centred on Oulu also has a developed environment for venture capital investments, but otherwise, today there are generally not structures in place for attracting international venture capital. Another perspective on international capital of relevance to the Arctic is the large-scale investments that are in part derived from international companies. Large-scale industries are related to the extraction of natural resources, the cold climate, and the vast and renewable/sustainable energy supply in the Arctic. Another example is the role of tourism, with many territories in the Arctic increasingly attracting international visitors. This calls for business opportunities for SMEs, and we find different examples across the Arctic of how this is being approached through, for example, combining efforts to attract data centres with strengthening structures and links to R&D environments and business parks.

## 3.1 GREENLAND

### Greenland investment climate at a glance

- Different targeted public programmes are in place to promote entrepreneurship.
- Access to credit and loans are more challenging outside the main towns and in cases that involve “new” sectors.
- The venture capital fund Greenland Venture is in the process of expanding its activities in cooperation with the Danish Growth Fund.

Greenland is a part of the Kingdom of Denmark, and associated to the EU as an Overseas Territory, which has preferential access to the EU market. Economic policies by the Self-rule Government in Greenland are relatively cautious, with a low level of government debt (around 5% of Greenland’s GDP) as a result<sup>4</sup>. Greenland’s Ministry of Industry and Energy is responsible for business development, which is managed through Greenland Holding, which has two subsidiaries, Greenland Business and Greenland Venture. Public business development funds are primarily directed at businesses in fisheries, food production and tourism, but the government also emphasises the need to broaden economic activities to “new” sectors such as ICT and business services.

In the last decade an internet sea cable to Nuuk has been established together with improved satellite connections to other towns. Ports and especially airports are the next big priority. In the summer of 2018 the Danish government published a plan to invest in and provide financial support to the Greenland Self-rule Government’s plans to enlarge the airports in Nuuk and in Illulissat (the second-largest town), allowing direct connections to other countries (today long-distance planes land in Kangerlussuaq).

### 3.1.1 Start-up climate

Greenland Business A/S is a government-owned business development company. It assists entrepreneurs, provides advice and manages grants for start-ups and SMEs through six different programmes: support for product development; support for export activities; support to purchase professional consultancy services (voucher system); support for tourism projects; support for food, ice and water, micro-loans (development costs are covered to the extent of 75%, and projects in rural areas have priority). The maximum combined support for each company is 300,000 DKK.

More than one third of start-ups are in hotels, restaurants or tourism. The second-largest group is construction. The biggest programme, support for product development, has been evaluated and demonstrated satisfactory results. Approximately 20 start-ups are supported annually, comprising 70-80% of total applicants. The support has little “red tape” and most entrepreneurs are satisfied with the programme, which has led to approximately 20 new jobs per year (besides the occupations of the entrepreneurs themselves)<sup>5</sup>.

<sup>4</sup> Danmarks Nationalbank (2016). Aktuelle tendenser i den grønlandske økonomi. Kvartalsoversigt 2. kvartal.

<sup>5</sup> Information from Greenland Business A/S

An incubator scheme was set up in 2017. This initiative aims at increasing the number and sustainability of entrepreneurs in Greenland.

In 2015 the rules for the Danish state-owned venture fund the Danish Growth Fund were changed, allowing it to invest in Greenland and in the Faroe Islands. Another, similar, change, allowing the Danish Export Insurance Scheme to cover exports from Greenland, is under implementation.

Nuuk Municipality has established a “start-up house” with room for approximately 10 start-ups. Rent and payments for basic office services are cheap, and there is a (short) waiting list for new start-ups. Each start-up may stay in the house for 3 years.

Generally, Greenland Business A/S can meet the current demand from aspiring entrepreneurs through the existing programmes. The organisation is based in Nuuk, but regularly business advisors visit other municipalities to meet entrepreneurs and SMEs.

### 3.1.2 Access to finance

Greenland has two banks, Grønlandsbanken and the smaller Bank Nordik. Both banks have a reputation for being well-run, cautious banks with relatively few losses and interest rate margins substantially above the average for Danish banks (the Danish Central Bank is the monetary anchor). There are indications that lack of competition between banks impedes lending and keeps interest rates up. However, established SMEs with a credit history and some years of audited accounts, and in most cases start-ups with sustainable business plans, can access finance from the banks. There is, however, a difference for businesses in the main towns and those outside them. For example, according to one bank, they require a “lending factor” (the ratio between the debtor’s loan and his/her gross income) to be limited to four in the bigger cities and two outside these. In connection with this, Greenland Business Association stresses that regulatory barriers and the need to modernise tax regulations are the main priorities from the side of the business community.

Mortgage lending is limited by low property values combined with the fact that land in Greenland is state-owned. The user leases the land and can, in practice, sell the lease or let their heirs overtake it. There is, however, a relatively well-functioning mortgage system for single-family houses, where the two banks syndicate with a Danish Mortgage Institute (Nykredit or DLR Kredit), with the banks taking the first potential losses. In practice, however, relatively few start-ups and SMEs receive finance in this way.

Private venture capital investments, including from business angels, are not common in Greenland. Some well-established or retired businesspeople, in fisheries and in the hotel/tourism industry, may finance new projects, but normally this will only comprise projects where the financiers’ friends or family are involved, and mostly in activities resembling those where the financier has earned his/her money. Similarly, there is no tradition for entrepreneurs to give away influence and a part of the economic upside in exchange for finance. Because of the limited tradition for venture capital there is also no market for more sophisticated financial products such as subordinate loans.

Bigger projects or companies have other options. Construction projects (e.g. hotels) are usually able to obtain mortgage finance. The financial instrument Vestnordenfonden (The West Nordic Fund) is

a financial instrument established in 1986 by the Nordic governments to promote business development in Greenland, the Faroe Islands and Iceland. In recent years, the fund has granted loans for several hotel construction projects in Greenland. The West Nordic Fund cooperates with and shares the risk with banks and the Self-rule Government-owned Greenland Venture.

Until now, the capacity of Greenland Venture has been limited to a handful of projects every year, but the fund has plans to increase its activities. Some of these will be stand-alone activities; the fund has also entered into agreements with The Danish Growth Fund, to finance business projects in Greenland. Projects under 4 million DKK will be taken by Greenland Venture, whereas the risk will be divided equally between Greenland Venture and The Danish Growth Fund for bigger projects. For investment in larger projects, the Foundation Erhvervsfonden (in English: business fund) has been established by Grønlandsbanken to support eligible projects with grants. The capacity of Greenland Venture is estimated to be annual investments in the range of up to 20 million DKK.

### 3.1.3 Investment climate for foreign capital

Regulations in Greenland concerning foreign capital are non-discriminatory and in alignment with regulation and practices in the rest of the developed world. There are indications, however, that both politicians and civil servants would benefit from exchanging experiences with others about approaches when, for instance, foreign mining companies are contemplating bigger investments in Greenland. As in many other countries, in these cases the Greenland Self-rule Government requires the foreign company to pay company taxes but also in some cases resource dividends and/or to make IBAs – Impact Benefit Assessments. IBAs are processes where impacts are assessed and balanced by contributions from investors to the local community, e.g. in the form of the establishment of roads or sports facilities to the local community. The problem is that requirements from authorities may come late in the negotiating process, hence negatively impacting the investors' business plan.

#### *Danish Government and Greenland's Self-rule Government establish business development fund in relation to airport construction projects*

The Danish Government and the Self-rule Government of Greenland have announced that they will establish a Fund to make it possible for SMEs in Greenland to utilise business opportunities from the upcoming airport construction projects. This can involve establishing new businesses and supporting the development of new services or products of existing SMEs to be able to serve as suppliers to construction. These investments are forecasted to amount to 1.5 billion DKK, and the spin-off fund will have capital of 200 million DKK. The capital of the fund may cover lending, security, guarantees etc. as well as venture investments. The purpose of the fund is to increase the total amount of investments in Greenland as well as taking on higher risks.

Moreover, a scheme will be set up to help SMEs develop business plans and undertake investments to be able to cooperate with bigger enterprises involved in the project. This scheme may be used to mature innovative commercial projects in Greenland, including costs for feasibility studies and consultancy services.

## 3.2 FAROE ISLANDS

### Faro Islands investment climate at a glance

- Entrepreneurship is growing in the Faroe Islands and support structures have developed with start-up houses that offer advisory services and cheap rent.
- An example of a crowd-lending scheme established by a regional bank and Danish Flexfunding to support entrepreneurship through loans by local individuals can be found in the Faroe Islands.
- The Faroese government has established a venture fund and the Danish Growth Fund can lend to and invest in projects in the Faroe Islands.

The Faroe Islands are a part of the Kingdom of Denmark. In the Faroe Islands support for start-ups and SMEs is the responsibility of the Ministry of Foreign Affairs and Trade and administered by Vinnuframi. Vinnuframi supports product development, early export activities and start-ups. The Faroe Islands are not part of EU, but are associated, and therefore also eligible for the Horizon 2020 programme. Vinnuframi supports applicants from the business side, and applications are screened by the Faroese Research Council. Public funds are primarily directed at businesses in fisheries, food production and tourism, but also in ICT and other business services.

### 3.2.1 Start-up climate

There is an increasing interest in entrepreneurship in the Faroe Islands. Vinnuframi offers advisory services, guarantees and grants for entrepreneurs. Many Faroese start-ups have an ambition to pursue possibilities in global markets but lack skills and knowledge relating to internationalisation. It is therefore a priority of Vinnuframi to assist SMEs in these activities. Vinnuframi also supports product development, early export activities and start-ups.

The biggest start-up environment in the Faroe Islands is Hugskotid, established by Torshavn Municipality, with approximately 25 start-ups that pay an advantageous fee for rent and basic office services. Most of these start-ups are in untraditional sectors in a Faroese context, e.g. the ICT sector. The organisation contributes to solving a problem of linking the public support and initiatives to the process entrepreneurs go through when applying for credit or a loan in a bank. They are obliged to terminate the lease after a certain period, depending on their size. Another start-up environment, Iverkseterahusid, is based in Klaksvik, the second-largest town based in the northern part of the Faroe Islands with similar services. In cooperation with the Danish Fund for Entrepreneurship Iverkseterahusid is also responsible for supporting entrepreneurship in schools.

### 3.2.2 Access to finance

Most start-ups receive most of their finance from personal savings and from bank and mortgage lending. Generally, SMEs that have a stable track-record and cash flow can secure credit or loans in the banks. The Faroese banking system has changed in the last few decades due to the financial crises that affected the islands. Today there are two bigger banks, Betri Bank and Bank Nordik, and two smaller savings banks, the Nordoya and the Suduroya Sparikassi. Besides these banks the government-owned bank, Landsbanki has been established to run the government's banking affairs, but this bank does not lend to private individuals or enterprises.

Some of our interviewees find that it may be difficult for start-ups outside the 2-3 biggest cities in the Faroe Islands to acquire loans. Others criticise that start-ups outside the traditional sectors (mostly fisheries and aquaculture) also find it difficult to receive finance. Competition seemingly functions a little better than in Greenland but is also to some degree limited due to the limited number of banks. Commercial lending is very limited from the two savings banks and interest rate margins are higher than in Denmark.

Mortgages can be given through syndication between the banks and Danish mortgage institutions (Jyske Bank and DLR Kredit), with the banks taking the first losses. With real estate prices lower than in Denmark, the mortgage system is, in practice, less frequently used and developed than in other countries and therefore a limited source of finance. Commercial lending is very limited from the two banks and interest rate margins are higher than in Denmark. Competition is to some degree limited, but generally there is support for business development from the side of the banks. For example, bank credits to the aquaculture industry, which is today reaching the same revenues as traditional fisheries, are highlighted as an important element in the growth of the Faroese economy. The West Nordic Fund also offers loans for development projects in the Faroe Islands. Often loans are granted in combination with bank loans or the venture fund, Framtak.

The government has established the venture fund, Framtak, to spur investments in promising SMEs looking for opportunities to expand and grow. However, it is still too small to take on substantial risks. The Danish Growth Fund can lend to and invest in projects in the Faroe Islands. The intention of the Danish Growth Fund is to engage in projects 1-3 times annually. To date, only a few lending cases have been established and no venture investments.

Provision of venture capital is limited, and there is not a developed business angel culture. However, a crowdfunding/lending initiative has been established. Suduroyar Sparikassi has, in cooperation with the Danish Flexfunding, recently established a scheme where it endorses, and takes a part of the risk, in a limited number of smaller crowd-lending projects in which individuals engage.

### **3.2.3 Investment climate for foreign capital**

In general, the Faroese business climate is open for foreign investments. Generally, the Faroese welcome foreign direct and indirect investments. Subsidiaries to Danish, Icelandic, Norwegian and British companies are part of the business landscape. There are no reports of regulatory or informal impediments to foreign ownership. The exception to this rule is fisheries, where new legislations require all fishing boats operating from Faroese harbours to be owned by persons domiciled in the Faroe Islands until 2024.

## 3.3 ICELAND

### Iceland investment climate at a glance

- A wide spectrum of targeted programmes are available for start-ups and offered through business support offices across the country.
- Icelandic banks are reported to have reestablished after the financial crisis and have become more willing to provide finance for business activities.
- On the venture side, new private and public-private venture funds have emerged in Iceland in recent years. Most of the venture funds are still small and in a growth process.

Innovation Center Iceland as part of the Ministry of Industry and Innovation and the Icelandic Regional Development Institute, an independent institution owned by the Icelandic state, are the key public business support organisations in Iceland. Together, they support entrepreneurship and SME development in tourism, fisheries, food production, biotechnology, ICT and other service industries. Innovation Center Iceland has its headquarters in Reykjavik but has branches across the country. The Icelandic Regional Development Institute is based outside the capital and is in place to promote business development in rural areas.

#### 3.3.1 Start-up climate

Advisory services and programmes to support start-ups are run by Innovation Center Iceland and Iceland's Regional Development Institute. Innovation Center Iceland has several support schemes for SMEs and start-ups focusing on innovation and technology development. In rural areas cheap loans to start-ups are given by the Regional Development Institute. As a tradition from the high-inflation days of the 1970s and 1980s these loans are index loans (where the outstanding loan every year is indexed with the increase in the price index).

Icelandic Startups, based in Reykjavik, is an organisation that offers various types of services to entrepreneurs who are looking to start their own business. Their services fall into three main categories: idea, growth and community. Icelandic Startups arranges events, brief coaching (30-minute meetings) and other start-up events. It currently runs three types of programme: Start-up Reykjavik, Start-up Energy and Start-up Tourism.

The two largest universities in Iceland, The University of Iceland and Reykjavik University, both support the commercialisation of research-based ideas and offer their students and faculty courses and advice on innovation and offer facilities for entrepreneurs. Icelandic businesses can also participate in European projects as part of the EU Horizon 2020 programme and Eurostars, a funding programme for small- and medium-sized start-ups involved with research and development projects. "Action for Job Creation" is a funding scheme by the Ministry of Industry and Innovation with the aim of supporting the early development of innovative ideas.

The Tech Incubator (TINC) project is available for Icelandic start-ups that want to prove their business model and the potential of their product with less risk and less cost. The Technology Development Fund, hosted by the Icelandic Centre for Research, supports individuals, universities, enterprises

and public institutions conducting research and development activities, which aim towards innovation in Icelandic industry.

### **3.3.2 Access to finance**

Not only are government-owned and government-supported initiatives supporting start-ups and SMEs, but also private initiatives. The Iceland Ocean Cluster is a well-functioning initiative supporting companies working in fisheries and other ocean-related activities. The cluster supports networking, incubation, consulting and research-related activities, especially with a special focus on SMEs. The AVS R&D Fund of Ministry of Fisheries and Agriculture supports research and development projects conducted by individuals, universities and business enterprises that aim to increase the value of fisheries.

Since the financial crisis, Iceland has tightened its financial regulations considerably. The banks were for a period state-owned or subsidised but are now in a process of returning to unsubsidised private ownership. This has also entailed that bank lending to start-ups has become more restricted. Lending outside the biggest cities is reported to be difficult. The Iceland Regional Development Institute to some extent alleviates this problem.

Iceland currently has three bigger, commercial banks: Landsbanki (former NBI), Arion Banki (former Kaupthing) and Islandsbanki (former Glitnir). Besides these banks there are a handful of small banks and savings institutions. Mortgages are not reported to be a major source of business finance.

Private venture capital and business angels play only a limited role in Iceland. A couple of funds have been established in recent years, with the government-owned NSA Ventures and the privately owned Frumtak Ventures as the most well-known and active. There seems to be a continuously strong interest from financial actors to increase the role of these funds in the coming years. In 2015 new venture capital funds were established: The Enterprise Investment Fund founded by 16 Icelandic pension funds, Brunnur, and Crowberry and Eyrir Invest, which are privately owned. As a political reaction to the financial crisis, financial regulations still include some capital control of foreign exchange movements, but this has not been a hindrance to the venture capital industry.

### **3.3.3 Investment climate for foreign capital**

Direct investments from other countries have been limited in the aftermath of the financial crisis but has increased in recent years. In general, we have not met reports of regulatory barriers to foreign investments, and Iceland is generally perceived to be an open economy which welcomes incoming investments. An illustrative example is the aluminium industry. Three aluminium smelters have been established in Iceland, of which two are owned by international companies.

## 3.4 NORTHERN FINLAND

### Northern Finland investment climate at a glance

- Northern Finland is home to the annual Polar Bear Pitching event and an ICT sector centered on the city of Oulu, which attracts venture capital investments also from foreign investors.
- A combination of public-sector schemes and the presence of banks reduces the challenges of gaining access to loans and credit.
- A growing business angel culture is observed in Northern Finland, but the current setup is geared towards initial start-up needs. Often, attracting venture capital for early expansion or scale up is a challenge.

Lapland and North Ostrobothnia are the northernmost regions of Finland, and the focus in this report. In terms of promoting cohesion and business development, the European Regional Development Fund (ERDF) and the European Agricultural Fund for Rural Development (EAFRD) are the most important sources of support for rural SMEs and innovation initiatives in the region. The EU funds provide flexibility to local and regional authorities for investing in the region. The ELY Centres (The Centres for Economic Development, Transportation and the Environment) play a key role in regional development and the granting of EU Funding. From 2015-2018, the ELY Centres invested a large proportion of the funds to SMEs for development activities (such as R&D and internationalisation projects). The grant-based funds are principally targeted at ICT, metal, forestry, tourism, clean energy and health technology.

### 3.4.1 Start-up climate

The start-up climate in Northern Finland is relatively strong, with a growing culture for entrepreneurship. An example of how start-up conditions have been improved is the annual Polar Bear Pitching event for start-ups and entrepreneurs that takes place in Oulu (North Ostrobothnia). The event works as a community and as a location, bringing together people from different fields of study and industries and has succeeded in gaining quite some international awareness and has started to attract participants from abroad.

#### *Polar Bear Pitching event*

The Polar Bear Pitching event started in 2013 after the Northern Finland economy was hit hard after the largest employer and technology giant, Nokia, cut thousands of jobs and sold its mobile business to Microsoft. The founder wanted to find a way to help market entrepreneurs and attract investment. Today, every year hundreds of participants from around the world come to Oulu in February to meet with other entrepreneurs and to participate in a pitching competition. The entrepreneurs give their pitches while standing waist-deep in ice-cold water on a stage carved from the frozen Baltic Sea.

Polar Bear Pitching is a joint venture by the Oulu entrepreneurial ecosystem. The main drivers behind the event are the Polar Bear Pitching non-profit organisation, the University of Oulu, the City of Oulu, Business Kitchen and other organisations, entrepreneurs and volunteers of the community.

The entrepreneurship community is especially strong around the city of Oulu. There are several hubs and labs for entrepreneurs in connection to the University of Oulu and the public sector. As an example, OuluHealth Lab provides an integrated health test and development environment for entrepreneurs and other stakeholders from academia and the public and private sectors. The Labs offer an environment where entrepreneurs can test and receive feedback on their business concept from professional healthcare teachers and students. Another example is the Business Kitchen, a co-working space for entrepreneurs that is located around the University of Oulu.

Overall, start-up companies have good access to different types of finance, including traditional bank lending, “soft money” through public support funds and the provision of equity through private sources and venture capital (both public and private sources). As an example, the local TE Office (local employment service under the Ministry of Employment and Economy) provides start-up grants for new entrepreneurs to cover basic earnings for a period of 6 months. The grant is available for people who are either unemployed or leaving paid work or studies as well as part-time entrepreneurs that are expanding to full-time. The start-up grant is a form of assistance intended to safeguard the basic livelihood of a new entrepreneur and is financed by the Ministry of Employment and Economy.

Business Finland was created January 1, 2018 by the merger of two organisations Finpro, which offered services for investments, and Tekes, which offered funding for innovation activities, also has a wide range of funding instruments and services available for start-up companies. Business Finland’s programmes are nation-wide, but businesses can receive services from regional offices, including the region of Lapland (Rovaniemi) and North Ostrobothnia (Oulu). There are different kinds of funding instruments available that are targeted at start-up companies under 5 years old. One instrument, Tempo, is intended for promising start-up companies, which aim to enter the export markets and whose product or service idea has a competitive edge in the chosen market. The funding can, for example, be used for internationalisation, market analysis, testing and the development of management. Another instrument is intended for young innovative companies with strong efforts in innovation activities. The funding comes in three levels, where the first stage is a grant, typically for the period of 6-12 months. The maximum amount of funding amounts to 1.2 million EUR, of which part can be funded as a grant, and part as a loan. Business Finland funds up to 75% of the eligible project costs.

According to the Finnish Venture Capital Association, Finnish start-ups and early-stage growth companies raised the fourth-highest amount of venture capital funding in Europe in 2017<sup>6</sup>. However, the interviewees indicate that the venture capital funding is primarily targeted at companies in the capital area, and subsequently in the larger cities. In Northern Finland, the venture capital is primarily targeted at companies around the city of Oulu, especially start-ups within the ICT sector. In the sparsely populated areas outside Oulu, it is more difficult for start-ups and entrepreneurs to obtain private venture capital investments.

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<sup>6</sup> <https://paaomasijoittajat.fi/en/investments-into-finnish-startups-hit-a-new-record-high-at-349me-foreign-investors-increasingly-attracted-to-the-maturing-startup-ecosystem/>

### 3.4.2 Access to finance

Overall, the investment climate for early expansion and scale-up in Northern Finland is relatively good. The existing facilities and investment institutions from both the public and the private sector are well-established and provide comparatively decent conditions for SMEs to find the necessary investment to expand and scale-up their business.

From the public sector, Finnvera, a nation-wide institution with locations in Northern Finland (Kajaani, Oulu and Rovaniemi) is one of the main actors that provides financing (loans and guarantees) for SMEs and larger enterprises. As an example, SMEs can apply for a growth loan to finance major growth or internationalisation projects. The loan is a debt-based mezzanine financing product. The company's self-financing portion must always be at least 20% and the share contributed to the total financing by financiers other than Finnvera must be at least 50%. In addition, Business Finland (as described above) also provides loans for SMEs to scale-up and enter new markets. The loan from Business Finland is offered with an interest rate of 1% and with no collateral requirement in most cases. Companies can receive a loan covering 50-70% of the project's total costs. The city of Oulu is also a key factor in providing finance for SMEs. The City Council provides venture capital for SMEs that can be accessed from the organisation Business Oulu. The funding is targeted at companies located in the city of Oulu and is aimed at companies that already receive finance from private investors or banks, but still need further financing.

In this context, interviewees indicate that the demand for investment from business in Northern Finland is strongest around the city of Oulu. The strong demand is primarily due to a high level of business activity within the ICT industry, where, in recent years, Oulu has developed into a strong hub with good connections between companies, research institutions and the public sector. It also means that interviewees indicate that the demand for investment is relatively low in the rural areas where there are fewer growth businesses.

The banks in Northern Finland also play a significant role in providing loans for the scale-up of SMEs. Often the concrete investment is arranged by a bank, and then supplemented by loans and guarantees from a public source (Finnvera, Business Finland or Business Oulu) that can be used as a security for the bank loan.

While there is a tendency towards an increasing number of business angels and venture capital funds in Northern Finland, the interviewees indicate that the level of private equity investors is low, especially VC funding above 0.5 million EUR. It can be a challenge to find the right investors for larger investments, and SMEs then need to look to private funds based in Helsinki or abroad. One of the main funds in Northern Finland is Butterfly Ventures, which was founded in 2012. It is currently one of the most active venture capital funds in the region. Butterfly Ventures is investing in early stage development.

### 3.4.3 Investment climate for foreign capital

The investment climate for foreign capital is, according to our interviewees, relatively limited in Northern Finland. There are some large-scale foreign investors within the mining industry as well as a growing number of foreign investors within the ICT sector, especially in connection to the business community in Oulu, but the general level and access to foreign capital is low. The organisation Business

Finland plays a key role in attracting investments, and maintaining dialogue with public authorities, banks and other stakeholders in connection with the establishment projects.

## 3.5 NORTHERN NORWAY

### Northern Norway investment climate at a glance

- Entrepreneurship and SME development is supported through a combination of state institutions with a regional presence providing support for business support infrastructure, innovation, and R&D. They are in close coordination.
- Overall, access to loans and guarantees is stable, also in the rural areas, with the combination of state institution Innovation Norway and banks.
- A venture fund structure that can meet the demand for early expansion of start-ups and scale-up of SMEs is not yet in place.

Northern Norway comprises the counties of Nordland, Troms and Finnmark. The counties have a shared R&D strategy that focuses on the region's positions of strength, identified as: seafood and marine resources; experience-based tourism; value chains associated with natural resources and natural advantages (bioeconomy); industrial manufacturing and supplier industry; and space (satellite and related technologies)<sup>7</sup>. As part of Norway's district policy, the northernmost municipalities of Troms and the entire county of Finnmark have specific measures in place that include higher transfers of business development funds and tax benefits<sup>8</sup>.

### 3.5.1 Start-up climate

Siva is a state-owned organisation that facilitates innovation by building, owning and developing infrastructure for industry, start-ups and research environments. Through a network of incubators and business support organisations they promote entrepreneurship across the country. Another key institution is Innovation Norway, the Government's main instrument for innovation and the development of Norwegian enterprises and industry with regional offices located across the country.

Northern Norway has several incubator environments for business start-ups. One of them is Norinnova based in proximity to UiT – The Arctic University of Norway. Norinnova is an innovation company with several functions, including tech transfer for research environments at UiT, hosting a science park and a business incubator, and the investment fund NorInnova Invest AS, established with private capital and a loan from Innovation Norway. Norinnova is one of the innovation environments in Norway which has been granted pre-seed capital from Innovation Norway. They manage the funds on behalf of Innovation Norway and can invest in the incubator start-ups matching the

<sup>7</sup> RFF Nord-Norge (2017) FoU-strategi Fondsregion Nord-Norge - Nordland, Troms og Finnmark 2017-2021.

<sup>8</sup> OECD (2016), OECD Territorial Review: Northern Sparsely Populated Regions, OECD Publishing, Paris. Available at: <http://www.oecd-ilibrary.org/regions>.

investments with private capital. The private co-investment is made by NorInnova Invest AS and business angels.

The knowledge park KUPA (which is part-owned by large international companies such as Equinor, Total E&P Norway and DNV GL, as well as governmental development bodies, including SIVA) manages another business incubator in Northern Norway. KUPA is also the operator of an accelerator programme specifically targeted at supporting youth entrepreneurship in the region.

#### *Accelerator Programme for young entrepreneurs in Northern Norway*

The Accelerator Programme for young entrepreneurs in Northern Norway was established in 2016 by Lundin Foundation (a registered Canadian non-profit organisation supported by the Lundin Group of Companies, which has operations in Northern Norway). KUPA manages the Accelerator Programme focusing on business ideas in the fields of renewable energy, energy efficiency and the sustainable use of natural resources. The target group is young people that have recently started up a business or are working on an innovation project in an existing company.

After an application phase, the young people with the best ideas are invited to a workshop, where they are trained in pitching their business idea, and at the end of the workshop 5-10 people are selected to participate in the 6-month Accelerator Programme. The young people are based in different parts of the region, but they meet three times for two-day sessions, and in between they are in contact with business advisors at KUPA. At the sessions they receive training, develop their business plans and practice pitching their ideas. Importantly, the young entrepreneurs meet each other and develop networks. The final session is completed with a presentation to a panel, including investors, after which a winner is announced. The prize is adapted to the winner's needs to ensure the continued development of the business.

After participation in the Accelerator Programme, some projects are accepted to KUPA's business incubator or other business incubators in the region. Interest in the Programme has increased during the 3 years it has been running, and from 2018 the funding of the programme has been expanded to, in addition to Lundin Foundation, include the company Equinor and Innovation Norway.

In incubator environments regional representatives from Innovation Norway and the Norwegian Research Council, and from RFF Nord-Norge – the Regional Research Fund owned by the three northernmost counties – are often brought together to discuss individual business cases. The Regional Research Fund has measures in place to sponsor the involvement of researchers to support R&D processes in businesses, and Innovation Norway has commercialisation schemes with which they can provide support. Sometimes a combination is needed in the start-up phase.

The Norwegian Research Council can support start-ups and SMEs with different measures. A key instrument is the tax incentive scheme SkatteFUNN which is relevant in cases where a start-up or SME needs R&D support to develop. Projects approved by the Norwegian Research Council can receive a tax deduction of up to 20% of the eligible costs related to R&D activity. If the tax deduction for the R&D expenses is greater than the amount that the firm is liable to pay in tax, the remainder is

paid in cash to the firm. All branches of industry and all types of companies can apply to the SkatteFUNN tax incentive scheme<sup>9</sup>.

### 3.5.2 Access to finance

Innovation Norway administers “soft” funds for business development and network services. For example, the organisation supports cluster development initiatives. Furthermore, Innovation Norway has two different types of loans, low-risk and high-risk. The main share involves low-risk loans or the “bank mission” of Innovation Norway. This type of loan is primarily granted instead of, or in combination with, bank loans or mortgages to SMEs. Especially in Northern Norway the local and regional banks are important and are used by two out of three SMEs<sup>10</sup>. Innovation loans and district loans, which are relevant in Northern Norway, are high-risk loans where Innovation Norway provides bank guarantees in connection with a focus on innovation, growth and internationalisation.

Sparebank 1 Nord-Norge is a significant actor in the region, generally willing to take a higher risk compared to other banks. It is a regional bank established not as a limited company but rather as a foundation that takes a social responsibility by reinvesting its profits in the region. Other smaller local banks based on the “sparebank” model are based in the region. There is a good presence of banks in Northern Norway, especially in the larger towns. In 2018, Sparebank 1 Nord-Norge launched a new loan programme in cooperation with the Nordic Investment Bank. Outside the towns Sparebank 1 Nord-Norge has a strong presence, but also DNB, one of the larger banks in Norway, has offices across the region. It is common for Innovation Norway and banks in the region to co-fund loans to SMEs.

The main challenge for early expansion and scale-up is access to private venture capital. There is a need for what interviewees refer to as “patient and competent” equity investments when businesses are facing a 5- to 10-year development phase. There is not a strong tradition for business angels in the region. Business angel investments are typically made within the same industry in which they themselves are active, e.g. the aquaculture and fisheries industry. It is generally more challenging to access finance for “new” business activities that are unfamiliar for potential private investors and for the banks. Interviewees stress a need for good investment cases that may influence potential angel investors present in the region that today invest in their own sector or in real estate to see opportunities. Attempts have been made by start-up environments to bring together potential angel investors, but this remains a challenge. Especially in sectors such as biotechnology and ICT, it is common for businesses to seek private venture capital in the capital area. In some cases, the knowledge-intensive start-ups not only relocate due to equity investors, but also to gain stronger access to competent labour, networks and markets.

### 3.5.3 Investment climate for foreign capital

Historically, Icelandic companies in the fisheries industry have been present in Northern Norway. In recent years, there have also been some examples of foreign investments made in the tourism and transport industry. Foreign venture capital investments in SMEs are not yet common in the region.

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<sup>9</sup> [https://www.skattefunn.no/prognett-skattefunn/About\\_SkatteFUNN/1247149010684?lang=en](https://www.skattefunn.no/prognett-skattefunn/About_SkatteFUNN/1247149010684?lang=en)

<sup>10</sup> NOU (2018). Kapital i omstillingens tid: Næringslivets tilgang til kapital. Norges offentlige utredninger 2018: 5.

Innovation Norway has two programmes of relevance to an Arctic context in place – ProRus and Arctic 2030. ProRus is a programme which Norwegian SMEs with an interest in the Russian market can apply for and Arctic 2030 a similar programme for SMEs with ambitions in other parts of the Arctic. The Arctic 2030 programme has, for example, co-financed Norwegian participation in the EU Interreg project Visit Arctic Europe.

## 3.6 NORTHERN SWEDEN

### Northern Sweden investment climate at a glance

- A growing culture for business angel investments based on a model of public-private co-investment can be observed in Northern Sweden.
- Obtaining bank loans and credit is more challenging for SMEs located inland compared to the coastal/urban areas, primarily due to closure of bank offices and lack of collateral.
- Access to private equity investments for early expansion and scale-up of SMEs is a challenge in all the region.

The regions of Norrbotten and Västerbotten are the focus in this report. They comprise the joint programme region Övre Norrland for the European Regional Development Fund (ERDF), and the two regions have thereby also developed a joint regional development and innovation strategy (smart specialisation) with seven broad areas of focus for the period 2014-2020: healthcare innovation; life science; technology and services related to manufacturing industry; sustainable energy and environmental technology; experience, cultural and creative industries; and digital services<sup>11</sup>. Part of the ERDF budget has been allocated to the public organisation Partner Invest to be used as a financial instrument. Most of the budget, however, is used for development projects in the region. The main share of the budget is used for increasing the competitiveness of SMEs, for which there has been a high demand. ERDF funds are also directed at promoting sustainable transport. This has primarily involved the development of harbour sites to promote trade through improved transport infrastructure facilities. Improvements have also been made to bus transport hubs across the region. The European Agricultural Fund for Rural Development (EAFRD) is another EU fund of relevance to business development.

### 3.6.1 Start-up climate

Almi Företagspartner AB is owned by the Swedish state and is the parent company of a group consisting of 16 regional subsidiaries. The regional subsidiaries, of which one is based in Northern Sweden, are 51% owned by the parent company and 49% by regional owners. The organisation provides advisory services and funding opportunities for start-ups and SMEs.

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<sup>11</sup><https://tillvaxtverket.se/download/18.5448a7041636d9ecf863fea4/1526900645612/Övre%20Norrland%202014SE16RFOP008.pdf>

Arctic Business Incubators (ABI), which was established in 2005 in affiliation with Luleå University of Technology (LTU) is one of the business incubator programmes in place in the region. ABI is a limited company owned by LTU Holding AB, Norrlandsfonden, Region Norrbotten, Luleå and Skellefteå municipality. In addition to its owners, ABI is currently funded by the municipalities of Piteå and Kiruna, Längmanska Företagarfonden, Sparbanken Nord and by the Excellence Programme of VINNOVA – Sweden’s Innovation Agency. ABI is based at LTU’s campuses in Luleå, Kiruna, Piteå and Skellefteå. However, they also work with start-ups based elsewhere in the region. Each year ABI evaluate approximately 250 business ideas, and they accept 40 ideas in their accelerator programme and 10 start-ups in their incubator.

#### **Arctic Ventures AB - business angel investments**

Arctic Ventures was established and is managed by ABI. A total of 23 business angels have invested in the company, and their investments have been matched 1:1 by the state-owned Saminvest AB. Most of them were recruited during a “roadshow” organised by ABI in 2017. They organised meetings in different places in the region, and invited relevant people, paying special attention to inviting women in business and generally people still active in business. The amount each person committed (from 100,000-300,000 SEK) is not a major investment for them as they would otherwise invest their money elsewhere.

Arctic Ventures invests with convertible loans to the approximately 10 incubator start-ups that are accepted annually. ABI makes the decisions on how investments are made. After a 4- to 5-year period the loans (with an interest rate of 6%) will be repaid or converted into owner capital/shares. Thus, in 2022, Arctic Ventures will be closed, and the profits paid to the owners. The plan is to start a new limited company in 2020 for a new round of investments.

There is a risk that the business angels will not have a full return on their investment. However, they benefit from meeting the 10 start-ups accepted to the incubator. In some cases, business angels are involved directly in the development of the businesses, e.g. as members of their board of directors. They can also invest further in the businesses.

ABI builds teams around each start-up and helps them gain access to finance, which usually involves a 50-50 mix of grant-based funding and venture capital. Depending on the needs of the individual enterprise, grants are applied for from the region (smaller amounts for consultancy support) and from VINNOVA – Sweden’s Innovation Agency or the Swedish Energy Agency (to support product development). ABI participate in EU Structural Funds co-financed projects. Typically, these are projects which ABI’s owners prioritise within regional development strategies, e.g. the space industry, mining, data centres, IT, gaming and energy. Venture capital is sourced from venture capital funds and business angels.

Business angel networks/funds, such as Arctic Ventures AB, are in place elsewhere, e.g. the local initiatives Northern Light Capital in Umeå and Digital Ventures in Skellefteå, and the Norrbotten-wide business angel networks Startkapital i Norr AB followed by Expander i Norrbotten AB. Startkapital was established in 2010 by two entrepreneurs who had identified a gap in private capital investments in the region. At the time there was no existing collaboration between business angels. They

contacted the County Governor, who invited selected entrepreneurs and business angels to his residence. Subsequently, 20 individuals each invested 250,000 SEK, an amount which was matched by Innlandsinnovation (currently in the process of closing). After all the funds had been invested, Expandera was established, this time with capital from 40 business angels. The owner-base is spread across the region.

Startkapital and Expandera follow their venture capital investments closely. Usually they make an equity investment of between 20-40% in a business, and they then assign one of the business angels to sit on the board of directors. The main added value they bring in addition to capital is their knowledge and expertise, e.g. regarding exports. They can also accompany the businesses to the bank and help them negotiate loans. In many cases, in addition to the investment made by the company, individual business angels will invest further in the businesses. Partner Invest in many cases also co-invests. Expandera is one of the 23 angels that have invested in Arctic Ventures, and they are thereby also involved in the development of the ABI incubator start-ups.

### 3.6.2 Access to finance

The business angel networks and the public financial instrument Partner Invest maintain close contacts and co-invest in start-ups with growth potential. According to interviewees the current setup is geared towards initial investment needs of up to 5 million SEK. However, for investments above this amount businesses will need to look to private investment funds based in the capital or abroad. Partner Invest, ABI and other support organisations in some cases invite investors from the capital area to meet businesses in the region. A challenge that is highlighted in this regard is that investors from the capital area do not see the potential in businesses that differ from those usually presented to them. The business ideas from the north tend to be broader, sometimes closely affiliated with the manufacturing industry, e.g. mining.

In addition to banks, the state-owned Almi and the foundation Norrlandsfonden (founded by the state-owned mining company LKAB) play key roles in providing loans for scale-up of SMEs. Sparbanken Nord is a regional bank established not as a limited company but rather as a foundation that reinvests its profits in the region. The bank has offices in 10 of the 20 municipalities of the region. As part of the digitalisation process, banks are increasingly centralising and closing local offices. In Northern Sweden this has entailed that, except for Sparbanken, banks have closed most of their offices in the inland municipalities. Already SMEs based in inland municipalities have had challenges acquiring loans, primarily due to the comparatively low property values in the inland, which is a problem when they need to use property as collateral. From the side of Sparbanken, they are aware that if they turn down a loan or credit application, most likely the SME will not have other opportunities.

Generally, due to its core value of societal responsibility, Sparbanken is willing to take a higher risk than commercial banks. This entails that the validity of the business case and cash flow of the business decides whether the business can obtain a loan, while the property value as far as possible should not be an obstacle. In particular, Norrlandsfonden is highlighted as being significant in terms of providing loans. In some cases, the bank shares the risk with both Norrlandsfonden and Almi. Partner Invest is also often involved in dialogue with the banks when there is also a need for venture capital. Partner Invest always co-invests with private actors. Their network now comprises 215 private investors in the region.

In autumn 2018 Norrlandsfonden (covering the four northernmost regions in Sweden) and Sparbanken Nord have started discussions with the European Investment Fund (EIF) to establish a credit guarantee instrument in Northern Sweden. It requires co-funding from national/regional level and thereby depends on political decisions. The idea is that the credit guarantee instrument would be managed by Norrlandsfonden. The need for EIF primarily arises due to the bank closures in the inland.

### **3.6.3 Investment climate for foreign capital**

Except for some “born global” type companies, most often arising in the university environments, attracting international venture capital is not commonplace for SMEs in Northern Sweden. However, the region has in recent years attracted several international large-scale industries. The organisation Invest in Norrbotten plays a key role in attracting investments, and maintaining dialogue with public authorities, banks and other stakeholders in connection with the establishment projects.

The cold climate and the vast sustainable and cheap energy (hydropower) make the region attractive for establishing data centres. Facebook established the first data centre in 2011. As of 2018, a total of 18 data centres have been established in the area, and an estimated 4,000 jobs created, also including in related industries<sup>12</sup>. With the establishment of the first data centre, backed by the county and the state, the national data centre SICS ICE built for cloud and big-data research was established at Luleå University of Technology and Luleå Science Park was expanded.

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<sup>12</sup> <https://www.svt.se/nyheter/lokalt/norrboten/facebook-gor-storsatsning-i-lulea>

## 3.7 NORTHERN RUSSIA

### Northern Russia investment climate at a glance

- Efforts to promote entrepreneurship have been strengthened in recent years with advisory services and different programmes available across the regions.
- Start-ups and SMEs have access to business support services but gaining enough public finance for development can be challenging.
- Access to venture capital investment is at an emerging stage in Russia.

Improving access to finance is a political priority for the economic development in Northern Russia. In 2015, the Russian Federation launched the “Strategy for the Development of Small- and Medium-sized businesses in the Russian Federation” for the period up to 2030 and an Action Plan to stimulate entrepreneurial activity and economic diversification in Russian regions. The years 2016-2017 were considered as a pilot stage to create a supportive infrastructure and system. From 2018 the plan is at a stage of active growth by encouraging lending to small- and medium-sized businesses. The SME sector in Russia has steadily grown since 2005, both in terms of SME numbers and turnover<sup>13</sup>.

### 3.7.1 Start-up climate

The numbers of start-up companies are beginning to grow, especially in the field of IT and innovation as well as production and tourism. The government has taken a series of measures such as establishing a national project and revising tax regulation to support start-ups and entrepreneurs. According to federal law the main institution responsible for entrepreneurship development since 2015 is a public corporation for the development of SMEs. The main tasks of the corporation are to provide support for SMEs, attract funding and resources, including foreign funding, to provide financial support for entrepreneurship, as well as to provide information and educational services for SMEs and start-ups. Russia’s Arctic regions have branch units of the corporation carrying out the support mechanisms at the regional level.

There are numerous programmes aimed at the development of SMEs. Within these programmes there are separate directions for the development and financial support for different groups, start-ups and operating entrepreneurs usually being one of them. The Centre for Supporting Entrepreneurship in the Murmansk region is the operator for several federal programmes in the region. The national programme “You are an entrepreneur”, involves young people between 14-20 years in entrepreneurial activities. The centre also supplies educational products targeting different groups (young people, women, people new in the field as well as more experienced business professionals) to provide help with accounting, legal issues, trade fairs, market support or co-financing.

The regional authorities are also important actors providing funding and they support the business climate through different measures. There are various funding provision measures offered by various institutions, which are usually administrated under the authority of some of the local ministries. In the Murmansk region the Ministry of Industry, Development and Entrepreneurship of Murmansk Oblast

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<sup>13</sup> Russian Federation (2016). Strategy for the Development of Small and Medium-sized Businesses in the Russian Federation.

is especially active in these questions and provides grants to new entrepreneurs. The regional authorities of the Murmansk region provide indirect support through several business support institutions governed by the ministry. One of them is the state regional budget institution Murmansk Regional Innovation Business Incubator, which manages a regional programme providing financial support in the form of subsidies to start-up companies and entrepreneurs.

The non-profit microcredit company Fund for the Development of Small and Medium-sized Enterprises in the Murmansk region (FORMAP) provides micro-credits for start-ups and entrepreneurs (who have been in business less than a year) for the duration of two years at an interest rate of 5%.

The Entrepreneurship Support Centre of Murmansk Region mostly provides “soft” support but also indirect financial support covering the costs of service providers that are required for business development. For instance, marketing, book-keeping, consulting service costs are eligible for financial provision. They also act as a mediator between investor and company by matching investors with investment projects.

In the Krasnoyarsk region, of which the northernmost municipalities are part of the Arctic, 300 Start-ups is a private venture investment company that offers a business accelerator programme for start-ups in the idea stage and provides funds for prototyping, testing various hypotheses, product launch, marketing and a further acceleration programme for scaling businesses. They invest in start-ups and offer co-working space and mentoring services.

In the Archangelsk region one of the main funding institutions available for SMEs is the Microcredit Company Archangelsk Regional Fund “Development”. It operates under the Ministry of Economic Development of Archangelsk Region. Funding is also provided from the regional authorities to the municipalities where it can be used to finance different forms of business competitions to spur on the innovation climate in the region.

Other measures implemented to improve the start-up climate include a regional guarantee organisation that acts as a co-guarantor and co-sponsor to a loan if the entrepreneur does not have enough security to be given a loan by the bank. Some banks also offer free-of-charge account opening for newly established and start-up companies for the transfer of state grants that they receive through state programmes.

### **3.7.2 Access to finance**

In 2014 the World Economic Forum identified access to finance and credit as a key barrier to SME development in Russia<sup>14</sup>. The federal and regional authorities are important actors when it comes to funding and other types of support in the region. For public funding there are three types of opportunities: 1) subsidies to compensate for costs related to establishing a business, 2) grants that are provided based on the business plan, and 3) loans. There are interest-free loans, and there are loans with

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<sup>14</sup> World Economic Forum (2014). Russia’s Regions- Drivers of Growth: 4x4. [http://www3.weforum.org/docs/GAC/2014/WEF\\_GAC\\_Russia\\_DriversGrowth\\_Report\\_2014.pdf](http://www3.weforum.org/docs/GAC/2014/WEF_GAC_Russia_DriversGrowth_Report_2014.pdf)

a very low interest rate. Interest-free loans are given by private companies, and loans with a very low interest are given by the regional state fund.

In general, there are some requirements to receive funding from the public authorities. These usually consist of training programmes and developing a business plan before receiving the money. A challenge in this regard is to create awareness among entrepreneurs about the business development opportunities available.

Access to physical banks is of importance in acquiring loans. The presence of banks varies between the different regions in Russia. In the Krasnoyarsk region in central Russia there are several banks while in the Archangelsk Oblast region access is much more limited. It is generally in remote rural municipalities that the banking infrastructure is limited. In these areas non-profit organisations exist to try to bridge that gap. The Microcredit Company Archangelsk Regional Fund "Development" and the Arctic programme for entrepreneurs near the Arctic zone is an example. They also have programmes for agricultural producers and for single-industry towns. Funding can also be obtained by investments from large private companies.

Private venture investments have become more commonplace since the beginning of the 2000s, but the availability of professional investment teams is not yet widespread in Northern Russia.

Considering the variety of funding schemes, and the variety of institutions dealing with financial support, interviewees have pointed to a need to create a system of multifunctional centres on the principle of "one window", so that SMEs and start-ups could more easily orientate in the diversity of programmes and requirements to obtain financial support. To expand the support further and to increase innovation, more business incubators and business parks could be a way to build up networks as well as strengthen efforts to promote an entrepreneurial culture.

### **3.7.3 Investment climate for foreign capital**

Russia borders many countries and is, for example, cooperating with Norway, China and Finland, but other Nordic countries are also visible in the region. In some cases, the Russian business community experiences a lack of knowledge and trust from foreign investors. In this regard, economic sanctions also pose a barrier for international trade. However, local authorities confirm that the companies that decided to invest in Northern Russia are operating successfully. Russian counterparts would like to see and would welcome more international investor coming to the region. Stakeholders express a need for more forums and discussion meetings at the international level to create the dialogue and networks.

There are certain organisations under the regional government with the task of increasing the attractiveness of investment in the regions. For instance, Murmansk Region Development Corporation is acting as a mediator for the investors to help to implement investment projects. They provide equal assistance to local and foreign investors with consultation, advisory services, legal issues and business networks. It also connects SMEs with potential investors, which can be also foreign investors.

## 3.8 ALASKA

### Alaska investment climate at a glance

- Overall, a stable system for getting access to support and public and private finance in the start-up phase is in place.
- Community Development Financial Institutions (CDFIs) based on a public-private funding model serve an important function as loan providers in rural areas as a supplement to banks.
- Access to venture capital for early expansion and scale up is challenging.

In addition to oil, gas and mining, fishing and tourism are important sectors in Alaska. However, diversification of the economy remains a challenge. In Alaska's economic development strategy: 2017-2022: Entrepreneurship & Innovation there is an aim to position Alaska to thrive in a technologically advanced global economy; Finance and Investment has the purpose of maximising the productive use of capital for Alaska business expansion; Economic Development of Infrastructure focuses on building the transportation, energy and technological foundation for economic growth; Economic Development Capacity Building aims to strengthen the ability of Alaskan organisations to execute economic development initiatives that create jobs and investment; and Quality of Life to support Alaskan communities to attract and retain a quality workforce and set the foundations for economic well-being<sup>15</sup>.

### 3.8.1 Start-up climate

During recent years Alaska has been cultivating an entrepreneurial eco-system. It has been initiated at a grassroots level with both public and private actors organising and facilitating network meetings and co-working spaces. In Anchorage there is a weekly gathering based on the concept of the 1 Million CUPS bringing entrepreneurs together to discover solutions and engage with their communities over "a million cups of coffee". The concept is funded by the Ewing Marion Kauffman Foundation to educate, engage and inspire entrepreneurs around the United States.

There are some differences in the state of entrepreneurial ecosystems when comparing urban and rural areas in Alaska and this is also a focus for the strategic planning. Efforts are made as part of the Entrepreneurship and Innovation Goal to connect rural Alaska and Alaska Native communities to the entrepreneurial resources of the urban centres. In relation to the Business Development Goal there is a focus on facilitating tools and resources available to rural and Alaska Native businesses (CEDSA 2018).

For years Alaska has predominantly seen so-called lifestyle businesses satisfied with remaining small and not focusing on growth. But there are indications that this is changing and there are more start-ups looking for incubator support and accelerator programmes. One actor supporting the start-up climate is the Centre for Economic Development (CED) at University of Anchorage. It is a university-based partnership promoting economic diversity through entrepreneurship, community building, and

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<sup>15</sup> Northern Opportunity: Alaska's Economic Development Strategy 2017-2022: <https://northernopportunity.com/wp-content/uploads/2017/10/Final-Statewide-CEDS.pdf>

action-oriented strategy. CED is a programme of the University of Alaska Anchorage Business Enterprise Institute and is one of 52 University Centres designated by the U.S. Economic Development Administration. CED leverages resources to provide technical assistance in the form of information and data and implement projects and programmes that promote economic development across the state.

### 3.8.2 Access to finance

Sources of access to finance in Alaska include public grants, private equity from angel investors, venture capital funds and commercial loans from banks/financial institutions. According to a business survey carried out by Alaska Small Business Development Centre (ASBC) one in five businesses reported seeking new capital in 2017 and 66% indicated they were successful. Nearly one in three respondents reported that they plan to seek new capital in 2018 to finance new products/services, expand operations or invest in new equipment. Regarding the type of capital, the respondents were planning to seek, 21% responded from Bank/Financial Institution; 14% from Angel Investors; 11% from SBA Loan Guarantee; and 11% from Family & Friends. Most respondents reported receiving up to \$199,999<sup>16</sup>. In general, it is a challenge when there is a need for venture capital above this amount.

The main actors providing business finance for start-ups and SMEs are domestic public (e.g. Alaska Development and Export Authority) and private institutions (e.g. commercial banks, credit unions and private mission-based lenders). They provide loans, guarantees and bonds for start-ups. Another significant instrument is the Community Development Financial Institutions Fund, which was established by the Treasury Department in 1994 to promote community development in distressed urban and rural communities by increasing the availability of credit, investment capital and financial services available. To date, the Fund has financed six Community Development Financial Institutions (CDFIs) in Alaska. They operate as specialised community-based financial institutions providing financial products and services to people and communities underserved by traditional financial institutions, particularly in low-income communities. CDFIs include community development banks and credit unions, and non-regulated institutions such as non-profit loan funds or venture capital funds. CDFIs are private-sector organisations that attract capital from private and public sources. The seafood company

SeaAlaska has been part of establishing Spruce Roots CDFI and Haa Aani CDFI, two different CDFIs in Southeast Alaska. Alaska Growth Capital is a CDFI owned by Iñupiaq shareholders.

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<sup>16</sup> Alaska Small Business Development Center (2017). Alaska Small Business Survey. <https://aksbdc.org/wp-content/uploads/2018/03/2017AKSBDCSurvey032018-1.pdf>

Entities across Alaska that finance business development have been involved in commercial or mission lending (to promote community development) for many years. The systems are well established, but they tend to be conservative in the lending practices, which does limit the types of loans and investments they make.

### Alaska Growth Capital

Alaska Growth Capital (AGC) is a subsidiary of Arctic Slope Regional Cooperation (ASRC), owned by approximately 13,000 Iñupiaq shareholders, and is registered with the Community Development Financial Institutions Fund (CDFI Fund) as a Native CDFI and a Community Development Entity (CDE), providing critical financial services to rural and low-income communities. AGC is an alternative lending company founded in 1997 as Alaska's first Business and Industrial Development Corporation ("BIDCO") created to promote economic development and job creation by providing loans, investments, and management assistance to businesses.

AGC is a leading provider of business loans, utilising programmes offered by the U.S. Small Business Administration and the U.S. Department of Agriculture. AGC is a resource for companies that find it challenging to access finance from traditional lenders. It is a key actor in terms of providing loans to the rural and low-income regions in Alaska that are often underserved by the traditional banking system, including many Alaska Native Corporations.

Some venture capital funds such as Launch Alaska and the 49th State Angel Fund focus on Alaska to provide an evergreen source of capital to high-growth businesses, promoting entrepreneurship and fostering innovation, and creating jobs and economic benefit for Anchorage, strengthening Alaska's risk capital and entrepreneurial ecosystem, assisting early-stage and disadvantaged businesses and providing funding for start-ups in technology. Other venture capital funds such as Evergreen Capital focus on Alaska and rural communities in North America. Finally, some funds such as Alaska Venture partners LLC and PT capital are broader in their focus, choosing to fund the most promising ideas inside as well as outside Alaska. Since PT capital was established in 2013 the fund has raised capital for its inaugural private equity fund, Pt Arctic Fund I, LP from global investors, asset managers, and Alaska Native corporations. However, several professionals working with access to business finance have stressed the need for a venture capital fund with a higher budget.

In Alaska some public programmes disappeared during the recession, which, according to interviewees, has made it more difficult to receive soft funding today compared to previously. The aim of most grants is to support research and innovation with the aim of increasing economic outcomes. In some cases, it can be a challenge tying research grants to commercialisation, leaving a need for a more strategic approach to linking the new technology with a business plan. The Alaska Science and Foundation (ASTF) provides grants to improve the state economy, opportunities in the tech sector and to increase the state's science and engineering capabilities. There are examples of Alaskan companies being early adopters of technology, e.g. in the use of satellite images and telemedicine technology.

There are different support mechanisms and funds to support business development in rural areas in Alaska. One of these is the Alaska Minority Business Development Agency (MBDA) which provides a free service and consulting to Alaska Native corporations, tribal enterprises, and other minority-owned firms. They support the success and financial growth of Alaska Native corporations, tribal enterprises, and other minority-owned firms by offering them management and technical assistance. MBDA serves eligible firms that want to grow, scale, and increase capacity by providing access to contracts, consulting, and capital through a nationwide network of business centres and strategic partners.

### 3.8.3 Investment climate for foreign capital

Foreign capital investments have primarily been in the large-scale industries extracting oil, gas, and minerals. These investments are major drivers of economic growth in Alaska, with several local service and construction companies operating as part of the supply chain. Currently, there are generally no investments beyond those in the natural resource industries as it is local banks generally providing the access to finance for the companies taking part in the supply chain activities.

## 3.9 NORTHERN CANADA

### Northern Canada investment climate at a glance

- Different programmes are in place to promote entrepreneurship, including within specific areas such as cold-climate technologies.
- Most banks are in the cities and in the south, entailing a lack of banks in the region, but the main challenge in terms of obtaining loans is that the threshold is higher in banks in the north.
- Access to private venture capital is a challenge. Efforts are underway to establish a regional venture fund with support from a national angel investor association.

To address the characteristic features of Northern Canada, the Canadian government in 2007 developed the Northern Strategy. The strategy led to a new development agency, Canadian Northern Economic Development Agency (CanNor), which was established to support northern business development<sup>17</sup>. The agency has one office in each of the three territories and works with companies, industry and communities through different programmes to create a sustainable economic business climate.

The three northern territories, Yukon, Nunavut and Northwest, have separate economic development strategies. The strategies have a common emphasis on the importance of more cooperation between

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<sup>17</sup> Government of Canada, (2018). Sustainable Economic Growth Strategy. [http://international.gc.ca/world-monde/issues\\_development-enjeux\\_developpement/priorities-priorites/segs-sced.aspx?lang=eng](http://international.gc.ca/world-monde/issues_development-enjeux_developpement/priorities-priorites/segs-sced.aspx?lang=eng)

public government, private investors and companies and the local communities and First Nation communities. It is stated that the local and territorial economy needs to be more connected to the natural resources, especially mining and energy<sup>18</sup>.

### 3.9.1 Start-up climate

Start-ups principally arise within the tourism and service industries and operate as “lifestyle” companies for people wanting to stay in the area. Within rural or far northern areas, it is generally more challenging to start a business than in urban areas. Some of the issues are risk and debt averseness, lack of entrepreneurial networks, and insufficient knowledge about the possible ways to secure funding. The threshold can also be high for businesses in the north where predictable business plans and collateral are more difficult to achieve.

In some areas, organisations are trying to meet this challenge by providing grant-based funding to encourage young people to start a business. An example of this is the national non-profit organisation Futurpreneur, partly funded by the national and provincial governments as well as several corporate banks. One of their initiatives, ThriveNorth, is trying to make young rural entrepreneurs in the north of British Columbia, bordering on Yukon, “bankable”. By providing grants and collateral-free loans at good interest rates for start-ups they provide instruments and capital to overcome the threshold of starting a business. Futurpreneur also cooperates with other credit institutions and is in a partnership with the state-owned Business Development Bank of Canada (BDC), which, with the security of the Futurpreneur’s mentorship programme, can provide bigger loans. The BDC is partly funded by the national government and bridges the gap of access to capital by providing venture capital, growth & transition capital and growth equity exclusively to entrepreneurs to lower criteria of risk assessment and collateral.

A joint ambition from the Yukon government and the Yukon business community has been to “put Yukon on the map” by diversifying the economy and focusing on northern innovation and technology. One example of this is the Cold Climate Innovation programme (CCI) located at the Research Centre of Yukon College. The programme is focused on funding the development, commercialisation and export of sustainable cold-climate technologies and related solutions for subarctic regions. In 2015 CCI supported 43 projects with \$3.6 million in cash and in-kind services. Through partnerships the Centre was able to leverage their budget and win the 2016 Startup Canada entrepreneur support award. New companies focusing on technology and innovation are now appearing even though the region still needs to improve internet connectivity to attract more companies within the technology sector.

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<sup>18</sup> Nunavut Economic Forum (2013); Yukon Government (2012; 2014); Government of Northwest territories (2013).

### *Support from the Cold Climate Innovation Program*

Kryotek Arctic Innovation Inc. is an example of a start-up that has developed with advisory and grant-based support from the Cold Climate Innovation programme (CCI). The company creates products in response to climate change, industrial development and mineral exploration challenges, designing and building light-weight research-grade drill rigs, permafrost thaw sensors and machine-learning software that predicts permafrost and ice thaw.

During the past year Kryotek has won or been shortlisted for several regional, national and international innovation awards, including the 2018 Startup Canada North Region Innovation Award. The company also received funding from Yukon Government sources to expand marketing capacity and investment availability.

Today Kryotek has 10 employees. They have become the importer and Canadian distributor for Beaded Stream LLC – an Alaskan company that manufactures world-class permafrost monitoring equipment. They intend to begin exporting their technology from the Yukon to the global market in 2019.

The territorial governments provide grant-based funding opportunities for the northern regions. National programmes targeting the north are managed through CanNor. For example, the programme Strategic Investments in Northern Economic Development (SINED) provides funding to “for profit” businesses, SMEs and “not-for profit” organisations with projects aimed at economic benefits for the region. The programme Northern Aboriginal Economic Opportunities Program (NAEOP) is targeting northern Aboriginal communities to increase the participation of businesses in economic opportunities. The programme was created in collaboration with indigenous communities and governments.

Other national programmes are focused on research (The Industrial Research Assistance Program (IRAP)) and targeting women entrepreneurs (Women Entrepreneurship strategy). The Women Entrepreneurship strategy is centred on four key action areas: helping women-led businesses grow; increasing access to capital; improving access to deferral business innovation programming; enhancing data and knowledge. It was started to improve upon the statistics showing that only 16% of SMEs in Canada are majority women-owned and only 10% of high-growth firms are owned by women. Women entrepreneurs face more barriers accessing capital and are less likely to seek equity financing, and more likely to be rejected when they do. The strategy aims at doubling women in business in Canada by 2025 through investment capital, advice and creating networks<sup>19</sup>.

### **3.9.2 Access to finance**

Around half of the population in the three territories consists of different indigenous peoples. Through land claims and self-governance agreements the various indigenous peoples have authority to manage their lands and resources. One example of how this is managed is the Gwich'in Development Corporation, which is a business subsidiary of the Gwich'in Tribal Council. The development cooperation is fully owned by the council and is created to develop business activities in the Gwich'in Settlement Region of the Yukon and Northwest Territories, as well as to help Gwich'in businesses

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<sup>19</sup> Government of Canada (2018). Women Entrepreneurship Strategy. <https://www.ic.gc.ca/eic/site/107.nsf/eng/home>

with funding, training and business opportunities. This is achieved through forming partnerships with experienced companies that are interested in resources and other investment opportunities within the Gwich'in settlement areas. The corporation currently has 10 operating subsidiary companies within the industries construction, real estate, hospitality, transportation and oil and gas.

The major banks in Canada generally have high demands for companies to have a sustainable and predictable business plan including collateral and a financial record to support the loan. Banks are primarily located in cities in the south and are generally more hesitant to loan to projects in the north because of the estimated higher risks. The collateral requested from the banks can therefore be higher regarding loans for projects in the north. This also includes companies and capital from the north, which, because of the cost of loans, would rather invest their capital in the south. Therefore, in Northern Canada there are several public institutions available to bridge the obstacles of receiving funding from banks. Favourable funding (loans and grants) are available from the territorial governments, from the Canadian Northern Economic Development Agency and from the national government. Funding can also be received indirectly from the national government through the state-owned Business Development Bank of Canada or other catalyst organisations partly funded by the state or territorial government. However, the challenge is that the amount of capital is low and does not enable businesses to take the next step to grow or scale up.

The oil, gas and mining sectors are big economic drivers in the region. Big companies outside these sectors are very limited. The demand for venture capital investments to support SMEs' scale-up activity is limited in Arctic Canada. Some of the previously mentioned new companies focusing on northern innovation or technology are now becoming revenue-producing and have ambitions to grow. For these companies that want to move beyond government funding and take the next step, access to private equity is relatively low. This is both because of a shortage of angel investors and because of a financial structure that is unaccustomed to the performance and exits of technology companies. Even though loans to some extent are available at the traditional banks it can be difficult receiving loans with a business plan stating exit after 10 or more years. Companies wanting to grow therefore often seek investments outside the region, which moves the company and capital from the region and in the long term makes it more difficult to attract other companies.

In cooperation with Canada's national angel association (NACO), to increase the number of angels in the region, the Yukon government is looking into creating a regional angel fund. Other important steps are to focus on growth financing and connect local companies with private investment networks and to create a network for business support providers to share knowledge about how other Arctic territories work to support access to business finance. Interviewees in Northern Canada have highlighted a need for greater coordination between different forms of grant initiatives and other financial instruments as well as education and knowledge transfer both to financial institutions and to local communities as being important to make funding more accessible for the northern regions.

### **3.9.3 Investment climate for foreign capital**

Extraction of oil, gas and minerals are the main markets that now attract foreign direct investment in Northern Canada. These markets are successful and are built up by American or multinational companies. Arctic Canada has many opportunities for a thriving investment climate with its rich oil and

gas deposits, diamond mines and nature amenities attracting tourists. Because of its unique environments, great demand is also placed on creating a balance between development and environmental protection. It is therefore of importance that companies deciding to stay or invest in the region understand how the space and geography of the Arctic works, and what is required in terms of environmental assessment studies and permits. The long-term resource-extraction projects are, also politically, considered an opportunity for Northern Canadian companies to derive more economic benefits as subcontractors in future.

## 4. Transnational and Cross-border Cooperation

This chapter introduces intergovernmental and cross-border organisations in the Arctic, their strategies and funding programmes. It demonstrates that while the European Union cooperation programmes have implemented business development projects for the past two decades, the strategic focus by intergovernmental organisations on business development in the Arctic has grown during recent years. The Arctic Council started out primarily focusing on environmental protection. Since then the agenda has broadened. During the 2013-2015 Canadian chairmanship of the Arctic Council, the Arctic Economic Council was established as an independent organisation representing Arctic businesses. The Nordic Council of Ministers' (NCM) Arctic Cooperation Programme was previously also primarily concerned with environmental and cultural protection in the Arctic, but from 2012 onwards it has also included a focus on business development. A similar development has taken place at the level of the EU that launched the strategy "An integrated European Union policy for the Arctic" in 2016. The strategy in addition to activities focused on counteracting climate change and safeguarding the environment has enhanced the focus on business development and access to finance.

Programmes to support cooperation projects for business development through "soft" grants are in place principally through the EU cooperation programmes and the Nordic programmes. The NCM Arctic Cooperation Programme is open to including Northern Canadian and Alaskan participants. However, transnational and cross-border business development projects are today primarily implemented in the rest of the Arctic. Many transnational and cross-border collaboration projects have been implemented during the past two decades and relations have been built between institutions, organisations and SMEs across borders. In combination with regional political constellations such as NORA (North Atlantic cooperation) and the NSPA (Northern Sparsely Populated Areas) a strong basis has been built for deeper cooperation in areas such as infrastructure development, education, and access to finance for SMEs. The latter is currently in process with the NSPA regions that are exploring opportunities to establish an Arctic Investment Platform that will create stronger alignment between public and private investment funds across the borders.

The transnational and cross-border cooperation projects concerned with business development are managed by business support organisations, cluster organisations, business incubator environments, education institutions, public authorities, etc. that include businesses in activities. Common broad topics for collaboration across the Arctic include place-based bioeconomy, tourism/destination development, cultural industries (including projects focused on the indigenous Sami population) and capacity building in relation to large-scale industries. The transnational and cross-border cooperation programmes demonstrate added value, particularly in solving mutual challenges through the exchange of knowledge and experiences and through ensuring critical mass, which is especially relevant with respect to strengthening the international competitiveness of businesses.

### 4.1 ARCTIC COUNCIL

The Arctic Council is the leading intergovernmental forum promoting cooperation, coordination and interaction in the Arctic. The Arctic Council is the only organisation that has all eight Arctic States as members and additionally six organisations of indigenous peoples as equal partners. To accommodate the growing interest for Arctic issues, several non-Arctic states and organisations have been granted

observer status within the Arctic Council. The number of observers totals 39 plus the EU as a de facto observer.

The Council's work originates from collaboration on environmental issues but has, over time, been extended to include other subjects such as sustainable economic development and the populations' living conditions and well-being. The Arctic Council has six permanent Working Groups engaged in different themes.

The Arctic Council has concluded three legally binding agreements between the Arctic States:

- Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (signed 2011).
- Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (signed 2013).
- Agreement on Enhancing International Arctic Scientific Cooperation (signed 2017).

The Arctic Council has one funding instrument, called the Project Support Instrument (PSI). The PSI is managed by NEFCO. PSI funding focuses on smaller pilot and demonstration activities, primarily in the Russian Federation, in the fields of combating climate change, hazardous waste management and enhancing biodiversity.

#### **4.2 ARCTIC ECONOMIC COUNCIL**

The Arctic Economic Council (AEC) is an independent organisation created to facilitate Arctic business-to-business activities and responsible economic development. Through the sharing of best practices, standards and innovative Arctic solutions the AEC is the primary forum for interactions between the Arctic Council and the wider circumpolar and non-Arctic business communities. The AEC's establishment was facilitated by the Arctic Council during the 2013-2015 Canadian chairmanship. The AEC is open for membership applications from corporations, businesses, partnerships and indigenous groups that have an economic interest in the Arctic.

The Arctic Economic Council's work is driven by Working Groups established on sectors and based on the organisation's overarching themes. The current five Working Groups of the AEC involve: Infrastructure; Maritime Transportation; Responsible Resource Development; Connectivity; Investment and Infrastructure; and Energy.

#### **4.3 NORDIC COUNCIL OF MINISTERS' ARCTIC POLICY**

The Nordic Council of Ministers (NCM) established the Arctic Cooperation Programme in 1996, which has since been a key tool for supporting projects and programmes in the Arctic. The seventh programme is in place for the period 2018-2021. It is focused on meeting the specific needs in the Arctic and contributing to sustainable development in accordance with the UN 2030 Agenda and the UN's 17 sustainable development goals. The programme has four priority areas to support sustainable development in the Arctic based on the four P's: Planet, Peoples, Prosperity and Partnerships.

The programme budget is divided into two parts, a budget for cooperation projects based on annual calls for tenders, and a budget for politically prioritised projects. The cooperation projects are required to include a minimum of three Nordic territories. In addition to this, the other Arctic states, the USA, Canada and Russia, can participate in projects. Political priority projects are nominated by the governments directly. For example, the “Arctic Business Analysis” was commissioned by the Arctic Expert Committee as a politically prioritised project, and co-financing of Norwegian participation in the EU Interreg project Visit Arctic Europe has also been politically prioritised.

The Arctic Expert Committee offers advice to the Ministers for Cooperation and the Nordic Cooperation Committee on matters relating to the Arctic, and it makes decisions on the allocation of funds from the Arctic Cooperation Programme. The Committee is made up of representatives of the Nordic governments, usually from the respective Ministries of Foreign Affairs and representatives from the autonomous territories.

Historically, most of the budget has been used for projects related to climate and environment. The Programme has also from the outset been concerned with improving the quality of life for the indigenous peoples in the Arctic and to promote social and cultural development for the Arctic people. Based on an enhanced political focus to strengthen the conditions for economic development in the Arctic, business development was first introduced with the Cooperation Programme for the period 2012-2014. The current Programme is focused on business development through the focus area of ‘Prosperity’.

#### **4.4 NORA - NORTH ATLANTIC COOPERATION**

NORA is an intergovernmental organisation under the regional cooperation programme of the Nordic Council of Ministers and it brings together Greenland, Iceland, the Faroe Islands and Coastal Norway. The organisation’s initiatives include strengthening cooperation between the business sector and research and development bodies across national borders. NORA is funded by the Nordic Council of Ministers with supplementary contributions from the four participating territories.

Once per year, NORA grants support to collaboration projects that include partners from at least two of the four NORA territories. It is possible for anyone to apply, including companies, public institutions and individuals. Projects address one or more of NORA’s identified areas of priority as defined in their strategy. NORA’s Strategy Programme 2017-2020 has the following focus areas: creative industries, green energy, bioeconomy, sustainable tourism, ICT, welfare services and maritime safety.

In 2009, NORA commissioned the OECD to conduct a Territorial Review of the region. It was the first in-depth political-economic analysis that considered the region. NORA’s goal was to use the OECD review to define NORA as one region and to provide a basis for further strengthening the cooperation. One of the outcomes was establishing an independent Think Tank that each year presents recommendations on a given topic. In 2017 this concerned the need for common requirements for the growing cruise industry, and in 2018 the Think Tank is focused on the potentials for the North Atlantic food industry<sup>20</sup>.

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<sup>20</sup> <https://nora.fo/think-tank-recommendations>

## 4.5 NSPA – THE NORTHERN SPARSELY POPULATED AREAS COOPERATION

The NSPA was established as a collaborative network in 2004 to raise awareness of the common issues and circumstances facing the sparsely populated northern regions within EU institutions, to influence EU policy and to provide a platform for best practice. The NSPA includes the four northernmost counties of Sweden (Norrbotten, Västerbotten, Jämtland-Härjedalen, and Västernorrland), the seven northernmost and eastern regions of Finland (Lapland, Northern Ostrobothnia, Central Ostrobothnia, Kainuu, North Karelia, Pohjois-Savo and South Savo) and Northern Norway (Finnmark, Troms and Nordland).

The Accession Treaty for Sweden and Finland to join the EU in 1995 included a special provision to promote the development and structural adjustment of regions with low population densities (8 persons per km or less), which included additional funding targeted to these regions (in 2014-2020 this amounts to 305.3 million EUR for Finland and 206.9 million EUR for Sweden). In Norway the northernmost municipalities of Troms and the entire county of Finnmark have some specific measures within the tax and transfer system including a 0% rate for employer social contributions (compared to a rate of 14.1% in the southern part of the country)<sup>21</sup>.

In 2016, the OECD published a Territorial Review for the NSPA. The review will be used as a basis for post-2020 Cohesion Policy discussions in the EU and to identify opportunities for the regions to strengthen collaboration. Maintaining the additional allocation of the EU Structural Funds is a significant priority for the NSPA network. The OECD pointed to opportunities for developing a collective approach amongst the NSPA regions to also influence the sectoral policies of national governments, so they can be better tailored and integrated to the unique challenges and opportunities facing the NSPA. Strengthening this place-based/smart specialisation approach to policies would allow the regions to better exploit complementarities (e.g. between food production and tourism, ICT and service delivery, and between urban and rural areas). One of the recommendations of the OECD involves encouraging a more coordinated approach between NSPA regions to better support for SMEs and start-ups (for example by addressing barriers such as access to finance) and facilitate access to external markets<sup>22</sup>.

In 2018, the NSPA regions have started to investigate potentials for establishing an Arctic Investment Platform to improve access to finance for start-ups and SMEs. Based on initial workshops, the main investment gap relates to the scaling up of SMEs. The Arctic Investment Platform involves plans to align public funds as well as private capital. During autumn 2018 a feasibility study has been conducted, and preliminary priorities for developing the policy mix to support scale-ups with respect to both technological and non-technological innovation include:

- Training and entrepreneurship to become more focused on upscaling;
- Regulatory and legal issues: the focus on SMEs, industrial upscale and demonstration unavoidably calls for better approaches to the legal boundaries of the public support; and

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<sup>21</sup> OECD (2016), OECD Territorial Review: Northern Sparsely Populated Regions, OECD Publishing, Paris. Available at: <http://www.oecd-ilibrary.org/regions>.

<sup>22</sup> Ibid.

- Governance – the role of intermediaries and Research & Innovation Infrastructures (RIIs)/bundling funding stream, e.g. IPR configuration and rewarding models<sup>23</sup>.

The EIB is also involved in current discussions to establish an investment platform.

## 4.6 EUROPEAN UNION ARCTIC POLICY

The Joint Communication, “An integrated European Union policy for the Arctic”, adopted by the European Commission and the European External Action Service (EEAS) in April 2016, sets out a new EU strategy for the region, building on earlier Communications in 2008 and 2012. It expresses the intention of the EU to step up its existing action and engagement in the Arctic by pursuing a series of activities focused on counteracting climate change, safeguarding the fragile Arctic environment, unlocking the potential of the region for sustainable development and strengthening international cooperation by deepening regional and multilateral cooperation. The Communication suggests that the European Arctic area is suffering from underinvestment and highlights the importance of investment in infrastructure together with research, science and innovation. It indicates that European company investment could help to advance the sustainable development of the region, possibly aided by the European Structural and Investment funds and initiatives under the Investment Plan for Europe.

### 4.6.1 Arctic Stakeholder Forum

The Arctic Stakeholder Forum (ASF) was established by the Joint Communication on “An integrated European Union policy for the Arctic” from the European Commission and the European External Action Service in April 2016. It comprises the national governments of Denmark, Finland, Sweden, Norway and Iceland, the regions of North and East Finland, North and Middle Norrland in Sweden and Northern Norway, Greenland, the Faroe Islands and the Saami Council. The ASF was established as a temporary forum for consultation, involving EU institutions, Member States and regional and local authorities in a consultation process to identify investment priorities and ways of better streamlining EU funding programmes in the future. The ASF launched its first report in January 2018<sup>24</sup>. The report proposes ways of improving the functioning of EU programmes in common areas of interest:

- Programmes should be more concentrated on the most pressing problems and on the main opportunities for development.
- Closer cooperation is needed concerning the use of research infrastructure, as well as across borders and between programmes.
- There should be increased coordination between programmes and with national and international initiatives and funding sources to reduce duplication of effort and to increase effectiveness. Increased effectiveness could also be achieved by giving more weight to multidisciplinary, cross-sectoral and international approaches.

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<sup>23</sup> Idea Consult (2018) Feasibility Study: Arctic Investment Platform, Inception Report September 28, 2018. Regional Council of Lapland, Finland.

<sup>24</sup> European Commission (2018). Summary report of the Arctic Stakeholder Forum consultation to identify key investment priorities in the Arctic and ways to better streamline future EU funding programmes for the region.

#### **4.6.2 Arctic cooperation – Five European Cooperation Programmes**

The European Cooperation programmes operating within the Arctic have decided to work more closely together. The cross-programme collaboration is encouraged and mandated by the European Commission and the EU High Representative in their Joint Communication “A new integrated EU policy for the Arctic”, published in April 2016. Ultimately, the collaboration should provide input for establishing research and investment priorities in the European Arctic.

The cross-programme collaboration is coordinated by the Northern Periphery and Arctic Programme. Participating programmes are Interreg Botnia-Atlantica, Interreg Nord, Kolarctic CBC, and Karelia CBC. To ensure a high complementarity with other policy initiatives and stakeholder organisations operating in the Arctic, these organisations will be consulted or involved where appropriate.

The programme managers have developed a joint roadmap of how they will work together. There are three main ways which they collaborate. First, the programmes organise common events, bringing together project recipients. The theme of a recent event was developing thematic clusters of projects from the participating programmes. Second, through the NPA programme, funding is available for coordination of projects, which provides the opportunity for projects implemented in different programme regions to collaborate. Third, they have established the Arctic Award project competition, with 2 Arctic themes each year. The award granted to one selected project initiative in each theme. In 2017, the Arctic Award was granted to the Interreg Nord co-financed project Visit Arctic Europe and Interreg Botnia-Atlantica co-financed project Transalgae, and in 2018 to the NPA co-financed project RYE Connect and the Interreg Botnia-Atlantica co-financed project WindCOE.

## Visit Arctic Europe

Visit Arctic Europe (VAE) is a project managed by the regional tourist boards Finnish Lapland Tourist Board (Lead partner), Northern Norway Tourist Board, and Swedish Lapland Visitors Board. Previously, there had been no collaboration between the organisations which were competing to attract tourists to their respective regions. The tourist boards recruited a total of 90 enterprises that participated in the first project period. In 2015-2018, the VAE project has had four areas of focus: networking, R&D, accessibility and marketing.

*Networking:* The purpose of this area of focus was to build trust between enterprises, bringing them together for seminars and workshops. This involved discussions about developing new package solutions for tour operators and of working with sustainability. Examples of collaborations that have formed include ski resorts that have started collaborating across the border, and elsewhere tourist seasons that differ across the border and the enterprises in the two destinations thus finding ways to share staff.

*R&D:* A consortium of the universities based in the three regions won the call for tender to deliver R&D services. This included a study on future visitor trends, a study on digital trends to clarify where visitors seek information, and a study on cross-border obstacles for destination development.

*Accessibility:* This area of focus was concerned with air traffic and public transportation across borders. For enhancing international airline traffic to the region, toolkits were delivered by the project partners to 18 airports. A model was also developed for how public transport could take visitor needs into consideration. Ideally a sort of cross-border hop-on, hop-off route will be established. The next step is that national transport authorities will meet to discuss the issue.

*Marketing:* This part of the project has focused on attracting more international tour operators to the region. Prioritised markets were the UK, Benelux, and German-speaking countries, and secondary markets China and the US. For the secondary markets the national tourist boards created a consortium, developed a marketing plan and implemented it. For the primary markets an invitation and description of the destination was sent to 300 tour operators, and, ultimately, 12 tour operators signed an agreement with the project partners to market the destination also after the end of the project period.

The focus of VAE phase 2 is the development of year-round sustainable tourism, enhancing overnight stays from selected market areas, and to continue efforts to develop cross-border public transport. A total of 125 enterprises are participating in phase 2. The first phase resulted in more than 671,000 overnight stays by international visitors and an approximate additional income for companies involved of 77 m. EUR.

### *Rural Youth Entrepreneurship - RYE Connect*

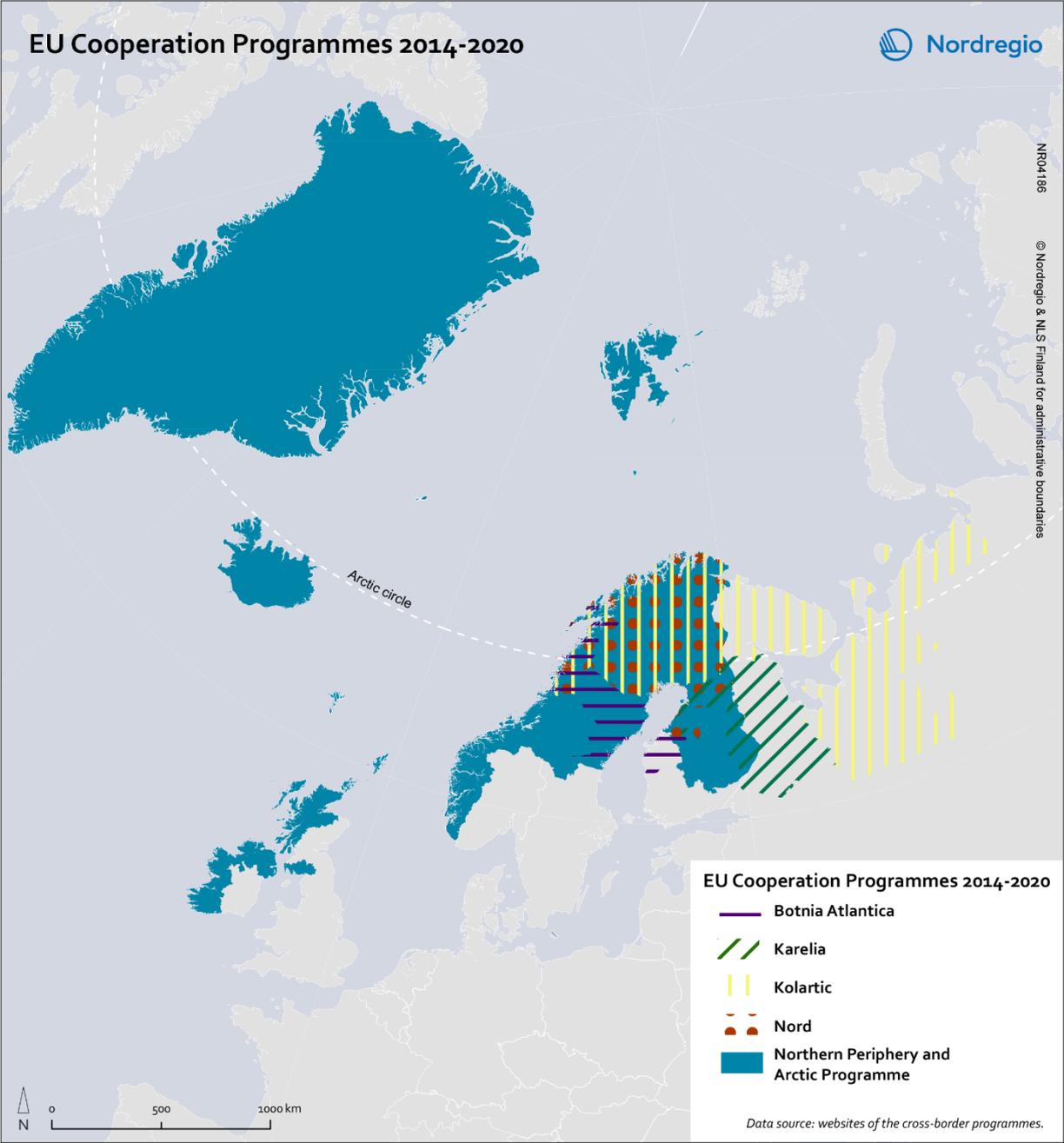
The Rural Youth Entrepreneurship project “RYE Connect” was implemented during the period 2015-2018. Kajaani University of Applied Sciences in Finland and Greenland Business were partners in the project that also included two partners in Northern Ireland. As a result of the project an online business portal was built up where young entrepreneurs can access tools and online training programmes, and they can connect with a network of mentors and investors.

During the project period many young people have participated in workshops hosted across the participating regions. They have worked with business plans comprising different types of ideas involving, for example tourism, food, and ICT. At the workshops the young entrepreneurs have been trained in pitching their ideas, and at a final event in Finland a pitch competition was organised.

Two Finnish entrepreneurs who have started up an escape room in Kajaani won the competition. They did not receive direct private investments, but they were given support by a local bakery, where they could rent a space for a reasonable fee. In addition, they arranged with companies to receive pre-payment for organising company events at the escape room, which reduced the risk. The start-up benefited from mentoring advice from successful entrepreneurs who want to see smaller companies in the area do well. A key finding from the project is that this type of mentoring and support seems to be a good method to help start-ups in remote areas.

All the EU Cooperation Programmes covering the Arctic include business development as one of their focus areas. There are variations between which sectors project interventions cover. However, common to all programmes are the areas of place-based bioeconomy, tourism and culture. Business development and public authority capacity building in relation to large-scale industries is another topic, which, for example, the NPA and Botnia Atlantica programmes, are supporting. Projects in most cases support collaboration between organisations and businesses across borders to help expand businesses beyond a small local market and to attract demand. In other cases, projects focus more on competence development and knowledge exchange. In different forms, the programmes have been in place for approximately 20 years, and programme managers emphasise that projects have moved from developing relations to creating more concrete results and business development.

Figure 4.1: EU Cooperation Programmes 2014-2020



For the Karelia CBC and Kolarctic CBC programmes there have been delays in the current programme period due to delayed ratification of the financing agreement by the Russian State Duma, which took place in July 2018. However, several projects have been granted funding and initiated in the autumn of 2018. An example of an ongoing project involves cooperation between Finnish and Russian partners to export reindeer meat to EU markets and food tourism destination development. In the previous programme period, a Kolarctic CBC co-financed project facilitated the establishing of

a wind turbine park in Nenets, Russia, where SMEs from Norway and Finland contributed with know-how to the project. In the Karelia programme region decreasing trade between the countries, for example, due to the decreased value of the Russian Ruble, can be observed in the projects that are implemented. Studies to identify how to open-up trade once more are being carried out, e.g. a study on how to work together in the field of e-commerce, which is a potential new area for cross-border cooperation.

## 5. International Financial Institutions

This chapter provides an overview of international financial institutions and financial instruments in place in the Arctic. Both the European Investment Bank (EIB) and the Nordic Investment Bank (NIB) provide opportunities to improve framework conditions for SMEs through co-investments in infrastructure projects. For this purpose, NIB has had earmarked funds for a 3-year period to projects in the Arctic. The Nordic financial institute NEFCO has a focus on sustainable infrastructure development in Russia, and it provides opportunities for “soft” funding for internationalisation of relevance for SMEs that wish to expand to a territory outside the EU/EFTA. Within the EIB Group several measures are in place to support access to finance for SMEs, for example, the COSME programme which encourages financial intermediaries to develop their portfolio/SME offer of financial intermediaries. The EIB group provides the strongest possibilities today, through financial intermediaries, for improving SMEs’ access to finance, and mechanisms are to some extent being utilised in the Nordic Arctic today. There is no international financial institution covering all the Arctic.

### 5.1 EUROPEAN INVESTMENT BANK

The EIB Group has four overall priorities: innovation and skills; SMEs; infrastructure; climate and environment. Regarding support for SMEs, they primarily work with EU Member States and public investment promotion institutions to develop innovative products and partnerships that facilitate access to finance for SMEs at all stages of their development. Together, the EIB and the European Investment Fund (EIF) mobilise financial and technical expertise to act as a catalyst for investment.

The EIB has provided loans to several banks and public intermediaries (e.g. guarantee schemes) in the Nordic countries, where some of them also operate in the Arctic, but they do not have a specific focus or programmes targeting the Arctic. The EIB has a minimum threshold of 20 million EUR.

The EIF develops and offers targeted financial products to intermediaries, such as banks, guarantee and leasing companies, micro-credit providers and private equity funds. They are responsible for implementing the EU COSME Financial Instruments, which improves access to loans and equity investments for SMEs. It is a scheme that requires financial intermediaries to develop their portfolio, e.g. to expand to new sectors or new investment approaches.

The EIB does not have a mandate to operate in Northern Canada or Alaska, but they are able to enter joint financing programmes with intermediaries located there. As this analysis has demonstrated, the opportunities offered by EIB and EIF are being utilised by some intermediaries. The EIB also takes part in ongoing discussions in the Northern Norway, Northern Sweden and Northern Finland cross-border region to establish an Arctic Investment Platform.

### 5.2 NORDIC INVESTMENT BANK

The Nordic Investment Bank (NIB) is an international financial institution. The NIB was established by the five Nordic countries in 1975 to overcome investment barriers and attract commercial lending. In 2005, the three Baltic countries joined NIB on an equal footing with the original members. The NIB offers loans to intermediaries.

In 2015, the NIB launched the Arctic Financing Facility to reflect the priorities by the Bank's member countries to lend to sustainable development projects in the Arctic. Three years later, NIB has disbursed more than 500 million EUR, which was allocated for the Arctic Financing Facility, and financing in the Arctic has again become part of NIB's regular operations. Projects in the Arctic have primarily involved infrastructure development, for instance the construction of railways, roads, and ports, as well as the development of renewable and biomass power generation and transmission capacity. On average 70% of lending by NIB is for private-sector development projects<sup>25</sup>.

NIB participates in two Northern Dimension partnerships, the environmental partnership (NDEP) and the partnership on transport and logistics (NDPTL), which are developing project pipelines in their respective areas, with a strong focus on the Arctic.

### 5.3 NEFCO

The Nordic Environment Finance Corporation (NEFCO) is an international financial institution established by the Nordic Governments in 1990. NEFCO provides results-based green financing, which includes loans, venture funds and grants. With its environmental focus, NEFCO has been engaged in Working Groups under the Arctic Council, and they manage the Arctic Council Project Support Instrument (PSI).

Russia is a priority area, e.g. through NEFCO's participation in the Northern Dimension Environmental Partnership. The bulk of the funds are allocated to municipalities. Projects often involve establishing waste management or renewable-energy facilities, and in some cases Nordic private sector companies are involved in these projects.

NEFCO also manages the fund NOPEF, which offers grants for feasibility studies for environmental profile SMEs that wish to expand their business to a territory outside EU/EFTA. In the Arctic context it is of relevance to Nordic SMEs with an interest in expanding to Russia, Canada, Alaska, the Faroe Islands and Greenland.

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<sup>25</sup> Information from NIB



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