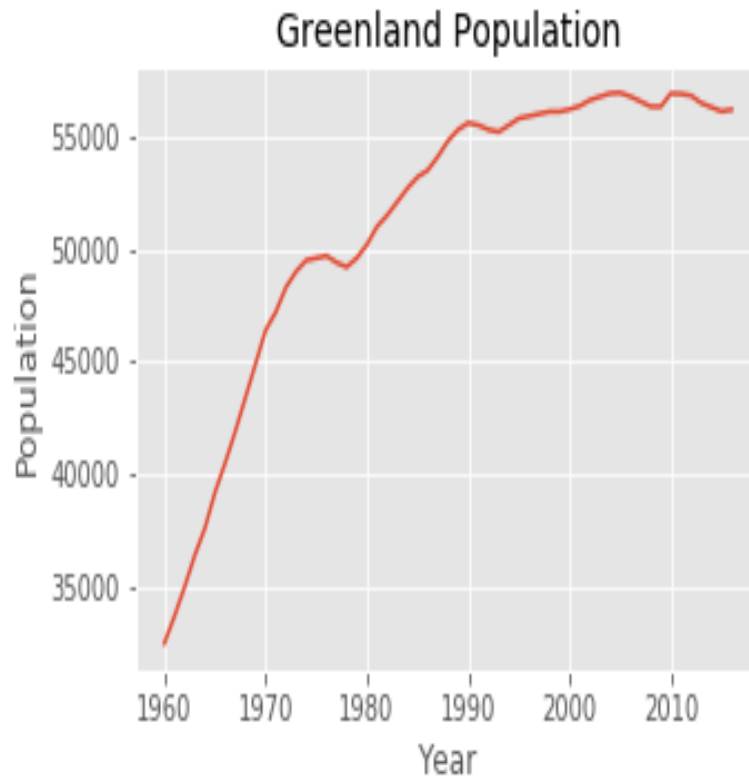


# Greenland



Greenland (Greenlandic: Kalaallit Nunaat, pronounced [kala<sup>ˈ</sup>it nuna<sup>ˈ</sup>t]; Danish: Grønland, pronounced [ˈɡʁønˌlanˀ]) is an autonomous constituent country within the Kingdom of Denmark between the Arctic and Atlantic Oceans, east of the Canadian Arctic Archipelago. Though physiographically a part of the continent of North America, Greenland has been politically and culturally associated with Europe (specifically Norway and Denmark, the colonial powers, as well as the nearby island of Iceland) for more than a millennium. The majority of its residents are Inuit, whose ancestors began migrating from the Canadian mainland in the 13th century, gradually settling across the island. Greenland is the world's largest island. Australia and Antarctica, although larger, are generally considered to be continental landmasses rather than islands. Three-quarters of Greenland is covered by the only permanent ice sheet outside Antarctica. With a population of about 56,480 (2013), it is the least densely populated territory in the world. About a third of the population live in Nuuk, the capital and largest city. The Arctic Umiaq Line ferry acts as a lifeline for western Greenland, connecting the various cities and settlements. Greenland has been inhabited off and on for at least the last 4,500 years by Arctic peoples whose forebears migrated there from what is now Canada. Norsemen settled the uninhabited southern part of Greenland beginning in the 10th century, having previously settled Iceland to escape persecution from the King of Norway and his central government. These Norsemen would later set sail from Greenland and Iceland, with Leif Erikson becoming the first known European to reach North America nearly 500 years before Columbus reached the Caribbean islands. Inuit peoples arrived in the 13th century. Though under continuous influence of Norway and Norwegians, Greenland was not formally under the Norwegian crown until 1262. The Norse colonies disappeared in the late 15th century when Norway was hit by the Black Death and entered a severe decline. Soon after their demise, beginning in 1499, the Portuguese briefly explored and claimed the island, naming it Terra do Lavrador (later applied to Labrador in Canada). In the early 18th century, Scandinavian explorers reached Greenland again. To strengthen trading and power, Denmark-Norway affirmed sovereignty over the island. Because of Norway's weak status, it lost sovereignty over Greenland in

1814 when the union was dissolved. Greenland became a Danish colony in 1814, and was made a part of the Danish Realm in 1953 under the Constitution of Denmark. In 1973, Greenland joined the European Economic Community with Denmark. However, in a referendum in 1982, a majority of the population voted for Greenland to withdraw from the EEC, which was effected in 1985. Greenland contains the world's largest and most northerly national park, Northeast Greenland National Park (Kalaallit Nunaanni nuna eqqissisimatitaa). Established in 1974 and expanded to its present size in 1988, it protects 972,001 square kilometres (375,292 sq mi) of the interior and northeastern coast of Greenland and is bigger than all but twenty-nine countries in the world. Greenland is divided into five municipalities – Sermersooq, Kujalleq, Qeqertalik, Qeqqata, and Avannaata. In 1979, Denmark had granted home rule to Greenland, and in 2008, Greenlanders voted in favour of the Self-Government Act, which transferred more power from the Danish government to the local Greenlandic government. Under the new structure, in effect since 21 June 2009, Greenland can gradually assume responsibility for policing, judicial system, company law, accounting, and auditing; mineral resource activities; aviation; law of legal capacity, family law and succession law; aliens and border controls; the working environment; and financial regulation and supervision, while the Danish government retains control of foreign affairs and defence. It also retains control of monetary policy, providing an initial annual subsidy of DKK 3.4 billion, which is planned to diminish gradually over time. Greenland expects to grow its economy based on increased income from the extraction of natural resources. The capital, Nuuk, held the 2016 Arctic Winter Games. At 70%, Greenland has one of the highest shares of renewable energy in the world, mostly coming from hydropower.

== Etymology == The early Viking settlers named the island as Greenland. In the Icelandic sagas, the Norwegian-born Iclander Erik the Red was said to be exiled from Iceland for manslaughter. Along with his extended family and his thralls (i.e. slaves or serfs), he set out in ships to explore an icy land known to lie to the northwest. After finding a habitable area and settling there, he named it Grœnland (translated as "Greenland"), supposedly in the hope that the pleasant name would attract settlers. The Saga of Erik the Red states: "In the summer, Erik left to settle in the country he had found, which he called Greenland, as he said people would be attracted there if it had a favorable name." The name of the country in the indigenous Greenlandic language is Kalaallit Nunaat ("land of the Kalaallit"). The Kalaallit are the indigenous Greenlandic Inuit people who inhabit the country's western region.

== History ==

=== Early Paleo-Eskimo cultures === In prehistoric times, Greenland was home to several successive Paleo-Eskimo cultures known today primarily through archaeological finds. The earliest entry of the Paleo-Eskimo into Greenland is thought to have occurred about 2500 BC. From around 2500 BC to 800 BC, southern and western Greenland were inhabited by the Saqqaq culture. Most finds of Saqqaq-period archaeological remains have been around Disko Bay, including the site of Saqqaq, after which the culture is named. From 2400 BC to 1300 BC, the Independence I culture existed in northern Greenland. It was a part of the Arctic small tool tradition. Towns, including Deltaterrasserne, started to appear. Around 800 BC, the Saqqaq culture disappeared and the Early Dorset culture emerged in western Greenland and the Independence II culture in northern Greenland. The Dorset culture was the first culture to extend throughout the Greenlandic coastal areas, both on the west and east coasts. It lasted until the total onset of the Thule culture in 1500 AD. The Dorset culture population lived primarily from hunting of whales and caribou.

=== Norse settlement === From 986, Greenland's west coast was settled by Icelanders and Norwegians, through a contingent of 14 boats led by Erik the Red. They formed three settlements—known as the Eastern Settlement, the Western Settlement and the Middle Settlement—on fjords near the southwestern-most tip of the island. They shared the island with the late Dorset culture inhabitants who occupied the northern and western parts, and later with the Thule culture that entered from the north. Norse Greenlanders submitted to Norwegian rule in the 13th century under the Norwegian Empire. Later the Kingdom of Norway entered into a personal union with Denmark in 1380, and from 1397 was a part of the Kalmar Union. Erik the Red's recruitment of others to colonize Greenland has been characterized recently as a land scam, the scam (and the name) portraying Greenland as better farm land than in Iceland. The Norse settlements, such as Brattahlíð, thrived for centuries but disappeared sometime in the 15th century, perhaps at the onset of the Little Ice Age. Apart from some runic inscriptions, no contemporary records or historiography survives from the Norse settlements. Medieval Norwegian sagas and historical works mention Greenland's economy as well as the bishops of Gardar and the collection of tithes. A chapter in the *Konungs skuggsjá* (The King's Mirror) describes Norse Greenland's exports and imports as well as grain cultivation. Icelandic saga accounts of life in Greenland were composed in the 13th century and later, and do not constitute primary sources for the history of early Norse Greenland. Modern understanding therefore mostly

depends on the physical data from archeological sites. Interpretation of ice core and clam shell data suggests that between 800 and 1300, the regions around the fjords of southern Greenland experienced a relatively mild climate several degrees Celsius higher than usual in the North Atlantic, with trees and herbaceous plants growing, and livestock being farmed. Barley was grown as a crop up to the 70th parallel. What is verifiable is that the ice cores indicate Greenland has had dramatic temperature shifts many times over the past 100,000 years. Similarly the Icelandic Book of Settlements records famines during the winters, in which "the old and helpless were killed and thrown over cliffs". These Icelandic settlements vanished during the 14th and early 15th centuries. The demise of the Western Settlement coincides with a decrease in summer and winter temperatures. A study of North Atlantic seasonal temperature variability during the Little Ice Age showed a significant decrease in maximum summer temperatures beginning in the late 13th century to early 14th century—as much as 6 to 8 °C (11 to 14 °F) lower than modern summer temperatures. The study also found that the lowest winter temperatures of the last 2000 years occurred in the late 14th century and early 15th century. The Eastern Settlement was likely abandoned in the early to mid-15th century, during this cold period. Theories drawn from archeological excavations at Herjolfsnes in the 1920s, suggest that the condition of human bones from this period indicates that the Norse population was malnourished, maybe due to soil erosion resulting from the Norsemen's destruction of natural vegetation in the course of farming, turf-cutting, and wood-cutting. Malnutrition may also have resulted from widespread deaths due to pandemic plague; the decline in temperatures during the Little Ice Age; and armed conflicts with the Skraelings (Norse word for Inuit). In 1379, the Inuit attacked the Eastern Settlement, killed 18 men and captured two boys and a woman. Recent archeological studies somewhat challenge the general assumption that the Norse colonisation had a dramatic negative environmental effect on the vegetation. Data support traces of a possible Norse soil amendment strategy. More recent evidence suggests that the Norse, who never numbered more than about 2,500, gradually abandoned the Greenland settlements over the 1400s as walrus ivory, the most valuable export from Greenland, decreased in price due to competition with other sources of higher-quality ivory, and that there was actually little evidence of starvation or difficulties. Other theories about the disappearance of the Norse settlement have been proposed; Lack of support from the homeland. Ship-borne marauders (such as Basque, English, or German pirates) rather than Skraelings, could have plundered and displaced the Greenlanders. They were "the victims of hidebound thinking and of a hierarchical society dominated by the Church and the biggest land owners. In their reluctance to see themselves as anything but Europeans, the Greenlanders failed to adopt the kind of apparel that the Inuit employed as protection against the cold and damp or to borrow any of the Eskimo hunting gear." === The Thule Culture (1300 – present) === The Thule people are the ancestors of the current Greenlandic population. No genes from the Paleo-Eskimos have been found in the present population of Greenland. The Thule Culture migrated eastward from what is now known as Alaska around 1000, reaching Greenland around 1300. The Thule culture was the first to introduce to Greenland such technological innovations as dog sleds and toggling harpoons. === 1500–1814 === In 1500, King Manuel I of Portugal sent Gaspar Corte-Real to Greenland in search of a Northwest Passage to Asia which, according to the Treaty of Tordesillas, was part of Portugal's sphere of influence. In 1501, Corte-Real returned with his brother, Miguel Corte-Real. Finding the sea frozen, they headed south and arrived in Labrador and Newfoundland. Upon the brothers' return to Portugal, the cartographic information supplied by Corte-Real was incorporated into a new map of the world which was presented to Ercole I d'Este, Duke of Ferrara, by Alberto Cantino in 1502. The Cantino planisphere, made in Lisbon, accurately depicts the southern coastline of Greenland. In 1605–1607, King Christian IV of Denmark sent a series of expeditions to Greenland and Arctic waterways to locate the lost eastern Norse settlement and assert Danish sovereignty over Greenland. The expeditions were mostly unsuccessful, partly due to leaders who lacked experience with the difficult arctic ice and weather conditions, and partly because the expedition leaders were given instructions to search for the Eastern Settlement on the east coast of Greenland just north of Cape Farewell, which is almost inaccessible due to southward drifting ice. The pilot on all three trips was English explorer James Hall. After the Norse settlements died off, Greenland came under the de facto control of various Inuit groups, but the Danish government never forgot or relinquished the claims to Greenland that it had inherited from the Norse. When it re-established contact with Greenland in the early 18th century, Denmark asserted its sovereignty over the island. In 1721, a joint mercantile and clerical expedition led by Danish-Norwegian missionary Hans Egede was sent to Greenland, not knowing whether a Norse civilization remained there. This expedition is part of the Dano-Norwegian colonization of the Americas. After 15 years in Greenland, Hans Egede left his

son Paul Egede in charge of the mission there and returned to Denmark, where he established a Greenland Seminary. This new colony was centred at Godthåb ("Good Hope") on the southwest coast. Gradually, Greenland was opened up to Danish merchants, and closed to those from other countries.

=== Treaty of Kiel to World War II === When the union between the crowns of Denmark and Norway was dissolved in 1814, the Treaty of Kiel severed Norway's former colonies and left them under the control of the Danish monarch. Norway occupied then-uninhabited eastern Greenland as Erik the Red's Land in July 1931, claiming that it constituted terra nullius. Norway and Denmark agreed to submit the matter in 1933 to the Permanent Court of International Justice, which decided against Norway. Greenland's connection to Denmark was severed on 9 April 1940, early in World War II, after Denmark was occupied by Nazi Germany. On 8 April 1941, the United States occupied Greenland to defend it against a possible invasion by Germany. The United States occupation of Greenland continued until 1945. Greenland was able to buy goods from the United States and Canada by selling cryolite from the mine at Ivittuut. The major air bases were Bluie West-1 at Narsarsuaq and Bluie West-8 at Søndre Strømfjord (Kangerlussuaq), both of which are still used as Greenland's major international airports. Bluie was the military code name for Greenland. During this war, the system of government changed: Governor Eske Brun ruled the island under a law of 1925 that allowed governors to take control under extreme circumstances; Governor Aksel Svane was transferred to the United States to lead the commission to supply Greenland. The Danish Sirius Patrol guarded the northeastern shores of Greenland in 1942 using dogsleds. They detected several German weather stations and alerted American troops, who destroyed the facilities. After the collapse of the Third Reich, Albert Speer briefly considered escaping in a small aeroplane to hide out in Greenland, but changed his mind and decided to surrender to the United States Armed Forces. Greenland had been a protected and very isolated society until 1940. The Danish government had maintained a strict monopoly of Greenlandic trade, allowing only small scale trading with Scottish whalers. In wartime Greenland developed a sense of self-reliance through self-government and independent communication with the outside world. Despite this change, in 1946 a commission including the highest Greenlandic council, the Landsrådene, recommended patience and no radical reform of the system. Two years later, the first step towards a change of government was initiated when a grand commission was established. A final report (G-50) was presented in 1950: Greenland was to be a modern welfare state with Denmark as sponsor and example. In 1953 Greenland was made an equal part of the Danish Kingdom. Home rule was granted in 1979.

=== Home rule and self-rule === Following World War II, the United States developed a geopolitical interest in Greenland, and in 1946 the United States offered to buy the island from Denmark for \$100,000,000. Denmark refused to sell it. In the 21st century, the United States, according to Wikileaks, remains highly interested in investing in the resource base of Greenland and in tapping hydrocarbons off the Greenlandic coast. In 1950 Denmark agreed to allow the US to reestablish Thule Air Base in Greenland; it was greatly expanded between 1951 and 1953 as part of a unified NATO Cold War defense strategy. The local population of three nearby villages was moved more than 100 kilometres (62 mi) away in the winter. The United States tried to construct a subterranean network of secret nuclear missile launch sites in the Greenlandic ice cap, named Project Iceworm. It managed this project from Camp Century from 1960 to 1966 before abandoning it as unworkable. The Danish government did not become aware of the program's mission until 1997, when they discovered it while looking for records related to the crash of a nuclear-equipped B-52 bomber at Thule in 1968. With the 1953 Danish constitution, Greenland's colonial status ended as the island was incorporated into the Danish realm as an amt (county). Danish citizenship was extended to Greenlanders. Danish policies toward Greenland consisted of a strategy of cultural assimilation—or de-Greenlandification. During this period, the Danish government promoted the exclusive use of the Danish language in official matters, and required Greenlanders to go to Denmark for their post-secondary education. Many Greenlandic children grew up in boarding schools in southern Denmark, and a number lost their cultural ties to Greenland. While the policies "succeeded" in the sense of shifting Greenlanders from being primarily subsistence hunters into being urbanized wage earners, the Greenlandic elite began to reassert a Greenlandic cultural identity. A movement developed in favour of independence, reaching its peak in the 1970s. As a consequence of political complications in relation to Denmark's entry into the European Common Market in 1972, Denmark began to seek a different status for Greenland, resulting in the Home Rule Act of 1979. This gave Greenland limited autonomy with its own legislature taking control of some internal policies, while the Parliament of Denmark maintained full control of external policies, security, and natural resources. The law came into effect on 1 May 1979. The Queen of Denmark, Margrethe II, remains Greenland's Head

of state. In 1985, Greenland left the European Economic Community (EEC) upon achieving self-rule, as it did not agree with the EEC's commercial fishing regulations and an EEC ban on seal skin products. Greenland voters approved a referendum on greater autonomy on 25 November 2008. On 21 June 2009, Greenland gained self-rule with provisions for assuming responsibility for self-government of judicial affairs, policing, and natural resources. Also, Greenlanders were recognized as a separate people under international law. (One country, two systems) Denmark maintains control of foreign affairs and defence matters. Denmark upholds the annual block grant of 3.2 billion Danish kroner, but as Greenland begins to collect revenues of its natural resources, the grant will gradually be diminished. This is generally considered to be a step toward eventual full independence from Denmark. Greenlandic was declared the sole official language of Greenland at the historic ceremony. ==

Geography and climate == Greenland is the world's largest non-continental island and the third largest country in North America. It is between latitudes 59° and 83°N, and longitudes 11° and 74°W. The Atlantic Ocean borders Greenland's southeast; the Greenland Sea is to the east; the Arctic Ocean is to the north; and Baffin Bay is to the west. The nearest countries are Canada, to the west and southwest across Baffin Bay, and Iceland, east of Greenland in the Atlantic Ocean. Greenland also contains the world's largest national park, and it is the largest dependent territory by area in the world, as well as the fourth largest country subdivision in the world, after Sakha Republic in Russia, Australia's state of Western Australia, and Russia's Krasnoyarsk Krai, and the largest in North America. The average daily temperature of Nuuk, Greenland varies over the seasons from −8 to 7 °C (18 to 45 °F). The total area of Greenland is 2,166,086 km<sup>2</sup> (836,330 sq mi) (including other offshore minor islands), of which the Greenland ice sheet covers 1,755,637 km<sup>2</sup> (677,855 sq mi) (81%) and has a volume of approximately 2,850,000 km<sup>3</sup> (680,000 cu mi). The highest point on Greenland is Gunnbjørn Fjeld at 3,700 m (12,139 ft) of the Watkins Range (East Greenland mountain range). The majority of Greenland, however, is less than 1,500 m (4,921 ft) in elevation. The weight of the ice sheet has depressed the central land area to form a basin lying more than 300 m (984 ft) below sea level, while elevations rise suddenly and steeply near the coast. The ice flows generally to the coast from the centre of the island. A survey led by French scientist Paul-Emile Victor in 1951 concluded that, under the ice sheet, Greenland is composed of three large islands. This is disputed, but if it is so, they would be separated by narrow straits, reaching the sea at Ilulissat Icefjord, at Greenland's Grand Canyon and south of Nordostrundingen. All towns and settlements of Greenland are situated along the ice-free coast, with the population being concentrated along the west coast. The northeastern part of Greenland is not part of any municipality, but it is the site of the world's largest national park, Northeast Greenland National Park. At least four scientific expedition stations and camps had been established on the ice sheet in the ice-covered central part of Greenland (indicated as pale blue in the map to the right): Eismitte, North Ice, North GRIP Camp and The Raven Skiway. There is a year-round station Summit Camp on the ice sheet, established in 1989. The radio station Jørgen Brønlund Fjord was, until 1950, the northernmost permanent outpost in the world. The extreme north of Greenland, Peary Land, is not covered by an ice sheet, because the air there is too dry to produce snow, which is essential in the production and maintenance of an ice sheet. If the Greenland ice sheet were to melt away completely, the world's sea level would rise by more than 7 m (23 ft). Between 1989 and 1993, US and European climate researchers drilled into the summit of Greenland's ice sheet, obtaining a pair of 3 km (1.9 mi) long ice cores. Analysis of the layering and chemical composition of the cores has provided a revolutionary new record of climate change in the Northern Hemisphere going back about 100,000 years and illustrated that the world's weather and temperature have often shifted rapidly from one seemingly stable state to another, with worldwide consequences. The glaciers of Greenland are also contributing to a rise in the global sea level faster than was previously believed. Between 1991 and 2004, monitoring of the weather at one location (Swiss Camp) showed that the average winter temperature had risen almost 6 °C (11 °F). Other research has shown that higher snowfalls from the North Atlantic oscillation caused the interior of the ice cap to thicken by an average of 6 cm or 2.36 in/y between 1994 and 2005. However, a recent study suggests a much warmer planet in relatively recent geological times: Scientists who probed 2 km (1.2 mi) through a Greenland glacier to recover the oldest plant DNA on record said that the planet was far warmer hundreds of thousands of years ago than is generally believed. DNA of trees, plants, spiders and insects including butterflies from beneath the southern Greenland glacier was estimated to date to 450,000 to 900,000 years ago, according to the remnants retrieved from this long-vanished boreal forest. That view contrasts sharply with the prevailing one that a lush forest of this kind could not have existed in Greenland any later than 2.4 million years ago. These DNA samples suggest that the temperature probably reached 10 °C (50 °F) in

the summer and  $-17^{\circ}\text{C}$  ( $1.4^{\circ}\text{F}$ ) in the winter. They also indicate that during the last interglacial period, 130,000–116,000 years ago, when local temperatures were on average  $5^{\circ}\text{C}$  ( $9^{\circ}\text{F}$ ) higher than now, the glaciers on Greenland did not completely melt away. In 2003, a small island, 35 by 15 metres (115 by 49 feet) in length and width, was discovered by arctic explorer Dennis Schmitt and his team at the coordinates of 83-42. Whether this island is permanent is not confirmed as of yet. If it is, it is the northernmost permanent known land on Earth. In 2007 the existence of a new island was announced. Named "Uunartoq Qeqertaq" (English: Warming Island), this island has always been present off the coast of Greenland, but was covered by a glacier. This glacier was discovered in 2002 to be shrinking rapidly, and by 2007 had completely melted away, leaving the exposed island. The island was named Place of the Year by the Oxford Atlas of the World in 2007. Ben Keene, the atlas's editor, commented: "In the last two or three decades, global warming has reduced the size of glaciers throughout the Arctic and earlier this year, news sources confirmed what climate scientists already knew: water, not rock, lay beneath this ice bridge on the east coast of Greenland. More islets are likely to appear as the sheet of frozen water covering the world's largest island continues to melt". Some controversy surrounds the history of the island, specifically over whether the island might have been revealed during a brief warm period in Greenland during the mid-20th century. === Postglacial glacier advances on the peninsula Nugsuaq === The 1310 m-high Qaagdruit-mountain-land on the south-side of the peninsula Nugsuaq, situated 50 kilometres (31 miles) west of the Greenland inland ice at  $70^{\circ}07'50.92''\text{N}$   $51^{\circ}44'30.52''\text{W}$ , is exemplary of the numerous mountain areas of West-Greenland. Up to the year 1979 (Stage 0) it shows Historical to Holocene, i.e. Postglacial glacier stages dating back at least 7000 and at most about 10 000 years. In 1979 the glacier tongues came to an end – according to the extent and height of the glacier nourishing area – between 660 and 140 metres (2,170 and 460 feet) above sea level. The pertinent climatic glacier snowline (ELA) ran at about 800 metres (2,600 feet) in height. The snowline of the oldest (VII) of the three Holocene glacier stages (V–VII) ran about 230 metres (750 feet) deeper, i.e. at about 570 metres (1,870 feet) in height. The four youngest glacier stages (IV–I) are of a Historical age. They have to be classified as belonging to the global glacier advances in the years 1811 to 1850 and 1880 to 1900 ("Little Ice Age"), 1910 to 1930, 1948 and 1953. Their snowlines rose step by step up to the level of 1979. The current snowline (Stage 0) runs nearly unchanged. During the oldest Postglacial Stage VII an ice-stream-network from valley glaciers joining each other, has completely covered the landscape. Its nourishing areas consisted of high-lying plateau-glaciers and local ice caps. Due to the uplift of the snowline about that about 230 metres (750 feet) – what corresponds to a warming about  $1.5^{\circ}\text{C}$  ( $2.7^{\circ}\text{F}$ ), since 1979 there exists a plateau-glaciation with small glacier tongues hanging down on the margins that nearly did not reach the main valley bottoms any more. == Biodiversity == There are approximately 700 known species of insects in Greenland, which is low compared with other countries (over one million species have been described worldwide). The sea is rich in fish and invertebrates, especially in the milder West Greenland Current, and a large part of the Greenland fauna associated with marine production, including large colonies of seabirds. The few native land mammals in Greenland include the polar bear, reindeer, arctic fox, arctic hare, musk ox, collared lemming, ermine, and arctic wolf. The last four are found naturally only in East Greenland, having immigrated from Ellesmere Island. There are dozens of species of seals and whales along the coast. Land fauna consists predominantly of animals that have spread from North America or for a lot of birds and insects coming from Europe. There are no native or free-living reptiles or amphibians on the island. Phytogeographically, Greenland belongs to the Arctic province of the Circumboreal Region within the Boreal Kingdom. The island is sparsely populated in vegetation; plant life consists mainly of grassland and small bushes, which is regularly grazed by livestock. The most common tree native to Greenland is the European white birch (*Betula pubescens*) along with gray-leaf willow (*Salix glauca*), rowans (*Sorbus aucuparia*), common junipers (*Juniperus communis*) and other smaller trees, mainly willows. Greenland's flora comprises about 500 species of higher plants, i.e. flowering plants, ferns, horsetails and lycopodiophyta. Of the other groups, the lichens are the largest with about 950 species; of major fungal species are known 600–700; mosses and algae anything less. Most of Greenland's higher plants are widespread, particularly in arctic and alpine regions, and only a dozen species of particular saxifrage and hawkweed is endemic. A few species were introduced by the Norsemen, such as cow vetch. The animals of Greenland include the Greenland dog, which was introduced by the Inuit, as well as European-introduced species such as Greenlandic sheep, goats, cattle, reindeer, horse, chicken and sheepdog, all descendants of animals imported by Europeans. Marine mammals include the hooded seal (*Cystophora cristata*) as well as the grey seal (*Halichoerus grypus*). Whales frequently pass very close to Greenlandic shores in the late summer and early autumn. Species represented

include the beluga whale, blue whale, Greenland whale, fin whale, humpback whale, minke whale, narwhal, pilot whale, sperm whale. Approximately 225 species of fish are known from the waters surrounding Greenland, and the fishing industry is a major part of Greenland's economy, accounting for the majority of the country's total exports. Birds, especially seabirds, are an important part of Greenland's animal life. On steep mountainsides breed large colonies of auks, puffins, skuas, and kittiwakes. By common ducks include eiders, long-tailed ducks and the king eider and in West Greenland white-fronted goose and in East Greenland pink-footed goose and barnacle goose. Breeding migratory birds are also including snow bunting, lapland bunting, ringed plover, red-throated loon and red-necked phalarope. Of land birds that are usually sedentary, can be highlighted arctic redpoll, ptarmigan, short-eared owl, snowy owl, gyrfalcon and in West Greenland the white-tailed eagle. == Politics == The Kingdom of Denmark is a constitutional monarchy, in which Queen Margrethe II is the head of state. The monarch officially retains executive power and presides over the Council of State (privy council). However, following the introduction of a parliamentary system of government, the duties of the monarch have since become strictly representative and ceremonial, such as the formal appointment and dismissal of the Prime Minister and other ministers in the executive government. The monarch is not answerable for his or her actions, and the monarch's person is sacrosanct. === Political system === The party system is dominated by the social democratic Forward Party (14 MPs), and the democratic socialist Inuit Community Party (11 MPs), both of which broadly argue for greater independence from Denmark. While the 2009 election saw the unionist—and largely Danish—Democrat Party (2 MPs) decline greatly, the 2013 election consolidated the power of the two main parties at the expense of the smaller groups, and saw the far-left Inuit Party (2 MPs) elected to the Parliament for the first time. The non-binding 2008 referendum on self-governance favoured increased self-governance 21,355 votes to 6,663. In 1985, Greenland left the European Economic Community (EEC), unlike Denmark, which remains a member. The EEC later became the European Union (EU, renamed and expanded in scope in 1992). Greenland retains some ties with the EU via Denmark. However, EU law largely does not apply to Greenland except in the area of trade. Greenland is a member state of the Council of Europe. === Government === Greenland's head of state is Margrethe II, Queen regnant of Denmark. The Queen's government in Denmark appoints a High Commissioner (Rigsombudsmand) to represent it on the island. The commissioner is Mikaela Engell. Greenlanders elect two representatives to the Folketing, Denmark's parliament, out of a total of 179. The representatives are Aleqa Hammond of the Siumut Party and Aaja Chemnitz Larsen of the Inuit Community Party. Greenland also has its own Parliament, which has 31 members. The government is the Naalakkersuisut whose members are appointed by the Premier. The head of government is the Premier, usually the leader of the majority party in Parliament. The Premier is Kim Kielsen of the Siumut Party. === Administrative divisions === Formerly consisting of three counties comprising a total of 18 municipalities, Greenland abolished these in 2009 and has since been divided into large territories known as "municipalities" (Greenlandic: kommuneqarfiit, Danish: kommuner): Sermersooq ("Much Ice") around the capital Nuuk and also including all East Coast communities; Kujalleq ("South") around Cape Farewell; Qeqqata ("Centre") north of the capital along the Davis Strait; Qeqertalik ("The one with islands") surrounding Disko Bay; and Avannaata ("Northern") in the northwest; the latter two having come into being as a result of the Qaasuitsup municipality, one of the original four, being partitioned in 2018. The northeast of the island composes the unincorporated Northeast Greenland National Park. Thule Air Base is also unincorporated, an enclave within Avannaata municipality administered by the United States Air Force. During its construction, there were as many as 12,000 American residents but in recent years the number has been below 1,000. == Economy == The Greenlandic economy is highly dependent on fishing. Fishing accounts for more than 90% of Greenland's exports. The shrimp and fish industry is by far the largest income earner. Greenland is abundant in minerals. Mining of ruby deposits began in 2007. Other mineral prospects are improving as prices are increasing. These include iron, uranium, aluminium, nickel, platinum, tungsten, titanium, and copper. Despite resumption of several hydrocarbon and mineral exploration activities, it will take several years before hydrocarbon production can materialize. The state oil company Nunaoil was created to help develop the hydrocarbon industry in Greenland. The state company Nunamineral has been launched on the Copenhagen Stock Exchange to raise more capital to increase the production of gold, started in 2007. Electricity has traditionally been generated by oil or diesel power plants, even if there is a large surplus of potential hydropower. There is a programme to build hydro power plants. The first, and still the largest, is Buksefjord hydroelectric power plant. There are also plans to build a large aluminium smelter, using hydropower to create an exportable product. It is expected that much of

the labour needed will be imported. The European Union has urged Greenland to restrict People's Republic of China development of rare-earth projects, as China accounts for 95% of the world's current supply. In early 2013, the Greenland government said that it had no plans to impose such restrictions. The public sector, including publicly owned enterprises and the municipalities, plays a dominant role in Greenland's economy. About half the government revenues come from grants from the Danish government, an important supplement to the gross domestic product (GDP). Gross domestic product per capita is equivalent to that of the average economies of Europe. Greenland suffered an economic contraction in the early 1990s. But, since 1993, the economy has improved. The Greenland Home Rule Government (GHRG) has pursued a tight fiscal policy since the late 1980s, which has helped create surpluses in the public budget and low inflation. Since 1990, Greenland has registered a foreign-trade deficit following the closure of the last remaining lead and zinc mine that year. More recently, new sources of ruby in Greenland have been discovered, promising to bring new industry and a new export to the country. (See Gemstone industry in Greenland).

=== Economics and business === About half of public spending on Greenland is funded by block grants from Denmark which in 2007 totalled over 3.2 billion kr. Additional proceeds from the sale of fishing licences and the annual compensation from the EU represents 280 million DKK per year. Greenland's economy is based on a narrow professional basis with the fishing industry as the dominant sector with some 90% of its exports. In a few years, quarrying and tourism could complement the fisheries that depend on the changing prices of fish and fishing opportunities. The long distances and lack of roads divides the domestic market into many small units that have high operating costs. Most of the fish factories are owned by Royal Greenland.

=== Transportation === Air transportation exists both within Greenland and between the island and other nations. There is also scheduled boat traffic, but the long distances lead to long travel times and low frequency. There are no roads between cities because the coast has many fjords that would require ferry service to connect a road network. In addition, the lack of agriculture, forestry and similar countryside activities has meant that very few countryside roads have been built. All civil aviation matters are handled by the Danish Transport Authority. Most airports including Nuuk Airport have short runways and can only be served by special fairly small aircraft on fairly short flights. Kangerlussuaq Airport around 100 kilometres (62 miles) inland from the west coast is the major airport of Greenland and the hub for domestic flights. Intercontinental flights connect mainly to Copenhagen. Travel between international destinations (except Iceland) and any city in Greenland requires a plane change. Air Iceland operates flights from Reykjavik to a number of airports in Greenland, and the company promotes the service as a day-trip option from Iceland for tourists. There are no direct flights to USA or Canada, although there have been flights Kangerlussuaq – Baltimore, and Nuuk – Iqaluit., which were cancelled because of too few passengers and financial losses. An alternative between Greenland and USA/Canada is Air Iceland/Icelandair with a plane change in Iceland. Sea passenger and freight transport is served by the coastal ferries operated by Arctic Umiaq Line. It makes a single round trip per week, taking 80 hours each direction.

== Population ==

=== Demographics === Greenland has a population of 56,370 (January 2013 estimate), of whom 88% are Greenlandic Inuit (including mixed persons). The remaining 12% are of European descent, mainly Greenland Danes. Several thousand Greenlandic Inuit reside in the Danish Peninsula. The majority of the population is Lutheran. Nearly all Greenlanders live along the fjords in the south-west of the main island, which has a relatively mild climate. More than 17,000 people reside in Nuuk, the capital city.

=== Languages === Both Greenlandic (an Eskimo–Aleut language) and Danish have been used in public affairs since the establishment of home rule in 1979; the majority of the population can speak both languages. Greenlandic became the sole official language in June 2009. In practice, Danish is still widely used in the administration and in higher education, as well as remaining the first or only language for some Danish immigrants in Nuuk and other larger towns. Debate about the roles of Greenlandic and Danish in the country's future is ongoing. The orthography of Greenlandic was established in 1851 and revised in 1973. The country has a 100% literacy rate. A majority of the population speaks Greenlandic, most of them bilingually. It is spoken by about 50,000 people, making it the most populous of the Eskimo–Aleut language family, spoken by more people than all the other languages of the family combined. Kalaallisut is the Greenlandic dialect of West Greenland, which has long been the most populous area of the island. This has led to its de facto status as the official "Greenlandic" language, although the northern dialect Inuktitun remains spoken by 1,000 or so people around Qaanaaq, and the eastern dialect Tunumiisut by around 3,000. Each of these dialects is almost unintelligible to the speakers of the other and are considered by some linguists to be separate languages. A UNESCO report has labelled the other dialects as endangered, and measures are now being considered to



protect the East Greenlandic dialects. About 12% of the population speak Danish as a first or sole language, particularly Danish immigrants in Greenland, many of whom fill positions such as administrators, professionals, academics, or skilled tradesmen. While Greenlandic is dominant in all smaller settlements, a part of the population of Inuit or mixed ancestry, especially in towns, speaks Danish. Most of the Inuit population speaks Danish as a second language. In larger towns, especially Nuuk and in the higher social strata, this is still a large group. While one strategy aims at promoting Greenlandic in public life and education, developing its vocabulary and suitability for all complex contexts, there are opponents of this.. English is another important language for Greenland, taught in schools from the first school year. === Religion === The nomadic Inuit people were traditionally shamanistic, with a well-developed mythology primarily concerned with appeasing a vengeful and fingerless sea goddess who controlled the success of the seal and whale hunts. The first Norse colonists worshipped the Norse gods, but Erik the Red's son Leif was converted to Christianity by King Olaf Trygvesson on a trip to Norway in 999 and sent missionaries back to Greenland. These swiftly established sixteen parishes, some monasteries, and a bishopric at Garðar. Rediscovering these colonists and spreading ideas of the Protestant Reformation among them was one of the primary reasons for the Danish recolonization in the 18th century. Under the patronage of the Royal Mission College in Copenhagen, Norwegian and Danish Lutherans and German Moravian missionaries searched for the missing Norse settlements, but no Norse were found, and instead they began preaching to the Inuit. The principal figures in the Christianization of Greenland were Hans and Poul Egede and Matthias Stach. The New Testament was translated piecemeal from the time of the very first settlement on Kangeq Island, but the first translation of the whole Bible was not completed until 1900. An improved translation using the modern orthography was completed in 2000. Today, the major religion is Protestant Christianity, represented mainly by the Church of Denmark, which is Lutheran in orientation. While there are no official census data on religion in Greenland, the Bishop of Greenland Sofie Petersen estimates that 85% of the Greenlandic population are members of her congregation. The Church of Denmark is the established church through the Constitution of Denmark: The Evangelical Lutheran Church shall be the Established Church of Denmark, and, as such, it shall be supported by the State. This applies to all of the Kingdom of Denmark, except for the Faroe Islands, as the Church of the Faroe Islands became independent in 2007. The Roman Catholic minority is pastorally served by the Roman Catholic Diocese of Copenhagen. There are still Christian missionaries on the island, but mainly from charismatic movements proselytizing fellow Christians. === Social issues === The rate of suicide in Greenland is very high. According to a 2010 census, Greenland holds the highest suicide rate in the world. Other significant social issues faced by Greenland are high rates of unemployment, alcoholism, and HIV/AIDS. Alcohol consumption rates in Greenland reached their height in the 1980s, when it was twice as high as in Denmark, and had by 2010 fallen slightly below the average level of consumption in Denmark (which is the 12th highest in the world). But at the same time alcohol prices are much higher, meaning that consumption has a high social impact. === Education === There is a 10-year compulsory schooling for children. Secondary education is available in several places in the country. There are many higher schools in Greenland, including the University of Greenland in Nuuk. Traditionally many Greenlanders have received higher education in Denmark. == Culture == Today Greenlandic culture is a blending of traditional Inuit (Kalaallit) and Scandinavian culture. Inuit, or Kalaallit, culture has a strong artistic tradition, dating back thousands of years. The Kalaallit are known for an art form of figures called tupilak or a "spirit object." Traditional art-making practices thrive in the Ammassalik. Sperm whale ivory remains a valued medium for carving. Greenland also has a successful, albeit small, music culture. Some popular Greenlandic bands and artists include Sume (classic rock), Chilly Friday (rock), Nanook (rock), Siissisoq (rock), Nuuk Posse (hip hop) and Rasmus Lyberth (folk), who performed in the Danish Eurovision Song Contest 1979, performing in Greenlandic. The singer-songwriter Simon Lynge is the first musical artist from Greenland to have an album released across the United Kingdom, and to perform at the UK's Glastonbury Festival. The music culture of Greenland also includes traditional Inuit music, largely revolving around singing and drums. === Sport === Sport is an important part of Greenlandic culture, as the population is generally quite active. Popular sports include association football, track and field, handball and skiing. Handball is often referred to as the national sport, and Greenland's men's national team was ranked among the top 20 in the world in 2001. Greenland has excellent conditions for skiing, fishing, snowboarding, ice climbing and rock climbing, although mountain climbing and hiking are preferred by the general public. Although the country's environment is generally ill-suited for golf, there are nevertheless golf courses on the island. == See also == Outline of Greenland Index of

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