

The Arctic: key things to know

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The Arctic, with its extreme climate and immense oil and gas resources, is also threatened by global warming.

The Arctic, whose bordering countries met in Reykjavik on Thursday, is on the frontlines of global warming and is increasingly coveted for its natural resources and strategic location.

What and where is it?

The Arctic is an ocean surrounded by land, unlike the Antarctic at the other end of the world, which is a continent surrounded by water.

Its vast territory of 21 million square kilometres (7.7 million square miles) stretches from the North Pole to the Arctic Circle.

Bordered by North America, Asia and Europe, it spans eight countries or territories: Russia, Finland, Sweden, Norway, Iceland, Greenland, Canada and the US.

The Arctic Ocean connects to the Atlantic and to the Pacific via various straits.

Polar nights

Its extreme climate means living conditions can be very tough.

With temperatures sometimes falling below minus 50 degrees Celsius (minus 58 degrees Fahrenheit) and with a very low level of light for much of the year—including "polar nights" when the sun doesn't rise above the horizon for months—its only vegetation is the tundra, a vast, treeless area of low swampy plains.

At the height of winter, ice forms to cover 14 million square kilometres of ocean. In summer, it melts to less than five million square kilometres—or even four million, with the annual melt being accelerated by global warming.

Four million residents

Some four million people live in the Arctic region, including around 500,000 people from dozens of distinct indigenous cultures such as the Inuit, the Aleut, the Sami and Yakut.

Many depend on the ocean and its wildlife for food and income.

An Arctic Council was set up in 1996 to discuss issues such as the environment and economic and [social development](#), and foreign ministers of the member states meet every two years.

Ecosystem threatened

The Arctic, which is home to some 21,000 known animal and plant species, is one of the last vast regions of the world to remain in a wild state.

But the development of human activities including fishing, transport, tourism and drilling has threatened its fragile ecosystem.

Since the 1970s, climate change has pushed up temperatures in the Arctic three times as fast as the world average.

In 2019, the region saw its second hottest year since 1900 and the second smallest ice floe ever registered.

The ice shrank even more in 2020.

Global warming, which reduces the part of the Arctic Ocean that is permanently covered by ice, puts at risk species such as polar bears, bowhead whales, seals and sea birds.

While the melting of the Arctic ice pack in the ocean has no impact on sea levels, the melting of the huge Greenland ice sheet is a cause for

concern.

Were it to completely disappear it would lead to a seven-metre (2.1 feet) rise in sea levels.

Other alarming phenomena include the emergence of major forest fires in remote areas and the melting of the permafrost, which houses large quantities of methane, a [greenhouse gas](#) much more powerful than CO₂.

Undiscovered resources

The Arctic is estimated to hold around 13 percent of the world's undiscovered oil and 30 percent of its natural gas reserves.

The melting of the Arctic ice cover has made the region more accessible to shipping as well as oil and gas extraction, making it increasingly coveted by neighbouring and distant countries, including China.

Russia has made the development of the region's natural resources a priority, while Norway estimates that the Barents Sea holds more than 60 percent of the country's untapped oil reserves, although drilling there has so far been disappointing.

Former US president Donald Trump approved oil and gas exploration in the US's biggest wildlife reserve in Alaska in August, but his successor Joe Biden has since blocked those efforts.

Greenland is also attracting interest from mining companies, although the new local government has vowed to stop a controversial uranium and rare earth mineral mine project.

Territorial disputes

Alongside interest in resources there has been an escalation of territorial claims in recent years with Moscow, Ottawa, Oslo and Copenhagen all weighing in with demands to extend their portion of the continental shelf.

The US is still gathering data to potentially make a claim, even though it has not ratified the UN Convention on the Law of the Sea.

Strategic shipping route

Thanks to the melting ice, Russia is counting on the development of maritime traffic via the northeastern passage of the Arctic linking Europe to Asia. It has opened military and scientific bases there over the past years.

Meanwhile, Canada sees the potential to considerably reduce the distance between the Atlantic and Pacific by using the northwestern passage off its coast.

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