

norway's arctic policy

Creating value, managing resources, confronting climate change and fostering knowledge. Developments in the Arctic concern us all.



NORWEGIAN MINISTRY
OF FOREIGN AFFAIRS



CHANGING FAST:
In Bodø, new
and traditional
industries are
developing side
by side.

PRIME MINISTER ERNA SOLBERG



a sustainable future

Every time I visit North Norway, I am inspired by the dynamism of the people and industries in the region. I am confident that we will succeed in further developing North Norway and turning it into one of the most creative and sustainable regions of the country. We need to address key challenges today to equip the High North to meet the demands of the future.

The Arctic as a region is defined by its natural environment, its resources and its inhabitants. There is great potential for value creation in the interplay between traditional industries and modern technology. The Government's aim is to assist the business sector in the region in realising this potential by drawing on a sound knowledge base and a dynamic education and research community.

The Arctic is Norway's most important foreign policy priority. We play a leading role in international diplomacy in the Arctic and we are cooperating closely with other countries and organisations on how best to develop the region. Our aim is to ensure that the Arctic continues to be stable, peaceful and predictable. The changes in the security situation in Europe highlight the importance of this approach to management in an area with such abundant natural resources but at the same time a highly vulnerable natural environment.

The impacts of climate change are particularly marked in the Arctic. We are facing major challenges that can only be tackled by means of knowledge, responsible management and international cooperation. At the same time, new opportunities are opening up. The melting of the Arctic sea ice is likely to lead to an increase in maritime traffic between Europe and Asia through the Northeast Passage. The large oil and gas deposits that are thought to exist in the Barents Sea can help to meet the world's growing energy needs. The Arctic is a region where there are long distances between economic centres and where weather conditions are harsh. The increasing human activity in this region means that infrastructure, environmental protection,

emergency preparedness and response, and search and rescue services must all meet high standards. The Government intends to deal with these issues through responsible management.

Norway has both interests and responsibilities in the Arctic. It is therefore essential that we play an active role in the area both to protect our rights and to fulfil our obligations in the region. The Norwegian Coast Guard has a particularly important role to play in this context. The Government will continue to ensure a high level of operational capability in the north.

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**There is great potential
for value creation in the
interplay between tra-
ditional industries and
modern technology.**

Our policy in the Arctic will build on the extensive efforts of previous governments. In the time ahead, the Government will give priority to the following five areas:

- ➊ International cooperation
- ➋ Business development
- ➌ Knowledge development
- ➍ Infrastructure
- ➎ Environmental protection and emergency preparedness

We intend to work hard to put our Arctic policy into practice. You can read more about what we are doing, as well as what we have already achieved, in this report.

Please note: This English version of the report is an extract and updated version of the Norwegian report «Nordkoden», that was launched in November 2014.



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GOVERNMENT PRIORITIES

The Government will set high environmental standards, improve preparedness, enhance safety standards, and maintain close cooperation with other countries, all of which are essential for sustainable economic activity.

the arctic

Important for Norway, important for the world.

Rising volume of shipping

80 % of maritime traffic in the Arctic passes through Norwegian waters. Maritime activity in the north is substantial, but only a few ships transit the whole Northeast Passage.

Major seafood industry

1 000 000

tonne cod quota in the Barents Sea in 2013. High quotas in 2014 and 2015 too.

Year-round tourism

206 % increase in the number of overnight stays in winter by visitors from abroad from the 2005/06 season to the 2012/13 season. Strong focus on year-round tourism.

Abundant mineral resources

33 % of turnover from the Norwegian mining and mineral industry is generated in North Norway and Svalbard.

Clear evidence of climate change

50 % loss of ice cover in the Barents Sea since 1980. The Arctic Ocean may be ice-free in the summer by 2050. Temperatures in the Arctic are rising two to three times as fast as the global average.

Effective monitoring

2 Norwegian satellites, AISSat-1 and AISSat-2, detect and track vessel traffic in the north. The largest ground station in the world for polar-orbiting satellites is in Svalbard. It downloads data from more than 80 satellites on a daily basis.

Vulnerable environment

3 000 polar bears live around Svalbard and in the northern Barents Sea. The breeding population of seabirds in this area totals 15 million, and the walrus population in the Svalbard area is about 4 000.

Vital international cooperation

8 Arctic states are members of the Arctic Council. 12 non-Arctic states are observers. The Arctic Council is the only circumpolar forum for political discussions at government level, and is attracting increasing attention outside the Arctic.

Huge petroleum potential

43 % of undiscovered oil and gas resources on the Norwegian continental shelf are expected to lie in the Barents Sea. These resources are the basis for the petroleum-related supply industry in North Norway.

Busy cross-border traffic

318 135

border crossings between Norway and Russia in 2014.

Extensive research

3 Norway is ranked no. 3 in the world, after the US and Canada, in terms of the number of scientific publications in English on the Arctic.

Millions of people

4 million people live in the Arctic. Nearly 10 % of Norway's population live north of the Arctic Circle, a greater proportion than in any other country in the world.

international cooperation

International perspective

ATMOSPHERIC MEASUREMENTS:
The Alomar Observatory on Andøya
during lidar measurements. The
laser pulses are used to study
conditions in the atmosphere.

Looking to the north

Foreign Minister **Børge Brende** standing at the heart of the area that is Norway's most important foreign policy priority, well aware that many other countries are also looking to the north, where new opportunities are opening up and important challenges need to be met.

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It is in everyone's interests that the Arctic remains a peaceful and stable region.

MINISTER OF FOREIGN AFFAIRS BØRGE BRENDE



It is no coincidence that countries such as China, South Korea and Japan have been queuing up to be granted observer status in the Arctic Council.

MINISTER OF FOREIGN AFFAIRS BØRGE BRENDE

TOP POLITICIANS including Hillary Clinton from the US, Laurent Fabius from France and Salman Khurshid from India. Chair of the IPCC Rajendra K. Pachauri. UN Secretary-General Ban Ki-moon. We have seen them all here, clearly impressed by the spectacular Norwegian landscape – snow-clad mountains, wide skies and deep waters. The climate is changing rapidly here. These prominent visitors have helped to put the Arctic on the map. They have also highlighted the global implications of climate change and the importance of Norway's role in managing the abundant resources in the sea and on land in the northernmost part of our planet. The Arctic is the Norwegian Government's most important foreign policy priority.

But why are so many people interested in a region that in many ways is an inhospitable wilderness? Even in countries far away from the Arctic?

– Access to energy resources and other natural resources is becoming easier, and new trade routes are opening up in the north. All this is creating new opportunities.

But at the same time the impacts of climate change are particularly visible in the Arctic. This is creating major challenges that can only be tackled with knowledge, responsible management and cooperation. This is why the Arctic is becoming increasingly important internationally,’ explains Minister of Foreign Affairs Børge Brende. ‘2015 will be an important year for the climate. Towards the end of the year, the world leaders will meet in Paris with the aim of reaching a new climate agreement. Norway is at the forefront of efforts to limit global warming and we have clear ambitions. If we are successful in Paris, the new agreement could prove to be the most important agreement of our time, for the Arctic and for the world at large.’

It is no coincidence that countries such as China, South Korea and Japan have been queuing up to be granted observer status in the Arctic Council. All the Arctic countries have shown that they take their responsibilities seriously by developing and implementing Arctic strategies. In a world full of conflicts and competition for resources, the Arctic stands out as a region where close people-to-people cooperation and dialogue across national borders is the norm,’ Mr Brende adds.

facts

The Law of the Sea

200

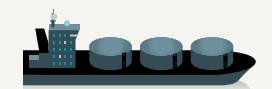
The Convention on the Law of the Sea allows a coastal state to establish a 200-nautical mile exclusive economic zone. It has sovereign rights over marine resources in this zone.



All coastal states have a continental shelf extending 200 nautical miles from their baselines. However, in many cases the continental shelf extends beyond this, for example in the case of the coastal states bordering the Arctic Ocean. Norway has already submitted documentation on the extent of its continental shelf beyond the 200-mile limit.

1750

The maritime delimitation line agreed between Norway and Russia in 2010 stretches for 1750 kilometres. All the coastal states bordering the Arctic Ocean have undertaken to resolve maritime delimitation issues in accordance with the Law of the Sea.



Peace and the Law of the Sea

On the subject of security policy and good neighbourly relations: there is no hiding the fact that Russia's actions in Ukraine are affecting relations between Russia and the rest of Europe. How is the situation influencing relations between Norway and Russia?

– Together with the rest of Europe and our other allies, we are standing firm in defence of international law and international rules in the face of Russia's conduct in Ukraine. This approach is also important in the context of the Arctic.

Respect for international law and international cooperation are crucial for promoting stability and predictability in the north. These fundamental values will always be at the core of Norway's efforts. At the same time, we intend to continue cooperation with Russia in areas where we have common interests. It is in everyone's interests that the Arctic remains a peaceful and stable region, Mr Brende says.

Mr Brende points out that the Law of the Sea provides vital guidelines for continued peaceful coexistence in the north. It is essential for Norway to take a clear and firm approach to upholding its rights and fulfilling its duties in maritime areas under its jurisdiction in the north. Norway has jurisdiction over huge areas of sea, and the Norwegian Armed Forces play a key role in monitoring and protecting these areas.

Targeted cooperation with Russia has led to improved maritime safety, higher cod quotas and action to reduce the risk of radioactive pollution. Norwegians and Russians living in the border area, in and around the towns of Kirkenes and Nikel, can now obtain local border traffic permits, which makes it easier for them to cross the border between the two countries. Since the scheme was introduced in 2012, permits have been issued to 1 749 Norwegians and 3 547 Russians. ‘These are all examples of important areas of cooperation with Russia that we wish to maintain,’ says Mr Brende.

Barents cooperation vital

Russia is by no means the only country Norway cooperates with in the north. Since 1993, the Barents cooperation between the five Nordic countries, Russia and the EU has been promoting peaceful and sustainable development in the Barents region. The need to ensure political stability over time and reduce possible tensions

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We are normalising people-to-people contacts. This gives us all a sense of safety and security.

PIA SVENSGAARD, HEAD OF THE NORWEGIAN BARENTS SECRETARIAT

was what inspired these countries to sit down at the same table.

Over 20 years later, the new head of the Norwegian Barents Secretariat, which is now permanently based in Kirkenes, views her job as more important than ever.

– The Barents cooperation is all about taking an east-west approach, not just a north-south one, says Pia Svensgaard.

She emphasises the importance of people-to-people projects in particular. This could mean a school class from Finnmark visiting a school in Murmansk. Or young IT entrepreneurs benefiting from working on joint projects with Russian partners. At a more general level, the Barents cooperation deals with areas such as transport and infrastructure, health and the environment, business and culture.

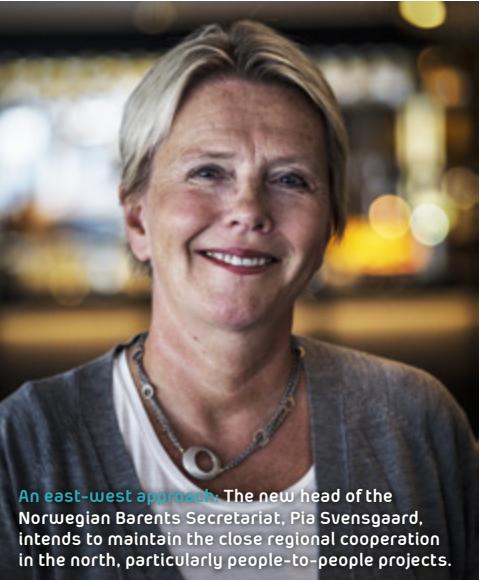
The Barents cooperation was initiated in response to changes in the political landscape, which made closer cooperation between the eight Arctic states possible.

'Everyone' wants to take part in the Arctic Council

The Arctic Council was established in 1996 as a forum for environmental cooperation. Since then, it has developed into the most important arena for dealing with the common challenges facing the eight Arctic states – and the rest of the world – in the Arctic. The members of the Council are the five Nordic countries plus Canada, Russia and the US. In addition, France, India, Italy, Japan, China, the Netherlands, Poland, Singapore, Spain, the UK, South Korea and Germany have all been granted observer status. The EU has been admitted as observer in principle and participates in the Arctic cooperation.

Business interests are moving higher up the Council's agenda, and a separate business forum,

the Arctic Economic Council, was established in autumn 2014. Its aim is to provide a platform for dialogue and cooperation between the Arctic Council and the business sector. Its secretariat



An east-west approach. The new head of the Norwegian Barents Secretariat, Pia Svensgaard, intends to maintain the close regional cooperation in the north, particularly people-to-people projects.

is to be based in Tromsø.

– Although various actors may have legitimate but conflicting interests in the north, there is no race for the Arctic or for the resources in the region. The UN Convention on the Law of the Sea applies to the Arctic seas just as it does to other parts of the world. Most of the natural resources that the Arctic is thought to hold are within states' exclusive economic zones. There are very few unresolved issues relating to jurisdiction in the Arctic, states comply with the Convention on the Law of the Sea, and the Arctic coastal states have committed themselves to the orderly settlement of any overlapping claims. The main challenges in the Arctic relate to other concerns, such as climate change and environmental issues, growing traffic along new sailing routes, the expansion of tourism, and greater oil and gas activity. This increase in activity levels is explained by the growing demand for energy and raw materials and the fact that the region is becoming more accessible as the sea ice melts, Mr Brende points out.

A region of opportunities

Foreign Minister Brende considers it important that the Government promotes sustainable bu-

INTENSELY ENGAGED IN THE DEBATE:
Foreign Minister Børge Brende at a meeting with key stakeholders from Nordland county in Bodø in August 2014, where the Arctic was on the agenda.



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Norway should continue to play the constructive role in the Arctic it already does: hosting and funding scientific and policy research into the High North.

JAMES ASTILL, POLITICAL EDITOR OF THE ECONOMIST

Business development in the north. – We can pride ourselves on the good results we have achieved so far, but now, more than ever, it is crucial that we turn good results into lasting progress. Our aim must be for North Norway to become one of the most innovative and knowledge-driven regions of growth in the world. And this is possible. Space technology and research is one area in which the region is already a world leader. The space research cluster made up of research centres in Svalbard, Tromsø, Narvik and on Andøya is Norway's answer to Silicon Valley. My aim is to promote a results-oriented Arctic policy that fosters more "Silicon Valleys" with more knowledge-based enterprises in the north, Mr Brende says.

He emphasises the fact that the Government will target its efforts towards industries with growth potential. Priority areas will include the oil and gas industry and the related supply industry, the maritime sector, the seafood industry, the mineral industry, tourism and space technology. 'The oil and gas sector is a mainstay of economic activity in the north, and offers unique opportunities for value creation, employment and growth, and for generating other positive spin-off effects in North Norway,' Mr Brende remarks.

How do you view the global energy situation?

– With the Arctic becoming more accessible, we will be able to produce more energy, which the world needs. Some 1.3 billion people still do not have access to electricity, and energy poverty is a major challenge. The global demand for energy will therefore continue to grow in the years to come. An estimated 22 % of the world's undiscovered oil and gas resources are thought to be in the Arctic, Mr Brende says. 'Renewable energy use should, and will, increase considerably, but a large share of the global energy supply will still have to come from sources such as gas. Gas will be an important bridge between a fossil fuel based and a low-carbon economy. Due to stringent requirements and strict regulation over the course of many years, the Norwegian oil and gas sector is a world leader in terms of limiting negative environmental impacts. Greenhouse gas emissions

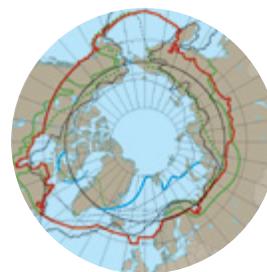
from oil and gas production on the Norwegian continental shelf are considerably lower than the international average.'

Norway's role in the Arctic

Although a small Arctic nation in terms of population, Norway plays a key role in the Arctic, and this is pointed out by international analysts and commentators.

– Norway has already played an instrumental role in raising international awareness of the Arctic and the key issues that confront the region. Norway has also played a leadership role in international fora, such as the Arctic Council, the Euro-Arctic Barents Council, the United Nations and elsewhere to focus policy attention,' says Heather Conley, Director of the Europe Program at the Center for Strategic and International Studies (CSIS) in Washington. At the same time, she points out that the Arctic has greater importance in Norway than in the US: 'Economically, the Arctic is very important to Russia and Norway, and has grown in interest in non-Arctic countries, such as China, Korea and Japan. The Arctic will never hold the same level of importance in Washington as it does in Oslo. In fact, the so-called lower 48 states are not fully aware that the United States is an Arctic nation. But having said this, the Arctic is gaining some policy traction in Washington, particularly as the US gears up for its Arctic Council chairmanship.'

James Astill, Political Editor of The Economist, draws particular attention to the role Norway plays as a source of knowledge and information on the Arctic: 'Norway should continue to play the constructive role in the Arctic it already does: hosting and funding scientific and policy research into the High North. Compared to a decade or so ago, international interest in the Arctic is extremely high. Asian exporters, like Korea and Japan, want to know if the Arctic will offer faster, cheaper routes to market for their products.' He emphasises the important role Norway plays in 'enforcing high environmental standards in the Arctic and encouraging others to adopt them'.



CHANGING THE PERSPECTIVE:
The world looks different
with the Arctic Ocean in the
middle of the map.
Illustration: AMAP

facts

Norway and Russia

196

kilometre land border between Norway and Russia.

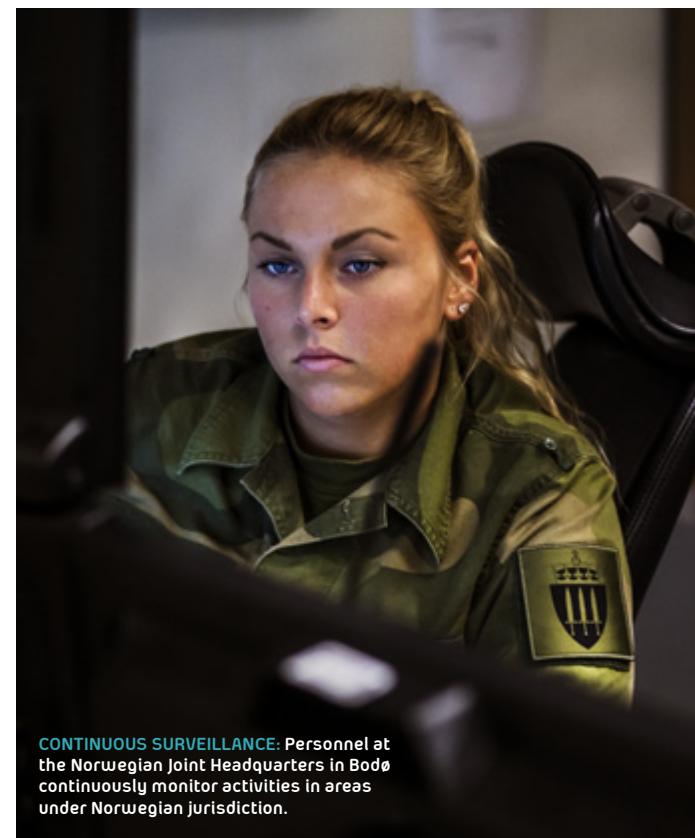
318

thousand border crossings between Norway and Russia in 2014.



1749

Norwegians and 3 547 Russians have local border traffic permits, making it easier for them to cross the border between the two countries.



CONTINUOUS SURVEILLANCE: Personnel at the Norwegian Joint Headquarters in Bodø continuously monitor activities in areas under Norwegian jurisdiction. Illustration: AMAP

The role of the Norwegian Armed Forces in the north

Every day, the Norwegian Armed Forces are engaged in upholding Norwegian sovereignty, ensuring adequate preparedness at all times, and exercising authority in areas under Norwegian jurisdiction, at sea, in the air and on land.

Activities include:

- The participation of Norwegian F-16 fighter jets in NATO's Quick Reaction Alert missions
- Maintaining national preparedness for military crisis management and surveillance
- Providing border guards at the external Schengen border between Norway and Russia
- Coast Guard duties (including fisheries inspections, customs inspections, environmental protection and search and rescue operations)
- Contributing to civilian search and rescue preparedness
- The Norwegian Armed Forces also play an important role at local and regional level as property owner and land manager.

2310

In 2014, the Norwegian Coast Guard in North Norway carried out 2310 patrol days.



What is the global significance of the Arctic?

JOHN KERRY,
US Secretary of State



– The Arctic region is the last global frontier and a region with enormous and growing geostrategic, economic, climate, environment, and national security implications for the United States and the world. There is nothing that should unite us quite like our concern for both the promise and the challenges of the northernmost reaches of the earth.

LAURENT FABIUS,
Minister of Foreign Affairs, France



– The stakes are high in the Arctic, both for the Arctic states themselves and for the planet as a whole. The Arctic is already bearing the brunt of climate change, as I saw for myself when I visited Svalbard with Foreign Minister Børge Brende in June 2014. The region is in urgent need of protection.

France will play its part in promoting ambitious measures to respond to the serious implications of climate change, both in the run-up to the Paris climate conference in 2015 and in our research efforts in close cooperation with Norway.

RAJENDRA PACHAURI,
Chair of the Intergovernmental Panel on Climate Change (IPCC)



– The Arctic has very significant impacts on global climate.

The annual mean Arctic sea ice extent decreased over the period 1979 to 2012 with a rate that was very likely in the range 3.5 to 4.1 % per decade. Along with the increase in permafrost temperature there is reason to be concerned about several implications of this trend, which would have a global impact. Arctic states have to take in hand adaptation measures to deal with the rapid changes taking place in the region. Given the fact that some of these states have highly developed technological capabilities, they could establish collaborative relationships with organisations in other parts of the world by which mitigation measures in particular but also experience with adaptation can help countries across the globe.

YUN BYUNG-SE,
Minister of Foreign Affairs, South Korea



– The Park Geun-hye Government adopted the Arctic Policy Master Plan in 2013. This Plan, which places Arctic activities high on the national policy agenda, highlights three points: i) strengthening scientific research, ii) exploring new opportunities, and iii) promoting international cooperation.

The Republic of Korea remains committed to becoming a trusted and constructive partner with all Arctic States. I hope and believe that our presence at the Arctic Council as a dedicated observer will further deepen and broaden our partnership with Norway in Arctic activities in many years to come.

international perspective

The world is turning its attention to the Arctic, a region where Norway has important interests to safeguard. The Government will strengthen Norway's position as a responsible actor and partner in the north by focusing on knowledge development, business development and international cooperation.

BETTER ACCESS TO NATURAL RESOURCES, new trade routes and growing human activity have increased the global importance of the Arctic. At the same time, the effects of climate change are more evident in the Arctic than anywhere else in the world, with major consequences for the environment and society. As a coastal state, Norway has a responsibility to uphold its rights and fulfil its duties under the Law of the Sea and to ensure sustainable management of the environment and the region's natural resources.

Norway will continue to take a consistent and predictable approach to the exercise of its sovereignty. We will play a leading role in promoting cooperation with other countries based on trust and openness. The purpose of international cooperation in the north is to promote predictable, peaceful and sustainable development through intergovernmental, regional and people-to-people co-operation. It is therefore important to maintain all existing cooperation fora in Arctic.

The Arctic Council is the only circumpolar cooperation forum for Arctic issues at government level. Norway plays a role in shaping developments in the region, together with the other member states. Climate change and environmental issues are key areas of the Council's work, and, in line with Norway's wishes, greater attention is now being paid to business development. Developments in the Arctic are also important beyond the region itself. That is why Norway attaches so much importance to cooperation with the countries which have observer status in the Arctic Council - both for the sake of the valuable contributions they can make to the Council's work, and to promote understanding of Norwegian policy.

The people who live in the north are the main drivers

of cross-border cooperation in the region. The Barents cooperation forum has formed the basis of much of the extensive cross-border contact in the north. Contact and cooperation across national borders strengthens business activity, enhances knowledge and provides a basis for a forward-looking and sustainable society. The Sámediggi (Sami parliament) and the Sami Parliamentary Council play a key role in efforts to promote cross-border cooperation and cultural exchange. In addition, cooperation between the Nordic countries is becoming more and more important.

Together with the rest of Europe and our other allies, Norway is standing firm in defence of international law and international rules in the face of Russia's conduct in Ukraine. Respect for the Law of the Sea and international cooperation are crucial for promoting stability and predictability in the north. As Arctic coastal states, Norway and Russia share many common interests, not least the need to ensure sound management of the environment, the natural resources and the joint fish stocks of the Barents Sea. Our aim is therefore to continue to cooperate with Russia in areas where we have common interests.

Norway's presence in the north contributes to security, stability and predictability, and the Government will continue to ensure a high level of operational capability in the region. The presence of our allies, such as for training and exercising in Norway, is an important and natural result of our membership of NATO. Closer cooperation between the Norwegian Joint Headquarters in Bodø and NATO's command structure strengthens the Alliance's ability to manage potential military crisis situations in the north. ◉

STRONG PRESENCE:
The Norwegian Armed Forces help to maintain security, stability and predictability in the north. The Norwegian Coast Guard plays an important role.



international cooperation

Government priorities

► Government measures for strengthening international cooperation in the north:

► **Enhanced Arctic diplomacy:** Norway is intensifying its diplomatic efforts in the Arctic vis-à-vis the other Arctic states, the EU, key European countries and the new Asian observers. Official political visits and dialogues on the High North with a number of countries are an important part of this work. In 2014, discussions on the High North were conducted with Canada, Singapore, Finland, Iceland and Germany. The same year the French Foreign Minister visited Svalbard and the Polish Foreign Minister visited Bodø.

► **Closer cooperation with the US on Arctic issues:** Norway is intensifying its bilateral dialogue with the US on Arctic issues and the Arctic Council prior to the US Chairmanship of the Arctic Council (2015–17).

► **Arctic Economic Council:** The AEC was established in Iqaluit in Canada in autumn 2014, and consists of business representatives from the Arctic states and the six indigenous peoples' organisations that are Permanent Participants in the Arctic Council. The Council's Secretariat is to be based in Tromsø. The AEC will be an important platform for dialogue between the Arctic Council and the business sector. Norway considers it important that the Arctic Council gives greater priority to business development cooperation.

► **Greater involvement of observer countries in the Arctic Council:** Norway is seeking to establish Arctic Frontiers Plus as an informal meeting place for dialogue between the member states of the Arctic Council and countries with observer status, at the annual Arctic Frontiers conference in Tromsø. In addition, the Ministry of Foreign Affairs holds regular meetings on cooperation in the Arctic Council with relevant embassies.

► **Closer Nordic business cooperation:** The prime ministers of Norway, Sweden and Finland have set up an expert group to identify ways of strengthening business cooperation in the north. The expert group presented its recommendations in Tromsø in January 2015.



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The purpose of international cooperation in the north is to promote predictable, peaceful and sustainable development.

► **More extensive Finnish–Norwegian cooperation:** Norway and Finland have established a partnership to strengthen economic and scientific cooperation in the Arctic. Key areas include promoting student exchanges, research cooperation, dialogue on transport and logistics, closer regional cooperation and flows of labour and services.

► **Freedom of Movement Council:** The Council was set up in spring 2014 to promote freedom of movement and business development in the Nordic region. The Council will work closely with the Ministers for Nordic Cooperation. The aim is to remove five to ten border barriers each year. This is important for strengthening the competitiveness of the Nordic countries.

► **Nordic Sami Convention:** Sweden, Finland and Norway began formal negotiations on a Nordic Sami Convention in 2011. The most recent round of talks was held in autumn 2014.

► **Follow up of the Barents summit:** The new Kirkenes Declaration, adopted at the Barents summit in 2013, emphasises the importance of business cooperation. The transport and logistics network in the region is vital for both individuals and the business sector. A draft joint transport plan for the Barents region was presented in September 2013 and is now being considered by the countries concerned. People-to-people contact will continue to be an important part of the Barents cooperation forum.

► **More extensive cross-border cooperation on health:** Norway will continue to participate in the Cooperation Programme on Health and Related Social Issues in the Barents Euro-Arctic Region. Under the programme, priority is given to cooperation on combating communicable diseases such as HIV/AIDS and tuberculosis, preventing lifestyle-related health problems and developing more comprehensive healthcare services for children and young people at risk. This work is becoming increasingly important given the growing activity in the region and the rise in cross-border traffic.

► **Further cooperation within the Northern Dimension:** A number of partnerships have been set up in the framework of the Northern Dimension, including partnerships on the

environment, health, culture, and transport and logistics. Norway participates actively in all of these. The aim is for the framework of the Northern Dimension to promote development in areas that are of particular importance to the population in the north.

► **Regional policy in the north:** Both the Norwegian Government and regional Norwegian stakeholders agree with the other Nordic countries, Russia and the EU on the need to view regional policy programmes and cooperation arenas in the Arctic as parts of a coherent whole. Norway is working to promote the establishment of a regional hub located in Tromsø to coordinate the work of different programmes and networks and to promote knowledge-building and better use of existing knowledge across the region.

► **Greater capacity at the Storskog border station:** In autumn 2014, the Government began a pre-study (due to be completed by 2015) for a project to increase the capacity of the Storskog border station.

► **Expansion of the local border traffic regime:** Norway is seeking to expand the local border traffic regime with Russia to include residents of the whole Neiden area.

► **New military border posts:** The building of new border stations will strengthen Norway's ability to monitor and control the Norwegian–Russian border. Pasvik border post was opened in June 2014.

► **Closer military cooperation:** Norway is further developing its military cooperation and ability to cooperate with key allies and Nordic partner countries in the north, for example by participating in joint exercises. The Cold Response exercise is carried out in North Norway every other year, most recently in March 2014.

► **Cooperation to combat IUU fishing:** Norway cooperates with the other Arctic coastal states on measures to combat illegal, unreported and unregulated fishing in the Arctic Ocean. In 2014, the five coastal states agreed a joint declaration in Nuuk, Greenland, on the need to develop interim measures to combat IUU fishing in the high seas area of the central Arctic Ocean. ●

business in the north

Access to rich natural resources and skilled and adaptable businesses make the north a region of opportunities. With assertive and knowledge-based commercial investment, there is great potential for growth.

THE HIGH NORTH has major natural advantages and is undergoing positive developments. The challenges and opportunities vary within the region.

Increased value creation is a key goal for investment in the north. This places demands on businesses, local research and development institutes and public actors. Competence sharing, network building and international cooperation are important for innovation and value creation. Increased innovation, knowledge, technological development and cooperation are needed to strengthen the adaptability and competitiveness of businesses in Northern Norway. Good framework conditions for stimulating as much sustainable value creation as possible provide a foundation for long-term positive development in the north. In order to safeguard the interests of indigenous peoples, we need good dialogues between business actors, such as the reindeer husbandry industry, the authorities, and the local population.

The oil and gas industry is the largest contributor to the Norwegian economy, and provides major opportunities for increased employment and growth in Northern Norway. The Government will carry out an ambitious oil and gas policy, which facilitates future development projects in the High North, including by offering attractive exploration areas offering attractive exploration areas. Access to land and a high level of activity are important prerequisites for the further development of oil- and gas-related business ashore. As oil and gas activities move northward, we will face new safety and environmental challenges which the authorities and industry will have to work together to manage.

The fishing and seafood industries have always been important in the north. Today's fisheries are a modern and efficient industry. The aquaculture industry in Northern Norway is experiencing positive development, and there are good opportunities for future growth. The land-based seafood industry has struggled with low profitability. The Government wants to improve the profitability of the

seafood industry and facilitate predictable growth in the aquaculture industry, within an environmentally sustainable framework.

Initiatives in the High North should facilitate maritime business operations and safe sea transport. The increased extraction of oil and mineral resources in the region has the potential to be a key driver of increased shipping in the Arctic. Actors in Northern Norway should be well positioned to share in these market opportunities. The Government has therefore assigned a high priority to building on the expertise exists in maritime operations, research and innovation in the High North.

The area's spectacular scenery and wildlife are major competitive advantages for the travel and tourism industry. Tourism is important for local employment. The Government will contribute to good, predictable framework conditions for the travel and tourism industry.

Northern Norway has substantial mineral resources, and the Government will facilitate sustainable and future-oriented growth in the industry.

► **Government measures that will contribute to knowledge-based business development in the north:**

- **Awards of new production licences:** There are major undiscovered oil and gas resources in the High North. The Government will offer new acreage in both geologically known and unknown areas, within the parts of the High North that are open to oil and gas activities. Awards in the Predefined Areas in 2014 concentrates on the geologically known areas and will make an important contribution to the further exploration of the Barents Sea. Large parts of the High North have not been explored. In the 23rd licensing round, for the first time since 1994 the Government will give access to new, interesting exploration opportunities in the southeast of the Barents Sea. ►

LOOKING UP AND FORWARD:
Clarion Hotel The Edge is a sign of the optimism and hope for the future that characterise the region. The new hotel, which opened in the spring of 2014, is one of Northern Norway's largest conference hotels.



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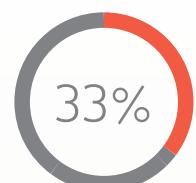
Increased value creation is a key goal in the High North.

► **NOK 150 million to business projects:** The Ministry of Foreign Affairs has allocated NOK 150 million to business projects in the High North for the period 2014-2019. The funds are administered by Innovation Norway. Norway has successfully developed a considerable amount of expertise and knowledge about High North issues in Norway, especially in Northern Norway. The goal is to translate this knowledge into entrepreneurship and innovation. This focus is an important embodiment of the Government's focus on the High North, with increased emphasis on value creation, business and public-private partnerships.

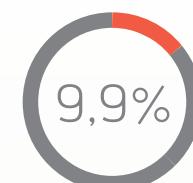
► **Coordinated use of European territorial cooperation and EU sectoral programmes:** The EU's regional policy is intended to stimulate the creation of value and reduce regional differences. Cross-border development programmes, such as Interreg, are a part of this. Interreg provides major opportunities for regional and local development, by working together with European partners in the public sector, business and research. Those involved come to see resources, knowledge and opportunities in context across borders, and meet common challenges through cooperation. Value creation and innovation are emphasised in all of the programmes. Good coordination with resources in other programmes, such as the EU framework programme Horizon 2020, will facilitate increased returns for those involved.

► **Continuation of mineral mapping:** If the minerals industry is to grow and develop, it is crucial to map the deposits. Companies prospecting for commercial mineral resources are dependent on a good overview when identifying areas for exploration. The Government will continue mineral mapping in Northern Norway under the management of the Geological Survey of Norway and will map larger areas. This mapping will provide better knowledge of the north's mineral resources, and facilitate better management of the region's resources by the authorities. This, in turn, will increase the probability of establishing new mineral operations in Northern Norway. ◉

Measures in numbers



33 percent of revenues in the Norwegian mining and minerals industry are generated in Northern Norway and Svalbard.



Annual growth in revenues in the maritime industry in the three northernmost counties during the period from 2004 to 2012.

150

NOK 150 million from the Ministry of Foreign Affairs are allocated to business projects in the High North during the period from 2014 to 2019 through Innovation Norway.

2015

This year, white papers on the aquaculture industry and the seafood industry are to be presented this year.

140

During the 23rd licensing round, 40 companies have nominated a total of 140 blocks in the Barents Sea and 20 blocks in the Norwegian Sea.

Increased shipping in the Arctic Ocean



In the spring of 2012, the Ministry of Foreign Affairs asked an expert group for advice on Norwegian interests given the expectation of increased shipping traffic in the Arctic. The expert group report 'Increased shipping in the Arctic Ocean: opportunities and challenges for Norway' concluded that Norway can and should take the lead in efforts to meet the challenges of maritime activity in the Arctic. The report makes a number of recommendations concerning safety, the environment and framework conditions.



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In order to safeguard the interests of indigenous peoples, we need a good dialogue among business actors, such as the reindeer husbandry industry, the authorities, and the local population.



facts

Ethical guidelines for resource extraction

The Ministry of Foreign Affairs is financing a project entitled "Resource Extraction and Indigenous Peoples – Evaluating Ethical Guidelines", which is led by the Árran Lulesami Centre. The project is to survey and evaluate ethical guidelines for resource extraction in indigenous areas. The project group will review international, national, and local guidelines for economic activity in indigenous areas and analyse concrete resource extraction projects in Norway and Russia. The project group will also look at the possibility of cooperation with indigenous agencies and businesses on developing a ranking system in which companies are ranked according to how they fulfil ethical guidelines and interact with the local population.

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● **Increased knowledge of marine disposal:** The Government allows the mineral industry to dispose of waste material in the sea, but will apply strict requirements and ensure environmental monitoring. Mineral operations often take place near the coast, and marine disposal can be the only real disposal option for materials that cannot be used commercially. The Research Council of Norway has contributed to a research project for the period 2014–2019 with an overall economic framework of NOK 28 million, of which 20 per cent comes from the participating companies. The programme will contribute to better knowledge of disposal and of how marine disposal can be combined with environmental considerations and other business activities, such as the seafood industry.

● **Better management of minerals:** Efficient and competent management of minerals is a competitive advantage for the mineral industry and results in better resource management of minerals. The budget for the Directorate of Mining with the Commissioner of Mines in Svalbard was increased in 2014.

● **Stronger technical expertise in the mineral industry:** Beginning in 2014, the Ministry of Trade, Industry and Fisheries is supporting a new professorship in Mineral Engineering at the Norwegian University of Science and Technology (NTNU) in Trondheim.

● **Strengthened business-oriented research:** Nofima is Europe's largest business-oriented research institute, with research competence in the entire value chain of the aquaculture and agricultural sectors, and the head office is located in Tromsø. The Government will strengthen long-term business-oriented research at Nofima. Their activities encompass issues connected to the Norwegian aquaculture, fishery and food industries.

● **Focus on business-oriented marine biotechnology and bioprospecting:** Through financing research and commercialisation, the public authorities are contributing to the development of businesses based on marine biotechnology and bioprospecting. Among other things, this is taking place through the Research Council of Norway's programme BIOTEK2021, Mabit (a business-oriented R&D programme in marine biotechnology in Northern Norway), the research infrastructure of Nofima, and through financing and further development of the national marine biobank Marbank.

● **Regulations relating to the extraction and utilisation of genetic material:** The Ministry of Trade, Industries and Fisheries and the Ministry of Climate and the Environment are working to establish regulations to govern the extraction and utilisation of genetic material (the Bioprospecting Regulations).

● **A new white paper on growth in the aquaculture industry:** The Government will present a white paper on sustainable development in the aquaculture industry in the spring of 2015.

● **Increased value creation in the seafood industry:** The Government will seek to improve profitability and value creation in the seafood industry through a white paper and draft legislation in the autumn of 2015.

● **Maritime strategy:** The Government has decided to develop a comprehensive policy for growth and value creation in the maritime industries, and intends to present the strategy in the spring of 2015. Opportunities for maritime value creation, ways for the authorities to facilitate such opportunities, and safe shipping in the High North will be discussed in this strategy.

● **Growth in the travel and tourism industry in Svalbard:** Visit Svalbard AS is today the only travel and tourism company that receives annual support directly from the Ministry of Trade, Industry and Fisheries. This is because Svalbard has special safety and environmental challenges and because the travel and tourism industry has a central position in society in Svalbard and is important for settlement. In the autumn of 2012, Visit Svalbard AS began work on a master plan for creating growth in the travel and tourism industry in Svalbard. Work on the master plan "Destination Svalbard 2025" is to be completed in 2014/2015.

● **Support to Norinova Technology Transfer in Tromsø:** The commercialisation programme of the Research Council of Norway, Forny 2020, gives support to Norinova Technology Transfer and their activities. The purpose is to commercialise research results from institutions such as the University of Tromsø, the University Hospital of North Norway and the Northern Research Institute (Norut).

● **Stimulating and stabilising recruitment measures:** The action zone for Finnmark and Nord-Troms entails exemption from employer's national insurance contributions, tax relief and measures directed at individuals. The measures directed at individuals have effects that stabilise and stimulate the recruitment of skilled labour, and make residence more attractive. ●

research and education focusing on the north

Norway will be a leader in knowledge about the north, for the north and in the north. By investing in research and education in a wide range of areas, we will contribute to developing our society, creating value and ensuring sustainable management of resources and the environment.

KNOWLEDGE AND COMPETENCE are crucial for developing commerce in the north. Knowledge and technology, which are the foundation for value creation in business, often build on basic research. Refining research results with a view to commercialisation in North Norwegian industries can provide a basis for further growth and value creation. At the same time, rapid climate change and increasing activity mean that managing the impact of human activity in the Arctic requires more knowledge. We need to understand the consequences of increased commercial operations, and of how changes in the climate will affect the environment and resources. For example, higher temperatures in the sea and changes in ocean currents may lead to fish stocks moving elsewhere. In the past decade, this has entailed increased efforts in research and the monitoring of marine resources in the north.

As in other sectors of society, business in the north is increasingly knowledge-based. It is therefore important to have access to qualified manpower. The research and education institutions in the north play an important role through both research and recruitment to businesses. The level of education in Northern Norway is lower than in the rest of the country. The development of strong, regional knowledge-based business environments and skilled manpower for business and society is critical to unleashing the value creation potential of the region, and at the same time meeting the environmental challenges. This must take place in interaction between individuals, business actors and centres of expertise, in cooperation with international partners.

The Government is determined to cooperate with business to make it attractive for young people to choose – and complete – courses of education that are important to the

development of society in the north. In order to develop the quality of higher education and to use resources more efficiently, the University of Tromsø and the Finnmark University College were combined into the University of Tromsø, Norway's Arctic university, in 2013. The Ministry of Education and Research is considering merging other institutions of higher education in the north to increase robustness and quality. Strong institutions with viable learning and research communities will contribute to further developing North Norwegian society.

Norwegian researchers are attractive in international Arctic research cooperation. Cooperation across borders is important to developing common knowledge bases, where new knowledge is produced and exchanged in a dynamic interaction.

► **Government measures for strengthening knowledge in and about the High North:**

● **Further development of the Fram Centre:** The Fram Centre (High North Research Centre for Climate and the Environment) in Tromsø, consists of 20 institutions that engage in interdisciplinary research, advisory services, management and the dissemination of information in the natural sciences, social sciences and technology. The Fram Centre is a significant initiative to build new knowledge on the environment and climate, and to strengthen Norway's position as an outstanding steward of environmental and natural resources in the north. The centre disseminates knowledge to public administration, businesses and industry, and the general public. The centre also contributes to strengthening the link between research and education. The Fram Centre houses the secretariat of the Arctic Council and contributes to strengthening Tromsø's role as the "capital city" of Arctic cooperation. The Government will return to

NEW TECHNOLOGY BUILDING:
In the autumn of 2014, the University of Tromsø opened a new technology building. The university focuses on technology and scientific studies

broad-based knowledge development

Government priorities

the question of a new building for the Fram Centre in the first half of 2015, after a new review of the costs and needs.

► **Research boost in the north:** The research boost in the north is a strategic initiative aimed at business-relevant knowledge infrastructure. The initiative provides support for competence-building measures and long-term cooperation between educational and research institutions and industry. The initiative primarily targets universities, university colleges and independent research institutes in Northern Norway. The programme has been operating since 2009 and has been extended for another three years for the period 2014–2016.

► **Continuation of important polar research:** The Government is continuing the Polar Research programme at the Research Council of Norway. An important goal of the programme is to develop new knowledge for Norwegian policy, public administration and business activities in the Polar areas. The programme particularly prioritises research connected to Svalbard.

► **Increased knowledge of the environmental consequences of business activities in the north:** As business activities in the north increase, it is important that this takes place in a way that safeguards the environment and the basis of existence in the long run. In order to accomplish this, it is necessary to adapt to the natural environment and to have innovation that contributes to good environmental solutions. The Fram Centre has therefore been assigned the task of developing a new research programme, MIKON (Environmental impact of industrial development in the north). The programme is intended to contribute to reinforcing the knowledge base or the authorities' work to limit the footprint of increased activity in the north, and to ensure that new business activities take place within environmentally responsible frameworks. MIKON has designated three areas of focus: the knowledge base for comprehensive management of sea areas, impact on organisms and ecosystems, and integrated environmental impact studies. Work is already well under way through 17 different projects.

► **Freezing of the research ship Lance into the ice:** Good climate models are necessary in order to be able to say something about future climate change, and better knowledge of sea ice is important to improving these models. In this context, there is a significant lack of systematic data from north of Svalbard for the winter half-year. The Nor-

wwegian Polar Institute will therefore let the research vessel RV Lance freeze into the ice north-east of Svalbard in the winter of 2014–2015 in order to follow the ice drift to the south-west, as the polar ship Fram did in 1893–1896. During the expedition, data about the ice, the ocean and biological activity will be collected. Another goal is to acquire knowledge about the processes that govern wind and weather, so that meteorological models can be improved. The expedition should provide new information about ocean acidification and how that affects the ecosystem.

► **New ice-going research vessel:** The Institute of Marine Research has signed a contract for the construction of a new ice-going research vessel. The vessel will have its home port in Tromsø and will be important for polar, environmental and fishery research, and for resource mapping in the High North. According to plan, the vessel should be ready for operation in 2017.

► **Geological mapping in the High North:** Knowledge of oil and gas resources is a prerequisite for good resource management. The Government has therefore allocated funds for geological mapping in the High North for 2015. This is a continuation of long-term mapping in the north that has been taking place for several decades. The planned mapping of the Barents Sea will provide new geological insight into the oil and gas potential in large parts of the Barents Sea, including areas close to the delimitation line with Russia, and areas already opened in the south of the Barents Sea. In addition to ensuring the best possible management of resources, this is necessary in order to safeguard Norwegian national interests.

► **New research and expertise centre for oil and gas activities:** In 2014, a research and expertise centre for oil and gas activities in the Barents Sea and the Arctic (ARCEx) was opened at the University of Tromsø, supported by the Ministry of Foreign Affairs and the Ministry of Petroleum and Energy, through the Research Council of Norway. The goal is to acquire new knowledge about oil and gas resources in the Arctic and develop knowledge and methods for more environmentally friendly exploration activities.

► **60 more students at the University of Tromsø:** Technology is important to business development and workplaces in Finnmark. The region needs more engineers in order to develop and realize its opportunities. The Ministry of Education and Research has therefore allocated 60 new places for technology students at the University of Tromsø

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Knowledge and competence are crucial for the development of businesses in the north.

Measures in numbers



The nickel plant on Kola annually discharges five times more sulphur dioxide than all of Norway. The impact on health and the environment should be documented.

95

thousand square kilometres of Norwegian seabed have been mapped in the Mareano project.

13

students from Norway took Upper Secondary level 3 at the Murmansk School in the school year 2013/2014, in order to learn better Russian, among other things.

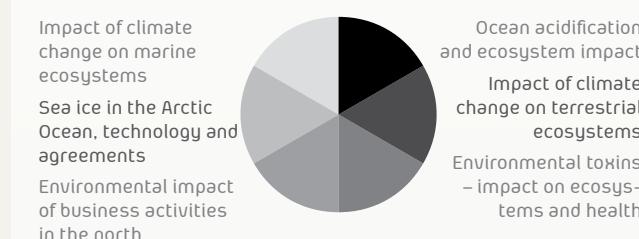
60

new places for students in technology studies were created at the University of Tromsø in the academic year 2013/2014.

17

projects are under way under the new research programme MIKON at the Fram Centre.

The Fram Centre has six flagship research projects that focus on the High North:



for the academic year 2013/2014. The places for students at the merged university have been allocated to the Alta campus, in order to ensure access to graduates for work and business in the northernmost region.

► **New building at the University of Tromsø – Norway's Arctic University:** The new technology building was opened in the autumn of 2014. The building facilitates cooperation between technology and scientific studies at the university. Among other things, the new building contains a separate simulator centre with ship, submarine and aircraft simulators. Funds have been allocated for the construction of a new medical and health building at the University of Tromsø, which is to be completed in 2017. The building will facilitate closer cooperation in both education and research among the various health care studies.

► **Maintaining the Murmansk School, Russia:** The school is intended to help strengthen cooperation between Norway and Russia, by giving North Norwegian students better Russian language skills. In the school year 2013/2014, there were 13 students from Norway who took Upper Secondary Level 3 at the Murmansk School.

► **Better infrastructure for research in Svalbard:** Norway has taken the initiative to establish SIOS, an international project for the distribution, coordination and better utilisation of research infrastructure and data for earth system research in Svalbard. The goal is increased effectiveness, quality, cooperation and openness in international research activities in Svalbard. A pilot project is being concluded, and in the course of 2015 the Government will decide whether and in what manner SIOS should be established.

► **Strengthening the knowledge base for management of the environment in Svalbard:** Climate change can make many species and areas in Svalbard more vulnerable to local activities. The Norwegian Polar Institute is therefore evaluating the impact of climate change on environmental management in Svalbard. At the same time, the Institute is developing knowledge that is necessary for making administrative plans for the national parks in West Svalbard. ◉

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Cooperation across borders is important to developing common knowledge bases, in which new knowledge is produced and exchanged in a dynamic interaction.

● **Mapping of the seabed in the north:** The depth, seabed conditions, biological diversity, habitats and pollution in the sediments in Norwegian coastal and sea areas are being mapped through the MAREANO programme. A database and mapping service with systematised information on the Norwegian coastal and sea areas is being developed. MAREANO delivers important knowledge for management of the environment and the resources in the Barents Sea, and it is key to the development of the knowledge base for management plans for Norwegian sea areas.

● **Adapting monitoring and research to the increasing challenges in the sea areas in the north:** SI:ARCTIC is a strategic initiative at the Institute of Marine Research spanning five years from 2014-2018. The main goal of the project is to develop a knowledge base for the status and dynamics of the ecosystem of the Arctic Ocean at the present time and in the future, and to explore possible alternatives for how to give ecosystem-based advice to public administration within the framework of a changing climate. The project is part of the Institute's increased efforts in research and monitoring in the Barents Sea and the Arctic Ocean in recent years.

● **Deepening knowledge of the environmental impact from the Kola peninsula:** Discharges from the nickel production facilities on the Kola Peninsula continue to pollute the border area between Norway and Russia. Documenting the impact on the environment and health is important for the dialogue with Russia on how to reducing the discharges. Documentation will be supplemented with new projects.

● **Acquiring more knowledge about changes that affect the environment and society in the Arctic:** Norway is leading work on a major report on changes in the Arctic up to 2030 and to 2080, and will develop new projects in this area in cooperation with the USA, among others. The Norwegian

Mapping Authority is building a new earth observatory in Ny-Ålesund on Svalbard, which is important for monitoring and understanding global and regional geophysical and oceanographic changes.

● **Further development of the knowledge base for comprehensive ecosystem-based management of Norwegian sea areas:** Climate change, ocean acidification and increasing activity result in changes in both the ocean environment and the risk situation. The Government will therefore further develop the knowledge base for the integrated ocean management plans for Norwegian sea areas.

● **Future scenarios for the Nordic Arctic:** This is a project sponsored by the Nordic Council of Ministers for the period 2013-2016 to study demographic, economic and climate change processes. The analyses provide knowledge of local and regional opportunities for business development and innovation, including on the basis of local participation, and taking into account the views of young people about their own future in the north.

● **Continuation of Árbediehtu:** Sámi allaskuvla, the Sami University College, is working on a multi-year project to document and disseminate traditional Sami knowledge.

● **International reindeer centre in Kautokeino:** The centre's task is to strengthen cooperation among reindeer herders in the circumpolar region and safeguard sustainable reindeer husbandry in the High North.

● **Joint Nordic language centre:** The Sami parliaments of Norway, Sweden and Finland have united in establishing a joint Nordic language centre – Sámi Giellagáldu. Developing and harmonising terminology in the Sami languages across the Nordic borders is the key to the use of the Sami languages in the broadest areas of society. ●

arctic 2030

The Ministry of Foreign Affairs has launched a new grant scheme, Arctic 2030, to realize the priorities for the High North.

PROJECT COOPERATION IS an important instrument in the Government's High North strategy. Through the establishment of a new grant scheme, Arctic 2030, we are expanding the perspective, both geographically and in time. The new scheme will have a framework of NOK 150 million for 2015. The purpose of Arctic 2030 is to promote Norwegian interests and contribute to realizing Government priorities for the Arctic. This entails strategic projects with various cooperative partners that can contribute to increased interaction across borders in the north, ambitious business initiatives, broad knowledge initiatives, further development of infrastructure, and reinforced environmental protection, security and preparedness.

Support from Arctic 2030 can also be channelled to projects that provide increased knowledge about climate change in the polar areas, as well as contribute to the concrete work of the Arctic Council and to international cooperation in the Antarctic.

Projects with international partners and

public-private partnerships will be given priority. Arctic 2030 is a seed scheme. This means that we welcome projects that can eventually operate on their own.

NOK 741 million has been allocated to the grant schemes Barents 2020 and Arctic Cooperation since their establishment in 2006. 246 projects have been realised thanks to these funds. Deloitte has recently evaluated three of the larger Barents 2020 projects. The conclusion is positive:

The evaluation shows that Barents 2020 has contributed to knowledge building in the High North and increased interest for High North related issues.

By combining the two grant schemes, Barents 2020 and Arctic Cooperation, into one new scheme, Arctic 2030, the scheme encompasses the entire circumpolar Arctic. The Government is raising its sights beyond 2020 and looking to new horizons in 2030. A decade in which many of the development characteristics in climate change, energy and shipping that we are seeing the contours of today can become a reality.



«Barents 2020 has contributed to the accumulation of knowledge in the High North, and to increased interest about the High North and High North-related issues.»

safe traffic and transport

Large distances characterise the High North. Good transport solutions, both internally and out of the region, are crucial for enhanced business opportunities, mobility, safety and cross-border cooperation.

THE GOVERNMENT will develop the transport system in the north so that it can handle the flow of goods, everyday transport and travel and tourism in a reliable and sustainable manner. In addition the Government will improve transport solutions across borders as well as at connections between north and south.

Norway's ambition is to develop an efficient transport system in the Barents region, with good internal connections between the Barents countries and good external connections to world markets. The transport system should facilitate regional development and create new opportunities for important industries. The transport system must be developed in a sustainable manner with emphasis on safety and accessibility for everyone. It is also important to develop good monitoring and information systems for safety and preparedness, and for monitoring the climate and the environment.

Congestion points, as well as landslide-prone and other vulnerable roads will be improved. The main priorities for developing the transport system are described in the National Transport Plan 2024-2023 (NTP) are the starting point for developing the transport system in the north. The recommendations from the Joint Barents Transport Plan and close cooperation among the transport agencies in the north are important prerequisites for developing corridors and for operational cooperation across national borders.

The Government will upgrade the E6 highway, providing the road users with better road standards, greater safety and shorter travel distances. Cross-border highways should also be improved, while cooperation with neighbouring countries should ensure coordinated development and the greatest possible harmonisation of standards across the borders.

Railways are important. Both the Nordland Line and the Ofoten Line carry a large amount of freight. Further improvement of the capacity of the Ofoten Line is being studied in cooperation with Swedish authorities.

The distances in Northern Norway make air transport especially important to ensure accessibility, market contact and security for residents and businesses. The Govern-

ment is also working to strengthen health services in the north, in order to meet the needs that arise as a result of increased activity.

Maritime infrastructure should contribute to safe and efficient maritime transport. This is essential for optimum utilisation of the resources in Northern Norway. Well-functioning infrastructure is important for the development of maritime industry and value creation in the north.

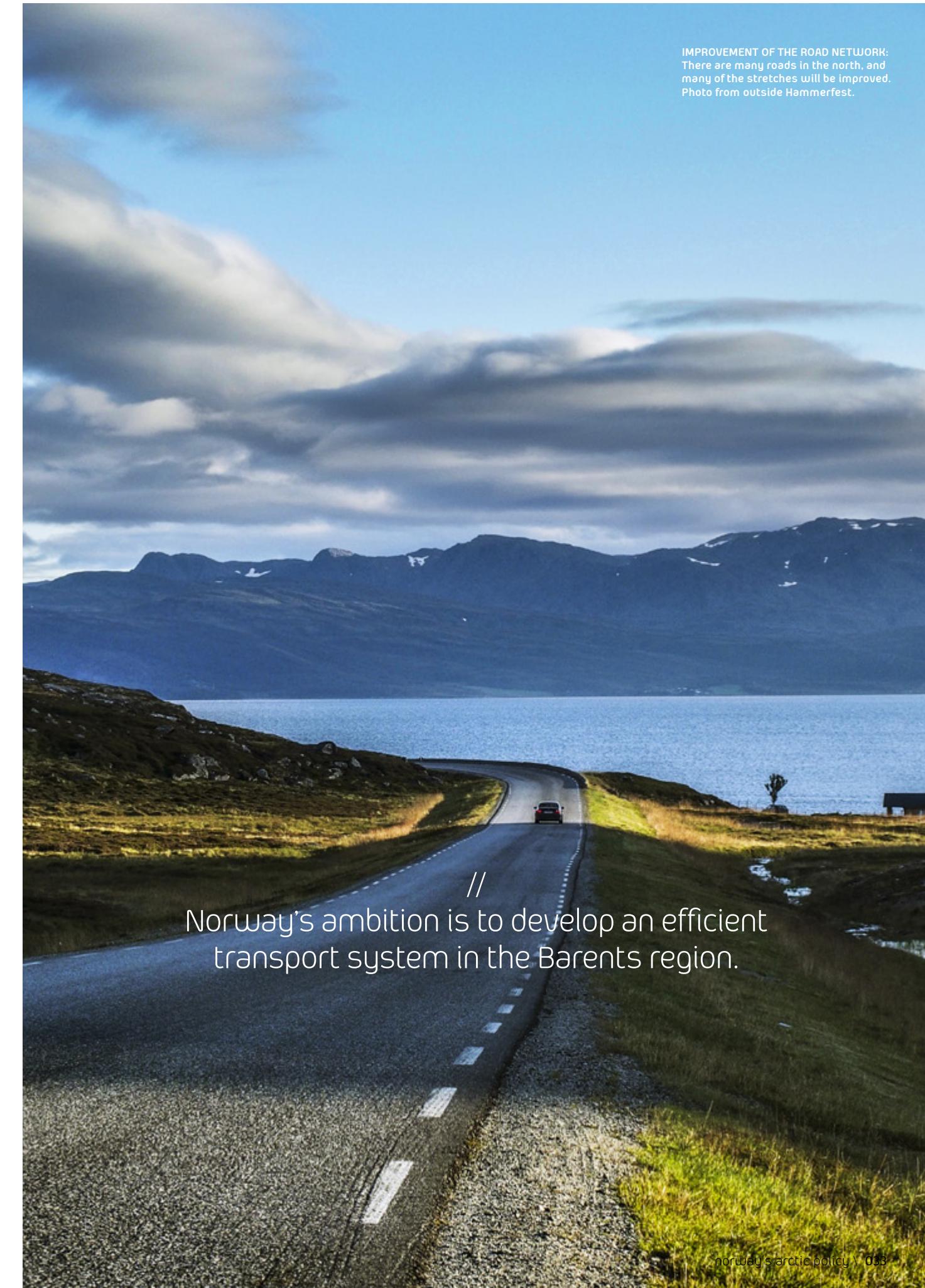
The Government has identified secure supply of power as a priority. Statnett, the Norwegian state owned enterprise responsible for owning, operating and constructing the central power grid in Norway, is making significant investments in the main grid, which will result in increased security of supply in Northern Norway. It will also provide the basis for increased generation of renewable power and continued value creation in business and industry in the region.

The Government will facilitate the development of space-based solutions for navigation, communication and earth observation. Together with climate change, Norway's scattered population, large sea areas and resource-based economy indicate that there is a need for such solutions, not the least in the north.

► **Government measures for further developing infrastructure in the north:**

► **BarentsWatch:** With the launch of the new Norwegian satellite AISSat-2 on 8 July 2014, the monitoring of sea and coastal areas has improved. At the same time, work is ongoing on a restricted-access coordination and information system for the use of agencies whose responsibilities include operations in Norwegian inshore and offshore areas, such as the police, Customs, the Norwegian Armed Forces, the Directorate of Fisheries, the Norwegian Maritime Authority, the Norwegian Coastal Administration and the Joint Rescue Coordination Centres. Improved cooperation will contribute to more rapid and coordinated responses for search and rescue operations, as well as more effective combating of

IMPROVEMENT OF THE ROAD NETWORK:
There are many roads in the north, and
many of the stretches will be improved.
Photo from outside Hammerfest.



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Norway's ambition is to develop an efficient transport system in the Barents region.

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The Government will develop the transport system in the north, so that it can handle the flow of goods, everyday transport and tourism in a reliable and sustainable manner.

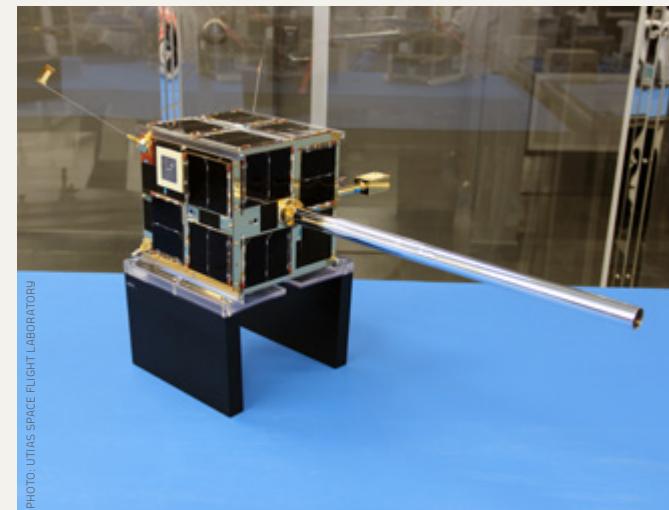
fishing crimes. BarentsWatch also includes an information portal for the public, which simplifies access to public information about the sea and the coast.

Follow-up of the joint transport plan for the Barents region: The proposal for the plan, which was presented in September 2013, points out developments that affect the long-term transport needs and gives an overview of the most important cross-border transport corridors. Proposals for concrete measures to improve the transport system make up an important part of the plan. The Norwegian side has proposed the preparation of development strategies for specific cross-border connections in the north. Along with other basic documents, this plan will be included in the work on the next national transportation plan.

Better accessibility and improved safety in the road network: The E6 in Helgeland will be upgraded (18 minutes shorter travel time) and the E6 Indre Nordnes-Skardalen will be protected from landslides (10 minutes shorter travel time). In addition, completion of the projects E6 west of Alta (12 minutes shorter travel time), E6 Hålogaland bridge (20 minutes shorter travel time) and E105 Storskog-Hesseng will provide safer and better road connections.

Investment initiative for the Ofoten rail line: The National Transport Plan 2014-2023, allocates funds to increase the rail line's capacity and improve its power supply. In addition, improvements will be carried out at terminals and stations. Forecasts from ore transporters indicate that there may, in a few years' time, be a need to increase the capacity of the Ofoten railway line by doubling the tracks. This is a project that requires closer evaluation, including in consultation with Swedish authorities. Alternative financing, like user payments, might become relevant.

Compensation for increased employer's national insurance contributions: Enterprises in the transport sector are no longer included in the differentiated payroll tax scheme. The Government has therefore presented a proposal for compensation in the form of infrastructure initiatives in Northern Norway, including for roads, railways and coastal traffic. Congestion points will be improved along the way. In addition, preparatory work is beginning on highway 77 Tjernfjellet in Nordland and the E6 at Kvænangsfjellet in Troms. For the railway, the measures will include passing



AISSAT-2: This tiny cube, 20 cm on a side and weighing only six kilos, contributes significantly to monitoring maritime activities in the High North.

Measures in numbers

2

Norway has two satellites of its own in polar orbit that monitor shipping traffic in the north. AISSat-2 was launched in the summer of 2014.

E6

The E6 highway is the main north-south running road in Norway and the west coast of Sweden. It runs from the southern Sweden at Trelleborg, into Norway and almost through the entire country north to the County of Finnmark, spanning a length of 3,140 km (1,950 mi). The road ends in Kirkenes close to the Russian border. E6 will be upgraded in the north during the coming years.

Shorter travel times in the north

The E6 highway in North Norway is to be upgraded over the next few years. This will reduce travel times along several stretches of the road, which is important for passenger and goods traffic. It will also improve accessibility and safety.

tracks on the Ofoten Line and the Nordland Line, in addition to the establishment of a stop at Reitan/Oteråga. On the coast, the fairway to Polarbase Hammerfest will be expanded. Furthermore, the approach to the Leirpollen quartzite quarry in Finnmark will be improved. Where agreements have been signed concerning the public procurement of transport services, the additional costs to transport companies may be transferred to the central government and county administration. In 2014, the counties received an additional allocation to cover these expenses. The three northernmost counties have the highest expenses, and have thus been reimbursed the most.

Major airports: Avinor, the state-owned company that operates most of the civil airports in Norway, has been tasked with continuing the planning and preparation of a licensing application for a new, major airport in Mo i Rana. In addition, technical analysis are being carried out at Hammerfest and Lofoten in order to determine whether relevant locations are suitable for the development of airports. The purpose of this is to ensure flight services that will benefit residents, businesses and tourism.

Study of communication systems for shipping in the Arctic: Satellite-based infrastructure is playing an ever greater role in managing the special challenges connected to maritime activity in the High North, particularly concerning communications, safe navigation, and search and rescue services. However, existing satellite communication systems have little or no coverage north of 75 degrees north. The Norwegian Space Centre is in the process of investigating possible concepts for satellite communications north of 75 degrees north.

Participation in the EU satellite navigation programmes: The EU satellite navigation programmes Galileo and EGNOS contribute to precise navigation in the High North. This is of great importance to maritime safety, among other things. In the spring of 2014, the Storting gave its approval for Norwegian participation in the EU satellite navigation programmes for the period 2014-2020.

New port facilities in Svalbard: In the National Transport Plan 2014-2023, funds have been allocated to upgrading and constructing new harbour infrastructure in the port of Longyearbyen. Greater capacity will be a prerequisite for

further development and increased activity in the future. Expanded capacity may also be important to the increased significance that Longyearbyen may have as a preparedness base for search and rescue services and combating pollution in the High North.

New analysis unit at the Norwegian Coastal Administration's Vessel Traffic Service Centre (VTS): The Government is continuing its work to establish a separate analysis unit at the Norwegian Coastal Administration's vessel traffic service centre at Vardø, which will be manned by personnel from the Norwegian Directorate of Fisheries and the Norwegian Coastal Administration. The unit will be tasked with uncovering illegal fishing, the transport of illegal fish and deviations from the regulations and procedures for the transport of hazardous or polluted cargo. In addition, if the unit uncovers information which is of interest to the authorities, including the customs authorities and the police, it will pass that information on.

New hospitals: There is a need for a new hospital in the north and a new hospital is under construction in Kirkenes. Provisions have been made for more extensive emergency preparedness. There is extensive health care cooperation between Murmansk and Arkhangelsk in Russia, and the hospitals in Finnmark. Efforts are being made to establish cooperation and notification routines in the event of major incidents. A new hospital in Stokmarknes was opened in August 2014.

Maintaining research activity in telemedicine and e-health: The National Centre for Integrated Care and Telemedicine (NST) at the University Hospital in North Norway (UNN) collects, produces, and disseminates knowledge about telemedicine services, nationally and internationally, and works to ensure that telemedicine and e-health are implemented. This is especially important in areas with great distances.

Development of electricity infrastructure: In 2013, Statnett was given a permit to build a new power line from Ofoten to Balsfjord. The line will improve security of supply and facilitate continued development of business and industry in the region. The line is planned completed in 2017. ●

environment, safety and preparedness

Climate change, ocean acidification and increased human activity create new challenges for the environment. Stricter environmental requirements, increased preparedness, safety measures and cooperation with other countries are necessary for sustainable operations.

THE HIGH NORTH has some of the most beautiful scenery and wildlife that Norway has to offer. There is rich natural diversity, both on land and in the sea. This has been the basis of settlement, value creation and welfare for as long as people have lived here. Fisheries, aquaculture, agriculture, new marine industries and tourism make use of the natural environment and are dependent on sustainable management.

As the effects of climate change and ocean acidification increase, species and ecosystems will become more vulnerable to additional stresses. It is important to take this into account when establishing frameworks for activities, so that the aggregate stress on species and ecosystems does not become too great. The Government will therefore continue to have strict environmental requirements as a basis for new activities, and protect particularly valuable and vulnerable areas. It is important to have a research-based approach when evaluating environmental consequences before making decisions about new activity.

Long distances, a demanding climate and relatively few rescue resources all pose challenges for shipping and other activities in the Arctic. It is therefore important that ships and other installations are suitable for polar waters, and that crew members have received the necessary training. The challenges in the Arctic transcend all borders, and must be managed through international cooperation in

agencies such as the UN Maritime Organisation IMO, and regionally in the Arctic Council.

More than 80 per cent of all maritime traffic in the Arctic passes through Norwegian waters. Climate change and ice melting have increased the importance of the Arctic, both to sea transport and to oil and gas activities. The Government will ensure preparedness for acute pollution and for preventive maritime safety in the Arctic. At the Minister Meeting in Kiruna in 2013, the member states of the Arctic Council signed an agreement on cooperation on marine oil pollution, preparedness and response in the Arctic.

Responsible oil and gas activities in the Arctic require thorough understanding of the risks. Processes to bolster the understanding of risk and develop technical solutions adapted to Arctic conditions have been established both nationally and internationally. Knowledge must be developed at the same pace as the activities move northward. The industry contributes actively to this work.

Norway is a significant actor in search and rescue in the Arctic. However, in order to make full use of the combined international resources, it is important to cooperate on rescue and preparedness in the region. In addition to bilateral rescue agreements, there are also two more comprehensive agreements. In 2008, Norway signed an agreement with Sweden, Finland and Russia on prevention, preparedness, and crisis management in

PHOTO: ARMED FORCES MEDIA CENTER

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More than 80 per cent of all maritime traffic in the Arctic passes through Norwegian waters.

LARGE SEA – and small ships.
Distances are great in the north,
which puts extra demands on preparedness and safety.

the Barents region. In 2011, the member countries of the Arctic Council signed an agreement on search and rescue services in connection with air and sea transport in the Arctic. This expanded Norway's responsibility for search and rescue in the region.

► **Government measures for safeguarding the environment, safety and preparedness in the north:**

► **Completion of the Polar Code:** Norway is an active driving force in establishing global safety and environmental rules for ships operating in polar waters. Norway has led the working group in the UN maritime organisation (IMO) which is working to establish the so-called Polar Code.

► **Using the system of comprehensive, integrated ocean management plans:** Norway is a maritime nation, and not least a nation of marine resources. Through work on the integrated ocean management plans for Norwegian sea areas, Norway is also a pioneering country when it comes to comprehensive, ecosystem-based management. Climate change and increased activity in the sea and coastal areas in the north create new challenges for the management. This makes it necessary to further develop maritime administration to safeguard good environmental standards and promote business activities and food safety within sustainable limits.

► **Administrative plans for conservation areas on Svalbard:** Two-thirds of Svalbard is protected. The administration of these areas includes challenges connected to climate change and increased traffic. Administrative plans for the large nature reserves in East Svalbard have been prepared, and work on corresponding plans for the large national parks in West Svalbard is well under way. The Government aims to have administrative plans prepared for all of the major protected areas in 2016.

► **Reinforcement of search and rescue preparedness on Svalbard:** In order to bolster the work of search and rescue services in Svalbard and nearby sea areas, the helicopter service of the Governor of Svalbard was strengthened by two Super Puma rescue helicopters in the spring of 2014. The helicopters have a greater range, reduced response time, greater carrying capacity and new, modern search, communications and safety equipment. At the same time, a new,



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Norway is a significant actor in search and rescue in the Arctic.

modern hangar building suitable for these helicopters was completed. The service vessel of the Governor of Svalbard is also an important resource for search and rescue and preparedness. As of 2014, there is a new, modern vessel in place, with better features for search and rescue services and pollution preparedness, including a helicopter deck large enough for the new helicopters. A new harbour structure in Longyearbyen will also be important for the increased significance of the place as a base for preparedness in the High North. In order for the Governor of Svalbard to be able to meet new challenges connected to search and rescue and preparedness, police staffing was reinforced with three new positions from 1 July 2014. The reason for this is the increased significance that Longyearbyen will have a base for search and rescue and pollution preparedness in the northern sea areas.

► **Environmental risk assessment and oil spill preparedness analysis for Svalbard and Jan Mayen:** In the course of 2014, the Norwegian Coastal Administration completed an environmental risk and preparedness analysis for Svalbard and Jan Mayen. The analysis will provide a better basis to measure national preparedness against acute pollution in these areas.

► **Conducting the National Health Exercise 2014 in Svalbard:** The purpose of the exercise was to strengthen the national capacity to lead and coordinate agencies and enterprises in a rescue operation with mass injuries in Svalbard.

► **Cooperation on evaluating the challenges posed by oil and gas activities in the Barents Sea:** In line with the white paper on the opening of the Southeast Barents Sea, the Petroleum Safety Authority Norway will identify and investigate the safety challenges associated with oil and gas activities in the north before the activities commence. This work will be carried out in close cooperation with the oil and gas industry.

► **Reinforced Norwegian efforts in the Arctic Council to prevent oil pollution in the Arctic:** The member states of the Arctic Council have established a Task Force on Arctic Marine Oil Pollution Prevention to consider measures to prevent marine oil pollution in the Arctic. The proposals are to be presented to the Council's ministerial meeting in 2015.

► **Preparation of international standards for Arctic oil and gas operations:** The industry itself has the primary responsibility for preparing standards for oil and gas operations in the north, but the Petroleum Safety Authority Norway contributes to this work by developing and updating such standards. The Ministry of Foreign Affairs supports the work of the standardisation body Standards Norway, on international standards for Arctic operations in the ISO (International Standards Organisation).

► **Environmental base/oil spill response base in Lofoten/Vesterålen:** In line with the government's political platform, an environmental base/oil spill response base is to be established in Lofoten/Vesterålen. Work to evaluate the form and content of the base is under way.

► **White paper on preventive sea safety measures and preparedness against acute pollution:** The Government sees the need for a new comprehensive review of the field of sea safety measures and preparedness against acute pollution, and it will present a white paper on this topic in the spring of 2016. The High North will have a prominent place here.

► **Training seamen for operations in polar waters:** Standards for training seamen are some of the most important elements that ensure safe passage in polar waters. Through the IMO, Norway actively contributes to the development of global, binding training standards. It is expected that these standards will be completed in 2015.

► **Development of the Arctic Maritime Centre of Expertise:** The Government will study the need for clearer coordination of Arctic maritime competence and the need to educate seamen for voyages in polar waters.

► **Initiative for strengthening the organisation of preparedness in the north:** The project MARPART – Maritime Preparedness and International Partnerships in the High North (2014-2016) – is to contribute to reinforcing cooperation among the most important preparedness institutions and research communities in the field in Norway. MARPART will take a closer look at the links between public administration, military resources and commercial actors, as well as at how the Arctic countries can ensure the most effective

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Long distances, a demanding climate and relatively few rescue resources are challenges for shipping and other activities in the High North.

coordination possible of common operations across national boundaries. The project is led by the High North Centre in Bodø.

► **Initiative for improving search and rescue operations in the High North:** The project SARiNOR – Search and Rescue in the High North (2013–2016) – is led by the Maritime Forum Northern Norway. The purpose of the project is to create an arena for cooperation in search and rescue among relevant private and public actors. Cooperation should contribute to the development and testing of new methods that can increase the effectiveness and capacity of rescue operations.

► **Strengthening cooperation on comprehensive, ecosystem-based maritime management under the Arctic Council:** Norway is working to strengthen cooperation on comprehensive, ecosystem-based maritime management. The Arctic Council is planning to present a joint strategic plan for the protection of the Arctic maritime environment at the Ministerial Meeting in 2015.

► **Joint Norwegian-Russian monitoring of the environment in the Barents Sea:** Norway and Russia are cooperating on developing joint frameworks for environmental monitoring in the Barents Sea. Work is under way on developing a comprehensive management plan for the Russian sector of the Barents Sea based on the Norwegian model.

► **Reinforced Norwegian efforts in the Arctic Council to combat short-lived climate drivers:** The Arctic Council is working to develop tools that can contribute to reducing the emission of short-lived climate drivers, and thus lessen the rise in temperature in the coming decades. A proposal will be presented at the Ministerial Meeting of the Arctic Council in 2015.

► **IMO working plan for international requirements for soot emissions:** International shipping is a significant source of soot emissions. Such emissions have a strong warming effect on the climate. Norway is therefore a driving force for the UN Maritime Organisation IMO to establish international requirements for soot emissions from ships. In the IMO, Norway is working to obtain agreement on definitions and methods of measurement, and to establish a working plan for establishing such requirements.

► **Follow-up of the climate action plan for the Barents region:** The parties in the Barents Cooperation forum have

prepared an action plan with measures that can contribute to reduced emissions and better adaptation to climate change. The Norwegian authorities will follow up prioritised measures in this action plan.

► **Follow-up of climate adaptation measures:** The Government will strengthen work on climate adaptation in the north through the measures that are announced in the white paper on climate adaptation in Norway (Report no. 33 (2012 -2013) to the Storting). A key measure is strengthening of the Norwegian Climate Service Centre.

► **Preservation of Polar Bears:** The population of polar bears in the Barents Sea is vulnerable to climate change and can also be affected by increased activity. A national action plan for preserving the polar bear emphasises better monitoring and encompasses initiatives for a joint Norwegian-Russian polar bear count in 2015. In cooperation with the other polar bear countries, Norway is preparing an international plan of action for preserving the polar bear and its territory. The action plan is expected to be adopted at the meeting of the parties to the International Polar Bear Agreement in 2015.

► **Boost cooperation in the Arctic Council's working group for preservation of natural diversity in the Arctic (CAFF):** Norway, together with Canada, will develop a plan for the follow-up of the Arctic Council's report on the threats to natural diversity in the Arctic. The Norwegian Environment Agency was the host of a major international conference on this topic in December 2014.

► **Action plan to combat invasive species on Svalbard:** Climatic warming and heavier traffic increase the danger of the spread and establishment of invasive species in Svalbard. An action plan to combat invasive species has been prepared, and prioritised measures will be implemented.

► **Maritime mapping around Svalbard:** There are many sea areas near Svalbard that have not been mapped, and where good depth measurements are lacking. The goal is to carry out maritime mapping annually at Svalbard to help improve our knowledge and make navigation safer. Mapping plans for Svalbard, as well as the priorities, are made in collaboration with the Norwegian Coastal Administration, the Naval Pilots, the research communities and the Governor of Svalbard. In 2014, new and more efficient maritime mapping vessels were acquired. ●

DEMANDING: Travel in polar regions, as here at Jan Mayen, is demanding due to climate and weather conditions.



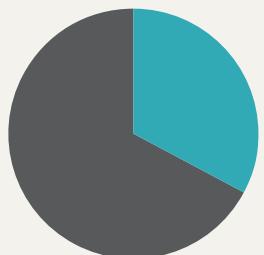
northern highlights

Selected facts and figures showing how important the Arctic is for Norway and the world as a whole.

huge areas



Norway has sovereign rights over an area of sea six times the size of its land area.



1/3 of Norway's land area lies north of the Arctic Circle.



80 % of Norway's sea areas lie north of the Arctic Circle.

continual surveillance

The Norwegian Armed Forces are responsible for exercising sovereignty in Norwegian waters. The Norwegian Coast Guard has an important role to play in this work.

In 2014, the Norwegian Coast Guard in North Norway carried out:

2310
patrol days

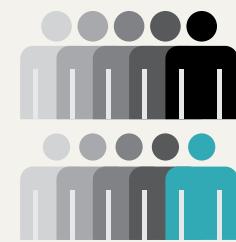


1082
fisheries inspections

people



Nearly 10 % of Norway's population lives north of the Arctic Circle, a greater proportion than in any other country in the world.



The Arctic Council (members and observer states) represents 60 % of the world's population.

thriving tourism industry



10%

The tourism industry in North Norway enjoyed a record year in 2013. The number of overnight stays in hotels in North Norway rose by 10 % in 2014.



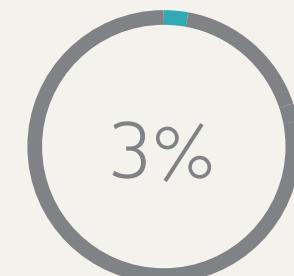
Cruise traffic in North Norway increased by 10 % from 2013 to 2014.

Interest in Svalbard is growing. In 2013, 39 000 cruise tourists visited Longyearbyen.

economic potential



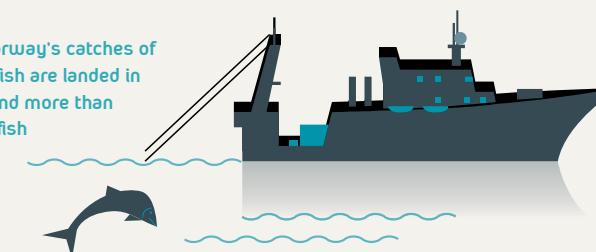
22 % of the world's undiscovered oil and gas resources are thought to be in the Arctic.



GDP growth forecasts for North Norway for 2014 and 2015 are better than for the rest of the country, and growth of 3 % is forecast for both years. Expected growth for the rest of the country in 2014 and 2015 is 2 %.

3/4

About ¾ of all Norway's catches of cod and related fish are landed in North Norway, and more than 1/3 of all farmed fish is produced in the region.

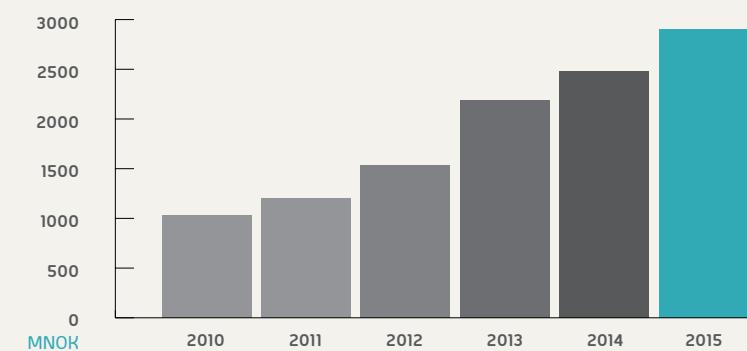


878 person-years of employment in the mineral industry in 2013 in Nordland, the county where the industry is most important.



Allocations for Arctic activities

The Norwegian Government's budget allocations for activities relating to the Arctic have risen since 2010. The figures are not exhaustive, but give an indication of the trend over time.



vulnerable environment

15



million seabirds breed around the Barents Sea, and the area has large populations of polar bears and walrus. Many species and ecosystems in the north are vulnerable to climate change and increasing human activity.

international cooperation

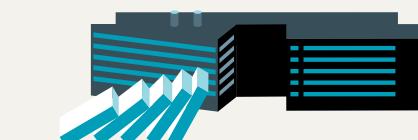
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international secretariats are located in North Norway: the secretariats of the Arctic Council and NAMMCO are in Tromsø, and the International Barents Secretariat is in Kirkenes.

318 135

border crossings between Norway and Russia in 2014.

knowledge development



142 doctorates were awarded at the Universities of Tromsø and Nordland in 2013, twice the number awarded in 2006.



The business sector in North Norway is more export-oriented than the rest of the Norwegian economy and is responsible for some 8 % of the country's exports other than oil and gas.

more information is available on the Government website, regjeringen.no

norway's arctic policy

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Read more about Norway's Arctic Policy on the Government website: regjeringen.no