



The
Federal Government

Germany's Arctic Policy Guidelines

Assuming Responsibility, Creating Trust,
Shaping the Future

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Shaping the Future

August 2019

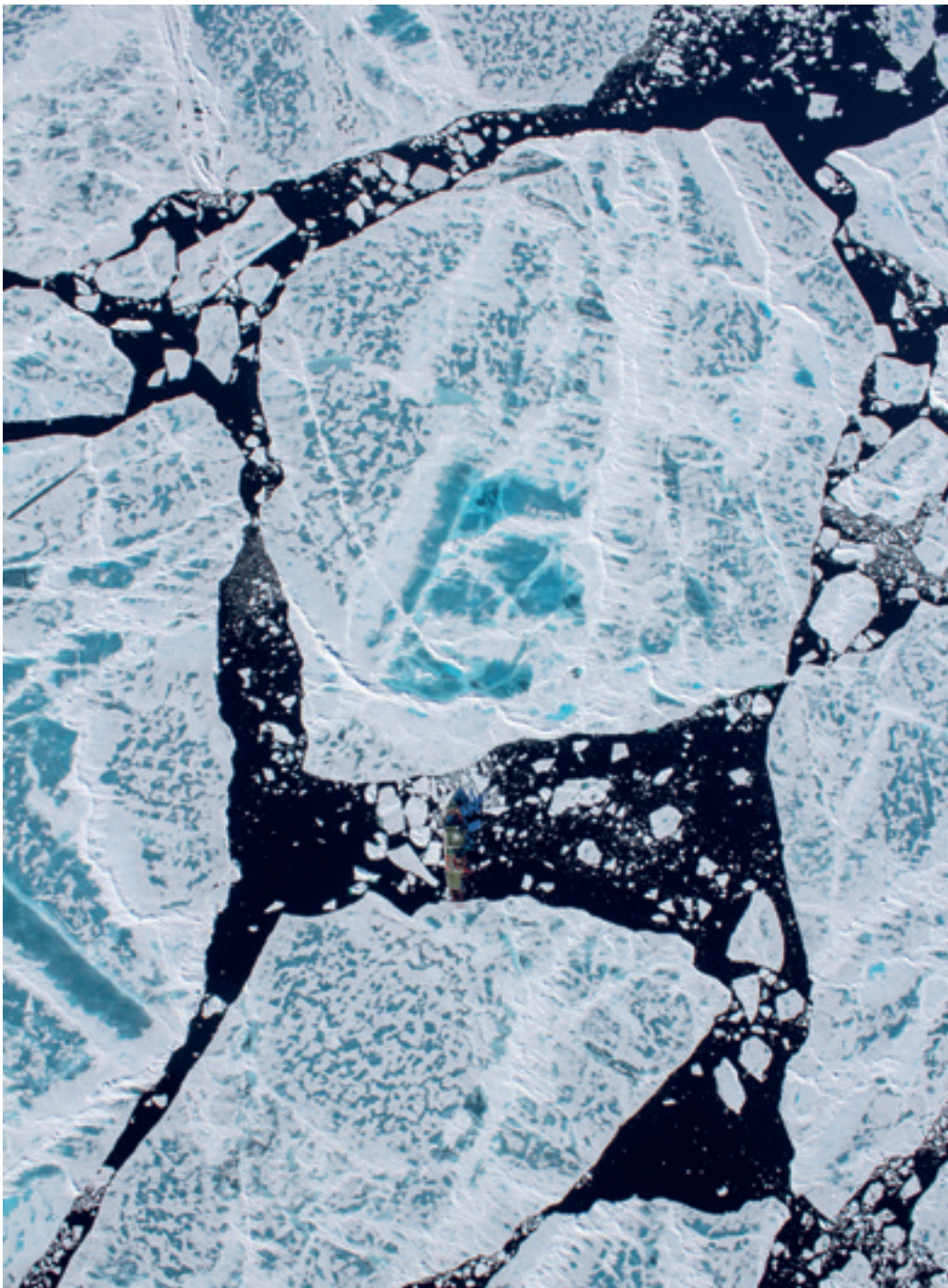
With these Arctic policy guidelines, the Federal Government is assuming greater responsibility for the Arctic region with a view to shaping it sustainably for the future.

The Federal Government views the Arctic as a region that is undergoing ever more rapid change. Due to global warming and the rapid increase in the melting rate of the polar ice sheets, the Arctic is of steadily growing geocological, geopolitical and geoeconomic importance for the international community. The Federal Government therefore believes that there is an increasing need to work towards worldwide climate protection in accordance with the Paris Agreement. It is committed to protecting the Arctic as a largely conflict free region as well as to its peaceful use. The economic potential of the Arctic should be exploited in an environmentally friendly way and with due consideration for its high level of ecological sensitivity.

The Federal Government

- recognises the precautionary and polluter pays principles as fundamental principles of all environmental and economic activity in the Arctic
- is committed to all international and regional agreements and calls for compliance with legally binding regulations on the use and exploration of the Arctic
- supports multilateral cooperation, particularly in the Arctic Council, and is committed to resolving overlapping sovereignty claims in the Arctic in a cooperative manner under the premise of responsible action
- is working to maintain and expand free and responsible Arctic research, based on the firm belief that scientific findings made in the region are of fundamental importance for Arctic policy
- is committed to the further designation of protected areas and quiet zones, as well as to the sustainable use of living marine resources in order to preserve the Arctic's unique biodiversity

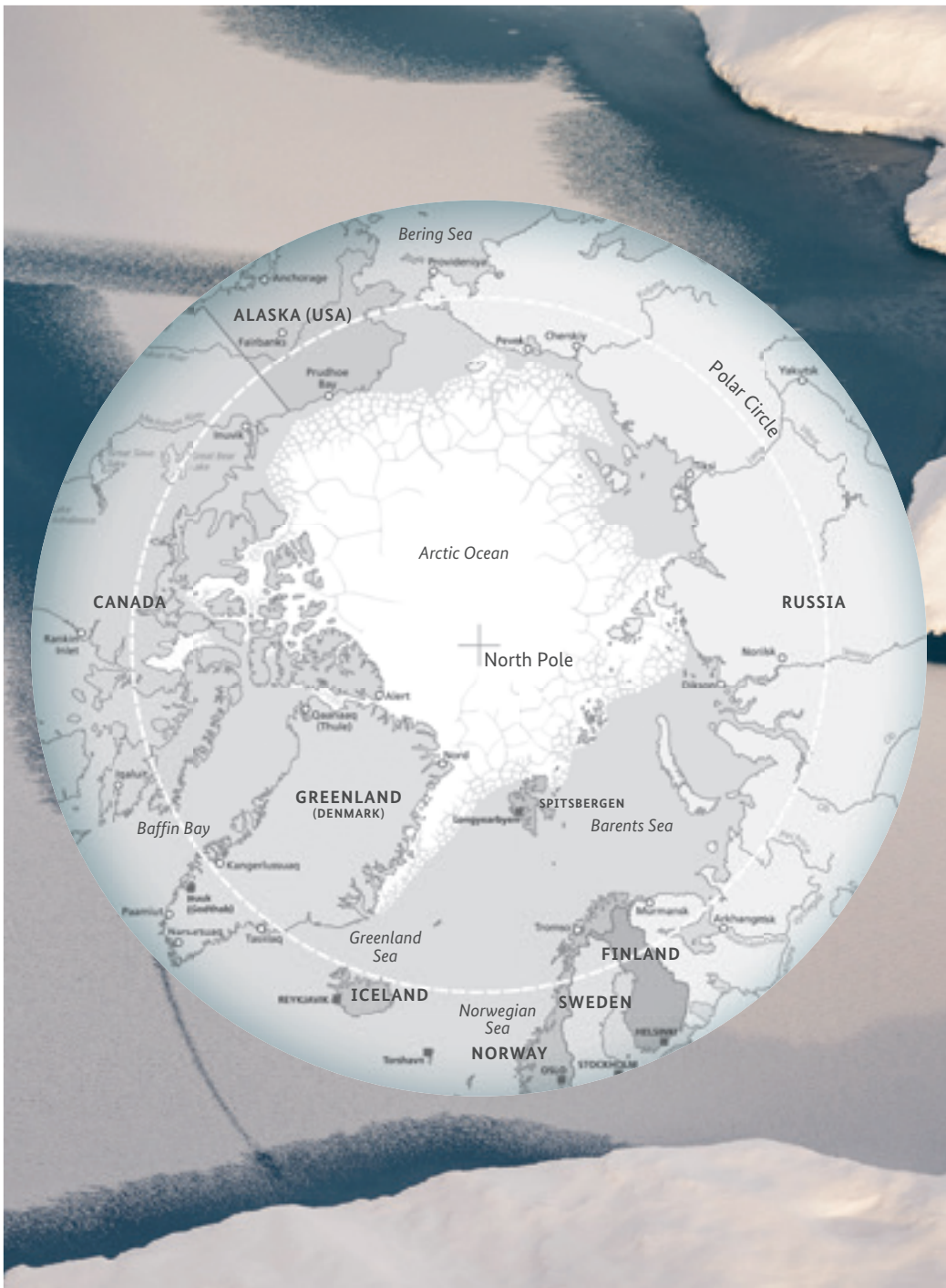
- firmly believes that Germany can contribute to sustainable economic development and the predictability of future developments in the Arctic on account of its great expertise in research, technology and environmental standards
- is committed to the freedom of navigation in Arctic waters in accordance with the regulations of the UN Convention on the Law of the Sea and endeavours to improve the framework conditions for coordinated, safe and environmentally compatible shipping in the Arctic, particularly within the framework of the International Maritime Organization
- is committed to compliance with legally binding regulations regarding the exploration and extraction of mineral resources and considers it necessary to set the highest environmental standards;
- recognises the special situation of indigenous peoples in the Arctic and supports their right to freedom, health and a self determined life in their homeland
- sees the need to exercise environmental responsibility with regard to the development of the Arctic's natural resources against the backdrop of their current great economic importance



THE ALFRED WEGENER INSTITUTE'S RESEARCH VESSEL POLARSTERN IN THE ARCTIC ICE
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ARCTIC SEA ICE ©Alfred-Wegener-Institut / Mario Hoppmann

1

The Arctic: Influential factors and fields of German Arctic policy

1.1

The Arctic as a region

The Arctic is predominantly characterised by the melting and freezing of water. In geographical terms, the region consists of sea ice, inland ice, snow and permanently frozen soils.

The Arctic is not only a sensitive indicator of climate change, but is also an important part of the Earth's overall climate system. Changes in the extent of sea ice, the volume of ice sheets and the spread of permafrost have global impacts and intensify the challenges bound up with this also for Germany.

The Arctic Council (AC) is the central forum promoting cooperation in the region. According to the AC, the Arctic comprises the Arctic Ocean as well as the northern landmasses of the eight Arctic states Denmark (Greenland), Finland, Iceland, Canada, Norway (including Spitsbergen), Russia, Sweden and the US (Alaska).



ARCTIC PACK ICE COVERED IN SNOW
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SETTLEMENT ON A HEADLAND IN GREENLAND
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SNOWMELT NEAR KANGERLUSSUAQ, GREENLAND
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TUNDRA PLANTS, YUCÓN, CANADA
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GLACIER CALVING
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1.2

Consistent climate and environmental protection – regionally and globally

The Arctic is a kind of early warning system for global warming as the impact of climate change is clearly visible from an early stage in the region. The Arctic is currently warming at about twice the rate of the rest of the world. The melting ice, whose shrinking surface reflects solar radiation less strongly, also reinforces the change in temperature. The melting of sea ice surfaces is further accelerated by black carbon particles on the ice, which are mainly produced as a result of the combustion of fossil fuels.

The Intergovernmental Panel on Climate Change (IPCC) forecasts that, with global warming of 1.5°C at the end of the century, the Arctic Ocean will be free of ice in one summer every 100 years. With warming of 2°C, an ice free summer is probable every ten years. Among other things, the serious changes in the heat balance cause permafrost soils, which are widespread in the Arctic, to thaw and release highly potent natural greenhouse gases, particularly methane, over large areas, which can thus also contribute to warming the atmosphere.

In addition, the raw materials extracted in the Arctic, such as oil and natural gas, contribute to greenhouse gas emissions, thereby exacerbating climate change. The changes observed in the Arctic affect the entire Earth system via feedback processes. Already now, atmospheric circulation over the northern hemisphere is changing, and this is affecting weather patterns in Europe and Germany. In addition to the temperature-dependent expansion of the oceans, the melting of the Greenland ice sheet contributes to rising sea levels globally. By the end of the century, sea levels are expected to rise by up to one metre or possibly even more, which would have serious consequences in Europe.

The Arctic is considered to be a particularly sensitive ecosystem due to the extreme living conditions in the region, which result in a high level of pressure for the flora and fauna to adapt. Decreasing sea ice, progressive ocean acidification and increasing economic pressure to exploit marine resources threaten species that depend on the Arctic for their habitat.



ARCTIC POPPIES
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In addition, persistent organic pollutants, mercury and litter from other regions of the world, including Germany, endanger the Arctic's flora and fauna. Sea ice acts as a mode of storage and transport for microplastic particles. There are fears that considerable quantities of plastic particles could be released when it melts.

Changing environmental conditions are making it easier to access the region for research and to exploit Arctic resources. This includes fishing grounds as well as oil and gas deposits and mineral resources. The decline in sea ice enables more intensive use of shipping routes through Arctic waters, thus placing an increasing burden on them. In recent decades, exhaust gases, wastewater and waste have increased significantly, as have underwater noise pollution and the risk of introducing non native species.

The German Environment Agency (UBA) and the Federal Agency for Nature Conservation (BfN) have comprehensive and wide ranging expertise in the field of environmental protection, which they also contribute to the working groups and expert groups of the AC.



WALRUSES ON A BEACH
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- **Consistent climate and environmental protection is a key element of Germany's Arctic policy.** In order to limit human induced global warming to well below 2°C, or to 1.5°C if possible, and thus achieve the goals of the Paris Agreement, necessary measures to reduce greenhouse gases must also be strictly implemented in Germany.
- **The Federal Government is committed to climate protection at the national, EU and international level.** The Federal Government is committed to the Climate Action Plan 2050 and to the reduction targets that it lays down. A programme of measures for 2030 and a law are intended to ensure that the climate protection targets are met.
- In addition, black carbon emissions must be reduced in Germany and also with respect to the international operations of German companies, including maritime shipping. **The Federal Government actively supports the activities of the International Maritime Organization (IMO) in this regard.**
- **The Federal Government intends to support the activities of the World Meteorological Organization (WMO) and the Arctic Regional Climate Centre Network,** which is currently in the process of being set up, as well as other international institutions, in order to close gaps in climate monitoring systems and to transfer them into a permanent climate monitoring system lasting several decades. It is also important to raise awareness among the population in Germany as to the important relationship between Germany and the Arctic environment.
- **Safeguarding the Arctic's unique environment, living conditions and biological diversity are of the highest priority for the Federal Government.** The precautionary and polluter pays principles are fundamental principles of all environmental policy making and economic activity in the Arctic. Developments that could lead to environmental pollution in the future must be avoided from the outset. Existing gaps in knowledge regarding the impact of human activities on the Arctic environment must be closed. Potential burdens or damage to the Arctic environment must be examined intensively in advance and avoided or reduced particularly when our knowledge is incomplete. Those who caused the environmental damage in question should, as a matter of principle, pay for the elimination or reduction of the damage caused. This creates incentives to avoid or put an end to harmful activities.

- In the absence of environmentally sound development and without the highest environmental standards for the extraction of raw materials, environmental pollution in the Arctic will continue to increase as the global demand for raw materials rises. The approach to mining waste also warrants special attention in this sensitive system.
- With regard to the sustainability goals of the 2030 Agenda, the Federal Government is endeavouring to identify the sources of environmental pollution in the Arctic and to reduce the extent to which they are released. At the international level, Germany has committed itself to reduce the extent to which harmful substances are released and, with the Stockholm and Minamata Conventions, is committed to preventing and reducing the release of persistent organic pollutants and mercury into the environment.
- As was the case recently with the adoption of the G7 Action Plan to Combat Marine Litter and the G20 Action Plan on Marine Litter under the German Presidency and its major contribution to the development of the OSPAR and HELCOM action plans on marine litter, the Federal Government is working internationally and regionally as an important player in the fight against marine litter and supports the development of a regional action plan including monitoring for the Arctic.



LITTER WASHED UP BY THE SEA ON A BEACH IN LOFOTEN, NORWAY
©Alfred-Wegener-Institut / Jennifer Hülskötter



POLAR BEAR ON AN ICE FLOE, ARCTIC OCEAN
©Alfred-Wegener-Institut / Stefan Hendricks

- The Federal Government remains committed to reducing the overall volume of waste generated and thus also marine pollution. Environmental pollution can be reduced in the long term at the regional and local level, for example through the use of environmentally friendly technologies and fuels as well as responsible behaviour. This applies to industrial polluters, tourism, shipping, fisheries and research, as well as to private households in the region and around the world.
- With the consistent application of the precautionary principle, the Federal Government advocates the designation of protected areas to protect biological diversity and the Arctic environment before economic exploitation increases in endangered Arctic regions. It endeavours to contribute research results to the identification of environmentally and biologically unique areas. In order to also protect migratory species such as marine mammals, fish and migratory birds that spend a part of their lives in the Arctic, the Federal Government is also supporting national protected areas and international projects such as the Arctic Migratory Birds Initiative (AMBI) within the framework of the AC working group for the Conservation of Arctic Flora and Fauna (CAFF), as well as the protection of European seas.



11TH MINISTERIAL MEETING OF THE ARCTIC COUNCIL IN ROVANIEMI, FINLAND
 ©Ministry for Foreign Affairs of Finland / Jouni Porsanger

1.3

International cooperation in the Arctic

The Arctic Council with a permanent secretariat in Tromsø, Norway, was established in 1996. It is the main intergovernmental forum seeking to balance the interests of the eight Arctic states and indigenous peoples. In addition to the Arctic states, six umbrella organisations of indigenous peoples are therefore Permanent Participants of the AC; other states and organisations, including Germany, are admitted as observers.

The cooperation between Arctic states, experts and indigenous peoples in the AC facilitates exchange and helps to balance international and regional interests through a multilateral approach. The practical work of the AC is coordinated in six working groups, e.g. on research and development projects for the conservation of biodiversity as well as in the transport sector.



NOMADS ON YAMAL PENINSULA, RUSSIA
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The UN Convention on the Law of the Sea (UNCLOS) forms the universal legal framework for the use and conservation of marine resources, marine environmental protection and scientific marine research, and also applies to Arctic waters. UNCLOS comprises corresponding obligations for cooperation between coastal and other states. The aim is for the States Parties to cooperate at the national, regional and global levels and to work towards the effective protection of the marine environment.

In view of the increasing interest in the Arctic and related activities, the UNCLOS provisions are vitally important. It governs, among other things, the establishment and demarcation of continental shelves, shipping rights, transit passage and peaceful transit, the freedom of marine scientific research and the use and conservation of living resources, as well as the prevention, reduction and control of pollution of the marine environment, including ice covered areas.

Of particular importance for the protection of the Arctic Ocean are the efforts to conclude an UNCLOS Implementing Agreement concerning the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction.



FISHING NEAR SPITSBERGEN, NORWAY
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The International Maritime Organization (IMO) governs international shipping with the aim of improving maritime safety and reducing pollution of the environment by shipping. The Polar Code, which entered into force in 2017, is a collection of binding regulations and recommendations on all aspects of shipping in the Arctic Ocean and is intended to make shipping safer and more environmentally friendly.

The 1992 **Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)**, based on the Oslo Convention of 1972 and the Paris Convention of 1974) is an international treaty for the protection of the North Sea and the North East Atlantic. The agreement focuses on the prevention and elimination of marine pollution and the designation of a coherent network of marine protected areas. **The North East Atlantic Fisheries Commission (NEAFC)**, 1982) promotes the sustainable exploitation of fish stocks on the high seas in the Atlantic and Arctic Oceans.

In the joint communication “An integrated EU policy for the Arctic”, the **European Union** set out in 2016 how it intends to contribute to adaptation to changes in the Arctic as well as to sustainable economic development, for example through the development of transport networks and digital infrastructure.

- **The Federal Government is endeavouring to continue to strengthen Germany's commitment by playing an active role as an observer in the AC**, for example through the participation of experts from German institutes and federal authorities in all working groups of the AC, German expertise in the field of polar research and environmental protection, as well as the co financing of research projects.
- **The Federal Government welcomes the constructive cooperation of all eight Arctic states in the AC.** Both this cooperation and tangible research projects should be intensified. For the Federal Government, cultivating bilateral relations with the states of the AC and with other observer states represents an additional platform for exchange on Arctic policy.
- **In conjunction with dialogue and cooperation, the Federal Government regards current international law, including UNCLOS, as a basis for the settlement of territorial and demarcation conflicts also in the regional and international context.** It is committed to strengthening cross sectoral international cooperation as well as to the coherent and effective implementation of the 2030 Agenda. It is making good on this commitment, for instance via the Collective Arrangement of the Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR) and the North East Atlantic Fisheries Commission (NEAFC) for the joint management of human activities in areas outside national competence in the North East Atlantic, as well as with the development of a multi stakeholder platform for regional maritime policy across sectors and countries (Marine Regions Forum, MRF).



INDUSTRY AT KOLA BAY, RUSSIA
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- **The Federal Government is committed to legally binding regulations for the exploration and extraction of mineral resources.** It considers it necessary to set the highest environmental standards, to develop multinational strategies for protecting the environment in the event of accidents and to establish a binding regime for environmental damage and liability.

- The Federal Government attaches great importance to the timely enforcement of binding regulations as well as to voluntary compliance with important recommendations of the Polar Code, in order to establish ambitious safety and environmental standards for shipping in the Arctic. A further development of the Polar Code that goes above and beyond this should also aim to achieve a comprehensive environmental protection system that is binding for all ships in the Arctic in equal measure and also includes regulations on grey water and underwater noise pollution.
- Preventive measures for ensuring protection against oil spills in the sensitive Arctic region and a complete ban on heavy fuel oil – as in Antarctica – are other important priorities of the Federal Government. The use of nuclear powered ships or other nuclear powered applications also entails environmental risks and is therefore rejected by the Federal Government.
- Support should be given to special areas with stricter rules for the discharge of waste water or the introduction of waste or to emission control areas (ECAs) to reduce sulphur and nitrogen oxides. The introduction of a ban on the transport of heavy fuel oil in the Arctic, which is currently being discussed in the IMO at the initiative of Germany, will continue to enjoy Germany's strong support. The designation of Particularly Sensitive Sea Areas (PSSAs) can make a further contribution to reducing the pressure on sensitive ecosystems.



TRANS-ALASKA-PIPELINE NEAR PRUDHOE BAY, ALASKA
©iStock / Incomel



TANKER IN ARCTIC PACK ICE
©iStock / Vasilvich



EXERCISE BY BRIGADE 23 OF THE GEBIRGSJÄGER (MOUNTAIN TROOPS) IN BARDUFOSSE-SKJOLD, NORWAY
©Bundeswehr / Mario Bähr

1.4

The security policy dimension of Germany's Arctic policy

Multilateral standards and norms, codes of conduct and conflict resolution mechanisms are increasingly being called into question worldwide. This is also putting international cooperation in the Arctic region under strain. In addition, raw material deposits and the increasing navigability of Arctic sea routes are a potential source of non cooperative behaviour in view of overlapping interests, unresolved territorial disputes and potential conflicts over resources in conjunction with varying threat perceptions. This is increasing the potential for crisis in the region.

Several states are safeguarding their interests in the Arctic also militarily to an increasing extent, which could lead to an arms race. The build-up of Arctic dual use capabilities and their continued modernisation as well as technological progress and strategies for external interference are blurring the boundaries between offensive and defensive courses of action. Other factors, such as accidents and environmental disasters, can exacerbate latent tensions between Arctic actors.

This increases the potential for non cooperative behaviour in the Arctic, which endangers economic, environmental and security policy stability in the region and thus also affects Germany's security interests. The decisive factors here will be the extent to which overlapping sovereignty claims are safeguarded (militarily) and the kind of agreement that is reached on the rights to exploit the seabed and to develop raw material deposits, as well as on status, legislation and regulations with regard to the use of the Northwest and Northeast Passages.

Developments in the Arctic thus affect Germany's security interests as set out in the Federal Government's 2016 White Paper on German Security Policy and the Future of the Bundeswehr. The Bundeswehr's mission is shaped accordingly within the framework of the comprehensive approach and the commitment of the entire Federal Government.

- Germany's security and defence policy in the region aims to preserve the Arctic as a largely conflict free region, promote cooperation and thus safeguard the peaceful use of the Arctic on the basis of recognised norms and rules.
- The Federal Government advocates the retention of a clearly defensive character of any military measures in order to counteract an intensified militarisation of the Arctic region.
- Early detection, prevention and containment of potential crises and conflicts in the Arctic region are a priority of the Federal Government's actions. At the same time, the Federal Government is endeavouring to draw on its capabilities in the area of mediation in a preventive and confidence building manner.



ROUNDTABLE ON ARCTIC SECURITY IN HELSINKI, FINLAND
©MSC / Kuhlmann

- It is vital to continue to integrate the Arctic into a system of multilateral stability in order to preserve it as a largely conflict free region. Regional bodies are essential components in this regard. Within this framework, the Federal Government is committed to ensuring that conflicts of interest are resolved by mutual consent on the basis of existing legislation.
- The Federal Government is clearly committed to its Alliance obligation, which stems from its EU and NATO membership, and advocates more intensive involvement in the security policy implications of the Arctic on the part of the EU and NATO. Within this context, the Federal Government supports the mutual exchange of experience and combined exercises of the Bundeswehr with partners and allies.
- The Federal Government is committed to the protection of freedom of navigation in Arctic waters in accordance with the regulations of UNCLOS.
- The Federal Government considers the EU Maritime Security Strategy to be an essential basis. The measures enshrined in the strategy are intended to strengthen resilience against external interference and to expand capabilities in order to improve the recognised air and maritime picture and combined space situational awareness in and above the Arctic.



THE ALFRED WEGENER INSTITUTE FOR POLAR AND MARINE RESEARCH'S RESEARCH VESSEL POLARSTERN
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1.5

Cutting-edge research in the Arctic region

The global impacts of changes in the Arctic are making its exploration increasingly pressing. A prerequisite for sustainable development in the Arctic is knowledge of the vulnerability and resilience of the Arctic environment and the impact on Arctic society.

With a strong profile in polar research, political engagement and active participation in discussions about the future and sustainable development of the Arctic, the Federal Republic of Germany is an international actor in the High North. The Federal Government cooperates with all Arctic states in bilateral and multilateral projects both on land and in the Arctic Ocean.

German Arctic research benefits from an excellent research infrastructure in this regard. This includes the research icebreaker Polarstern operated by the Alfred Wegener Institut für Polar- und Meeresforschung (Alfred Wegener Institute for Polar and Marine Research, AWI), the research aircraft Polar 5 and Polar 6 and the research station AWIPEV operated by the AWI together with the French Polar Institute in Spitsbergen. A focus of German polar research is the role of the Arctic in the global climate system.

In close coordination with the competent federal ministries, the AWI established the German Arctic Office in order to improve the exchange of information and cooperation between German Arctic stakeholders from academia, politics and business. The German Arctic Office is able to provide direct scientific advice to policymakers. This direct access makes it possible to contribute scientific results to relevant political decision making processes at an early stage and thus make an active contribution to a science based German policy on the Arctic.

Germany has actively supported the development of an agreement initiated by the AC to improve cooperation in Arctic research and is committed to its implementation.

The most urgent questions of German Arctic research are set out in the strategy paper “Rapid changes in the Arctic: polar research in global responsibility”. The objectives identified in the paper focus in particular on understanding ecosystem functions, taking a comprehensive approach to observing and quantifying changes in the global transition and analysing effective processes and global interactions in this context. Based on observations, process understanding and modelling, the aim is to make it possible to improve the predictability of future developments. Research into the opportunities and risks associated with the use of natural resources contributes to facilitating sustainable



THE GERMAN RESEARCH AIRCRAFT POLAR 5 AND POLAR 6
©Alfred-Wegener-Institut / Raimund Waltenberg

development with the responsible use of the environment in mind. This research must be carried out in line with the socio economic interests of the Arctic states and the local population.

The strategy of Germany’s Arctic research programme is based on the research programme of the Federal Government, MARE:N: Coastal, Marine and Polar Research for Sustainability. Furthermore, the Federal Government is committed to the strategic goals sig-

ned by the research ministers of the Arctic states and countries engaged in Arctic research in the Joint Statement on the occasion of the Second Arctic Science Ministerial. The Statement aims to achieve an enhanced and better coordinated international cooperation with a view to understanding the rapid changes taking place in the Arctic. International cooperation in Arctic research is to be improved and expanded in the three areas: (1) observations and data sharing, (2) regional and global changes, and (3) challenges facing inhabitants of the Arctic due to global change.



DRONES OPERATING IN THE ARCTIC
©Alfred-Wegener-Institut / Tobias Mikschl

German Arctic research is primarily supported via the institutional funding of the Helmholtz centres AWI, GEOMAR – Helmholtz Centre for Ocean Research Kiel, and the German Aerospace Center (DLR), as well as via targeted research programmes. The Federal Institute for Geosciences and Natural Resources (BGR) conducts research on fundamental issues of geological development and the formation of deposits and focuses on marginal areas of the Arctic Ocean and the assessment of Arctic resource potential. Financial support for inter- and transdisciplinary projects as a basis for a science based climate, environmental and economic policy is key.



TENT ERECTED BY SCIENTISTS FOR ANALYSING ICE
©AWI / Mario Hoppmann

- A number of Arctic states are actively pursuing their claims to an extended continental shelf in accordance with UNCLOS. **The Federal Government is committed to ensuring that these areas also remain accessible to scientific marine research for all disciplines.**
- **Germany’s Arctic research seeks to make a significant contribution to understanding the Arctic and its regional and global impacts and to pass this knowledge on to society and decision makers.** This research must be carried out in line with the interests of the Arctic states and the indigenous and local population. In addition, research activities should be carried out responsibly and be subject to the highest environmental standards.
- **The Federal Government continues to support the national sustainability strategy, in particular via the Framework Programme Research for Sustainable Development (FONA), and attaches great importance to the dialogue on research policy within the framework of the MARE:N research programme in order to identify solutions for the future of the seas and oceans that are based on scientific findings.**



CRUISE NEAR THE ALASKAN COAST
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1.6

Safeguarding sustainable development

Over 30 percent of the world's undiscovered fossil fuels, such as oil and natural gas, are believed to lie north of the Arctic Circle. Large quantities of natural gas in particular are already being extracted in Russia, Norway and the US (Alaska). Maritime traffic within the Arctic will also increase considerably due to the exploration of new raw material deposits.

The Northeast and Northwest Passages along the northern shorelines of Europe, Asia and the American continent are becoming increasingly navigable during the summer months. An ice free Northeast Passage would be the shortest shipping route between the ports of Europe's Northern Range and East Asia. The advantages of a shorter shipping route must still be weighed against several factors: the sea ice's unpredictability, the fact that, as of yet, there is insufficient emergency rescue capacity, and the lack of Arctic capable cargo ships.

The demand for tourist cruises in Arctic areas has increased significantly in recent years. Heavily frequented routes and places of interest have already had a visible impact on the ecosystem in some areas. The growing number of cruise ships and visitors to the Arctic therefore requires particular efforts in the development of sustainable tourism. In order to protect the sensitive Arctic ecosystem, tourism activities should be subject to special environmental compatibility requirements in the future.

All economic activities in the sensitive Arctic ecosystem require the highest environmental and security standards. In order to prevent a disorderly development of fishing activities in the Arctic high seas, China, Denmark (for the Faroe Islands and Greenland), the EU, Iceland, Japan, Canada, the Republic of Korea, Norway, Russia and the US concluded an Agreement to prevent unregulated high seas fisheries in the Central Arctic Ocean. It prohibits fishing in this area of the high seas as a matter of principle. Germany is bound to the agreement as an EU member state.

With the adoption of the 2030 Agenda in 2015, the UN defined a new frame of reference for sustainable development, including the Sustainable Development Goals (SDGs). Objectives for the sustainable use of ecosystems relevant to the Arctic are included, for example, in SDG 12 “Ensure sustainable consumption and production patterns”, SDG 13 “Take urgent action to combat climate change and its impacts”, SDG 14 “Conserve and sustainably use the oceans, seas and marine resources”, and SDG 15 “Protect, restore and promote sustainable use of terrestrial ecosystems”.



NORTH SLOPE PIPELINE, ALASKA
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- In the future, northern sea routes could create significant opportunities for German shipping, thanks to shorter travel times, reduced fuel use and lower costs. **The Federal Government is committed to the unimpeded, safe and peaceful passage of vessels through Arctic waters taking into account strict environmental stipulations and the interests of the indigenous population.** It is strongly committed to the development and implementation of the highest environmental and safety standards in all economic activities in the sensitive Arctic ecosystem.
- The international community must develop a binding disaster response mechanism for the Arctic Ocean that creates capabilities for early warning, prevention, and elimination of damage. **The Federal Government is seeking to work together with the Arctic states on balanced and sustainable solutions for safe shipping in the long term.**
- **The Federal Government is working within the IMO to achieve improved maritime surveillance, infrastructure expansion, and Arctic search and rescue capabilities.** It is involved in the development and implementation of the measures contained in the Action Plan complementing the EU Maritime Security Strategy, including those relating to the Arctic. In dialogue with the European Arctic states, it is examining the fields in which the development of its own civilian capacities is expedient and feasible. Sea marks, lines of communication and bases need to be established as widely and extensively as possible. The Federal Government supports measures to improve the validity and quality of electronic nautical charts.
- **As an observer state, the Federal Government supports the AC and its working groups in their efforts to make tourism in the Arctic sustainable and environmentally friendly.**
- The increasing navigability of Arctic waters offers a market with great potential for innovative shipbuilding with rigorous environmental standards. As one of the world’s leading technology suppliers, Germany’s shipyards and suppliers have specialised in innovative, particularly environmentally friendly and efficient ship propulsion systems as well as in the construction of special ships, including ice class, and state of the art marine technology.

- Even if the highest environmental standards and the best available technologies are applied, harmful environmental impacts resulting from the extraction of raw materials cannot be completely avoided. In order to reduce these impacts, [the Federal Government is advocating the designation of protected areas without economic use among the Arctic states](#). In order to reduce the global extraction of resources, the Federal Government will continue to promote the development and expansion of raw material cycles, promote reuse and recycling, and improve resource efficiency.
- [A stable energy supply in the long term and a sustainable supply of raw materials are of great importance for Germany](#). Natural gas is considered to be a relatively low emission fossil fuel that can help reduce emissions of air pollutants in the transition to a climate neutral energy supply. Germany already purchases a large part of its natural gas requirement from the Arctic states Norway and Russia.
- The current development of major liquefied natural gas (LNG) terminals and the construction of ice capable transport vessels are opening up the possibility of using Arctic natural gas for distant markets without pipeline connections. German businesses are supporting this development with their expertise.
- [In international fisheries organisations, the Federal Government is committed, via the EU, to the conservation and sustainable use of living marine resources in the Arctic](#). The aim is to ensure the effective prevention of illegal, unreported and unregulated fishing in particular.



EXTRACTION OF NATURAL GAS IN THE RUSSIAN TUNDRA
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HIGH-VOLTAGE LINES NEAR THE ARCTIC CIRCLE
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FEDERAL FOREIGN MINISTER HEIKO MAAS IN CONVERSATION WITH A RANGER AT SIRMILIK NATIONAL PARK IN POND INLET, CANADA
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1.7

Involving the local and indigenous population

In addition to global effects, climate change has considerable impacts on the way of life of the approximately four million people living in the Arctic region, in particular the indigenous population (approx. 10 percent of the total population). The traditional knowledge of the indigenous population plays an important role in Arctic research, promoting understanding of the environmental, social and economic impacts of changes in the Arctic region.

The warming of the Arctic region, the increasing economic development and exploitation of Arctic mineral resources and increased levels of shipping are endangering the natural livelihoods and cultural traditions of the indigenous population through environmental damage, changes in ecosystems and increased health risks. One of the greatest challenges is reconciling local needs, national policies and global conditions.



AN INUIT HUNTER IN NUNAVIK, QUEBEC, CANADA
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- The Federal Government is committed to the indigenous people of the Arctic, in particular to respecting and recognising their right to freedom and self determination. Their territorial claims and participation in the economic use of resources must be taken into account. In accordance with the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), the Federal Government supports the indigenous peoples of the Arctic and aims to ratify ILO Convention 169 on the protection of indigenous peoples.



DRIED FISH IN OQAATSUT, GREENLAND
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- The Federal Government welcomes the fact that the indigenous population is involved in the decision making of the AC as an equal party. Special attention must continue to be paid to environmental protection, preserving the cultural identity and territorial claims of the indigenous

population and their participation in the economic use of the Arctic. The working groups of the AC must take into account the traditional knowledge of the indigenous population and make use of its expertise.

- With a view to implementing the central principle of leaving no one behind, the 2030 Agenda emphasises the involvement of particularly vulnerable groups, especially indigenous peoples, and the consideration of their specific needs. The use of the Arctic should be sustainable and the needs of the local population taken into account. In addition to state obligations to protect human rights, it is also important that companies operating in the Arctic live up to their responsibility to respect human rights.
- The Federal Government is committed to strengthening the links between existing structures of regional and multilateral institutions promoting scientific cooperation and international cooperation. Local and regional administrative and economic models should serve as a starting point in these efforts.



HERDER TENTS ON YAMAL PENINSULA, RUSSIA
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INUIT IGLOO VILLAGE IN THE NORTHERN POLAR REGION
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ARCTIC SEA ICE
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Outlook: Assuming responsibility, creating trust, shaping the future

Few regions of the world are as vulnerable and influence the global climate to as great an extent as the Arctic. The surface area of Arctic sea ice has shrunk by 50 percent since the 1980s and sea levels are rising due to melting inland ice. Where less ice reflects the sun, temperatures continue to rise; thawing soils that release greenhouse gases reinforce this trend. The consequences of this are as far reaching as they are dramatic. They range from changing food chains in the animal kingdom to sea routes becoming free of ice and the race for the raw materials that can now be exploited in the Arctic.

For the Federal Government, this constitutes grounds for assuming responsibility and taking action. The future of the Arctic deserves our full attention.

The Federal Government is committed to a clear international framework that lays down the same rules for all in key areas such as climate and the environment as well as security. It will continue to strengthen institutions such as the Arctic Council and the International Maritime Organization. International conventions such as the United Nations Convention on the Law of the Sea must be strictly complied with and implemented. It is essential to involve local and indigenous Arctic populations directly affected by developments in the region.

Climate and environmental protection have a central role to play within a strengthened international legal framework for the Arctic. The Federal Government considers the precautionary and polluter pays principles to be the basis for all activities in the Arctic. It is therefore committed to ensuring that national, European and international regulations and climate protection targets are complied with and implemented. It is committed to the sustainable and environmentally sound management of resource extraction in the Arctic, including the use of environmentally friendly technologies, the designation of protected areas to conserve biodiversity and the use of other regulatory instruments specific to the region. In this context, cutting edge research is an

important cornerstone of German involvement in the polar region. Improved understanding of the role of the Arctic in the global (climate) system is of central importance in this regard.

The Federal Government is committed to integrating the Arctic into a diversified resource security system as well as to safe and environmentally friendly shipping.

The aim of the Federal Government is to counter existing geopolitical tensions in the region and to prevent conflicts (of interest) and potential crises in the Arctic. Applicable shipping and transit rights must be protected. Moreover, the Federal Government is committed to ensuring that NATO and the EU also devote more attention to the Arctic and its significance in terms of security policy. The Federal Government rejects any attempt to militarise the Arctic.

By adopting these Arctic policy guidelines, the Federal Government wishes to underscore the central importance of a comprehensive German policy on the Arctic and emphasises the joint responsibility of all actors for this sensitive region.



NORTHERN LIGHTS ABOVE THE CENTRAL ARCTIC OCEAN
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