Innovation

in the Nordics
1973–2023

Nordic
Innovation

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in the Nordics
1973–2023

50 YEARS

Nordic Innovation

Preface

For 50 years, Nordic Innovation has connected innovative minds from the business sector, academia and politics with the power of Nordic cooperation. Since the Nordic Council of Ministers established the Nordisk Industrifond (Nordic Industry Fund) in 1973, the Nordic countries have witnessed an era of innovation that has placed several of them at the top of the list of the world's most innovative countries.

Since 1973, Nordic Innovation has supported thousands of innovation projects and worked systematically on networking and collaboration across the countries. Our purpose has evolved over time but has always been to facilitate cooperation on innovation among the Nordic countries.

This book celebrates an era of Nordic cooperation and innovative power by highlighting what we have achieved together. It is a testimony to our past and provides a glimpse into a future powered by Nordic innovation.

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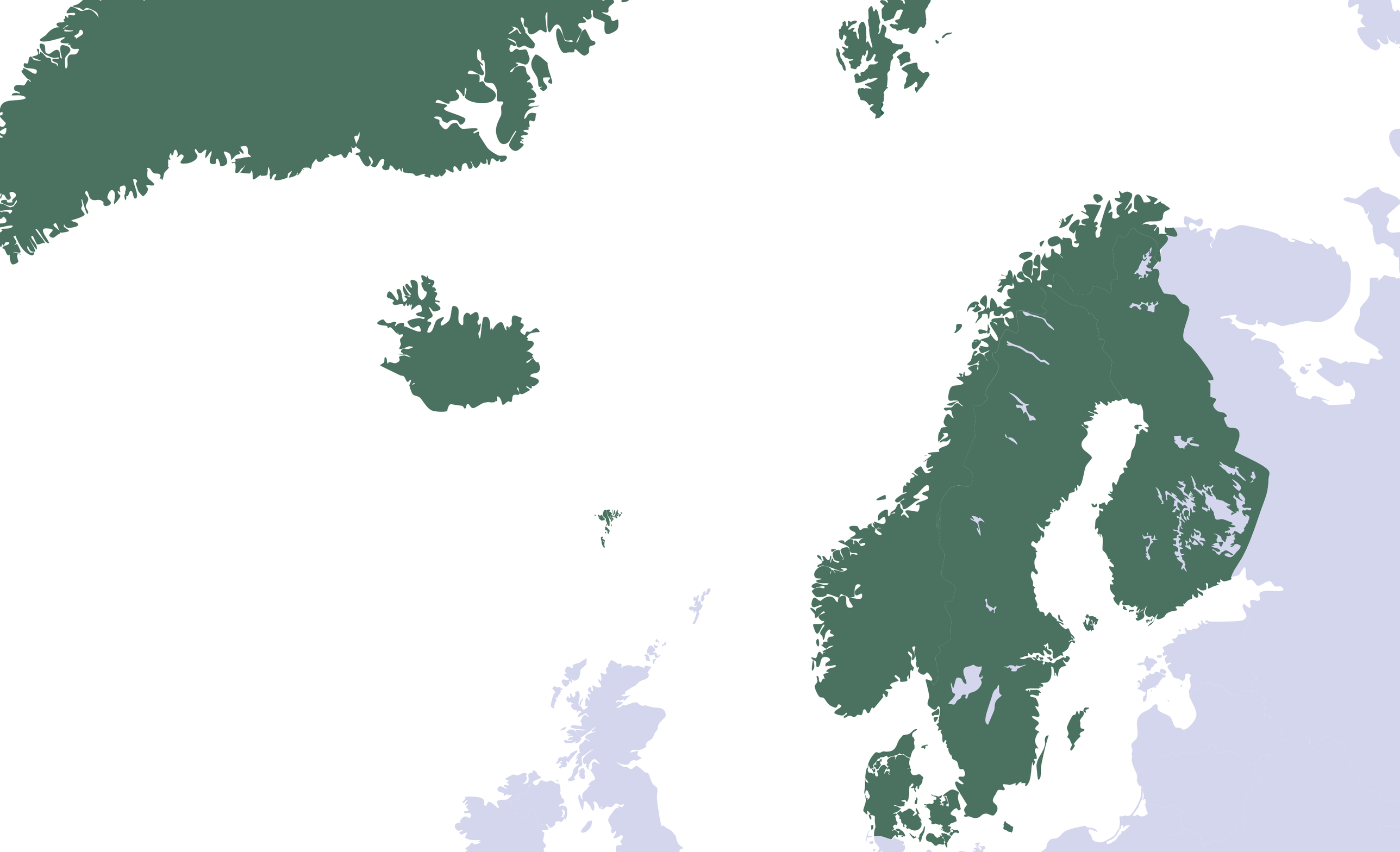
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"The willingness to cooperate has never changed."

Learning from the past to improve the future

"Who controls the past controls the future", wrote George Orwell in his book "1984". The aim of this 50-year anniversary book is not to control the past, but to learn from the past to improve the future.

By going through the files and seeing the kind of activities that Nordic Innovation and the former Nordisk Industrifond have engaged in and supported, it is striking to see how priorities and modus operandi have changed over the last 50 years.

In the 1970s and until the mid-1980s, focus was on using enabling technologies such as ITC in different ways. From the mid-1980s and for the next 20 years, Nordic Innovation was primarily involved in research-based innovation projects. From 2015, the main priority has been projects that focus on sustainability and system innovation with the ambition to change entire value chains and make changes on a societal level. This resonates well with the vision for Nordic cooperation of the current Nordic Prime Ministers: making the Nordic region the most integrated and sustainable region in the world.

In this book we try to illustrate how Nordic Innovation has evolved over the last five decades. This journey has gone hand in hand with how the Nordic region has developed. Much has changed over the decades but there is one constant in the book: The willingness to cooperate has never changed.

We hope you will enjoy reading this book and that it will inspire you to be part of shaping the next chapter of Nordic cooperation.

Svein Berg
Managing Director
Nordic Innovation



Our innovative history lays the foundation for future solutions



Our Nordic cooperation model is something we can all be proud of, a joint undertaking where trust and Nordic added value are central to all efforts towards common goals.

The Nordic countries have a unique role to play in achieving the transformation necessary for a sustainable future. The challenges ahead are significant and must be met with agility and resourcefulness. This is evident in how Nordic Innovation has adapted its work to a constantly changing reality and needs over the past 50 years.

Rest assured, Nordic Innovation has been an important catalyst in facilitating cooperation and strengthening ecosystems within Nordic business communities. Nordic Innovation has also provided opportunities for innovative businesses in the Nordics, to develop ideas, products, and services through strategic cooperation, while also building bridges between public and private actors. Cooperation across fields and the exchange of knowledge and best practices continues to be an important instrument for achieving the goals of the Vision 2030.

The emphasis in Nordic Innovation's work has moved on to supporting networks and ecosystems working towards solutions in energy efficient transport and mobility throughout the Nordic region,

"Nordic Innovation has been an important catalyst in facilitating cooperation and strengthening ecosystems within Nordic business communities."

finding more efficient and sustainable solutions in the construction industry as well as supporting small and medium-sized enterprises in their efforts to implement circular business models. Nordic Innovation has also supported initiatives in the fields of life sciences and health tech and initiatives to support smart ocean-based solutions. In all this work, the focus is on supporting networks of knowledge and competence around new digital and high-tech solutions.

An example of this type of initiative is a recent round-table on "multi-use" platforms at sea, bringing together representatives from academia, ocean industries and government agencies to discuss the establishment of multi-use parks at sea in the Nordics with the aim to increase cost efficiency and positive environmental impact through wholistic thinking and co-location.

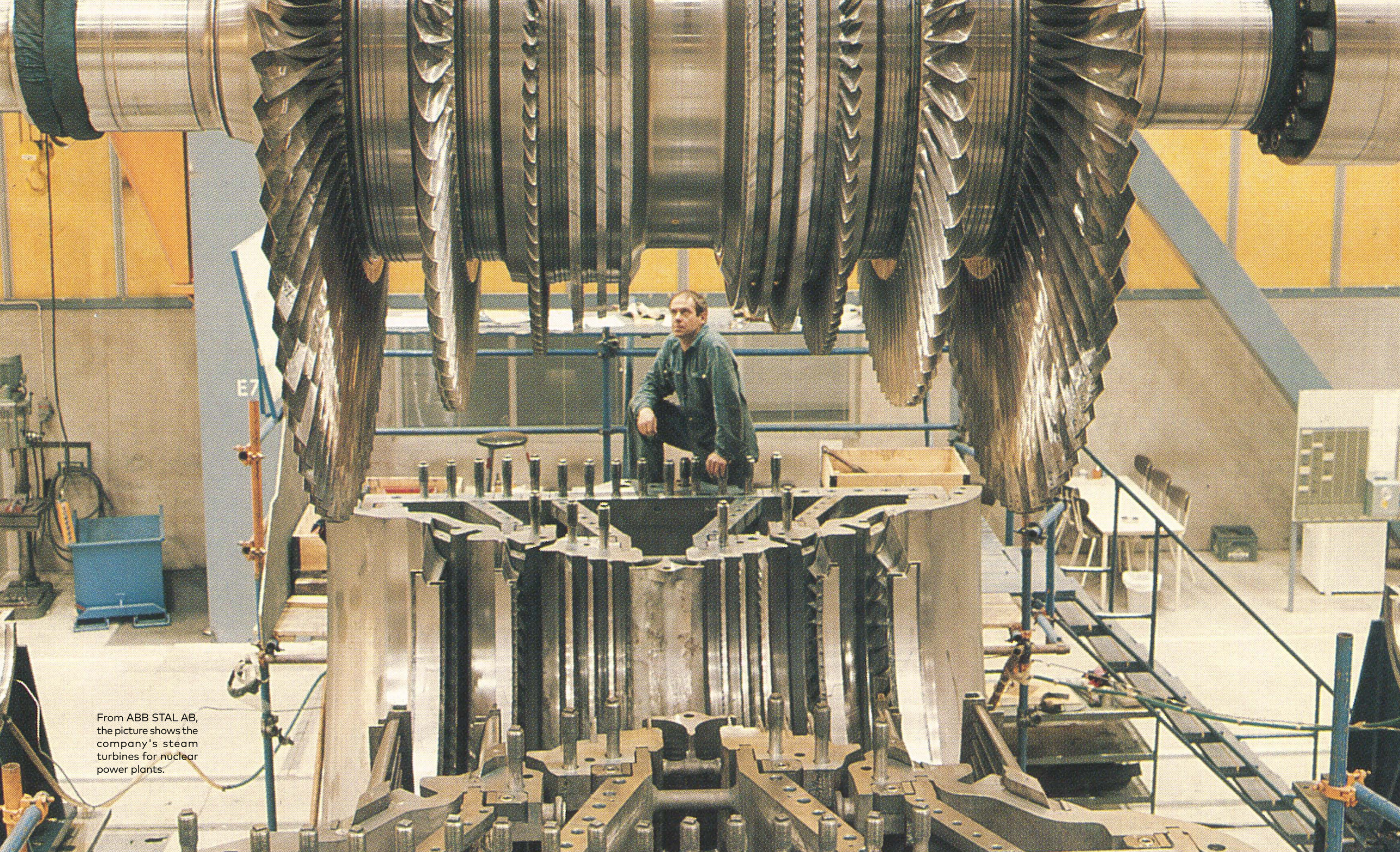
Another recent initiative is Nordic Innovation's health program which is pushing boundaries of Nordic collaboration within health innovation through development of an ethical AI solution which can read Nordic patient records and with the aim of unleashing a significant innovation potential in health technology.

The challenges ahead will only become more complex, faster changing and more urgent. Nordic Innovation will continue to be an important instrument for facilitating and supporting innovation and collaboration throughout the region.

In recent years, the Nordic Council of Ministers celebrated that 50 years had passed since it was founded and last year, 75 years had passed since the establishment of the Nordic Council. We can now look back on a long history of Nordic cooperation and an accumulated experience of working together across national borders towards common goals.

Innovation requires a long-term perspective, as well as agility and the ability to respond quickly to technological and market changes. The Nordics have, over a long time, worked consistently on innovation within green solutions and sustainability. A fact which now has become a competitive advantage for the region. Approaching innovation from a circular and sustainable perspective can create growth and increase competitiveness, while at the same time reducing emissions and protecting nature and resources. Increased cooperation on Nordic innovative solutions will increase competitiveness and resilience in a stronger Nordic region; the most sustainable and integrated region in the world by 2030.

Karen Ellemann
Secretary General
Nordic Council of Ministers



From ABB STAL AB, the picture shows the company's steam turbines for nuclear power plants.

Bylaws §1 Purpose

The institution shall contribute to making the Nordic region a pioneer in sustainable growth and work to enhance entrepreneur-ship, innovation, and competitiveness in Nordic businesses.

(Decided by the Nordic Council of Ministers on September 4, 2015).

Our history in brief

1973

The Nordisk Industrifond was founded by the Nordic Council of Ministers. The fund has its main office in Stockholm.

1986

The institution moves from Stockholm to Oslo.

1987

Nordforsk becomes part of the Nordisk Industrifond

1992

Nordforsk and the Nordisk Industrifond then split into two separate institutions. Receives a new mandate from the Nordic Council of Ministers.

2004

The Nordisk Industrifond merges with Nordtest and adopts the name Nordic Innovation Centre.

2011

The Nordic Innovation Centre changes its name to Nordic Innovation

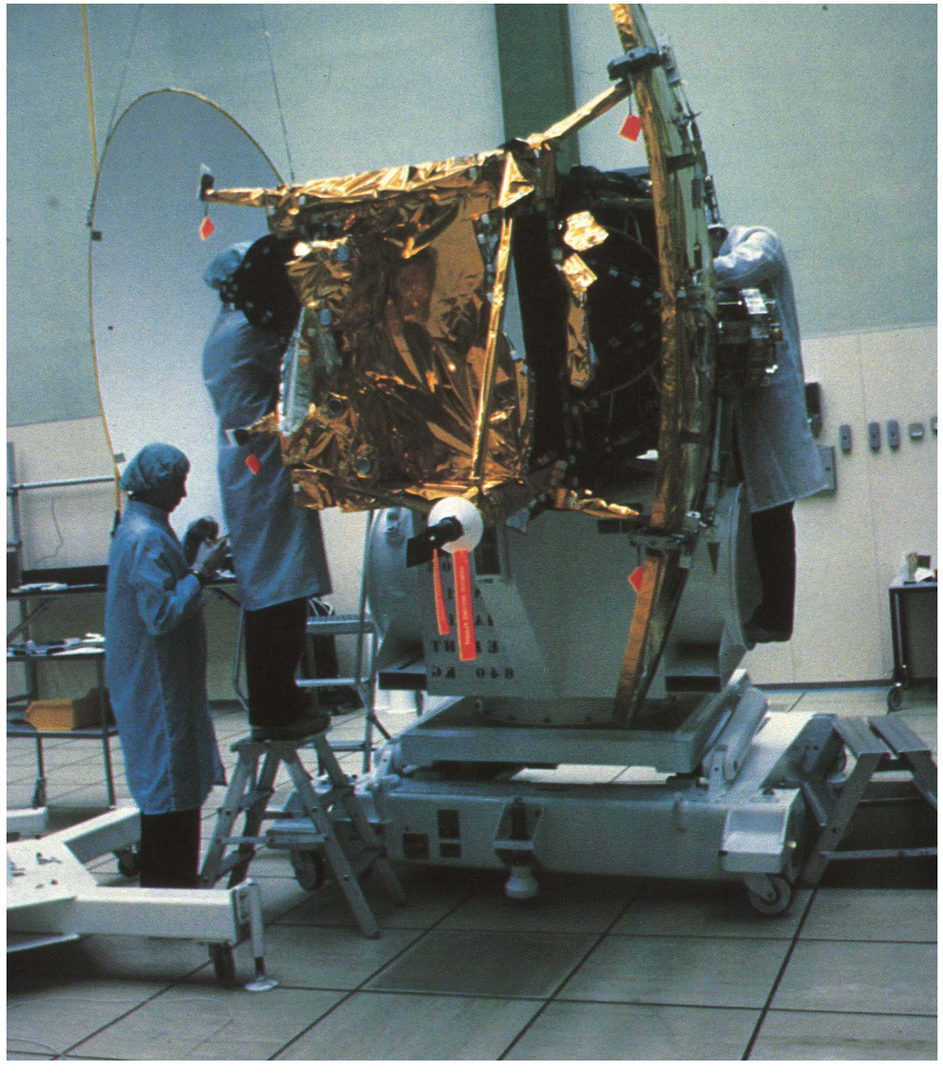
2015

New and current bylaws for the institution are adopted.

This is a yarn tension meter, developed for the Nordic textile industry.

The 1970s

The Untold Story of Nordic Satellite Collaboration



^ **Building Satellites:** The Tele-X satellite under construction.

The struggle for dominance in outer space has traditionally been a race between the major powers. While they competed to be the first to explore new planets, the Nordic countries needed satellites to fulfill their desire to watch each other's TV broadcasts. The vision of satellite cooperation was followed up by the Nordisk Industrifond (now Nordic Innovation), which initiated the Nordsat project. Through this cooperation, the Nordic space industry received an energy boost and an influx of knowledge that has grown into a world-leading industry in several fields.

The idea of a joint Nordic TV Collaboration

The idea of a Nordic TV collaboration emerged as early as 1955. The proposal was for the Nordic countries to expand their broadcasting networks and jointly produce programs, since the new medium was so costly. However, it was not until 1973 that a concrete recommendation for a Nordic TV collaboration was adopted. This time, the goal was to strengthen cultural ties, increase language understanding between countries, reinforce Nordic identity and reduce the import of programs from non-Nordic countries. Other European countries, such as Germany, France and Luxembourg were well advanced in planning satellite broadcasting. As the satellites were launched, Nordic TV viewers with antennas and reception equipment would be able to receive foreign broadcasts.





< **Family time:** The Nordic satellite project emerged from a wish to share TV broadcasting across the region.

^ **Tele-X:** The Swedish-built satellite was launched in 1987 and was in service until 1997.

The Nordisk Industrifond followed up on these ideas and initiated the Nordsat project, which comprised a total of three reports. Research for the first report, on the technical and economic prerequisites for implementing satellite cooperation, began in 1975 with assistance from Svenska Rymdbolaget (now the Swedish Space Corporation). The report was completed in 1977 and concluded that satellite distribution of radio and TV in the Nordic countries was realistic and economically feasible.

Key players from the Nordic satellite industry

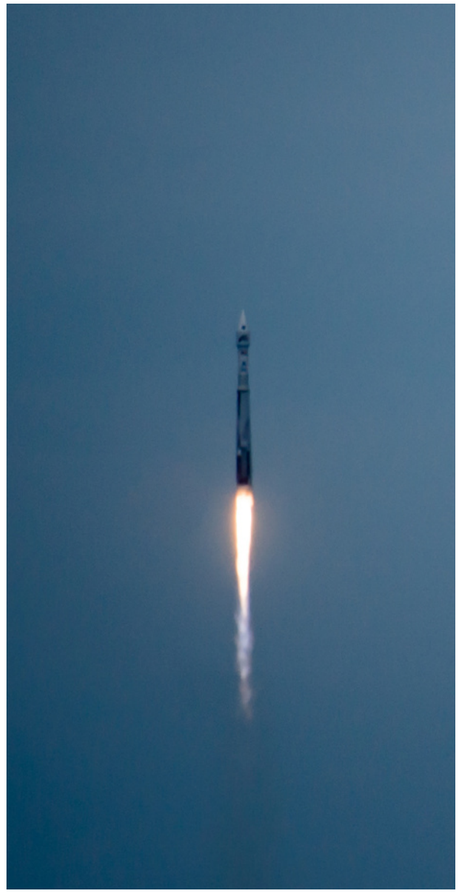
This first report laid the groundwork for collaboration between players in the Nordic satellite industry. A group called the Nordic Industrial Group for Nordsat – NIG was established, comprising companies such as Saab, Ericsson, Nokia, Kongsberg Våpenfabrikk and Christian Rovsing. Many of these companies have greatly benefited from the satellite development facilitated by the Nordsat feasibility studies.

The next step was to examine the cultural, programming, technical, legal and economic aspects of a satellite cooperation. This second report, totaling 2000 pages, laid the foundation for the Nordic Council of Ministers' proposal in 1981 to initiate a Nordic satellite cooperation.

Many actors were positive about the plans. For example, the NORDEN Association (Foreningen Norden) gave the project its full support, believing that "direct distribution of all TV programs could provide the Nordic population with excellent opportunities to keep up with each other's cultural and political life." The satellites were intended to orbit at such a high altitude that the signals could reach Svalbard. At the time, TV viewers in Svalbard had to make do with watching the news program Dagsrevyen and other programs 14 days after they had been broadcast on the Norwegian mainland.

"Without the boost that Nordsat created for the Nordic industry, we wouldn't be as big as we are today."

However, Nordsat also faced significant opposition. Some people expressed concerns about unresolved copyright issues and differing practices in advertising on TV. Other people were worried about children watching too much TV, people choosing low-quality programs if they were given more choice, and people participating less in cultural activities.



The project was continually delayed, partly due to uncertainties around costs. The Nordsat project ended when Denmark withdrew in 1982. Collaboration regarding the development of the TV satellite Tele-X continued with the other Nordic countries but was abandoned in 1988. The Nordic Council of Ministers concluded that there were "no prerequisites for achieving consensus on the permanent distribution of TV programs in the Nordic countries via direct satellite broadcasting."

A boost for the Nordic satellite industry

Even though the Nordic collaboration collapsed, Swedish industry moved forward with Tele-X, which was launched in 1989. Key players in the Nordsat collaboration were behind the satellite: Swedish Space Corporation and Saab Ericsson Space. Tele-X marked the first step in a new era of advanced telecommunications in the Nordic region and was in operation until 1998.

In 2003, the Deputy Director of Saab Ericsson Space stated: "Without the boost that Nordsat gave to the Nordic industry, we wouldn't be where we are today. It has given us the opportunity to work with major players in Europe. Our company is now a world leader in the manufacturing of specific satellite components."

From a point where all we wanted to do was to watch each other's TV broadcasts, satellites and related technology have become a key part of our infrastructure.



We need satellites for communication, data, research, navigation and defense, to name a few. The strategic geographical location and highly skilled population in the Nordic region gives us a significant competitive edge. These days, the ecosystem consists of everything from large, global companies like Kongsberg Defence & Aerospace to research environments, industry organizations, as well as smaller start-ups. Sweden has even established a dedicated Space High School, Rymdgymnasiet.

Although the Nordsat collaboration failed, it remains an excellent example of how Nordic collaboration on innovation and knowledge acquisition in the early stages created unforeseen results and values from which companies continue to benefit.

Summary

- The satellite project Nordsat was initiated by the Nordisk Industrifond (now Nordic Innovation) in the 1970s. Commissioned by the Nordic Council of Ministers, the project began as a collaboration to reduce costs related to TV broadcasts and to strengthen the cultural community in the Nordic region by offering joint TV programs.

- The communication and broadcasting satellite Tele-X was launched in 1989 from Kourou in French Guiana. The project was originally a joint Nordic venture but was eventually taken over by Swedish space industry.

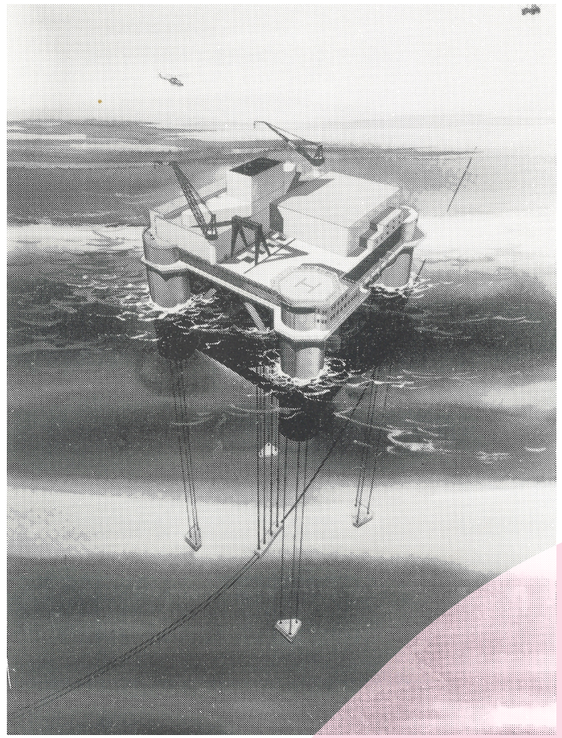
- Nordsat marked the beginning of what is now a competitive and academically strong Nordic space industry. Nordic space activity is an essential part of the social structure and security in all the Nordic countries.



Animal fodder
Norwegian Hydro and Swedish Marabou received funding for a research project aimed at producing protein from hydrogen. The goal was to create a process for industrially-produced animal fodder. (1974)



Paper industry
Finnish, Norwegian and Swedish pulp and paper industries joined forces to find better ways of reducing emissions from pulp and paper mills. (1977)



Offshore
The Aker Group in Norway and Karlskronavarvet AB in Sweden collaborated on the development of floating offshore power plants that would convert excess gas from oil fields into electricity. (1977)



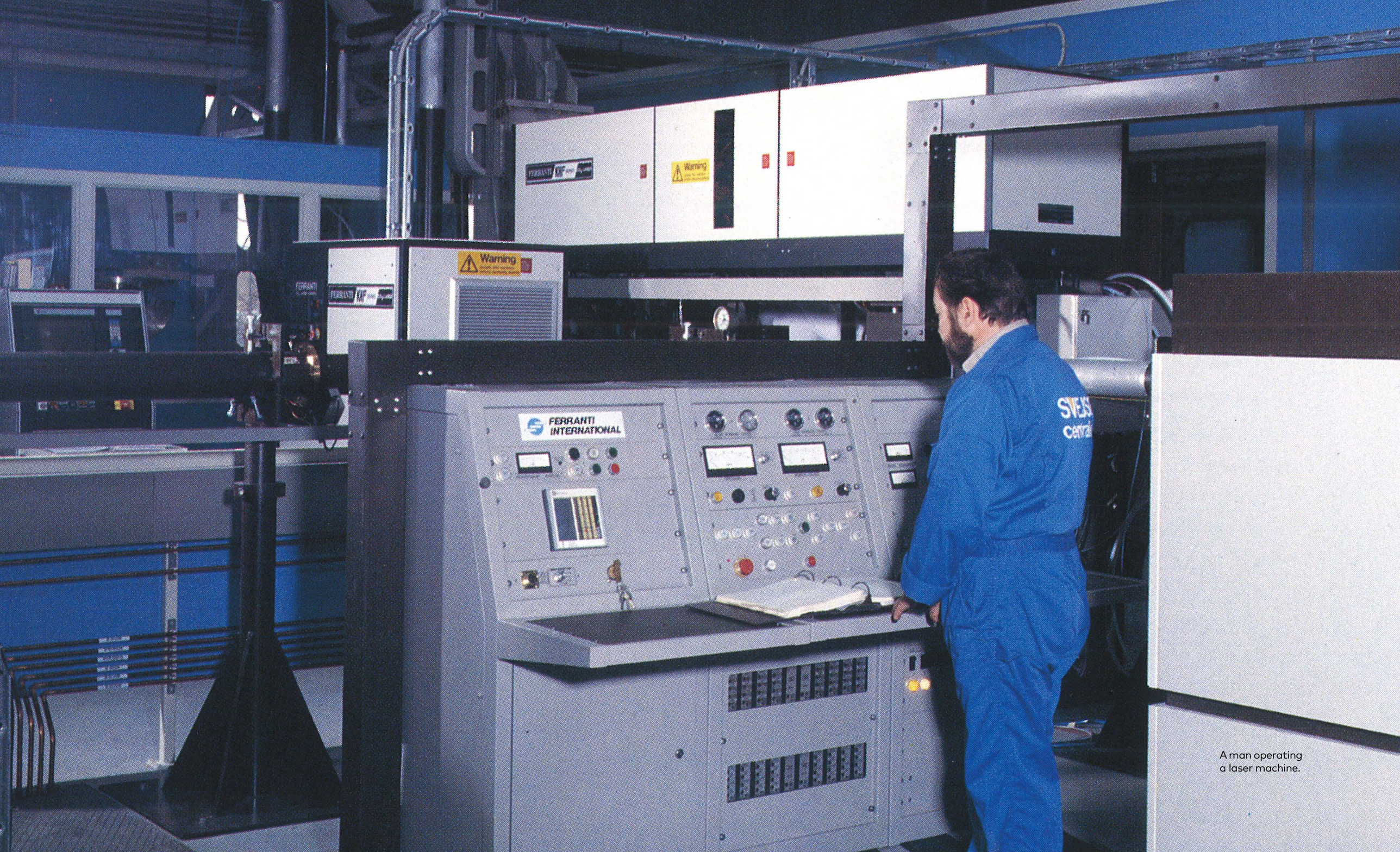


Stockholm
The Nordisk Industrifond was founded, with a start-up capital of 10 million DKK. The secretariat was based in Stockholm. (1973)

Paint
Nordic cooperation was established to develop a standard for paint used on heavy-duty structures, such as boats and industrial components, that prevents rust. (1978)



Fish fillet factories
A research project for the Nordic fishing industry aimed to reduce pollution in fish fillet factories, reduce water consumption and increase the utilization of raw materials. Nordforsk was the initiator and the Nordisk Industrifond the main source of financing for a two-year research project. (1975)



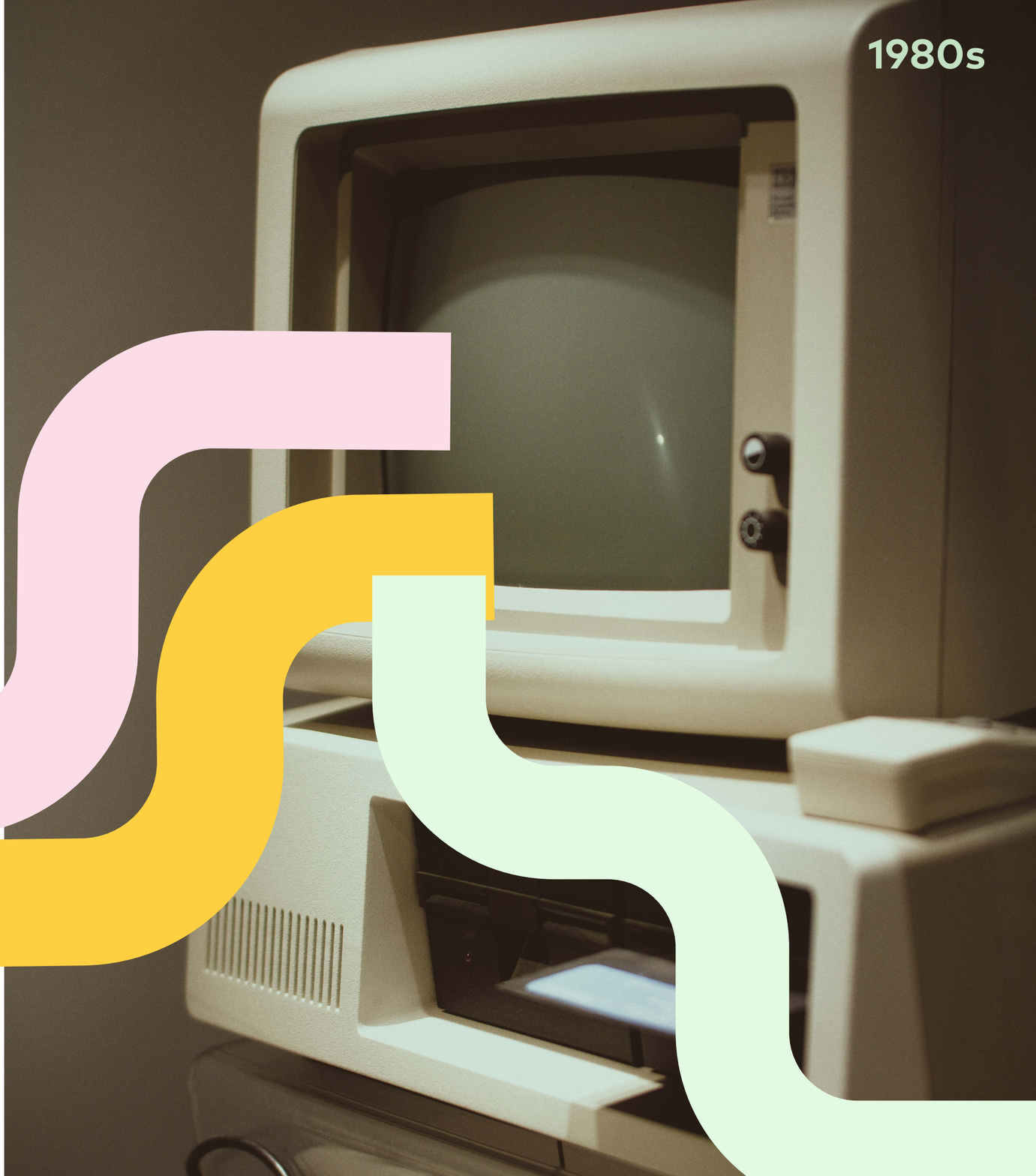
A man operating
a laser machine.

The 1980s

The Global Tech Race

The start of the Computer Age in the 1980s revolutionized offices, homes and industry. The Nordic governments recognized early on the opportunities in promoting Nordic computer technology for innovative projects. This foresight is paying off today.

The Nordisk Industrifond was responsible for following up the technological initiatives in various industrial niches, in which the Nordic countries have a competitive edge globally. This work laid the foundation for making the Nordic region a leading player in digitalization, ethical AI and the responsible use of data.



< **CADCAM-technology** was developed for the tekstile industry, to construct patterns. The picture is from Borås College.

A technological competition

In the early 1980s, information technology was a hot topic among politicians in the industrialized countries. The world witnesses a race in computer technology, in which Japan lead the way with major strategic initiatives, followed by the United States and the larger nations of Western Europe. Also in the Nordics, such strategies gained ground, exemplified by the Nordic action plan within computer technology ("Nordisk handlingsplan på datateknologiområdet").

The five-year action plan was given the go ahead in 1985 and the most prominent part, financially speaking, concerned industrial development, which the Nordisk Industrifond was tasked with implementing. The Nordisk Industrifond initiated and funded a total of 41 projects over a five-year period, and the program budget was NOK 300 million.

The action plan within computer technology was a venture without parallel in the history of Nordic research policy. In addition to several outstanding research results – which resulted in the establishment of several businesses and new products – the program paved the way for a new type of Nordic industrial research collaboration, taking a project all the way from initiation to implementation. The method that was developed at the time still forms the basis for Nordic innovation cooperation today.

SIL: Signals From the Earth's Interior

The action plan for computer technology in the Nordics was largely about initiating and investing in information technology that could contribute to a simpler, more efficient and safer life. One of the projects involved the creation of a system for earthquake registration in Iceland. The ability to monitor underground activity on the Saga Island using computer technology was crucial to issuing rapid warnings about earthquakes.

The construction of such an extensive data acquisition system, partly based on new technology and new data acquisition methods and instruments, was a task that required Nordic cooperation. In 1986, eight researchers from the five Nordic countries launched the "Seismisk datahandlingssystem för södra Islands lågland" project (SIL). The automatic seismic system could early detect and evaluate ground movements and used cutting-edge technology.

After several years of data acquisition and testing, in 1993 the SIL system became Iceland's national seismic network. The network represented a global improvement in the quality of earthquake detection and evaluation, and the number of seismic stations has increased in line with the degree of detection capability. Today, the SIL network is an important part of the system that warns Icelanders about earthquakes.

CART: Fighting Cancer With Data Technology

The enormous progress in computer technology, which accelerated in the 1980s, particularly in imaging systems, created new opportunities for using



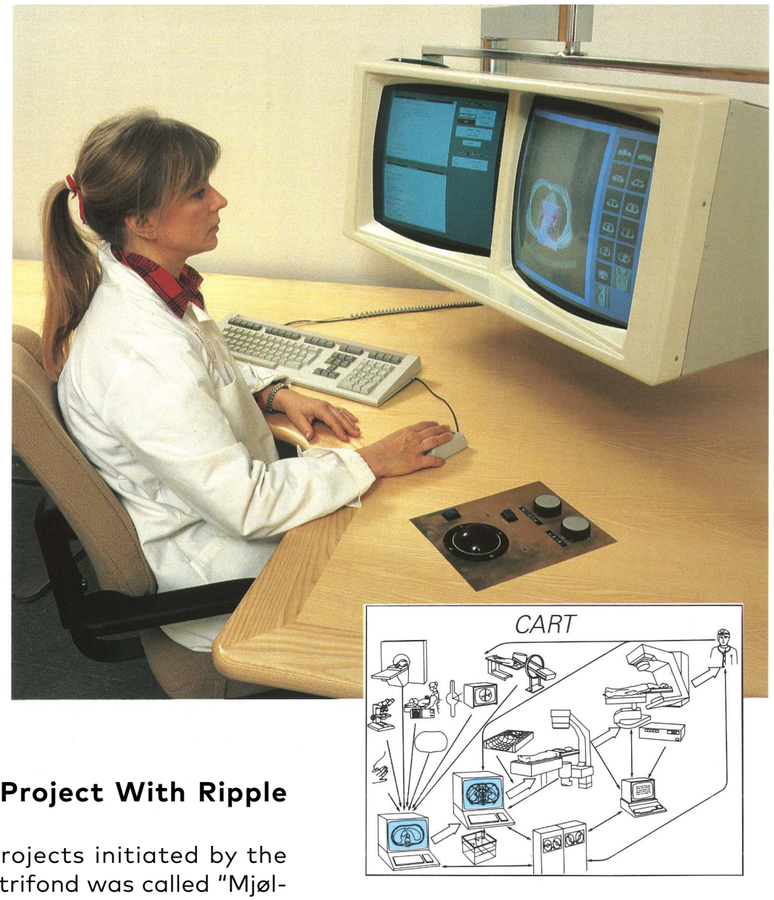
< **From Danfoss AS**, a factory producing theromstatic valves. The factory employed CIM - Computer Integrated Manufacturing - that was further developed for scandinavian industry through a project in the late 80s. In this factory, the system helped automate more of the production.

>The CART project aimed to integrate the use of data in radiotherapy and enable the development of more products within the Nordic industry. The image shows one of the products generated in the project, a workstation from Helax AB.

computer systems in the medical industry. Between 1985 and 1987, the Nordisk Industrifond helped fund a program to develop computer systems for radiation treatment of cancer, and the project contributed to several key advances in the fight against cancer.

The Nordic research and development program CART (Computer-Aided Radiotherapy) aimed to improve data communication and develop computer systems by the year 2000. The goal of the project was to improve the scheduling of radiation treatment and ensure that it was implemented according to plan. By using computer technology in the scheduling, high radiation doses could be concentrated to the areas where the disease had spread with greater safety and precision, which would consequently reduce the side effects of radiotherapy.

The CART project, which involved 12 Nordic companies and more than 400 people, led to several commercial products, and received international attention. The companies that specialized in radiotherapy were relatively small and were spread across the Nordic region. Thanks to the CART project, a specialist Nordic community was able to share new technology, system improvements and databases, contributing to important developments in radiotherapy.



Mjølner: A Project With Ripple Effects

One of the projects initiated by the Nordisk Industrifond was called "Mjølner". The project aimed to develop an integrated system of programming tools based on powerful workstations with graphic displays. The project participants were from industry and universities in Denmark, Sweden and Norway. As a result of the project, the company Mjølner Informatics was established, and this is a good example of the major ripple effects of a Nordic cooperation project.

Mjølner's computer engineering system has been used in Ericsson's telephone exchanges around the world, and its software has been used in Danfoss motors. The Mjølner project also created a distinct computer language OSDL (object-oriented extension of SDL). SDL is a globally standardized language for description and specification. These days, the language is known all over the world.

"It has been a brilliant development. I never thought this project would lead to the formation of Mjølner Informatics.

What we were dealing with at that time was almost like basic research. But when you also get representatives from industry, you can get good synergy effects – and this is what happened here" – CEO of Mjølner Informatics, Jørgen Lidskov Knudsen, 2003.

The Success of Nordic Tech

The development of computer technology was in its infancy in the 1980s and the fact that the Nordic countries were at the forefront of facilitating technological cooperation between the countries has contributed to strengthening Nordic competitiveness in the market and making the region one of the most digitized in the world.

Today, Denmark is ranked as the world's most digitally competitive country, according to the IMD World Competitiveness Center. The remaining Nordic countries are all in the top 15 list. The Nordic region constitutes an ecosystem that is attractive to tech and IT start-ups and scaleups. Today, tech start-ups make up several of the Nordic region's 78 unicorn companies, which is the highest number of unicorns per capita in the world outside Silicon Valley.

The Nordisk Industrifond's programs in the 1980s contributed to increasing the level of expertise and competitiveness in the Nordic IT industry. The fact that Nordic citizens and industries saw the early use of technology, especially computer technology and the internet, has undoubtedly been a key factor in a number of Nordic success stories. This also cultivated a solid foundation for the further development of Nordic digitization in the Nordics in the years to follow.

Summary

- In 1985, the Nordic Council of Ministers funded a five-year Nordic action plan within computer technology ("Nordisk handlingsplan på datateknologiområdet")
- At the time, the action plan was a venture without parallel in the history of Nordic research and innovation policy. The Nordisk Industrifond was tasked with implementing the industrial part of the ambitious action plan.
- The Nordisk Industrifond initiated and funded a total of 41 projects over a five-year period, and the program budget was NOK 300 million.





Gas busses

The Nordic Gas Bus Project was a collaboration between over 30 companies and government agencies. With support from Nordisk Industrifond, they developed a bus engine that ran on natural gas and was cleaner and quieter than other buses. (1988)



Turbines

Volvo Flygmotor and Ulstein Turbine joined a Eureka project with French Turbomeca to develop, manufacture and marked an industrial gas turbine, Eurody. The project was partly financed by The Nordisk Industrifond (1989)



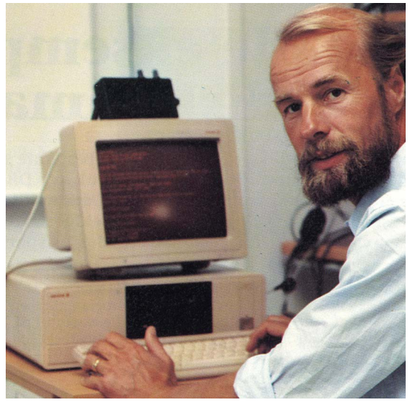
Vacuum power

A collaborative project between OY Wiik, TEX Innovation and Högland AB created a prototype of a vacuum packaging machine for pigs. (1987)

Standardizing fish

Is it possible to create standardized quality standards for fish? Through a Nordisk Industrifond funded project, four marine research institutes were responsible for developing a standard for one fish each, herring in Denmark, cod in Norway, redfish in Iceland and pollock in the Faroe Islands. (1989).

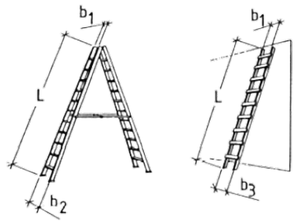




Synthetic speech

Since the 1940s, the Royal Institute of Technology in Stockholm has conducted research on "speech prostheses", which is a computer that can play out loud what you have just written.

The Nordisk Industrifond included the research project in its computer technology action plan during the 1980s.



Ladders

The Nordisk Industrifond supported an effort to coordinate Nordic standards for ladders. The goal was to reduce ladder-related accidents, of which there were many at the time, about 2000 per year. (1985)

Trouble in Oslo

The Nordisk Industrifond moved to Oslo in the 1980s. In 1987, 2030 kilograms of partially confidential documents were accidentally scattered around the city center during an office renovation. A removals company had left the documents in the street, and strong winds caused a “paper storm”, as well as headlines in the local news.



A robotic drill arm
from Atlas Copco

The 1990s

Feeding the Future

Food is an essential part of life. It is a major contributor to health and well-being, culture, trade and economic development. Before we can take a bite of a juicy sandwich, each and every ingredient has been through its own journey of production, screening, packaging, storage, distribution and preparation. There is potential for innovation throughout the value chain. This was why the Nordisk Industrifond decided to focus on this topic in the 1990s, through the NordFood program.



Food focus

NordFood was launched in 1993 after a decision by the Nordic Council of Ministers to make the Nordic food industry one of four priorities in their strategy. The official goal of NordFood was to "contribute to ensuring competitiveness in the food industry in a changed market by achieving critical mass in selected research areas. " The selected research areas were packaging, food quality, food hygiene and new methods/ processes.

Two programs lasting four years were launched with a budget of NOK 300 million. The Nordisk Industrifond contributed 30 per cent of the budget. Around 200 companies, 30 research institutes and 14 universities participated in the programs.

By combining heat and water, grain became even healthier – and with longer durability.

By 1995, more than 100 publications under the NordFood programs had been published. Seminars and conferences had also been initiated by this point in order to share the research findings and the gained industrial experience.

Waterjet Deboning (WJD)

How can we ensure that meat and seafood processing become smarter? One key area of research in the NordFood initiative investigated how water could be used to fillet fish. The invention of waterjet knives meant that the process of filleting fish became increasingly more efficient, and it also led to a reduction in production costs. Consequently, it has also benefited consumers as this initiative has helped lower the cost of meat and seafood.

The Waterjet Deboning project involved industry, institutions and academia, bringing together four Nordic countries, five companies and one university to optimize seafood processing. The project shared information between academia and industry, as well as fueling Nordic cooperation on innovation in the seafood and meat processing industry.

< This man has received a scholarship through the Nordic Industrial Research Education and poses with a prototype for a sorting system for the seafood industry.

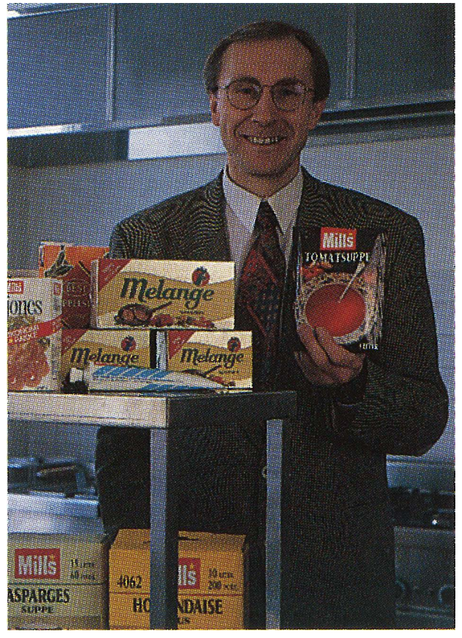
High pressure processing

In 1994, the Nordic countries began studying the effect of high-pressure processing, a food preservation technique that kills microorganisms to extend shelf life of different types of food. Research in the field had already blossomed in the US, Japan and England at the time – and in mid 1990s the Nordics were eager to investigate the effect this method had on microorganisms and enzymes.

At the start of the project, collecting literature was key to understanding the existing research framework. The project partners travelled to Japan, which later resulted in two seminars in 1994.

Future-proof food

Another project focused on improving grain in foods. The hydrothermal treatment of grain proved highly effective in enhancing a number of properties in foods. By combining heat and water, grain became even healthier – and with a longer shelf life. Hydrothermal treatment combined traditional methods of grain processing with modern malting processes. The result? The nutrient value was enhanced, durability was extended and even the flavor was affected by the process.



< Ola Eide was head of the steering committee in Nordfood during the early days of the project. He was also CEO in AS Forma, owner of brands like Mills and Melange.

Reaching beyond the Nordics

By the end of the 1990s, NordFood was noticed on beyond the Nordic region. The EU stated that the program had reached new heights in terms of food research. As a result, the program was integrated into the EU, a decision largely influenced by Finland, Sweden and Denmark's membership of the EU.

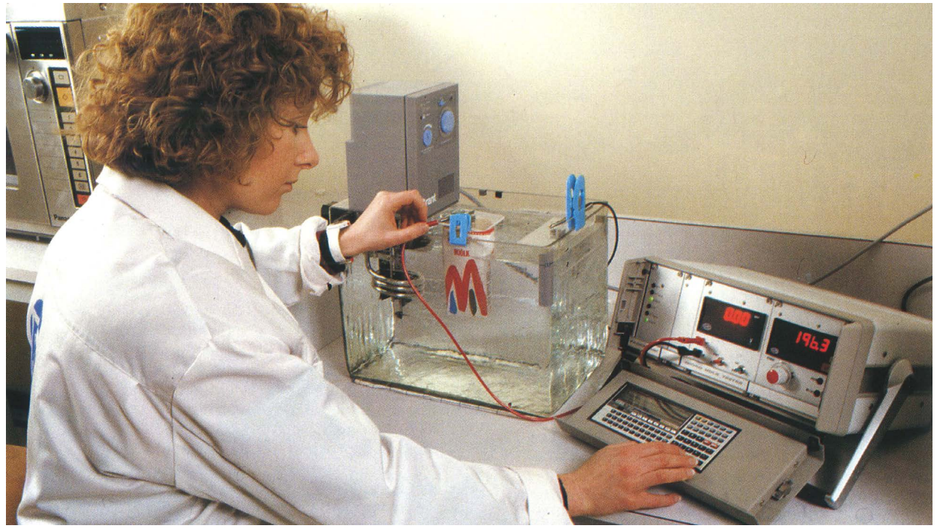
What started as a program to secure the interest of consumers, eventually became the very foundation for the Nordic venture on food security. Representatives from NordFood travelled across 18 EU members states in order to make contact with the different research communities, as well as key decision makers. The work has been described as a translation project and was concluded in 2004.

Lasting impact

The NordFood program ended up running as two four-year programs as the topics included in the program were of interest to both companies and researchers. The program comprised around 40 R&D projects and included 200 companies, 30 research institutions and 14 universities. Approximately 600 individuals were actively involved in the two programs.

Although the NordFood program ended in the 2000s, the production methods and insights from many of the projects are still being used today. Since the 1990s, Nordic Innovation has continued to engage in different projects concerning food, especially in the marine industry. Sustainable Ocean Economy is one of the current programs in which the exploration of new opportunities in ocean food is a key component. The NordFood program also created a foundation for ongoing Nordic cooperation between the national food agencies, independent of projects run by Nordic Innovation. A good example is a recent report calling for a Nordic approach to food safety risk management of seaweed for use as a food. The report was written in collaboration between the different Nordic food agencies.

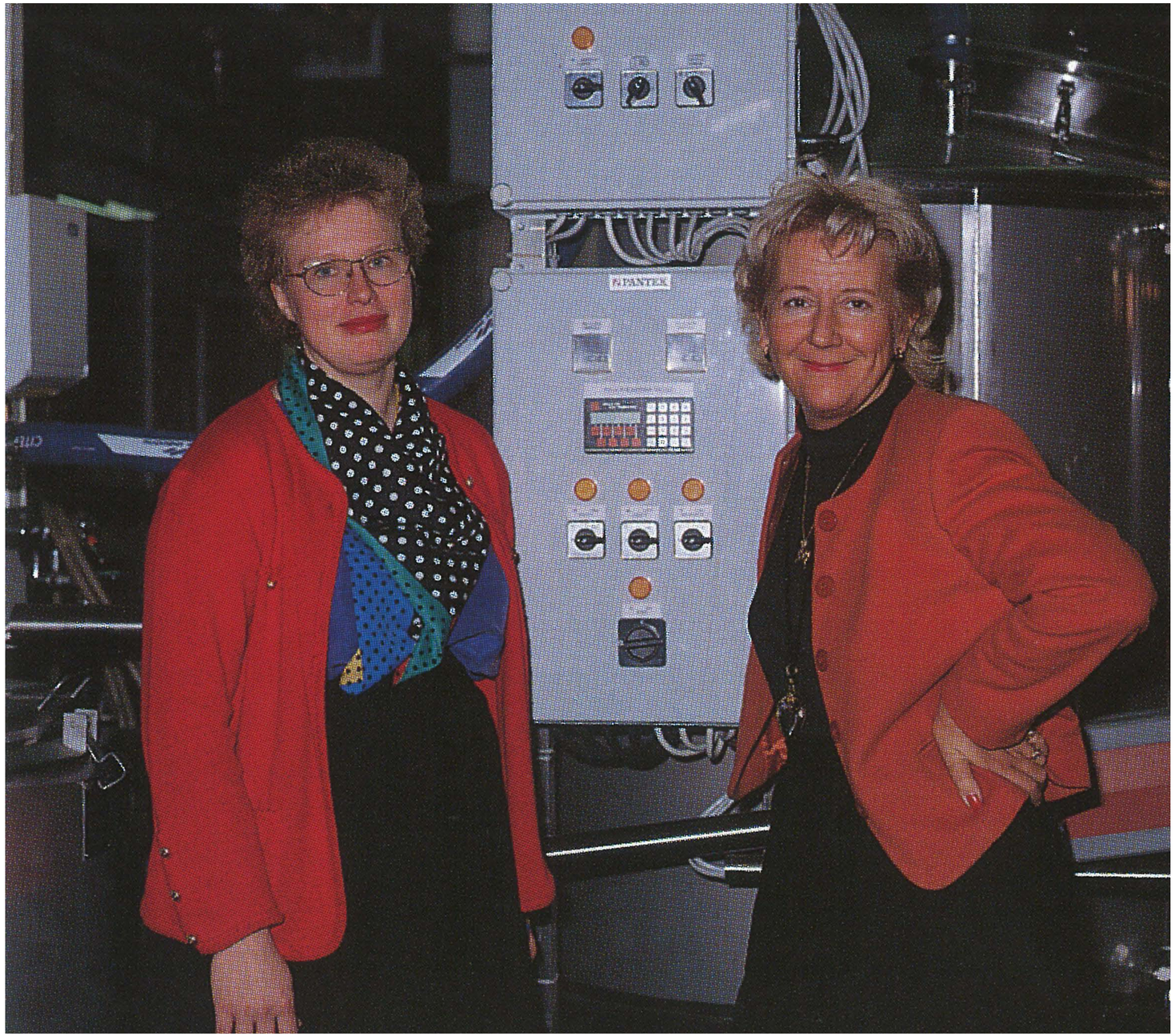
The Nordic food industry has developed into a dynamic and thriving sector that showcases a unique blend of tradition, innovation and sustainability. During the past decade, the industry has increasingly embraced a forward-thinking approach by placing a strong emphasis on sustainability, with initiatives such as reducing food waste, promoting local and seasonal produce, as well as incorporating plant-based alternatives. This commitment to sustainable practices has not only resonated with consumers but has also positioned the Nordic food industry as a global leader in responsible and ethical food production.



^ This instrument discovers and measures microscopic holes in packaging.



^ From the NordFood conference in Iceland, 1996.



< **VVTs pilot machine**, a part of NordFoods microbiological program. This machine improved cleaning and disinfection within the dairy industry.

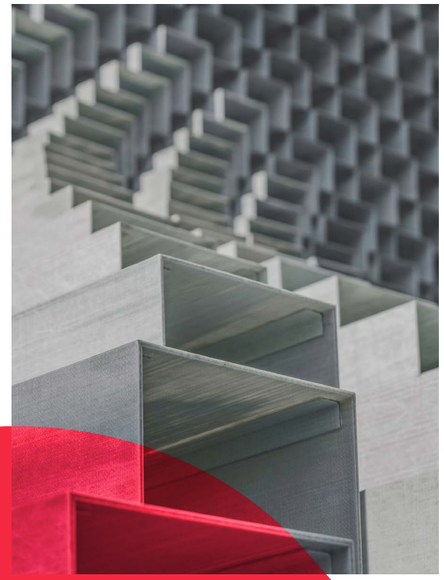
Summary

- NordFood 1 ran from 1993 to 1997, with a focus on packaging, food quality, food hygiene and new methods and processes.
- Nordfood 2 ran from 1998 to 2001, with a focus on processes (safety, hygiene, health, information technology and logistics), market chal-lenges (consumer trends, market structures, globalization) and information (communication and knowledge transfer from researchers to the industry).
- NordFood 1 and 2 key figures:
  - 40 R&D projects
  - 200 participating companies
  - 30 research institutions
  - 14 universities
  - 600 individual, active participants
- The NordFood project model, including its focus areas, inspired the EU at the beginning of the 2000s. NordFood representatives significantly contributed to the launch of a major EU project on food production and safety.



The bottom of the sea

The Nordisk Industrifond supported a collaboration between Swedish and Norwegian companies where the aim was to investigate whether it was possible to classify the seabed (sand, clay, rocks, etc.) based on single and multi-beam echo sounding. Classification of the seabed was of major importance for both commercial and research activities. (1993)



Steel standards

Thanks to support from the Nordisk Industrifond, professionals from the Nordics actively participated in the work to develop a European steel standard. (1991)

Chlorine free production

Through the Nordisk Industrifond -supported project "Ozone bleaching", the forestry research institutes KCL in Finland, PFI in Norway and STFI in Sweden have collaborated on finding ways to stop using chlorine and other dangerous chemicals in the forestry industry. As a result, several Scandinavian companies had the opportunity to switch to new bleaching technology, thereby avoiding being excluded from important markets. (1991)



Joining forces

To promote cooperation in technical and natural science research, the Nordisk Industrifond took the initiative to establish a database in English: "Nordic Research Directory". The database provided information on laboratories, their research areas, equipment, researchers, as well as areas of expertise. (1990)



Perfect potato

One of the research projects developed an advanced potato model for processing chips, French fries and raw peeled potatoes that could provide consumers with consistent quality. (1998)

Wood works

"Nordic Wood" was a program that ran throughout the 1990s. One of the program projects, the FINT project, aimed to reduce product lead times and increase productivity. The Norwegian furniture manufacturer Ekornes participated in the project and was able to reduce the production time for its sofas from ten days to less than one day. (1996)





In the 1980s, the Nordic Gas Bus Project developed a bus engine that ran on natural gas and was cleaner and quieter than other buses.

The

2000s

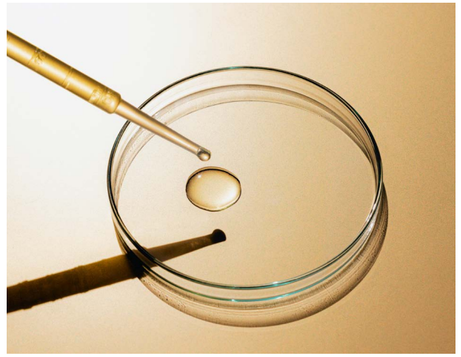
Driving Innovation in Life Science through biotechnology and health tech



Life science and health tech innovation was high on the agenda in the 2000s. Nordic Innovation sought to establish a research initiative, later known as ScanBalt, that would connect Eastern Europe to the Nordics across the Baltic Sea in the early 2000s. What started as an initiative to launch a research network has now become a leading actor in inter-regional cooperation. It also spurred the establishment of one of the first mega-regions. Another initiative was the foresight study, FOBIS, that looked into the implication of biomedical sensors in Nordic health and industry 10-15 years into the future.

"Our lives are about to change!"
The main idea of the ScanBalt project was to bridge European life science and biotechnology research. The promotion of dialogue and the exchange of knowledge became key targets of the project. The benefits of Baltic Sea cooperation in life science were placed high on the political agenda by Novo Nordisk Vice Chairman Børge Diderichsen in a meeting with the (then) Norwegian Prime Minister Jens Stoltenberg in 2001. By January 2002, a working group had been established, aiming to create a project proposal.

In 2002, the Nordic Innovation Centre (now Nordic Innovation) decided to co-fund a pilot project to develop the concept of a ScanBalt BioRegion. By December 2002, the vision was born of a project targeting four key areas. Educational mobility, economic barriers to borderless cooperation, organizational set-up, as well as the "biotech – one click away" initiative, were the initial target areas of the project. The latter area became essential to democratizing research in life science. The project spanned 11



countries comprising 85 million inhabitants, 60 universities and 870 bio-related companies, creating a 'mega-region' that could compete in the emerging international biotech market.

"I don't think anyone can imagine the revolutionary possibilities that biotechnology can offer the health sector. Our lives are about to change!" Bergsråd Matti Sundberg, a profiled business owner from Finland, exclaimed after the launch – and continued: "The industry is in a situation where it will need enormous resources to navigate properly. The problem is that there are not enough resources in each individual Nordic country. If we don't cooperate there's a risk that the development will be fragmented or stop all together."

In the infancy of the project, setting up a network of research institutions was key. Through this network, the institutions were able to connect and exchange information. It also served as a guide to the institutions, helping researchers seek opportunities for cooperation in the field. The ScanBalt Forum was a result of these initiatives.



Scanbalt is still very much alive and is currently one of the most important innovative networks in Europe.

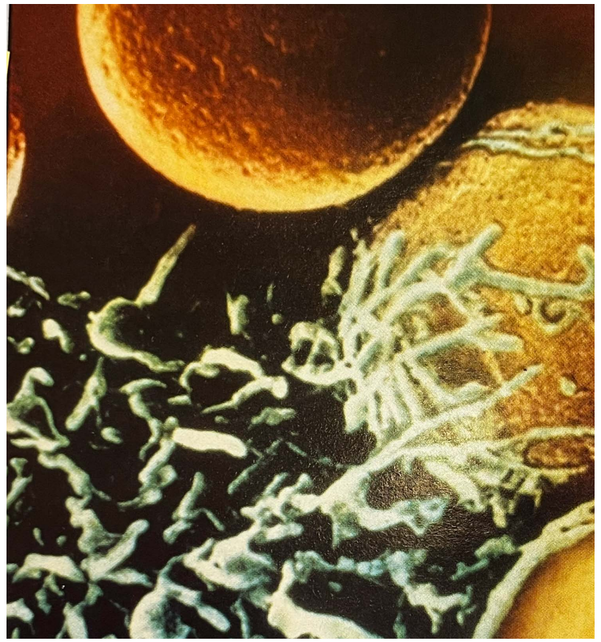
Building lasting impact

By 2004, several ScanBalt Forums had been organized. The third forum was arranged and hosted by Bio-Turku in Finland. The ScanBalt Forum was established as a meeting place for projects under the ScanBalt umbrella. It also included other key stakeholders and decision makers to promote coordination and dialogue.

2004 also marked the year when ScanBalt became an independent, non-profit membership organization. This was an important step toward concretizing what had started as a vision to promote research cooperation across the Nordics and Eastern Europe.

ScanBalt today

ScanBalt is still very much alive and is currently one of the most important innovative networks in Europe. Serving as a think tank, accelerator of



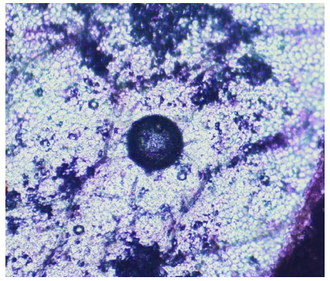
^ **Biotechnology** was an emerging industry globally during the 2000s. Pooling resources in the Baltic Sea Region made the region more competitive.



projects, communication and match-making hub, it contributes to many regional projects. The ScanBalt Health Region is an EU flagship project with the aim of developing the Baltic Sea Region into a globally leading and prosperous "Health Region" using the ScanBalt BioRegion as a model. And the ScanBalt Business Club facilitates business development and market access, reaching out to 3000+ companies, 50 university hospitals, 50 healthcare clusters and networks and 75 healthcare sector science parks.

Biomedical Sensors: a wireless doctor online

Imagine that your doctor can monitor your heart using data sent wirelessly from your home and alert you if any abnormality is recorded. Or that diagnoses can be made instantly wherever the patient happens to be, reducing the need for costly hospital visits and tests.

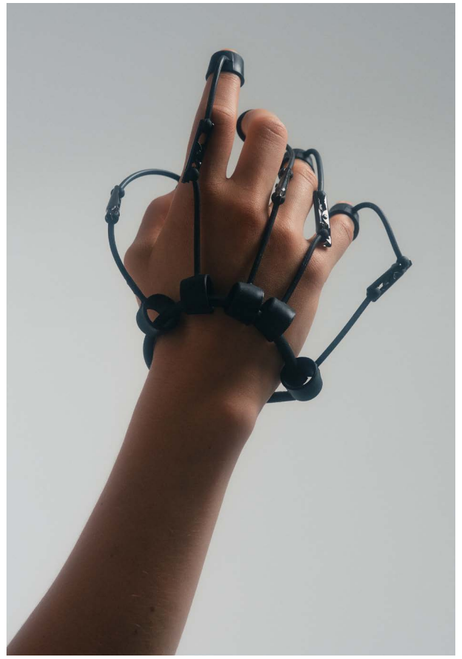


As we have seen with the Scanbalt project, life science and health tech was a major topic throughout the 2000s and just like today, issues surrounding the aging population, lack of healthcare workers and cost savings in public health were high on the agenda. Another project highlighting this was the FOBIS project, a foresight study that looked at the implications of biomedical sensors in Nordic health, and industry, 10–15 years into the future. The project was funded by the Nordic Innovation Centre and developed by SINTEF, the Sensor Technology Center, VTT, S-Sence, FOI and MedCoast Scandinavia.

The aim of the project was to study the use of biomedical sensors in three areas: home-based care, emergency medicine and chemical hazards. The combination of biomedical sensors and telemedicine promised huge cost savings in the provision of public health.

"Advanced body-wearable biomedical sensors combined with remote monitoring and telemedicine, open up a whole new range of healthcare services. Patients with chronic diseases like diabetes and rheumatism can be monitored in order to safeguard their treatment. Biomedical sensors can be used to monitor important body functions like blood sugar level or heartbeat rate. Alarms can be set to go off when values are dangerous", said Dag Ausen from SINTEF, and added: "There is even the possibility of having chips implanted into your body, chips that send signals directly to your doctor's office, or the hospital."

Biomedical sensors that enable health professionals to monitor patients in their own homes were seen as an important part of the solution to the aging population and lack of healthcare workers, with improved quality of life and prolonged longevity as additional benefits.



< Health technology has been a recurring theme in projects since the 1980s up until today.

A continued focus on Life Science and Health Tech

Nordic Innovation has continued to work on health and life science-related projects. The potential of expanding Nordic health and medtech companies in Nordic and international markets is still high on the agenda. The use and sharing of health data in both the public and private sector is also high on the agenda. From 2018 to 2021, the Health, Demography and Quality of Life program focused on health data, preventive health, healthy cities and value chain collaboration. The initiatives have continued through the AI and Data program and the Life Science and Health Tech program, which will run until 2024.

Summary

- Nordic Innovation Centre (now Nordic Innovation) was a key player in funding and starting the ScanBalt BioRegion.
- The organization became an independent, non-profit membership organization in 2004. However, Nordic Innovation has continued to work with the organization.
- The ScanBalt BioRegion encompasses Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Poland, Sweden, the northern part of Germany and nort western Russia.
- Today, ScanBalt® MTÜ is Northern Europe's leading accelerator for inter-regional cooperation envisioning the region as a global hotspot for health and bio economy.
- FOBIS was a foresight study looking at the implication of biomedical sensors in Nordic health and industry 10-15 years into the future.

Tourism

Several projects on tourism were initiated during the 2000s. One of the projects called "Nice Travel" focused on the opportunities and challenges facing airports, airlines and service providers regarding new AutoID technologies. Another project aimed to create a digital platform to make traveling in the Nordic mountain areas more attractive.





Smart clothing

Nordic Innovation supports the establishment of a new network that aims to develop smart textiles with embedded electronics. Examples of this include built-in heat sensors for firefighters, blood pressure monitors in hospital garments and GPS tracking in snowmobile suits. (2004)

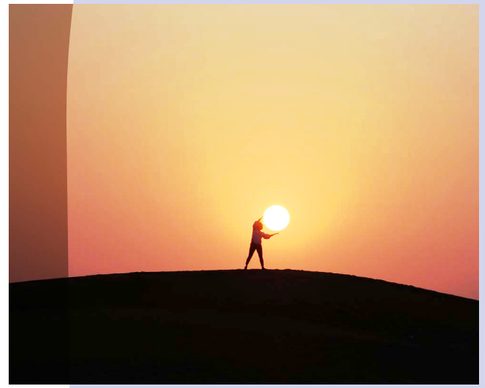


Feeding fish

The *"Feed for Atlantic cod"* project aimed to optimize the content of macro nutrients and energy in diets for different sizes of Atlantic cod. (2003)

Lead is out

Bang&Olufsen, Nera Networks, ABB Robotics, Tomra Systems, Kitron Arendal, Lövanger Electronics and Partnertech worked together to introduce lead-free products to the market. The aim was to phase out lead and other heavy metals before 2006, and Nordic Innovation's project "No lead in Nordic Electronics (NoNe)" enabled this to happen earlier than required. (2003)



Power of the sun

Nordic Innovation funded a report which, for the first time, presented evidence of the economic benefits of solar heating and solar energy in the housing market in the Nordic countries. Metro Therm, Solarnor and Solentek were involved in the project and had products on the market in 2007.

Female entrepreneurship

Nordic Innovation brought experts together to develop a Nordic initiative for female entrepreneurship. They identified specific measures and recommendations to influence Nordic policies on the subject. (2009)





Building materials

The different national regulations in the Nordic countries prevent the sale of building materials across national borders. In 2006, a project group initiated by the Nordic Innovation Centre started working on standardizing and harmonizing regulations in the construction sector in the Nordic countries. (2006)

In the late 1980s, Nordisk Industrifond supported a project that helped standardize the size of swap containers. This would lead to a more efficient and safer transportation of goods across borders.

The 2010s

Promoting Nordic cuisine across the pond

Food brings us closer together. It is a core component of all cultures around the world and sharing a meal is an expression of friendship, hospitality and even diplomacy. Food is also one of the very first things to which we are introduced. It teaches us to share, try new things and appreciate a peaceful moment with our loved ones. When we start school, our taste buds are challenged, and we must learn to adapt to new cuisines.



> The Nordic region is especially famous for food sourced from the sea. Here from a seafood processing plant in the Faroe Islands.



^ The New Nordic Food project team from the Nordic Innovation Centre at the gastronomic competition Bocuse d'Or, promoting the project.

The New Nordic Cuisine Movement
The New Nordic Cuisine Movement was started in order to promote Nordic food culture. It also encouraged locally based produce, sustainability and innovation in the Nordic kitchen. In particular, the famous Danish restaurant Noma was an incubator for New Nordic Cuisine, inspiring others to take advantage of traditional Scandinavian produce when creating new, inspiring dishes. In 2005, the Nordic Council of Ministers agreed to provide support for the movement, resulting in the New Nordic Food Programme, which ran until 2014. Nordic Innovation ran several of the projects in the programme, among them the Nordic Food Day in Washington DC. As a result, 45 000 students at public schools in the US capital were able to try Nordic food at school. Young chefs from Nordic countries prepared food for over 20 different schools, supported by mentor chefs.

Salmon, rye bread, Nordic sandwiches and Swedish meatballs were just some of the food that was served to American children. Moreover, a cookbook with easily understandable recipes for children contributed to helping children cook healthy Nordic food.

Young chefs serving up
Young chefs from the Nordics competed in a culinary competition. In order to win the competition, the chefs had to create a tasty and healthy meal with

Salmon, rye bread, Nordic sandwiches and Swedish meatballs were just some of the foods that was served to American children.



Nordic ingredients that could be served on a large scale in an American school kitchen. The preparation of the meal had to be filmed on a cellphone and submitted as part of the competition. Magnus Westling, a 21-year-old Food Art and Ecology student from Örebro University (Sweden) was one of the young chefs who won the competition and travelled to Washington DC.

"In Washington, we worked in kitchens and had the opportunity to speak with those people who are fighting for better food in these schools. We learned that there were a wide range of problems that prevented tasty and healthy food from being served to schoolchildren.



This was really important because we learned about the contrasts and differences between systems and this enabled us to retain the good and change the bad. But the best part of our visit was meeting all the wonderful people who were involved in this project," Magnus reflected after his visit.

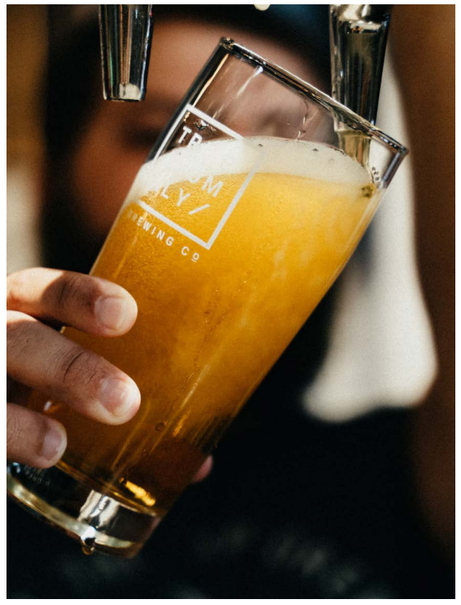
Royal attention

The project involved several key Nordic actors, including the Nordic embassies. The Miner Elementary School was lucky enough to receive a visit from the Prince of Sweden. The pupils welcomed the prince with a performance of both the Swedish and the US national anthems, a symbol that marked the cultural exchange between the two countries.

To further promote Nordic culture, other aspects of Nordic culture were introduced. For example, Brookland Educational Campus had the pleasure of hosting the Norwegian fiddler Vilde Aasland and Icelandic Jazz musician Björn Thoroddsen.

> Locally sourced ingredients is a major component of the New Nordic Food cuisine, together with traditional methods of preservation and seasonal produce.







Culinary diplomacy
It was not only schoolchildren who were invited to explore New Nordic Cuisine in the early 2010s. Nordic Innovation also organized Nordic Food Days in which top chefs from different Nordic countries served food at some of Washington DC's finest restaurants. The event was the first time world-class chefs from the Nordics gathered in the US. The New Nordic Food Program organized these types of projects under the heading "Nordic Food Diplomacy", where the key aim was to raise awareness of New Nordic Cuisine abroad and strengthen the brand of classic Nordic produce. Today, there are restaurants serving New Nordic Food across the globe.

During this period, Nordic Innovation also worked on a report on local produce, tourism and restaurants, through the project "EXPLORE – Experiencing Local Food Resources in the Nordic Countries". The report presented 11 case studies of high-quality rural restaurants in Finland, Iceland, Sweden and Norway and found that high-quality rural restaurants helped to improve local food and experience production systems by enhancing the quality of products product quality and the range of products and services offered. Another project was called Nordic Malt House and aimed to promote the use of Nordic malt both locally and internationally, as well as revitalize the Nordic beer industry.

The philosophy of the New Nordic Cuisine movement, favoring locally sourced foods, has now been adopted as a key element in sustainable food production and distribution. Also, healthy Nordic products such as fish are in increasing demand worldwide.

Today, Nordic Innovation promotes Nordic cuisine and products mainly through its continued effort to innovate in the marine industry. The Sustainable Ocean Economy program has projects on seaweed, kelp and how different maritime industries can co-exist.

Summary

- New Nordic Cuisine was started as a movement to promote Nordic food culture, the use of locally produced foods and clean, pure flavors.
- New Nordic Cuisine was propelled and inspired by new ideas introduced in a manifesto signed by several Scandinavian chefs in 2004 in Copenhagen, including chefs from the renowned restaurant Noma.
- The Nordic Council of Ministers ran the New Nordic Food programme from 2007 until 2014, supporting the key ideas behind New Nordic Cuisine. Nordic Innovation delivered several projects within the programme.
- Nordic Innovation worked on several related projects during the 2010s, for example, a project on locally sourced food used in restaurants and a project aimed to revitalize the Nordic beer industry and promote the use of Nordic malt.

City challenge

The Nordic Built Cities was a follow-up to Nordic Build, aimed at developing, visualizing and exporting Nordic innovative solutions for livable, smart and sustainable cities. The Nordic Built Cities Challenge was launched in 2015. Six Nordic cities were looking for innovative and multidisciplinary solutions to urban challenges in a specific urban space. The Nordic winner, the Soul of Nørrebro, involved the engagement of local stakeholders and structures aimed at mediating the local effects of climate change. (2014–2017)

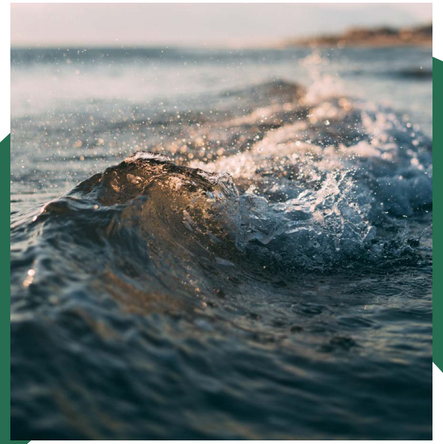


Sustainable buildings

Nordic Built was a Nordic initiative to accelerate the development of sustainable building concepts, and a total of 17 projects received funding during the program period. As a part of this program, the Nordic Built Challenge was launched: An open, multidisciplinary design contest for the refurbishment of five typical Nordic buildings, focusing on innovation and sustainability. Some of the submitted proposals included green balconies and ice storage. (2012–2014)

Marine Innovation

The Nordic Marine Innovation program was initiated to improve innovation, profitability and competitiveness in the Nordic marine sector. In 2012, Nordic Innovation hosted the first Nordic Marine Innovation conference. One of the projects focused on automatic pinbone removal in cod and white fish to increase the sustainability, profits and market for Nordic cod and other whitefish. (2011–2014)



Venture capital

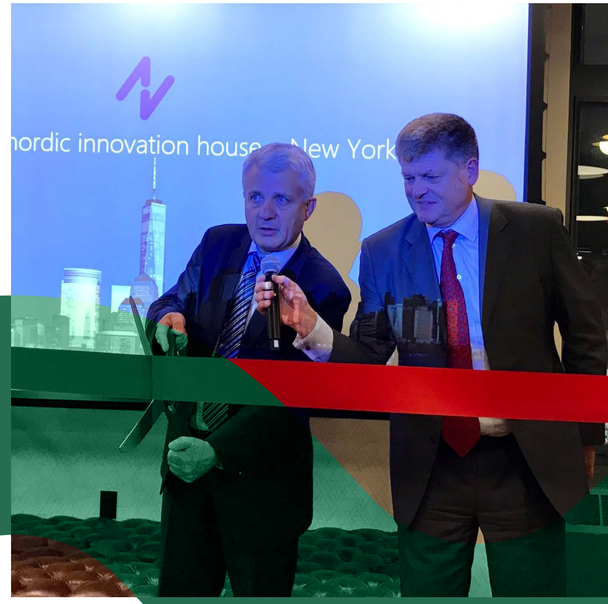
As a consequence of the financial crisis, Nordic venture capital funds were struggling to raise funds. As a result, a project was initiated that aimed to use credible statistics for the Nordic venture capital market to attract more international capital to the region. (2014)



Nordic Innovation Houses

The first Nordic Innovation House opened in 2014. Located in Silicon Valley, the aim was to create a Nordic community and network for connecting startups to high-quality mentors, networks of investors and funding opportunities, as well as provide other business connections. Since this time, similar houses have opened in New York, Singapore, Hong Kong and Tokyo. The Nordic Innovation Houses are operated by the Nordic Trade Promotion Organizations.





Carbon Capture

Nordic Innovation supported the establishment of NORDICCS, a Nordic user-driven competence center for the realization of carbon capture and storage. The project involved the major CCS stakeholders in the five Nordic countries, such as Norcem, Statoil, Vattenfall and Reykjavik Energy. (2011–2015)

Scale-ups

Nordic Scalers was an initiative designed to support and accelerate the growth of promising scale-up companies. One example of an activity within the project was the "Nordic Scalers Lab," a series of tailored workshops and mentoring sessions. Participants had the opportunity to learn from experienced entrepreneurs, industry experts, and investors, gaining valuable insights and practical advice on how to successfully scale their companies. The program continued into the 2020s when the Nordic Scale-up Awards were launched.

An illustration of The Soul of Nørrebro, the Nordic winner of the Nordic Built Cities Challenge Awards in 2016.

The 2020s

> Swedish studio Interesting Times Gang, a current project partner, has designed a 3D-printed chair made from recycled fishing nets and wood fiber.

Transitioning to a green, competitive and socially sustainable Nordic region

Since the adoption of Vision 2030 in 2019, Nordic Innovation has been increasingly focused on turning the vision into reality. We aim to become the world's most sustainable and integrated region, and if anyone can meet this challenge, it's the Nordic countries working in harmony. We at Nordic Innovation exist to enhance this effort. As we are now approaching 2030 the organization has intensified its efforts and ambitions, exploring solutions for the challenges that lie ahead.



The importance of innovation for sustainable development has existed since the organization was founded in 1973. There are many examples of projects guided by this idea, for example, aiming to reduce emissions of harmful chemicals, exploring new energy sources, increasing the efficiency of production methods and the utilization of raw materials. While the explicit aim to support sustainable development was an important topic in the 2000s and 2010s, sustainability has been at the very heart of every project that Nordic Innovation has initiated since 2015.

Sustainability and digitalization

Nordic Innovation developed three programs for the period 2018–2021: Nordic Smart Mobility and Connectivity, Nordic Sustainable Business Transformation and Health, Demography and Quality of Life. These programs supported the Nordic Council of Minister's Co-operation Programme for Innovation and Business 2018–2021, which outlined the primary areas of co-operation and set a clear direction for Nordic co-operation on business policy.

Sustainability and digitalization were cross-cutting dimensions of all three programs. The programs also integrated the UN's Sustainable Development Goals, with emphasis on making the Nordics a carbon-neutral region.

The link between sustainability and digitalization was exemplified in the Health, Demography and Quality of Life program, in which the collection, sharing and utilization of health data were key elements of all the projects. Several Health Hackathons were hosted throughout the Nordics, bringing together important actors within health data from the Nordic region. "All five Nordic countries are renowned for their data registries, and we should use this to our advantage. The Nordic Health Hackathons highlighted how data can be analyzed and shared across the Nordic region safely and smartly," said Rasmus Malmborg, Senior Innovation Adviser at Nordic Innovation.

Moving towards a circular future

In September 2020, the Nordic Ministers for Trade and Industry launched eight new programs that aim to support sustainable solutions, circular economy, digitalization and innovation. These programs will run from 2021 to 2024. They are a result of political initiatives by the Nordic governments and cover a wide range of themes, including mobility and connectivity, construction, life science and health tech, AI and data, circular business models, sustainable minerals and sustainable ocean economy.

> Senior Advisor, Hanna Törmänen, talks at the Nordic Circular Summit 2021.





< The winning team of the Nordic AI & Open Data Hackathon 2022, Mahammed Zeeshan Siddique, Davide Di Staso, Arpad Fodor, Daniel Benedi and Lika Ashmarina. They won with their solutions on how to use road data to improve freight transport routes and travel times.



^The Nordic Network for Electric Aviation (NEA) works to accelerate the introduction of electric aviation in the Nordic countries. The network is made up of major actors within the industry.

One important theme during this program period is the concept of circular economy, which represents a profound shift in our approach to resource consumption and waste management. Unlike the traditional linear economy, which follows a 'take-make-dispose' model, the circular economy is designed to minimize waste and maximize the value of products and materials throughout their lifecycle. This innovative approach not only reduces the strain on natural resources but also presents economic opportunities, fosters sustainability and contributes to a more environmentally responsible future.

Nordic Innovation has become an important actor in the Nordic circular economy ecosystem, facilitating projects, collaboration and knowledge sharing across the region. For example, the Nordic Circular Economy Playbook was created as a tool for the Nordic manufacturing industry, providing a step-by-step guide to understand and transition to a circular business model. In 2023, Nordic Innovation co-hosted the World Circular Economy Forum in Finland, gathering over 15,000 participants both on site and online from 155 countries.

Mobility also plays a crucial role in transforming the Nordic region into the most sustainable and integrated region globally. From 2003, an understanding of the concept of mobility emerged in the Nordic region and has gradually replaced the term transport. Sustainable mobility can encompass emission-free, carbon-neutral and environmentally friendly transportation, with decarbonization as the first step. Mobility is essential to many aspects of our lives and forms the basis of how we live and interact with others. A people-centric focus is therefore vital. During the past two program periods, Nordic Innovation has worked on projects that focus on mobility solutions that are accessible,



> Circular and sustainable interior walls made from mycelium and orange peel rinds, made by Interesting Times Gang.



affordable, seamless and integrated, catering to people's desires and needs. For example, Nordic Innovation supports the Nordic Network for Electric Aviation (NEA), gathering actors in the aviation industry to explore how to speed up the development and implementation of electric aviation in the Nordics. Other examples includes projects on drone-based mobility services, autonomous vehicles, and increased energy efficiency of ships and how to develop hydrogen fuel networks.

Circular economy represents a profound shift in our approach to resource consumption and waste management.

50 years and onwards

Today, we stand on the shoulders of talented and steadfast innovators as we discuss and explore solutions to the many future challenges facing the Nordics. These challenges include increased energy needs, significant emission reductions, an aging population, data security and sustainable economies, to name a few. By 2050, the world is projected to consume resources as if there were three planet Earths. Climate change is already affecting us in multiple ways and we need to minimize a further increase in climate change together with climate adaptation. Shifting geopolitical alliances affect access to important value chains.

The Nordics are in a unique position to develop effective solutions. Our shared values and abundant resources provide a strong foundation for creating a more sustainable and integrated future. The world needs innovative solutions and smart partnerships that drive green growth and entrepreneurship.

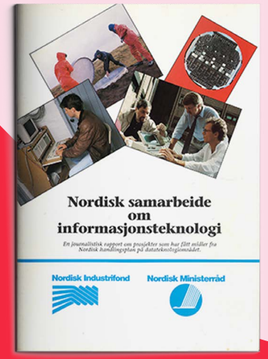
As we look toward the future, it is important to acknowledge the unpredictability of what lies ahead. The challenges we face today will undoubtedly evolve and new challenges will arise. But one thing is certain: The power of the Nordics, continued co-operation and co-creation, will be critical in shaping a better future for generations to come.





From the Nordic Innovation stand, World Circular Economy Forum 2023.





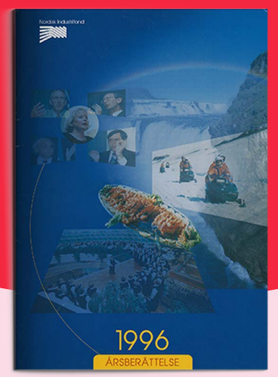


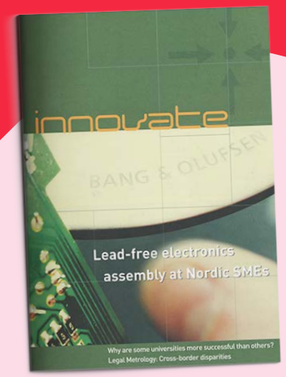














Nordic Innovation's publications have varied in expression and design over the years. You can find all of our latest publications at norden.org.

Innovation in a new era

Interview with Kristina Háfoss, Council Director for the Nordic Council.

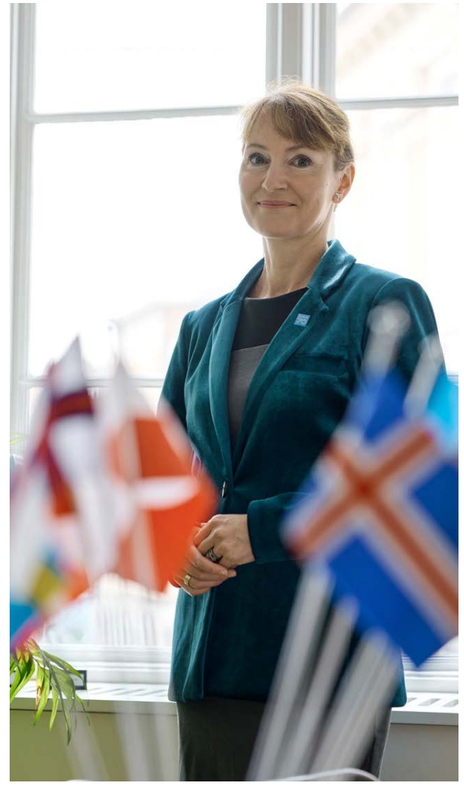
Nordic Innovation was created 50 years ago, under different geopolitical and societal conditions. How do the Nordic Council and Nordic Innovation fit into the context that the Nordic region finds itself in today?

The major challenges facing the Nordic region, Europe and the world can only be solved through increased international cooperation and strengthened Nordic collaboration. The geopolitical context makes Nordic cooperation more relevant than ever before: North of the Arctic, we now have a completely different situation than previously regarding climate, natural resources, trade, and security policy. Historically, there has always been a challenging neighbor to the east with Russia, but the situation is now aggravated by the war in Ukraine. In recent years, there has also been increasing instability in the south, with threats to democracy, the rule of law and women's rights, while what has historically been a stable neighbor to the west has become a United States characterized by attacks on democracy and inequality. Ensuring a safe Nordic region going forward and a Europe based on the fundamental values of the Nordic region will require strengthened Nordic cooperation, both internally among the Nordic countries and externally in international arenas.

"The geopolitical context makes Nordic cooperation more relevant than ever before."

The Nordic Council is a unique inter-parliamentary cooperation comprising 87 Nordic parliamentarians elected by our eight Nordic parliaments, and we work closely with the Nordic governments and the Nordic Council of Ministers. We find that both parliamentarians and governments are seeking more cooperation across national borders in the Nordic region.

One of the significant differences compared to when Nordic Innovation was created 50 years ago is the acceleration and digitalization of social development, and how quickly everything is moving today. Innovation has never been as important as it is now because constant development and innovation are required – either you are developing, or you are phasing out. There is already a lot of innovation going on in each Nordic country, and we have an enormous amount to gain from cooperation since all the Nordic countries are small countries from an international perspective. Together, however, we are large and are the 11th largest economy in the world, on par with Russia before the war. But it is also a significant advantage that our region comprises several small countries, because it is being small that allows us to adapt more quickly and implement innovative solutions faster than larger countries. This gives the Nordic region a significant advantage, especially in these times when change happens faster than ever before. This is also one of the reasons why the Nordic countries are among the world's frontrunners in digital solutions.



What challenges and opportunities do you see the Nordic region facing in the coming years, and what role does joint innovation play in this?

The Nordic region faces several joint challenges, and these challenges require someone to take the lead in finding solutions. One common challenge is climate change and the threat to biodiversity. The vision for Nordic cooperation is that we will be the most sustainable and integrated region in the world by 2030, which requires innovative solutions, and that, as a region, we lead the way and inspire other countries around the world. Another challenge we see for the Nordic population is how digitalization, artificial intelligence and data security play a role in people's lives. These are areas that require cooperation and cannot be tackled alone. A third challenge is the threat to our fundamental values, democracy, and legal system. We note that several European countries have actually taken a step back concerning equality and rights. A fourth significant challenge in the Nordic region is defense and security policy, in which both parliamentarians and governments now see the need for close cooperation in the region. Fifthly, we also face challenges going forward to secure our Nordic welfare society. All Nordic countries face challenges in recruiting enough health employees, and the pressure on the healthcare system is high.

What is required if innovation is to succeed in the Nordic region and ensure good cooperation across national borders?
We are well advanced in our innovation work in the Nordic region, but to achieve even more, political prioritization is needed, where politicians not only have a national focus but also a Nordic focus. I also believe that innovation must be cultivated in relation to how upcoming generations think and learn – creating even more space for creativity in everything from kindergartens to schools and other educational institutions. As we enter a future in which automation and artificial intelligence will take over many tasks, we must cultivate what is unique to us humans, such as creative ideas and new thinking that arises in encounters with other people. It is crucial that we support Nordic cooperation on various levels to preserve and develop a Nordic sense of belonging. This can be achieved by creating spaces in which people physically meet and exchange ideas, creating cultural and human bonds. Strong Nordic cooperation in culture, education and research is crucial to achieving this.
I would also like us to ensure that all children in the Nordic region could visit a school class in another Nordic country at least once during their school years. This could result in life-long Nordic friendships and a sense of belonging.

Another aspect is the regulatory side, where we can make it more attractive for businesses to collaborate with their Nordic colleagues. Infrastructure, both physical and digital, must also be in place, such as a digital ID that works across national borders. These are essential tools to avoid the border barriers that are currently experienced by both the population and businesses in the Nordic region. This is also crucial for us to achieve the vision of becoming the world's most integrated region.

Nordic cooperation has had its ups and downs throughout history, but there is now a strong focus and desire to strengthen the cooperation, and we see that more parliamentarians want to join the Nordic Council. In addition to the political side of Nordic cooperation is the civil side: whether we are talking about culture, sports or organizational life, there are Nordic associations, competitions, meetings, and events. Nordic cooperation starts from the bottom up, with ordinary people – it starts from within – and that is why it has such a strong foundation. But we must never take our Nordic cooperation for granted, and it is essential that we use the historical time we are now in to develop and strengthen cooperation in the Nordic region – including the use of innovative Nordic solutions.



Workshop on circular business models in the Nordic manufacturing industry, Copenhagen 2019.



A model of an electric seaplane, developed by the Elfly Group.

Nordic next

Voices from across the region

To make the Nordic region greener, more competitive, and socially sustainable, significant changes – and innovations – are required. A new generation of young leaders will be at the forefront of developing our region towards 2030 and beyond. We have spoken with a selection of distinct voices from across the Nordic countries about their perspectives on the future of the Nordic region. What they all have in common is that they are young adults who are engaged in societal development through their job, academic path or volunteer work.

"I certainly hope that one day, my field of work, which is to actively and constantly seek acknowledgment of our Indigenous rights, will no longer be needed."

Aviaaja Lennert Olsen

Nationality: Greenlander
Age: 27
Indigenous Rights Activist



I am an Arctic representative of the Global Indigenous Youth Caucus, which is under the United Nations. My field of work involves participating in various projects that promote the well-being of my people and the promotion of Indigenous rights and Indigenous community development.

There are positive future prospects for Indigenous Youth, we have shown our strength and willingness to address the generational traumas caused by the rarely mentioned brutal colonialism, which was forced upon us and is still present today. This is why many indigenous communities need further decolonization.

I would say that the major similarities in governance and way of life does not include the Indigenous peoples. A history of systematic oppression of the Indigenous peoples of the Nordic countries is not over, we are still not treated equally. We continue to uncover facts about what the colonial power has done to our people, such as the forceful insertion of

IUDs into women and girls as young as 12 from the 1960s up to 1991. Both the government of Greenland and Denmark are in the process of reporting the scale of this wrongdoing. The behavior of the colonial powers continues to this day, for example the human rights violations against the Sapmi people of Norway. I am hopeful that when we reach 2050, we will see a Nordic region in which the former colonial powers acknowledge their human rights violations. I believe the Nordics could be an example for the rest of the world, as somewhere where there is no need for Indigenous peoples to fight for their rights. I certainly hope that one day, my field of work, which is to actively and constantly seek acknowledgment of our Indigenous rights, will no longer be needed. I hope that in 2050 we will no longer need to demonstrate against our respective governments.

Innovation can be used to promote the positive aspects and opportunities that exist in my beautiful country. Describing my country and my people, it is not just the hardship we have endured the past few hundreds of years, but also the possibilities of sustainable innovative business branches that exist. Cooperation can help undoubtedly, as long as decisions that concern us are not taken without our presence and opinions.

Veera Pietikäinen

Nationality: Finnish
Age: 29
Investment Analyst

"The Nordic countries stand out in the venture capital landscape due to their high level of education, a thriving research culture and strong socio-economic support for families."

Over the last four years I have focused on early-stage deep-tech investments in the Nordics and Baltics. I am currently transitioning to the startup side and I am looking to develop my own business and build something of my own that will make a positive impact.



In the coming decades, venture capital will be shaped by three major forces. Firstly, advanced technologies such as quantum computing will usher in a new era of innovation. Secondly, the focus on ESG will intensify due to climate change and concerns about resource scarcity, sparking opportunities for creative disruption. Thirdly, geopolitical shifts will impact both the sources and the targets of venture capital, with regions like Europe vying to become innovation powerhouses. This convergence promises an era of limitless potential and transformation in the world of investments.

The Nordic countries stand out in the venture capital landscape due to their high level of education, a thriving research culture and strong socio-economic support for families. This creates an ideal environment for innovation to thrive, attracting highly skilled individuals and positioning the region as a promising hub for venture capital and cutting-edge startups.

In my area of deep tech investments, innovation plays a key role in shaping its future towards 2050. Advanced technologies such as AI, quantum computing and advanced materials will improve investment analysis and decision-making, providing investors with more accurate insights and enabling the most promising deep tech initiatives to be funded. Cross-industry synergies may also play a key role, fostering collaboration between traditionally separate sectors and yielding new investment opportunities from the merging of expertise. A good example of this is innovations in synthetic biology. Also, the deep tech landscape will become increasingly aligned with sustainability and ESG criteria, with innovations that address climate change, resource efficiency and social impact attracting significant investor interest. I believe that innovations will continue to fuel the growth and scaling of deep tech investments on a global scale.



Dinosshan Thiagarajah

Nationality: Norwegian
Age: 27
Signal Processing and AI Engineer

I'm developing algorithms and sensor solutions to analyze the condition of power grid poles.

In 2050, I expect the technology and infrastructure industry to be heavily influenced by sustainable solutions and digital transformation. To illustrate, at Birdsview, the company where I work, our primary emphasis is on the development of solutions aimed at monitoring and overseeing infrastructure, including power grids, buildings and bridges.
We use digitalization, AI and cutting-edge sensors to achieve this in a sustainable, precise and secure way. I also foresee an increase in automation, particularly in maintenance tasks, facilitated by emerging sensor and drone-like technologies for enhanced efficiency.

"Innovation will be crucial to addressing the complex challenges we face, especially in the context of sustainable infrastructure solutions."

The Nordic region is already in a strong position when it comes to sustainability and green technology, and I anticipate this position will be further strengthened by 2050. Similarities in governance and lifestyle, combined with the region's prosperity and social welfare, provide excellent conditions for innovation. I believe the Nordic countries will play a leading role in the development and implementation of renewable energy sources, making it an even more attractive region for green innovation.

Innovation will be crucial to addressing the complex challenges we face, especially in the context of sustainable infrastructure solutions. It's important to focus on both the economic and environmental aspects. Solutions should be cost effective and long term, while also being energy efficient and low in emissions. With better technological solutions, we can build and maintain infrastructure that takes all these factors into account. Also, strong collaboration between the public and private sectors, as well as startups, will play a crucial role in the implementation of innovative solutions.



Tobias Henriksson

Nationality: Ålander
Age: 30
Education Technology Specialist at Åland University of Applied Sciences

I'm graduated Environmental and Marine Biologist, currently employed in a project with the aim of digitizing the education at the Åland University of Applied Sciences.

If you look back 25 years and compare university education then to now, one major difference is that now we offer students much more flexibility in terms of both time and space. Students can now attend courses from wherever they want and, in some cases, whenever they want. The flexibility offered by online education also means that it is easier to attend courses at different universities. Universities are cooperating on an entirely new level, opening their courses to each other and there is a new platform being built for this specific purpose. When it comes to emerging technologies in the educational sector, we see an increase in the use of Augmented Reality and Virtual Reality, as well as AI-powered systems. It is difficult to predict how such systems will be used but it is certainly safe to say that the role of traditional, visible classrooms is going to change in the next decades.

"One of the main potentials of AI could be its ability to personalize education."

The Nordic countries are known for their high-quality university education and highly educated population, with a

tradition for cooperation and innovation in the educational sector. With the rise of online education and the increased use of English as a course language, the cooperation is bound to improve. In terms of educational technology, the Nordic countries are already at the forefront when it comes to online learning. The rapid changes that have occurred recently in the university sector have strengthened the ties between universities and we should leverage this to develop new innovative ways of learning, using technology such as VR, AR and AI.

Through innovations we have been able to offer students a lot more freedom and flexibility in their studies. There is a risk that, in some cases, technology has been introduced for the sake of technology itself, meaning that pedagogy might suffer. Addressing this "pedagogical debt" might require innovations in course design. It's impossible to look ahead to 2050 without thinking about how AI will transform the field of education. One of the main potentials of AI could be its ability to personalize education. Currently, one teacher is designing tasks and giving feedback to around 20 students. AI can transform teaching and become an intelligent tutor that adapts to the personal learning style of the student, designs personal tasks and gives immediate feedback.

Harriet Olafsdóttir av Gørðum

Nationality: Faroe Islander
Age: 34
Full- time sheep farmer and entrepreneur.

I am mainly a full-time farmer with multiple income streams to support the farm and family. I sell posters and other merchandise with my sheep wearing flower crowns. I host tourists and locals for Heimablídni (home dinners), mainly serving food from our farm and the Faroe Islands, do farm tours and tell people about traditional Faroese farming and how we farm today, work on the preservation of Faroese horses, with only 89 of them left today, as well as run a Bed and Breakfast on the farm. I also do all of our own marketing and content creation for social media and sometimes work with other associations.

In 2050, hopefully Nordic cooperation will flourish and be a force to reckon with. Personally, I think that some of the future can be found in the past and by looking into more sustainable business models, especially farming opportunities, we can

"I believe that change happens one step at a time and that taking several small steps every year will ultimately result in giant steps by 2050."

make sure that our history and especially our heritage breeds and smallholdings are not swallowed up by industrialization. By 2050, many people will have moved out of the big cities and settled in smaller areas, growing their own food and making more time for the family. Politicians must acknowledge this trend and make sure that regulations and incentives are in place for this to happen.

It's hard to say how the Nordics will stand out compared to the rest of the world, but I hope that in 2050, young voices will be as strong as they are today and will focus on what it means to be Nordic, highlighting our strengths and learning from our mistakes. Even though the Nordic countries are different in so many ways, we should keep focusing on what binds us together and, in the end, that will make us even stronger as a whole nation in 2050.

Innovation could be used in the development of agriculture by finding even more sustainable ways to farm in the future, helping us to find ways to make our countries even more self-sufficient in terms of food, promoting slow tourism and getting people interested in smallholdings again.



I believe in showing people that there are many ways to farm, make a living and live in harmony with nature, especially seeing that many of our Nordic areas are quite small and isolated. It's important to make sure that there is room for large-scale food production, and at the same time acknowledge that smaller farms also contribute to self-sufficiency and that many small creeks make a big lake. We should focus on biodiversity and environmental improvements in our own area. I believe that change happens one step at a time and that taking several small steps every year will ultimately result in giant steps by 2050.



Geir Finnsson

Nationality: Icelandic
Age: 31
Teacher and President of the National Youth Council of Icelandic (LUF)

I am an upper secondary school teacher at Keilir in Iceland and President of the LUF. My passion is to advance youth rights, a commitment reflected during my tenure at the LUF and previously as a deputy member of parliament and as part of the Reykjavík City Council. In both the LUF and in my role as a teacher, I've made it a priority to empower the next generation with leadership skills and knowledge.

"Without the boost that Nordsat created for the Nordic industry, we wouldn't be as big as we are today."

In 2050, I envision a future in which teachers have greater flexibility and autonomy to tailor their lessons. While technology offers tools that can enhance education, it is essential that our system evolves in order to seamlessly integrate these tools, embracing both local and immigrant perspectives. As far as youth organizations are concerned, the main goal of the LUF is for Iceland to have a comprehensive national youth policy. I see a united Nordic effort in which youth-led organizations receive strong backing, ensuring young individuals, both native and immigrant, are an integral part in decision-making processes concerning the future of the entire Nordic youth community.

In 2050, I foresee a Nordic educational landscape in which teachers have more flexibility and autonomy in their teaching approaches. While technological advancement offers tools that can significantly affect education, it is imperative that our Nordic systems collectively adapt and seamlessly integrate these tools. Regarding the organization of youth, there is an aspiration for a harmonized Nordic youth policy. This aspiration encompasses a unified Nordic initiative in which youth-led organizations, such as the LUF, receive unconditional support. The ultimate goal is to ensure that all young individuals

across the Nordic countries, regardless of origin, play a key role in shaping the region's future through active participation in decision-making processes.

Harnessing innovation is key to maximizing the benefits of increased immigration in Iceland. Digital platforms will facilitate tailored e-learning for diverse student populations, adapting to various cultural backgrounds and learning needs. Virtual collaboration tools can foster connections between local and immigrant youth, promoting mutual understanding and shared projects. The LUF and other youth organizations will use digital platforms to empower young immigrants, offering them resources, mentorships and platforms for their voices. By combining innovative technology with a commitment to inclusivity, Iceland can foster a cohesive and vibrant society that fully embraces its multicultural fabric.

Emilie Madelen Biti-Jessen

Nationality: Sámi and Norwegian
Age: 23
Leader of Noereh – Sámi youth organization

I have always been involved in indigenous issues, especially those concerning youth. That's why I have become involved in Noereh's work. At Noereh, we work to create safe meeting places for all Sami youth, regardless of who they are. For us, it is important that young Sami people can meet other Sami youth and get to know Sami culture and history.

At the moment, the political situation for young Sámi people is very complex. Every

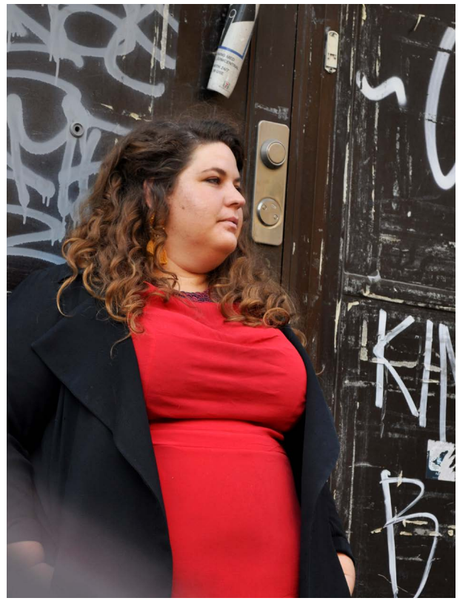
"I think that innovation can be used as a form of creative thinking and knowledge exchange."



day, Sámi youth find their rights to traditional practice and culture being impacted by political decisions, green colonialism, external factors, and they have to fight for their voices to be heard in the mass media. If this continues, then the political situation for young Sámi people in 2050 will look rather bleak. It's important that we learn to exchange knowledge and that the people in power listen to the youth and minorities so that we can learn to cooperate in the future.

If we can overcome the challenges that the Sámi people face today across the Nordic region, I think it will become easier to cooperate in the Nordic region. All Sámi people across the borders face many of the same problems, so my hope is that the Nordic region will jointly work on identifying solutions that will work across the borders and that they include the Sámi people in this work.

I think that innovation can be used as a form of creative thinking and knowledge exchange. It can bring the different kinds of Sámi youth together and make it easier for them to cooperate. It will then be easier for us to promote and fight for our right to culture, language, and traditional knowledge. We need to work together in order to keep our culture alive so that future generations can use the same knowledge that we have inherited from our ancestors.



Emelie Weski

Nationality: Swedish

Age: 34

Deputy Secretary General, Ibn Rushd Study Association and democracy activist

Ibn Rushd is a national study association that focuses on diversity, human rights and religion. Its range of study circles and cultural events promote democratic participation, meetings between people from different backgrounds, as well as empowerment and learning together. Ibn Rushd's vision is for Muslims to be a natural part of Sweden.

The recent setback in the peace and democracy index is a cause for concern, although I do believe that we are moving toward a future that is both more globalized and more democratic.

"Automation, AI and digitalization are enabling new standards of welfare for citizens all over the world."

Automation, AI and digitalization are enabling new standards of welfare for citizens all over the world. By 2050, there will have been a noticeable change. I believe that even dinner table conversations will move from talking about basic salaries to exploring issues relating to meaningfulness, solidarity and human rights.

An aspect that makes the Nordics differ from the rest of the world is *Folkbildning* – a unique, one-hundred-year-old Nordic tradition; Like the idea of lifelong learning and self-learning, *folkbildning* explores personal growth through reflection and debate. *Folkbildning* uniquely ties the pursuit of knowledge with an individual's inner force and journey of empowerment. It has been a guiding force in the development of democracy in northern Europe during the 20th century. It has laid the foundation for trade union movements, workers' rights movements, women's rights movement, as well as present day minority rights movements, such as the Muslim faith community. Regretfully, with the political situation in the Nordics becoming increasingly authoritarian and racist, *Folkbildning* is facing the prospect of receiving less funding. Thus, it can no longer be stated with any degree of certainty that the Nordic region will be at the forefront compared to the rest of the world in rankings of democracy and civic space as these traditions are continuously being eroded.



Christian Orthmann Andersen

Nationality: Danish

Age: 24

Studying Agricultural Economics at Dalum Agriculture College

As a student of Agricultural Economics at Dalum Agriculture College, I am learning about sustainability and the UN's 17 Sustainable Development Goals (SDGs), which I find very exciting. I dream of becoming an independent farmer in the future, and I want to produce food in the best possible way for the global population in order to help bring an end to hunger and ensure sustainable production.

I see a great future for food production. The global population is growing, and this means we need more food. Denmark has

a long tradition of animal production and I believe there will still be a demand for animal products in 2050, hopefully the focus will be producing the best possible quality, rather than producing as much as possible. This doesn't mean that farms won't grow, but the focus will not be on growing the most, but on growing the best in terms of sustainability and climate. I believe that we will rethink our agricultural production methods so that we can deliver sustainable and climate-friendly products to an ever-larger global population.

In the Nordics, a great demand is placed on food producers, this is positive, because it makes us think. We can produce food with low greenhouse gas emissions because we have developed new ways of producing it. We must share our knowledge of producing food with low emissions with the rest of the world. The Nordic countries must develop solutions that will address the increased need for food and for sustainable and climate-friendly production.

Innovation is essential for the agricultural sector and there is always a need to develop. Innovation is important because it will help us get a handle on climate change. We must dare to invest in new and "crazy" ideas in order to go beyond what we can imagine today. It is our modern way of life that has brought us this crisis. We must therefore dare to think innovatively in order to solve it. Many opportunities for sustainable production are being investigated in the agricultural sector. One example of this is pyrolysis technology, in which crop residues can be used to make green fuel. One of the residual products of pyrolysis is biochar, which binds carbon to arable soil for a long time, meaning no CO2 is released into the atmosphere. This is also called Carbon Capture and Storage (CCS). Pyrolysis is a known technology, but it will require investment before it becomes widely known, although it has a great potential for reducing greenhouse gas emissions. It is a technology that benefits agriculture and society and we can produce food and energy in the same area.

"We must dare to invest in new and "crazy" ideas in order to go beyond what we can imagine today."

Christian Orthmann Andersen

An enabler of cross-Nordic innovation

Nordic Innovation aims to make the Nordics a pioneering region for sustainable growth by promoting entrepreneurship, innovation and competitiveness in Nordic businesses. We believe that by bringing businesses, people and organizations together, this will lay the foundation for solutions and innovations that will benefit the entire region.

Nordic Innovation's role is not to provide all the answers, but to act as an intermediator and facilitate co-creation across the Nordic region. Our task is to support ecosystems and enable cross-border collaboration. Through cooperation and sharing of experience, we aim to inspire society at large. This is intended to ensure that the process of program development and implementation includes all relevant actors in the co-design, co-implementation and co-evaluation of the activities.

We develop innovation in the Nordic region by supporting innovation activities in Nordic businesses using the following methods: funding, network building and analyses. These methods are linked to specific programs based on our vision:

To make the Nordics the most sustainable and integrated region in the world by 2030.

Nordic Added Value
Nordic Innovation believes that cooperation across national borders creates new synergies and leads to greater benefits. This is what we call Nordic Added Value. To support cross-border cooperation, Nordic Innovation requires funding activities to promote cooperation between stakeholders from at least three Nordic countries.

To further support entrepreneurship, innovation and competitiveness in Nordic businesses, our funding is specifically targeted at SMEs. Funded activities are required to have external co-funding and all activities must be self-financed at the end of the project period.

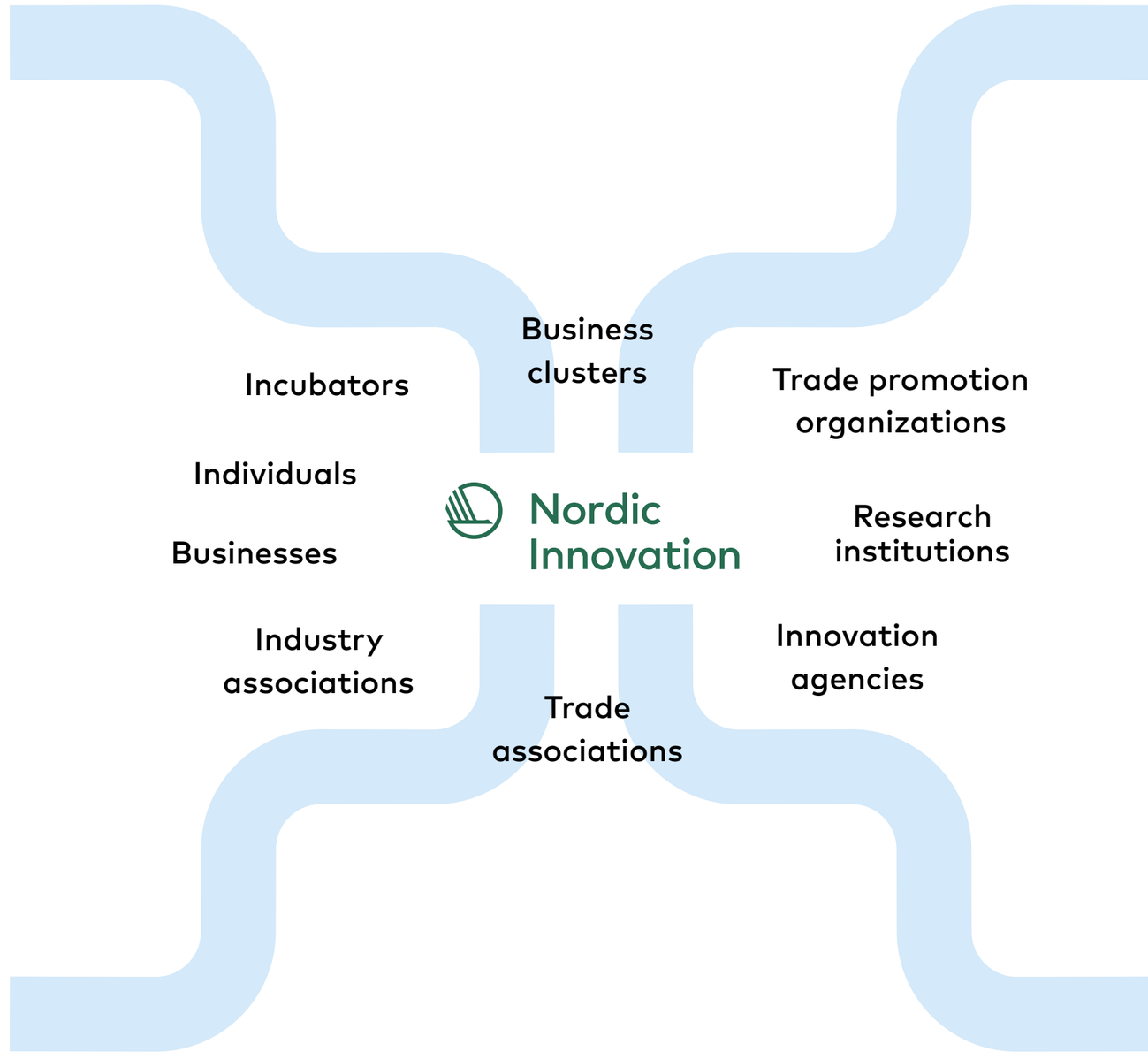
Connecting ingenuity with the power of the Nordics

Nordic Innovation's role is to bring businesses, people and organizations together to create solutions and innovations that will benefit the inhabitants of both the Nordic countries — and the rest of the world.

Thus, it is, and has always been, our partners who play the main role in our work.

Our partners are central to drive us forward and create results. Nordic Innovation acts as a catalyst and enabler, connecting different actors across the region and facilitating these connections.

Over 50 years, we have worked with thousands of different Nordic companies, trade promotion organizations (TPOs), research institutions, local and government authorities, non-governmental organizations (NGOs) and individuals. It is this collaboration, and what happens when we bring these different actors together, that constitutes our history. We would like to thank all our partners, both past and present, for their incredible contributions.





Participants at the Nordic AI and Open Data Hackathon 2022.

Our vision 2030

The Nordic region will become the most sustainable and integrated region in the world.

A **green** Nordic region

Together, we will promote a green transition of our societies and work towards carbon neutrality and a sustainable circular and bio-based economy.

A **competitive** Nordic region

Together, we will promote a green growth in the Nordic region based on knowledge, innovation, mobility and digital integration.

A **socially sustainable** Nordic region

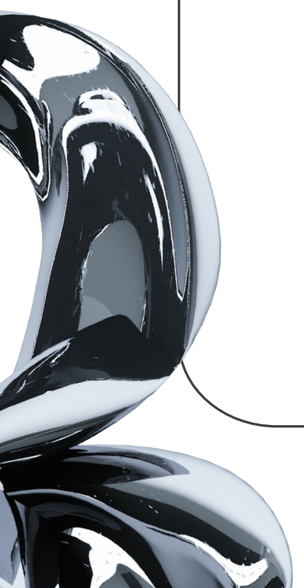
Together, we will promote an inclusive, equal and interconnected region with shared values and strengthened cultural exchange and welfare.

Envisioning the *FUTURE*

Looking back on our history, it is apparent how our lives and perspectives have changed since 1973, in some respects, rather dramatically. While we are working to achieve Vision 2030, there is a need to think in longer-term perspectives to achieve the changes needed for a more sustainable future.

So, what do you think the world will look like in 2073, 50 years from now? Take a moment to reflect on how innovation will shape our future.

What will the three biggest challenges be leading up to 2073?





What do you think will be the single most significant difference between now and 2073?

What activities or tasks will we spend most of our time on in 2073?

On a scale of 1 to 10 (1 being the least change and 10 being the most change), to what extent do you think the following aspects of our lives will have changed by 2073?

	1	10
Food		
Mobility and transportation		
Communication		
Housing		
Education and learning		
Energy production and consumption		
Healthcare and well-being		
Jobs and employment		
Relationships		





What will be the Nordic region's advantages in the next 50 years?

How will the relationship between humans and technology evolve, and how will this affect our daily lives?

What will work look like in the future? What will we do more of, and what will we stop doing?

What industries or sectors could emerge as key drivers of growth and prosperity for the Nordic countries in the coming decades?

What is your dream invention? Please draw it.

Curious about what others think? Scan this QR code to respond digitally and see how others have replied.



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The aim of this book has been to provide a snapshot of an organization's position over 50 years. The information is collected through research in Nordic Innovation's reports from the past 50 years. With limited space, we have only been able to include a small selection of the thousands of partners and projects we have worked with. Even if you are not visible in this book, you are still a part of our common history, and we want to thank everyone for your contributions.

Nordic Innovation was founded in 1973 under the Nordic Council of Ministers. For 50 years, Nordic Innovation has connected innovative minds from the business sector, academia and politics with the power of Nordic cooperation. This book celebrates an era of Nordic innovation and provides a glimpse into the future.

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