



Knowledge is the key

The world is looking to the north, to our neighbouring areas, where we have important interests to safeguard. Knowledge is the key to addressing the challenges and exploiting the opportunities in a responsible way. This is why Norway has invested extensively in knowledge about the Arctic throughout the country.

The Fram Centre in Tromsø, which was established in 2010, is helping to develop new interdisciplinary knowledge about the climate and the environment. Expertise and knowledge regarding the environmental impacts of new business activities in the Arctic is being strengthened. At present there are around 300 researchers in these fields in 20 different institutions. The University Centre in Svalbard is part of this research community. The Bjerknes Centre for Climate Research in Bergen and the University of Oslo are other important climate and polar research centres.

In 2012, NOK 1.4 billion was allocated for the construction of a new ice-class research vessel. It will be able to break through one-metre thick ice, and will play an important part in environmental and polar research and the mapping of natural resources. New student places and new research infrastructure have been established at universities and university colleges in the north. The new technology building at the University of Tromsø – the Arctic University of Norway and the basic funding for the High North Center at the University of Nordland are good examples.

Did you know that:

- Norway is in third place worldwide, after the US and Canada, in terms of scientific publications on the Arctic?
- the Research Council of Norway will allocate around NOK 570 million on High North research in 2013?
- that the Zeppelin Observatory in Svalbard is an ideal platform for the monitoring of global atmospheric change and long-range pollution transport? The first five months of 2013 showed a record level of CO2 in the atmosphere.

Sources: University of Tromsø, University Centre in Svalbard, Research Council of Norway Knowledge institutions and businesses throughout the country are involved in the implementation of Norway's Arctic policy. For example, the maritime industries in the southernmost part of Norway are important suppliers of components to the oil and gas activities in the Goliat project off Hammerfest in the far north.

New medicines from maritime organisms

Only a fraction of the available maritime resources are used today. In 2009, a strategy for marine bioprospecting was launched, which will encourage the development of new industry. Various knowledge institutions in Tromsø are currently testing bioactive substances from maritime organisms to see if they can be used to develop new medicines, for example for cancer, diabetes and heart disease. Such substances are also used in the production of dietary supplements and cosmetics. Given the huge biodiversity in the Arctic that has not yet been explored, research in this field is expected to grow significantly in the years to come.

Space research enhances safety in the Arctic

Norwegian space research has increased considerably in recent years. More than NOK 750 million was allocated to this field in the government budget for 2013. This is almost three times as much as in 2005. Large distances between settlements and activities mean that satellite-based infrastructure is particularly important for emergency preparedness and communication in the Arctic. In 2010, the Norwegian satellite AISSat-1 was launched from India. This makes it possible to monitor vessels far from land and around Svalbard. Its successor AISSat-2 will be launched in the autumn of 2013.

New growth in the north

Norway's Arctic policy is creating a basis for job creation in many industries. Like the rest of the country, North Norway is currently seeing an increase in population and employment levels, and unemployment is low. The main growth industries are oil and gas, aquaculture, minerals and tourism.

Value creation in North Norway has improved considerably since 2008. Employment opportunities in the region have attracted many foreign employees, and this has helped to reverse a negative population growth. Indeed, the main challenge for many companies today is a lack of qualified labour.

Did you know that:

- Norway is the world's largest producer of olivine, which is used in the making of iron ore pellets?
- tourism in connection with the Northern Lights and the polar night is growing?
- some 36 million meals of Norwegian seafood are consumed worldwide every day?

Sources: The Geological Survey of Norway, Konjunkturbarometeret for Nord-Norge, spring 2013 Norwegian Seafood Export Council Much of the growth in the business sector in North Norway is connected to the extraction of oil and gas. For example the offshore supplier industry in Finnmark enjoyed an annual growth of 37 % from 2004 to 2011. The Government has decided to establish a new centre of expertise and research for oil and gas operations in the Arctic under the University of Tromsø, with particular focus on responsible exploitation.

Huge mineral assets

It is estimated that Norway has profitable mineral resources amounting to around NOK 1.4 billion, with the greatest potential in the north. The Government has allocated NOK 100 million for mapping the mineral resources in North Norway in the period 2010–14. In 2013, it presented its Strategy for the Mineral Industry, which sets out the aim of increasing profitability and growth as well as the ambition that the Norwegian mineral industry should be one of the most environmentally sound in the world. It also paves the way for closer coordination with environment and Sami interests.





A global leader in seafood

Around 30 % of Norway's value creation in the seafood sector is in North Norway, which has seen an annual growth of more than 20 % in the sea and coastal fisheries and the fish farming industry since 2004. In the spring of 2013 the Government presented a white paper on how Norway can further develop its position as a seafood nation by enhancing knowledge, profitability and sustainability.

The tourist industry is also thriving. There was an increase in guest nights for international visitors of 19 % in North Norway from 2000 to 2012. This is considerably higher that the increase in the rest of the country of 9 %. Cruise tourism alone saw an increase of 41 % from 2011 to 2012. In 2009, the Government established Northern Norway Tourist Board to strengthen the profile of the tourism industry and international marketing of North Norway. Important new markets include countries like Russia and China.

These growth industries make it necessary to improve infrastructure. Since 2005, there have been large increases in the allocations for transport and communications in the north. Nevertheless more needs to be done, particularly to improve communication within the region. The planned port facilities in Svalbard and the new road between Kirkenes, Norway and Murmansk, Russia are examples of projects to meet increases in traffic and trade.

Record high cod quota in 2013

The cod stock in the Barents Sea is now higher than it has been for many years. This is the result of a consistent long-term policy based on the principle of responsible and sustainable harvesting. In addition, we enjoy close cooperation with Russia on the management of our joint fish stocks, which dates back to the 1950s.

Thanks to this cooperation, the fishery resources of our northern sea areas are among the best managed in the world. Our close cooperation on fisheries controls is particularly important in this context, and is the main reason why Norway and Russia have been able to put a stop to illegal, unregulated and unregistered fishing, which used to be a serious problem.



Good neighbourly relations and international cooperation

The Arctic is a peaceful region with clear boundaries and close international cooperation. Norway's relations with Russia are good, and regional cooperation is growing. Norway wishes to strengthen and further develop these positive trends.

Important issues regarding Norway's maritime boundaries have been clarified in the last decade. The outer limits of our continental shelf have been established (in 2009), and the Treaty concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean came into force in 2011. Clear boundaries open up opportunities for increased activity and closer cooperation. But this also means that Norway has a major responsibility. Up-to-date information and integrated management plans are vital if we are to use the resources in a sensible way so that they can also benefit future generations. The approach taken by Norway in this respect has attracted considerable international interest.

20 years of fruitful cooperation

Norway's cross-border cooperation with Russia has developed further in many areas. Across what used to be a closed border, there is now cultural exchange, trade and cooperation that has had a real effect on people's day to day lives. The number of Russian students in Norway has more than doubled since 2008, and around 30 Norwegian companies have set up business in Murmansk. Russia is now the largest market for Norwegian fish exports.

The introduction of a visa-free local border traffic regime in 2012 has further facilitated cooperation. Cross-border traffic doubled from 2005 to 2012, and in 2013 will probably amount to more than 300 000 crossings. The Government intends to build a new border station at Storskog in Sør-Varanger, as set out in the white paper *Opportunities and Challenges in the High North*.

The Barents cooperation, which celebrated its 20th anniversary in 2013, has helped to normalise cross-border contact in the north, and has given regional leaders and indigenous peoples a stronger voice in international forums.

The Arctic Council has strengthened its international position, and is the most important forum for Arctic issues. It now has a permanent secretariat in Tromsø and new observers have been admitted. The member states of the Arctic Council have entered into two important agreements in record time on strengthening cooperation and coordination in the area of oil pollution emergency preparedness and search and rescue.

Did you know that:

- Norway and Russia share a land border of 196km?
- in 2012, Russian students made up the second largest group of foreign students registered at Norwegian higher education institutions?
- students from Japan and the Republic of Korea can apply for grants to study at universities and university colleges in North Norway?

Sources: Ministry of Foreign Affairs, Ministry of Education and Research, Norwegian Centre for International Cooperation in Education (SIU)

Maritime delimitation

The 2010 Treaty on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean between Norway and Russia is a good example of the practical application of the Law of the Sea. It brought to a successful conclusion a major issue that had been the object of negotiations for forty years. The treaty ensures the continuation of the extensive and fruitful Norwegian-Russian fisheries cooperation. It further contains provisions on how Norway and Russia are to cooperate on exploiting any transboundary petroleum deposits that are discovered.

The Arctic Council

The Arctic Council (established in 1996) is made up of Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the US, as well as representatives of indigenous peoples such as the Russian Association of Indigenous Peoples in the North (RAIPON) and the Saami Council. Observers: the UK, the Netherlands, Belgium, Poland, Germany, Spain, France, Italy, China, Japan, India, Singapore and the Republic of Korea. In addition, the EU has been admitted as observer in principle.

The Barents cooperation

The members of the Barents cooperation (established in 1993) are: Denmark, Finland, Iceland, Norway, Russia and Sweden, as well as the European Commission and the northern regions of Finland, Norway, Sweden and Russia. The indigenous group includes the Sami, Nenets and Veps.



Enhanced security, safety and preparedness

Norway has jurisdiction over large sea areas, and more than 80 % of shipping in the Arctic passes through Norwegian waters. We therefore have a major responsibility for maintaining a presence in our sea areas and for developing monitoring and emergency response systems.

The Norwegian Armed Forces' growing presence and higher level of activity in the region are key elements of the Norway's Arctic strategy. The Norwegian Joint Headquarters has been moved north to Bodø. A new Coast Guard headquarters has been established in Sortland, and its vessels have been upgraded. The Armed Forces' aircraft have the capacity to detect oil spills, and a number of Coast Guard vessels are equipped with oil booms.

Safe shipping in cold waters

In 2012, the first phase of BarentsWatch was launched. This is an integrated civilian monitoring and information system for Norwegian sea and coastal areas. The next phase will be to ensure that authorities with responsibility for monitoring activities at sea and maritime safety have effective access to each other's systems. BarentsWatch makes it easier to identify dangerous situations in time, and will make it possible to save more lives.

Other measures that have enhanced maritime safety are the new vessel traffic service centre in Vardø, a new meteorological radar at Gednje on the Varanger peninsula, and routeing measures to divert high-risk traffic further away from the coast. Year-round tugboat preparedness has been established in North Norway. This is important for preventing shipping accidents and oil spills. A prohibition on the use of heavy bunker oil by ships has also been introduced in the protected

areas around Svalbard. Furthermore, vessels sailing around Svalbard are now required to employ a pilot, and search and rescue capacity in Svalbard will be strengthened with the addition of two new rescue helicopters and a new vessel for the Governor, which will be in place in 2014.

Seeking to establish binding rules

Enhanced preparedness and maritime safety is a key element of international cooperation in the north. On the initiative of Norway and Russia, a mandatory vessel reporting system for the Barents region has been established under the International Maritime Organization (IMO). Norway is also strongly engaged in the IMO's work on developing a mandatory international code of safety for ships operating in polar waters (the Polar Code).

Did you know that:

- in no other country in the world does a larger proportion of the population live north of the Arctic Circle?
- the Coast Guard carried out 1 713 fisheries inspections in 2012?
- three of the Coast Guard's vessels run on liquefied natural gas (LNG)? They are the most environmentally sound coast guard vessels in the world.

Source: Norwegian Armed Forces



