DRILL, BABY, DRILL

How banks, investors and insurers are driving oil and gas expansion in the Arctic

RECLAIM Finance

DRILL, BABY, DRILL:
How banks, investors and insurers are driving oil and gas expansion in the Arctic

Authors:
Eren Can Ileri
Henri Her
Alix Mazounie
Lucie Pinson

Contributors:
Clément Faul
Andrea Hernandez
Maude Lentilhac
Lorette Philippot
Angus Satow

Data:
Financial data from Profundo
Company data from Rystad Energy
Read more in the methodology

Thanks to:
Etienne Côme
Teissir Ghrab
Kyle Gracey, Oil Change International
Yann Louvel
Tommaso Venturini, researcher at the CNRS
and associate professor at the University of Geneva

Graphic designers:
Jordan Jeandon
Guénolé Le Gal

Publication date:
September 2021

TABLE OF CONTENTS

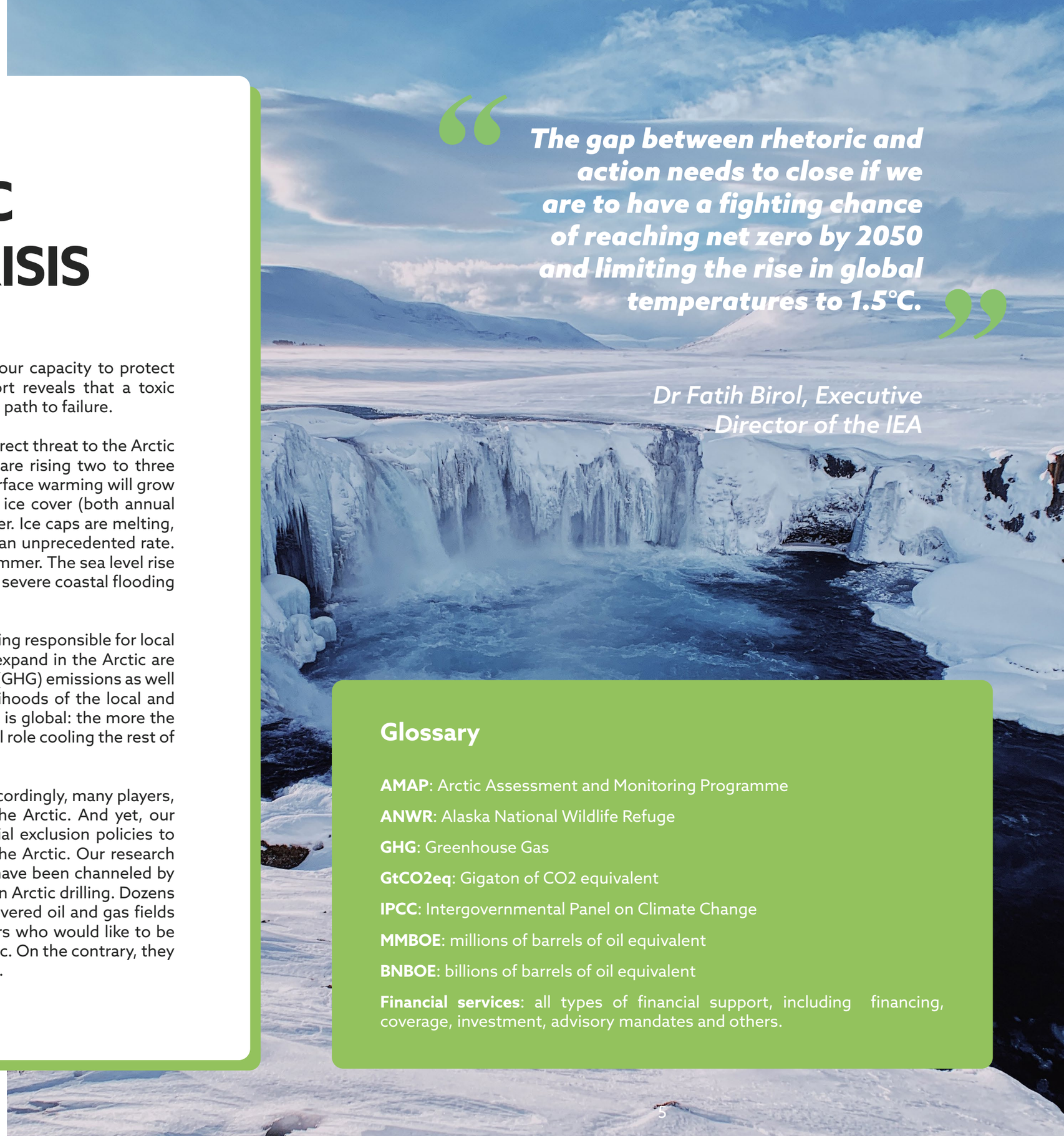
THE ARCTIC IN CLIMATE CRISIS

Our capacity to protect the Arctic is a litmus test for our capacity to protect our planet and its ecosystems. Tragically, this report reveals that a toxic combination of fossils and finance is setting us on the path to failure.

The sixth IPCC report confirms that climate breakdown is a direct threat to the Arctic region. Extreme heat events have increased; temperatures are rising two to three times faster in the Arctic than in the rest of the world; and surface warming will grow more pronounced over the 21st century. Current Arctic sea ice cover (both annual and late summer) is at its lowest level since 1850, if not earlier. Ice caps are melting, spring snow cover is thinning, and permafrost is thawing at an unprecedented rate. By 2050, in all scenarios, there will be at least one ice-free summer. The sea level rise will continue in the Arctic, contributing to more frequent and severe coastal flooding and shoreline retreat.

As fossil fuels are root causes of global warming as well as being responsible for local forms of pollution, attempts by the oil and gas industry to expand in the Arctic are alarming in the extreme. They are increasing greenhouse gas (GHG) emissions as well as endangering both the unique Arctic habitat and the livelihoods of the local and Indigenous communities dependent on it. Equally, the threat is global: the more the Arctic is affected by climate change, the less impactful its vital role cooling the rest of the planet, and the faster the climate changes.

The fragility and importance of the Arctic is widely known: accordingly, many players, particularly in the finance world, have pledged to protect the Arctic. And yet, our report reveals that there are no robust plans and no financial exclusion policies to stop the oil and gas industry from drilling its way through the Arctic. Our research unveils that, in recent years, hundreds of billions of dollars have been channeled by the private finance sector to the oil and gas players involved in Arctic drilling. Dozens of projects are in the making and there is a long list of discovered oil and gas fields waiting to be developed. Those banks, investors and insurers who would like to be seen as "Arctic protectors" are failing to live up to their rhetoric. On the contrary, they are supporting Arctic predators and fuelling the climate crisis.



"The gap between rhetoric and action needs to close if we are to have a fighting chance of reaching net zero by 2050 and limiting the rise in global temperatures to 1.5°C."

Dr Fatih Birol, Executive Director of the IEA

Glossary

AMAP: Arctic Assessment and Monitoring Programme

ANWR: Alaska National Wildlife Refuge

GHG: Greenhouse Gas

GtCO2eq: Gigaton of CO2 equivalent

IPCC: Intergovernmental Panel on Climate Change

MMBOE: millions of barrels of oil equivalent

BNBOE: billions of barrels of oil equivalent

Financial services: all types of financial support, including financing, coverage, investment, advisory mandates and others.

OUR MAIN FINDINGS

1 The Arctic: a climate bomb in the making

- There are currently 599 oil and gas fields in the Arctic, in production, under development/evaluation or discovered.
- If every drop were extracted, **22% of our remaining carbon budget to stay below 1.5°C would go up in smoke**.
- In the next five years Arctic oil & gas production is set to increase by 20%.
- This fossil bonanza is being undertaken by some of the world's largest oil and gas companies: by 2030, Gazprom - the biggest Arctic expansionist - is due to increase production by 14%; ConocoPhillips by 36% and TotalEnergies by 28%.

2 Big money is fuelling oil and gas expansion in the Arctic

- From 2016 to 2020, commercial banks have channeled more than **$314 bn** to the leading companies developing new oil and gas projects in the Arctic.
- Top backers of Arctic expansionists include **banks committed to restricting oil & gas financing in the Arctic: JPMorgan Chase (top globally with $18.6bn between 2016-2020), Barclays (4th largest, $13.2bn) Citigroup (6th, $12.2bn) and BNP Paribas (7th, $11.8bn).**
- European banks account for more than 1/4th of global underwriting and loans to Arctic developers, with increasing support from 2016 ($16.6bn) to 2020 ($28.4bn). Two European banks - HSBC and BNP Paribas - were top bankers of Arctic expansionists in 2020.
- Investors hold roughly $272 bn in the top companies developing new oil and gas projects in the Arctic region (as per March 2021). **The biggest investors supporting Arctic expansionists include BlackRock, Vanguard and Amundi.**

3 Existing policies to restrict oil and gas financing in the Arctic are too weak

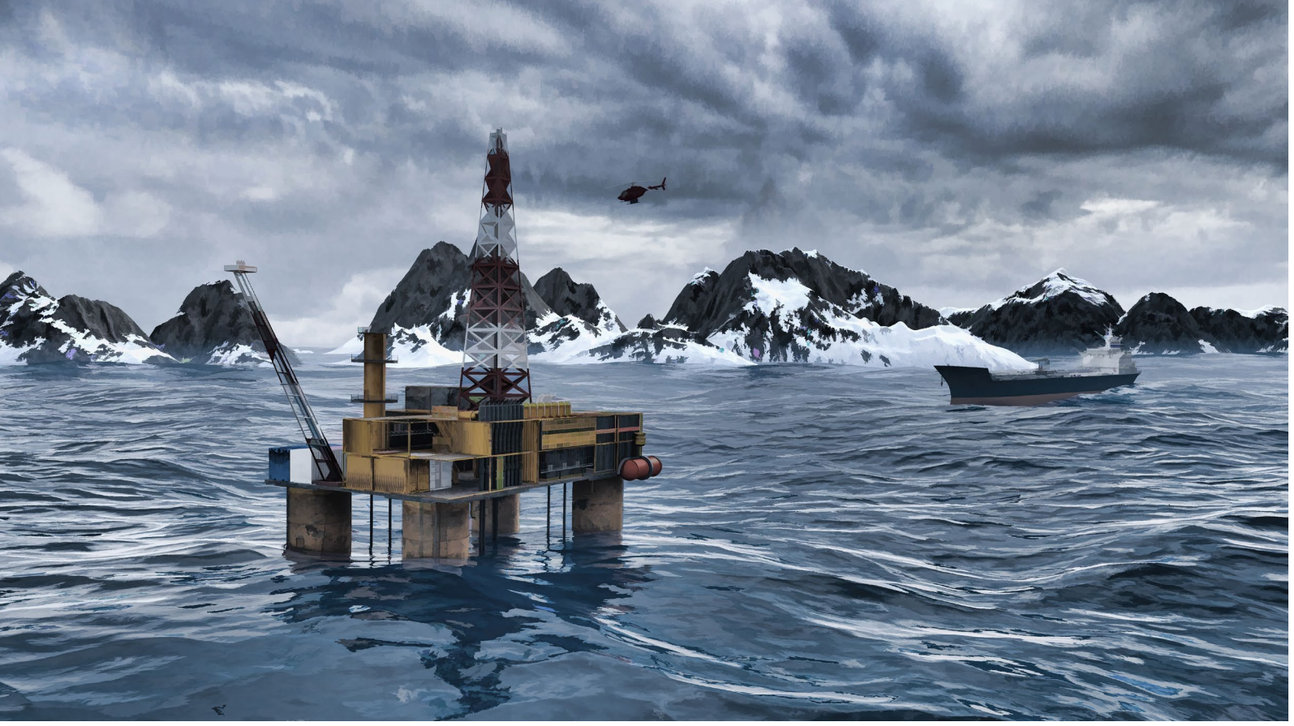
- Most of the banks and insurers with policies partially or totally exclude direct financing and insurance coverage to oil and gas projects in the Arctic but have no or very weak exclusion criteria at the corporate level.
- **Not a single policy excludes all companies expanding in the Arctic.** Consequently, most of the biggest expansionists in the Arctic, including oil and gas majors like Total, Shell and ConocoPhillips slip through the net of existing policies.
- **Four out of eight banks that implemented an Arctic policy before 2020 have since *increased* financing to Arctic expansionists:** BNP Paribas, Société Générale, Natixis, and HSBC.

  Financial institutions like Morgan Stanley and Axa have **based their commitments on highly limited geographical definitions of the Arctic, allowing them to sidestep their own exclusion policies** and potentially support oil and gas projects in the region.

4 Financial players need robust policies to stop oil and gas expansion in the Arctic

Reclaim Finance is calling on financial institutions to:

- Exclude all forms of project financing, coverage & investment across the AMAP Arctic area.
- Rapidly end support to all companies with expansion plans in the AMAP Arctic area.
- Exclude both oil and gas expansion in the AMAP, across offshore, onshore, upstream and midstream.



1. OIL AND GAS IN THE ARCTIC: A CLIMATE BOMB

Despite heightened industrial, environmental and climate risks, the oil and gas industry is looking to expand into the Arctic. Companies hold enough oil and gas fields to burn a gaping hole in the global carbon budget and accelerate global warming, all while posing a threat for vulnerable ecosystems and livelihoods. Local oil and gas pollution is also hindering the Arctic's natural cooling effect for the planet.

a. Enough oil and gas fields to burn over 1/5 of our carbon budget

According to the International Energy Agency,[1] to stay below 1.5°C and achieve net zero GHG emissions by 2050, new fossil fuel reserves must not be extracted. After 2021, investments in oil and gas must decline and should be directed to existing oil and gas fields only. **Yet, the Arctic[2] is under threat of oil and gas expansion**.

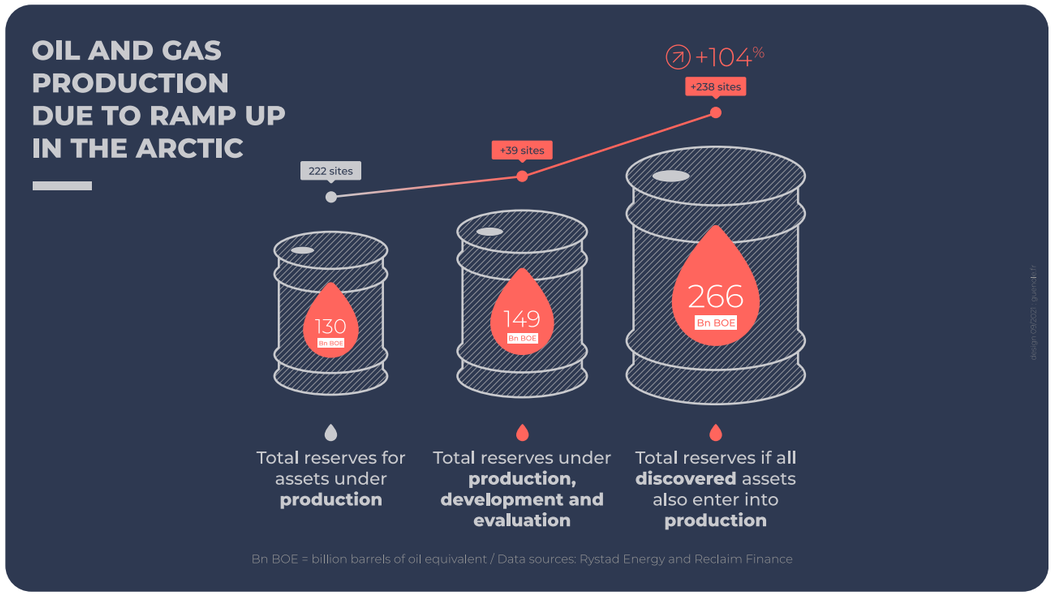
As the Arctic melts increasingly quickly,[3] extraction and transport of oil and gas reserves in the Arctic is becoming increasingly accessible and attracting the attention of the oil and gas industry. Despite the importance of the Arctic for climate stability, ecosystems and livelihoods, **there are currently 599 oil and gas fields under production, under field evaluation or development, or at the discovery stage within the Arctic region as defined by the Arctic Monitoring and Assessment Programme, one of the Arctic Council's workings groups.[4] According to our estimates, the Arctic[5] could account for 15% of the world's expected oil and gas growth by 2030.**[6]

More than a third (222 out of 599) of these fields are already under production, representing more than 4 billions of barrels and 1.3 GtCO2eq of GHG emissions in 2020, and increasing each year. That's three times the GHG emissions of France.[7] Despite heightened costs and extreme conditions, more climate bombs could develop in the Arctic: two-thirds of the assets listed are not yet at the production stage. **If the companies receive the required backing from banks, insurers and investors, 39 more oil and gas fields could be operational in the next few years.[8]** By 2026, Arctic oil & gas production is set to increase by 20%. There are also another 338 more fields that companies have already 'discovered', and could start developing. In a worst-case scenario where all assets go into development, production could increase as much as 30% by 2030, from 11.5 millions of barrels of oil equivalent (mmboe) a day to 15.3 mmboe a day.

If all 599 assets were to find the financial support they require to go into production, reserves in production would double, unleashing 88.6 GtCO2 of emissions over their lifetime. **In other words, Arctic oil and gas assets alone could burn up to 22.1% of the carbon budget we have left to limit temperature increases below 1.5°C.**[9] Arctic exploitation may also only be the beginning: according to the USGS, the Arctic Circle alone (a subset of the AMAP Arctic area) holds a further 400 billion barrels of oil equivalent of undiscovered oil and fossil gas.[10]

According to our data, **oil and gas expansion in the Arctic will be increasingly offshore**: less than 20% of the fields under production are offshore but more than half of the fields under development/under field evaluation are offshore and mostly located in deep waters.[11] These come with heightened risks: offshore production of oil and gas is already a risk, a dynamic which is all the more true in the Arctic region. Drifting floating ice, as well as the particularly harsh weather in this area, require infrastructure to be particularly resistant, and brings with it heavy capital expenditures (thus potentially irrecoverable costs).

Our research also shows that the gas industry is also developing liquefied natural gas (LNG) infrastructure to liquefy and export Arctic gas: there are currently five LNG assets under production, and megaproject Arctic LNG-2 (which includes three terminals) under development. If operationalized, Arctic LNG-2 would allow the gas industry to nearly double LNG production capacity in the Arctic (from current 196.36 mmboe annual capacity to 376.36 mmboe).[12]



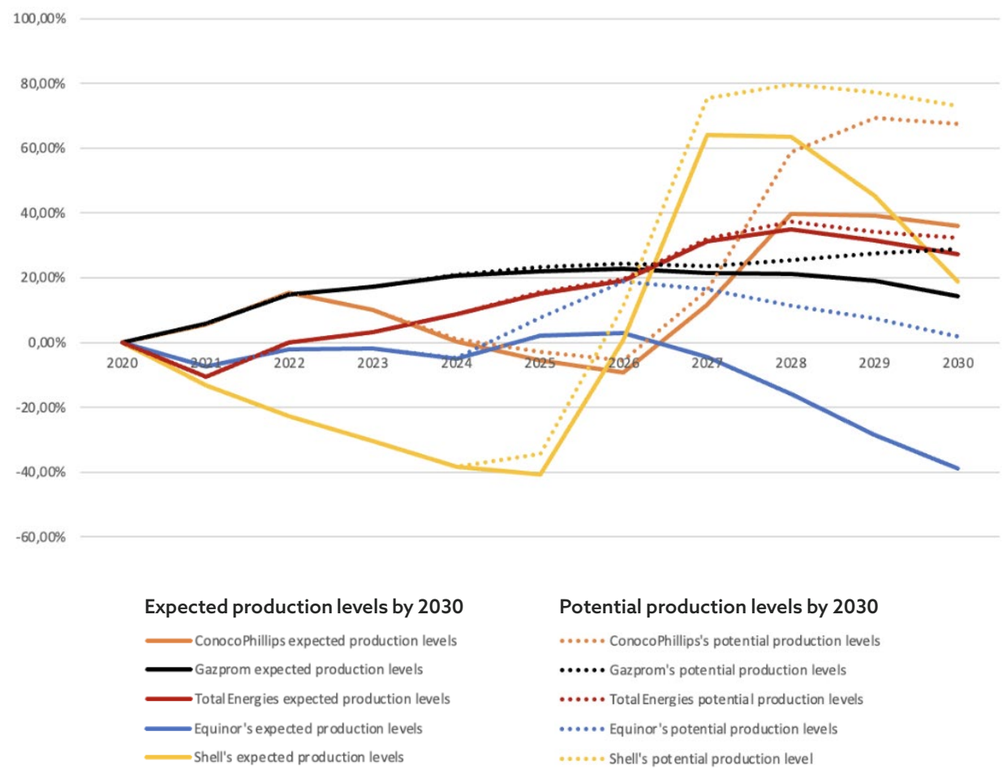
Breakdown: oil and gas fields in the Arctic AMAP area[13]

Type of asset	Discovered	Short term expansion		Producing	Total general
		Under field evaluation	Under development		
Land	**162**	**6**	**11**	**181**	**360**
Gas fields	97		6	72	175
Oil fields	65	6	5	109	185
Shelf (offshore, up 125 meters deep)	**60**	**1**	**3**	**16**	**80**
Gas fields	31		1	4	36
Oil fields	29	1	2	12	44
Deep water (offshore, from 125 to 1500 meters deep)	**116**	**11**	**7**	**25**	**159**
Gas fields	70	8	3	11	92
Oil fields	46	3	4	14	67
Total	**338**	**18**	**21**	**222**	**599**

The top 20 companies with short term expansion plans in the Arctic

Company	Under Field evaluation (mmboe)	Under development (mmboe)	Total reserves (mmboe)
Gazprom		6941	**6941**
Novatek		4824	**4824**
ConocoPhillips	876	38	**914**
TotalEnergies	54	803	**857**
CNPC (parent)		753	**753**
CNOOC		753	**753**
Equinor	185	455	**640**
JOGMEC		565	**565**
Rosneft		472	**472**
RusGazDobycha		376	**376**
Petoro	177	193	**370**
Vaar Energi	41	216	**257**
Oil Search	203		**203**
Repsol	195		**195**
Mitsui		188	**188**
Shell	136		**136**
Neptune Energy	11	101	**112**
Wintershall Dea	2.4	108	**110**
Lukoil	69	41	**110**
Siccar Point Energy	109		**109**

Expected and potential production levels in Arctic oil and gas production from 2020 to 2030



This graph shows both expected production levels from 2020 levels by 2030 (based on annual production levels for the company's assets under production, under development or field evaluation) and potential production levels from 2020 to 2030, if the company's discovered assets also came under production. This estimate does not take into account economic considerations). (Reclaim Finance calculations based on data extracted from the Rystad Energy database).

b. Several major oil and gas companies are expanding in the Arctic

There are at least 24 companies with short term oil and gas plans in the Arctic AMAP area. **20 of those companies currently account for 99.3% of the new oil and gas fields' reserves under development and under evaluation**.[14] This report will focus on these 20 Arctic expansionists.

The number 1 Arctic expansionist in the short and long term is Gazprom, the biggest Russian energy company and second largest oil and gas producer in the world in 2020. Gazprom has major plans for the Arctic, with 74% of its reserves based there. Gazprom holds direct shares in 68 assets either discovered or under development/evaluation that could double current production levels (and GHG emissions) if operationalized. Gazprom's production is due to increase by 14% by 2030 from 2020 levels (and reach 7621 mmboe per year in 2030). If Gazprom also finds the support required to develop its other discovered Arctic reserves, production could increase by more than 30% in 2030.

Russian companies may be leading the oil and gas frenzy in the Arctic but American ConocoPhillips, French TotalEnergies, Norwegian Equinor, and Anglo-Dutch Shell are also listed in the top 20 companies developing projects in the Arctic.

- **TotalEnergies is the leading European player when it comes to oil and gas expansion in the Arctic**. The French major is directly involved in 31 oil and gas assets, of which nine are currently under production, five are under development (two of which are in deep offshore waters), four under field evaluation, and 13 just discovered. When Total's assets under development enter the production stage, **TotalEnergie's Arctic production capacity is expected to increase by approximately 28% in 2030** from 2020 levels (and reach 179 mmboe per year in 2030). It could increase by 32% if Total's discovered assets also reached the production stage.
- With four projects nearing the production stage, **ConocoPhillips' production is due to grow by 36% in 2030**. It could grow by nearly 68% by 2030 if all 30 discovered assets went into production by then.
- **Shell's production is due to increase by 18% in 2028**. Production could grow by 78% by 2030 if the oil and gas major find the support to push its 17 discovered assets into production.
- **Equinor's** production could decrease by more than 38% in 2030 (and reach 249.8 mmboe), with new projects under development/evaluation more than offset by a larger decline in the 22 oil and gas fields currently under production. However, if Equinor finds the support needed to develop its other discovered assets, its production could stay the same as 2020 levels.

In the future, the American and European oil and gas industries could play an increasing role in the Arctic. ExxonMobil, Chevron, ConocoPhillips hold direct or indirect participation in 58 assets (under development/field evaluation or at the discovery stage).

The European oil and gas industry also has big plans for the Arctic. BP (via its stake in Russian Rosneft), Equinor, Shell, Petoro, Vaar Energie (Norwegian company with Italian ENI as its main shareholder), Wintershall, TotalEnergies hold direct or indirect participation in 178 of the 375 assets under development, under evaluation, or at the discovery stage.

c. The oil & gas industry is impacting the Arctic cooling system, livelihoods and wildlife

The climate impact of Arctic oil and gas extraction and infrastructure does not stop at unleashed emissions — worse still, the pollution related to the intensive exploitation process can create a runaway effect hindering the Arctic's role in cooling down the planet, as well as affecting Arctic ecosystems and livelihood.

Oil and gas pollution is hindering the Arctic's role in cooling down the planet.

The polar ice caps play a vital role in cooling down the planet by reflecting solar radiation off their white surface back into the atmosphere, instead of absorbing their heat. The **oil and gas industry in the Arctic is adversely affecting this mechanism**: shipping pollution and the flaring of excess gas during oil and gas extraction (to avoid leakage during transport) both produce "black carbon," also known as soot.[15] When soot deposits on the frozen Arctic ground, it absorbs the heat, like a dark shirt on a scorching summer day.

This makes Arctic ice melt even faster. **Melting polar ice caps contributes to a feedback loop that accelerates global warming: less ice in the Arctic means less solar radiation reflected and less cooling**. Permafrost (frozen soil) traps organic material underground and stops it from decomposing—as the permafrost melts, methane trapped underground gets released into the atmosphere, strengthening the greenhouse effect. The oil and gas industry is rapidly pushing us towards a tipping point where Arctic thaw is irreversible. Melting ice can also cause sea level rise and disrupt ocean currents, increasing the risks of extreme weather events and coastal flooding. According to the 2021 AMAP report,[16] in the past 50 years, temperatures in the Arctic have increased three times faster than elsewhere in the world. This is higher than reported in previous AMAP assessments.

THE TOP 20 ARCTIC EXPANSIONISTS

Conoco Phillips
Oil Search
Repsol

Equinor
Vaar Energi
Neptune Energy
Petoro
Wintershall
Shell
Siccar Point Energy

Gazprom
Rosneft
Novatek
CNPC
CNOOC
Lukoil
Jogmec
Rusgazdobycha
Mitsui

TotalEnergies

Under development

Field evaluation

Climate chaos and industrial expansion harm local communities and wildlife

Local communities in the Arctic are among the worst hit by climate change. According to Arctic Council data,[17] there are 4 million people living in the Arctic, 9% of whom are indigenous communities each with a distinct and unique culture. Two-thirds of the Arctic people live on permafrost. As Arctic temperatures rise and the permafrost thaws and coastlines erode because of climate change, communities are forced to move to survive. Climate chaos and habitat destruction have caused the migratory patterns of traditional food sources, including caribou and salmon, to shift, further endangering Indigenous Peoples' livelihoods. According to the AMAP working group, "Communities in Alaska, northern Canada, and Finland have reported changes in the abundance and quality of berries. Indigenous hunters and fishers in Canada and Russia have reported thinner seals, worsening health of wildlife, and a greater prevalence of worms in fish and marine mammals".[18]

The development of the oil and gas industry in the Arctic, as well as the climate crisis more broadly, has damaged local habitats, injured wildlife, and broken food chains. The heating climate has led vegetation to die out, cutting off herbivores such as caribou and lemmings, essential food sources for local communities and carnivore species, from their primary food sources; as coasts erode and ice recedes, aquatic and semi-aquatic mammals, who dwell on floating glacial ice are forced ashore or to travel far to find food.[19] Many oil and gas projects, such as ConocoPhillips, Colville Delta-5 and Greater Mooses Tooth-1 projects, are situated next to protected wildlife habitats: pipelines and roads hinder caribou herd movement and subsistence opportunities while waste and gravel pits hurt nesting bird populations.[20] Noise is another endangering factor. From beluga whales to walruses, several social marine mammals rely on song and echolocation to socialize and parent. Seismic surveys, offshore construction, and drilling are extremely loud, causing hearing loss in these animals—this can have devastating effects on wildlife, leading parents to no longer recognize their calves.[21]

Runoff from chemical disposal areas and wastewater dumped from passing ships, in heightened marine temperatures, can directly contaminate marine wildlife and lead to toxic algae blooms. This algae in turn affects the staple diet (mollusks, etc) of many marine species, including the endangered steelhead trout and critically endangered right whale. The dumping of persistent organic pollutants has caused these toxic chemicals to accumulate across the food chain, causing some indigenous people to have levels of pollutants exceeding World Health Organization limits in their bodies.[23] Industrial activity such as natural gas flaring also causes toxic air pollution levels, leading to respiratory illnesses.

The Arctic National Wildlife Refuge

The Arctic National Wildlife Refuge (ANWR) is one of the world's last intact ecosystems, home to nearly 200 wildlife species, including many migratory birds, and the breeding grounds of the white polar bear and the Porcupine caribou herd. The Refuge is also the home and sacred place of the Gwich'in people, and has been protected since the 1960s. In 2017, the Trump administration decided to open the refuge to oil and gas leasing and development. Gwich'in people successfully campaigned against this, leading to more than ten major banks and six insurers[22] banning financing for oil and gas projects in ANWR (and in some cases, the loosely defined "broader Arctic region"). In January 2021, parts of ANWR were auctioned off for oil and gas leases - although they attracted little interest from bidders. In June 2021 US President Biden suspended oil and gas leases for the Refuge pending an environmental review. However, unless the Biden administration changes the 2017 law, there could be another auction in 2024. Find out more here: https://ourarcticrefuge.org/

The compounded risk of an ecological disaster in an extreme environment

Arctic oil and gas drilling carries with it a heightened risk of disaster. The ice sheets make the drilling conditions more extreme. At the same time, as global temperatures increase,[24] permafrost melt is compromising the structural integrity of infrastructure built upon solid ground ice. The capacity to respond to spills is diminished in the Arctic environment due to its remoteness, extreme weather conditions, short navigable seasons, and difficulties navigating and cleaning around sea ice—a spill during ice season would be near-impossible to contain or recover. If it took the same number of days to cap and contain an Arctic spill as it did for Deepwater Horizon, the spill could not be contained before ice season, leaving the spill to continue until the next summer.[25]

The Norilsk oil spill in the Arctic

In May 2020, an accident at the Nornickel plant led to a massive oil spill. 21,000 tonnes of petrochemicals were released into rivers and subsoil near the city of Norilsk on Siberia's Taymyr peninsula, causing the Ambarnaya River to turn red. The accident is estimated to be the biggest oil spill since the Komi pipeline accident in 1994. According to the Chair of the Association of Indigenous Minorities of the Taimyr Krasnoyarsk Territory, Grigory Dyukarev, "This accident is devastating to our economy. The river is spawning, and our people go fishing there (...) And if the river is polluted: there will be no more fish for us. But we will lose not only fish: a wild deer is likely to change migration routes, so we will have to travel hundreds of kilometres for hunting".[26]

2 BIG MONEY IS FUELLING THE ARCTIC CRISIS

Bankers, investors and insurers have been directly or indirectly fuelling oil and gas expansion in the Arctic. In fact, even when they have policies in place to ban any further direct project support in the Arctic, they still enable financing and insurance for companies developing new projects in the Arctic.

a. Banks backing Arctic oil and gas expansionists

The large majority of Arctic operations are bankrolled by commercial banks through corporate financing, with project financing representing a small share of the overall funding requirements for oil and gas projects in the Arctic. From January 2016 to December 2020, more than 120 commercial banks provided financial services to 17 of the 20 top companies currently developing new oil and gas projects in the Arctic (financial transactions to three out of the 20 companies - Petoro, Gasruzdobycha and JOGMEC - could not be found. The remaining 17 companies are referred to as the Arctic expansionists).

From 2016 to 2020, 120 commercial banks provided more than $314 billion to the Arctic expansionists. Approximately 34% was provided through loans and 66% through the issuance of bonds and shares.

The top 30 Arctic bankers, making up more than 80% of the overall financing identified in this research, include **JPMorgan Chase, Barclays, Citigroup and BNP Paribas and VTB group, Russian Sberbank and Gazprombank**. European banks in the top30 account for more than 1/4 of global underwriting and loans to Arctic developers and increased from 2016 ($16.6bn) to 2020 ($28.4bn)

Ironically, **20 of the top 30 banks fuelling expansion and destruction in the Arctic region now have so-called Arctic restriction policies.** Among them are lead Arctic bankers **JPMorgan Chase, Barclays, BNP Paribas, Citigroup, Deutsche Bank, HSBC, and Crédit Agricole**. Unfortunately, the policies are not designed to stop expansion in the Arctic. Shockingly, **BNP Paribas (also one of the banks with the highest financing for Arctic companies in 2020), Crédit Agricole, Société Générale, Natixis and HSBC** even increased financial services to Arctic developers after adopting an Arctic exclusion policy - for the other banks, it's still too early to tell as they adopted policies only in 2020 or 2021. Unless banks strengthen their Arctic policies, they could keep bankrolling climate chaos in the Arctic region for a very long time.

JPMorgan Chase bankrolling top Arctic expansionist Gazprom

From 2016 to 2020, banks channeled more than $50bn to Gazprom, the biggest gas producer in the world and biggest Arctic expansionist by far. Gazprom is planning to increase production by 2030, and has 74% of its oil and gas reserves located in the Arctic region. JPMorgan Chase has been the second biggest Gazprom banker, providing almost $4.5bn in financing from 2016 to 2020. In February 2020, JPMorgan Chase adopted an Arctic restriction policy that does not exclude corporate financing to companies operating in the Arctic, meaning that the US banking giant can keep funding Gazprom's future Arctic operations. Other private banks Intesa SanPaolo, Crédit Agricole, UniCrédit, Mizuho Financial and SMBC are also listed in the top 10 banks which most supported Gazprom in recent years.

b. Investors holding billions in companies developing Arctic oil and gas

Institutional investors provide finance for the oil and gas industry through buying shares and bonds at the company or project level. **As per March 2021, investors held $272.5 billion in companies expanding in the Arctic.**

There are hundreds of investors implicitly backing oil and gas companies developing new projects in the Arctic. **30 financial companies are responsible for 60% ($162bn) of the investments, led by BlackRock, Vanguard and Crédit Agricole (via Amundi)**. None of these four investors have adopted Arctic restriction policies. While Crédit Agricole CIB has a policy, Amundi, its asset management branch, does not. This is also the case for the other banks listed as investors via their asset management arms. Out of the top 30 investors, only State Street and BNP Paribas have Arctic investment/screening guidelines.

Shell and Total, investor magnets despite expansion plans in the Arctic

Oil and gas majors Shell and TotalEnergies are listed among the top Arctic expansionists. Within the scope of our research, they are the Arctic expansionists receiving the most support from investors (close to $84bn for Shell and $70bn for TotalEnergies). In March 2021, Shell's top investor was BlackRock (with $8.5bn in shares and bonds). Crédit Agricole was TotalEnergie's top investor, holding more than $10bn in shares via its asset management arm Amundi.

List of top 30 commercial banks supporting Arctic expansionists (from 2016-2020)

Rank	Bank	Total amount channeled to the Arctic expansionists from 2016 to 2020 (in billion USD)	Increase in financial flows from 2019 to 2020?	Number of expansionists supported	Top 3 Arctic expansionists	Arctic policy?
1	**JPMorgan Chase**	**18.6**	yes	12	Shell, Gazprom, TotalEnergies	yes
2	**VTB Group**	**14.5**	no	2	Rosneft, Gazprom	no
3	**Sberbank**	**14.4**	yes	8	Rosneft, Novatek, Gazprom	no
4	**Barclays**	**13.2**	yes	5	Shell, Total, Equinor	yes
5	**Gazprom-bank**	**12.5**	no	4	Gazprom, Rosneft, Novatek	no
6	**Citigroup**	**12.2**	yes	14	Shell, TotalEnergies, Equinor	yes
7	**BNP Paribas**	**11.8**	yes	8	Shell, TotalEnergies, Vaar Energi	yes
8	**Bank Of China**	**11.5**	no	6	CNPC, Gazprom, CNOOCt	no
9	**Morgan Stanley**	**11.4**	no	6	Shell, TotalEnergies, Repsol	yes
10	**Goldman Sachs**	**10.7**	no	10	Shell, Total, Equinor	yes
11	**Deutsche Bank**	**10.2**	yes	9	Shell, TotalEnergies, Gazprom	yes
12	**HSBC**	**10.1**	yes	9	Shell, TotalEnergies, ConocoPhillipsl	yes
13	**Crédit Agricole**	**9.2**	no	11	TotalEnergies, Gazprom, Shell	yes
14	**Bank of America**	**9.0**	yes	8	Equinor, TotalEnergies, Shell	yes
15	**Mizuho Financial**	**8.2**	no	11	Gazprom, TotalEnergies, ConocoPhillips	yes
16	**China Minsheng Banking**	**7.6**	no	1	CNPC	no
17	**SMBC Group**	**6.9**	no	10	Gazproml, TotalEnergies, Oil Search	yes
18	**Société Générale**	**6.1**	no	12	TotalEnergies, Shell, Wintershall	yes
19	**Royal Bank of Canada**	**5.5**	yes	4	Shell, TotalEnergies, Neptune Energy	yes
20	**Industrial and Commercial Bank of China**	**5.3**	no	3	CNPC, Shell, CNOOC	no
21	**CITIC**	**5.2**	no	1	CNPC	no
22	**China construction Bank**	**5.2**	no	3	CNPC, Gazprom, CNOOC	no
23	**Intesa Sanpaolo**	**5.0**	no	5	Gazprom, Novatek, TotalEnergies	yes
24	**Agricultural Bank of China**	**4.8**	no	2	CNPC, CNOOC	no
25	**Unicredit**	**4.7**	no	5	Gazprom, TotalEnergies, Wintershall	yes
26	**Mitsubishi UFJ FInancial**	**4.3**	no	8	TotalEnergies, Gazprom, Mitsui	yes
27	**BPCE Group/Natixis**	**4.2**	yes	9	Shell, TotalEnergies, Gazprom	yes
28	**Credit Suisse**	**4.1**	no	6	TotalEnergies, ConocoPhillips, Wintershall	yes
29	**Bank of Ningbo**	**3.9**	yes	1	CNPC	no
30	**Santander**	**3.8**	yes	3	Shell, TotalEnergies, Repsol	yes
Total		**$254.2bn**				

List of top 30 investors supporting Arctic expansionists in March 2021

Rank	Investor	Amount in billion USD (as per March 2021)	Number of top 20 expansionists supported	Top 3 Arctic expansionists supported	Arctic policy?
1	**BlackRock**	**28.5**	15	TotalEnergies, Shell, ConocoPhillips	No
2	**Vanguard**	**21.6**	15	Shell, TotalEnergies, ConocoPhillips	No
3	**Crédit Agricole/ Amundi**	**12.9**	15	TotalEnergies, Repsol, Shell	No
4	**Capital Group**	**12.6**	9	Shell, ConocoPhillips, TotalEnergies	No
5	**JPMorgan Chase**	**7.2**	14	Rosneft, ConocoPhillips, TotalEnergies	No
6	**State Street**	**7.0**	16	Shell, ConocoPhillips, TotalEnergies	Yes
7	**Wellington Management**	**5.5**	14	TotalEnergies, Shell, ConocoPhillips	No
8	**Norwegian government Pension Fund Global**	**4.7**	8	Total, Gazprom, Lukoil	No
9	**Invesco**	**4.4**	15	Novatek, Total, ConocoPhillips	No
10	**Fidelity Investments**	**4.3**	13	Shell, Total, Equinor	No
11	**Norges Bank IM**	**3.9**	1	Shell	No
12	**Credit Suisse**	**3.6**	14	Shell, TotalEnergies, Gazprom	No
13	**Folketryg-dfondet**	**3.6**	1	Equinor	No
14	**Dimensional Fund Advisors**	**3.5**	13	Shell, TotalEnergies, ConocoPhillips	No
15	**T. Rowe Price**	**3.5**	13	TotalEnergies, ConocoPhillips, Shell	No
16	**State Administration for Foreign Exchange**	**3.1**	2	Shell, Equinor	No
17	**UBS**	**2.9**	15	Shell, TotalEnergies, Equinor	No
18	**Schroders**	**2.8**	14	Shell, Equinor, Lukoil	No
19	**Deutsche Bank**	**2.7**	14	TotalEnergies, Shell, ConocoPhillips	No
20	**Franklin Resources (Franklin Templeton Investments)**	**2.6**	13	Shell, TotalEnergies, Lukoil	No
21	**Geode Capital Management**	**2.5**	12	ConocoPhillips, Shell, TotalEnergies	No
22	**Standard Life Aberdeen**	**2.4**	14	Shell, TotalEnergies, ConocoPhillips	No
23	**Société Générale**	**2.3**	13	TotalEnergies, Shell, Equinor	No
24	**Northern Trust**	**2.3**	13	Shell, ConocoPhillips, TotalEnergies	No
25	**State Farm**	**2.2**	4	Shell, TotalEnergies, Equinor	No
26	**Sumitomo Mitsui Trust**	**2.1**	13	Mitsui, ConocoPhillips, TotalEnergies	No
27	**BNP Paribas**	**2.1**	15	TotalEnergies, Gazprom, Lukoil	Yes
28	**Fisher Investments**	**2.1**	7	TotalEnergies, Shell, ConocoPhillips	No
29	**Mitsubishi UFJ Financial**	**2.0**	13	Mitsui, Shell, ConocoPhillips	No
30	**Nomura**	**1.8**	14	Mitsui, ConocoPhillips, Shell	No
Total investment		**162.6 billion US$**			

c. Insurers can make or break future projects in the Arctic

Insurers are in a unique position with regards to the climate crisis: they face enormous financial risks from the damages caused by extreme weather events, while in providing insurance coverage to oil and gas companies they enable them to stay in business. According to Swiss Re, in the first half of this year, insurance losses caused by "natural" catastrophes were the second highest on record.[38]

As previously discussed, global temperature rises[39] will mean increased risks of permafrost thaw compromising the structural integrity of infrastructure built upon solid ground ice.[40] This means that insurance companies risk paying out high losses. Insurers also face increasing liability: according to AXA XL's climate change working group, there are now more than 1,500 active climate lawsuits around the world.[41] As fossil fuel producers are targeted by climate lawsuits, insurance companies run the risk of having to pay for legal costs and damages. For instance, Russian courts have ordered PJSC Norilsk Nickel Co. to pay $1.9 billion for environmental damages caused by the May 2020 oil spill at the company's OJSC Norilsk-Taimyr Energy Co. subsidiary, close to the Arctic Ocean.[42]

Very few insurers and re/insurers have adopted Arctic restriction policies: 13 out of the 46 insurance companies screened in this report (both the world's biggest insurers and the biggest oil and gas insurers) have some kind of Arctic sector underwriting policy: **AXA, Allianz, Axis Capital, Generali, Munich Re, RSA, Suncorp, MAPFRE, Lloyd's of London, Aviva, Hannover Re, QBE and Swiss Re.**[43]

There is little to no information available on which insurers are insuring and re/insuring which Arctic projects and companies. However, only a few insurers around the world would have the capacity to insure the big infrastructure projects of the oil and gas industry, even more so in the inhospitable Arctic region. According to Insure our Future research[44] based on Finaccord and HTF reports, the following 18 insurers are listed among the biggest providers of cover to the oil and gas industry: **AIG, Travelers, Zurich, Allianz, Chubb, Liberty Mutual, Mapfre, W.R. Berkley, AXA, Fairfax, Munich Re, PICC, Starr, Tokio Marine, The Hartford, Swiss Re, Berkshire Hathaway, Endurance (Sompo) and Great American Insurance Group**. Only three of them - AXA, Swiss Re and MAPFRE - have published an underwriting policy in the Arctic.

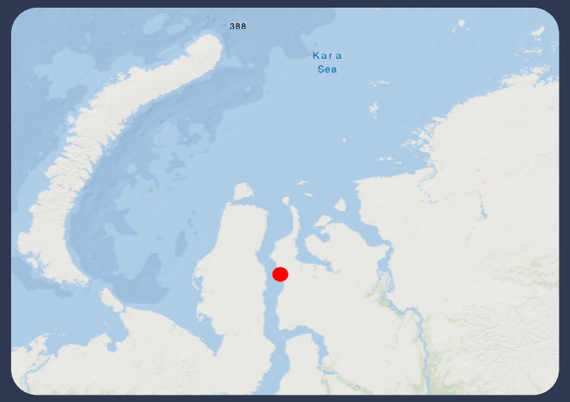
Where do members of the Net Zero Insurance Alliance stand on Arctic oil and gas restrictions?

Out of the eight founding members of the Net Zero Insurance Alliance launched in 2021, six have Arctic underwriting guidelines: AXA, Swiss Re, Generali, Aviva, Allianz and Munich Re. Scor has an Arctic policy that only applies to its investments, not its insurance activities. See table on Arctic restrictions policies page 38 for more information.

ARCTIC LNG-2,

A MEGAPROJECT IN THE REALM OF THE ARCTIC CIRCLE

Located on the Gydan peninsula above the Arctic Circle, megaproject Arctic LNG-2 is step two in Novatek and Total's partnership to expand gas production in the Arctic. Arctic LNG-2 aims to build three LNG trains and infrastructure to liquefy natural gas extracted in the Arctic and transport it all the way to Europe and Asia. The project is under development and should start operating in 2023, and reach its full capacity by 2025 or 2026. A total of 7 billion bep[27] could be produced, i.e. 27 years of gas consumption for a country such as France.[28] The Russian government is a critical enabler of these future gas projects. In fact, Russia aims to increase LNG production in the Arctic fivefold by 2035.[29]



Who's involved and who's financing?

The $21.3bn project is currently looking for funders. According to newspaper Komersant,[30] it is likely that the pool of banks reportedly ready to provide loans for $11bn of the total costs will be the same that financed Yamal LNG. If so, the Russian banks VEB.RF, Sberbank and Gazprombank would cover half and a pool of foreign financiers, consisting of China Development Bank (CDB), the Export-Import Bank of China, the Bank of Japan for International Cooperation (JBIC), Intesa Sanpaolo and Raiffeisen Bank International will cover the other half. The Italian, French and German governments are also considering supporting the project with respectively €1bn, €700mn and €300mn in export credits. According to Komersant,[31] the remaining $10bn would be raised through the project's sponsors Total, Novatek, PetroChina, CNPC, Mitsui and Jogmec.

Because the project is located above the Arctic Circle, a number of banks with Arctic restriction guidelines cannot directly support the project. However, since the project will also be financed through corporate financing, many of the banks providing support to the sponsors listed above are indirectly supporting Arctic LNG-2. For instance, in 2020, the companies involved in Arctic LNG-2 received financial support from Goldman Sachs, Crédit Agricole, JPMorgan Chase, Citigroup, Barclays, Bank of America, Mizuho Financial, Morgan Stanley and many other banks (cf. example of corporate financing scheme on page 25).

The project will also be indirectly supported by shareholders of the oil and gas companies involved with the project. Top investors to TotalEnergies, Novatek, CNPC and CNOOC, as well as Mitsui include BlackRock, Vanguard, Invesco, Wellington Management, T.Rowe Price, Capital Group, Berkshire Hathaway, Fidelity Investments and State Street.

There is no public information available on which insurers are underwriting risks for this project (see insurers' section for more).

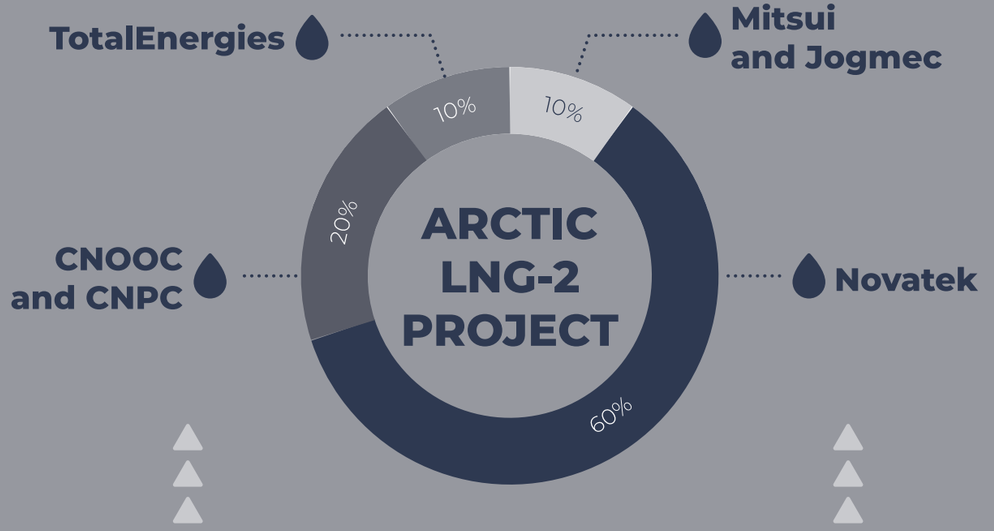
ARCTIC LNG-2: $10 BILLION RAISED THROUGH CORPORATE FINANCING

Banks which financed **TotalEnergies** in 2020

Barclays
JP Morgan
Chase
Crédit Agricole
Morgan Stanley
Goldman Sachs
Etc.

Banks which financed **Mitsui** in 2020

Crédit Agricole
Citigroup
Wells Fargo
Bank of America
Mizuho Financial



Banks which financed **CNOOC & CNPC** in 2020

China Minsheng Banking
Bank of China
CITIC
Agricultural Bank of China

Banks which financed **Novatek** in 2020

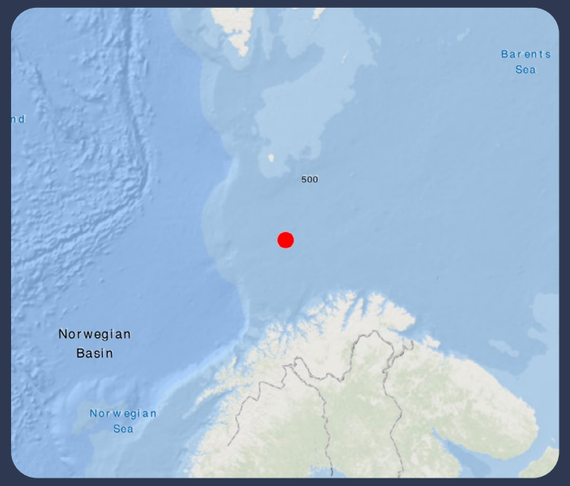
Sberbank

design 09/2021 - guenclak.fr

JOHAN CASTBERG

DRILLING PROJECT IN THE BARENTS SEA

The Johan Castberg field encompasses three smaller fields - Skrugard, Havis and Drivis. It is located in the Barents Sea, in the far north Arctic waters of Norway. The Barents Sea is home to a unique ecosystem of narwhals and beluga whales. The remote Bear Island, which is the closest land to Johan Castberg, is a nature reserve, with arctic foxes and bird mountains with several endangered seabirds. Currently under development, it is due to start production by the end of 2023 if not further delayed. According to operator Equinor, the project would produce 400 to 650 million barrels of oil.



Two out of the three project shareholders are Norwegian state-owned enterprises: Petoro is 100% state-owned and Equinor (formerly known as Statoil), is 67% state-owned. Norway oil production is increasing: in 2020 total Norwegian oil production reached 1.7 million barrels per day, the highest level in nine years. With the opening of the Johan Sverdrup field in the North Sea, Norwegian oil production could increase to 2 million barrels per day in 2025.

The Norwegian State is also a critical enabler for oil and gas expansion in the Arctic. In June 2020, the Norwegian government presented massive oil drilling plans in the Barents Sea and in June 2021, the government issued licenses for as many as 70 new exploration blocks in the Barents Sea.

Who's involved and who's financing?

The Johan Castberg project is estimated to cost $6.7bn. Given that oil and gas projects are rarely financed solely through project financing, it is likely that the majority of the financing will come from corporate financing to the companies involved in the project, Equinor (50%), Petoro (20%) and Vaar Energi (30%).

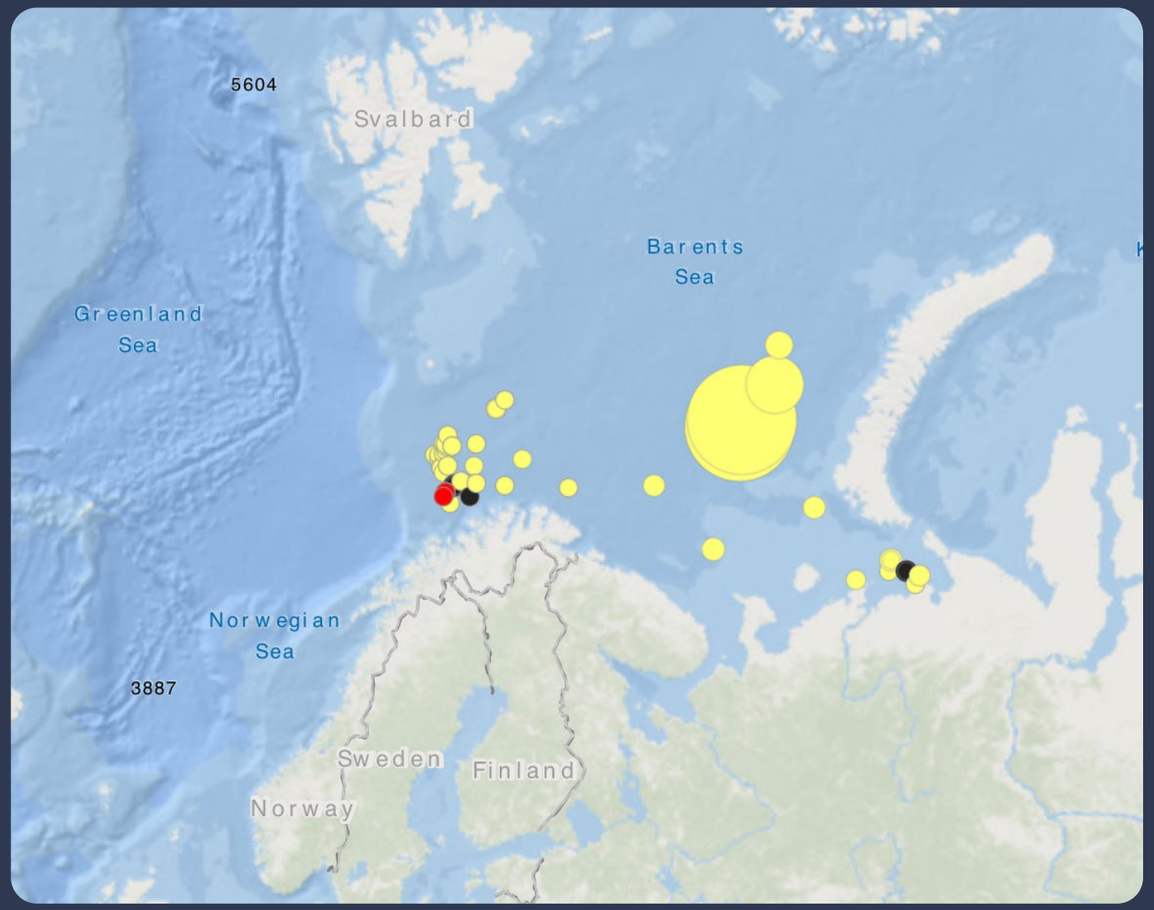
Our data reveals that in 2020, major banks like **Bank of America, JPMorgan Chase, Barclays, Citigroup, Goldman Sachs, and BNP Paribas** underwrote the issuance of more than $8 billion in shares and bonds to Equinor. Similarly, in 2019, a consortium of international banks contributed to a $6.6bn loan for Vaar Energi, another shareholder of the Johan Castberg project, and the second biggest energy producer in Norway (after acquiring Exxon Mobil's Norwegian oil and gas assets[36]), owned by Eni and HiTecVision.

The project will also be indirectly supported by the investors in the oil and gas companies involved with the project. Although Equinor is essentially state-owned, shareholders include heavyweight investors such as Schroder Investment Management, BlackRock and the Vanguard Group.

BlackRock, voting in favor of oil and gas exploration in the Barents sea

At its 2021 Annual General Meeting, a group of Equinor shareholders tabled a resolution pressing the oil company to "Instruct Company to Stop all Oil and Gas Exploration in the Norwegian Sector of the Barents Sea". BlackRock voted against this resolution.[37]

Norwegian oil and gas fields around the Barents sea



Cartography: Esri, GEBCO, NOAA, National Geographic, DeLorme, HERE, Geonames.org, and other contributors
Data: Rystad Energy UCube

3. WEAK ARCTIC RESTRICTION POLICIES

Although an increasing number of financiers have some sort of restriction for oil and gas operations in the Arctic, support for oil and gas development in the Arctic has continued largely unabated. Existing policies are not robust enough to effectively stop supporting oil and gas expansion in the Arctic. None of the policies exclude corporate support to Arctic developers and fully cover the Arctic region. Some financial institutions also turn a blind eye to gas.

a. Exclusion zones that are too limited or arbitrary

The AMAP is the Arctic region monitored by the Arctic Monitoring and Assessment Programme (AMAP) for climate and environmental purposes. The AMAP working group, now a part of the Arctic Council, was established as part of the Arctic Environmental Protection Strategy and charged with monitoring the Arctic region concerning pollution and climate change to produce science-based, policy-relevant assessments and public outreach products to inform policy and decision-making processes.[45] Due to the program's wide human and ecosystem mandate, the AMAP defines the Arctic based on oceanographic features, sea ice extent and permafrost limits, vegetation, and political boundaries.[46] It essentially covers terrestrial and marine areas north of the Arctic Circle (66°32′N), and north of 62°N in Asia and 60°N in North America. It also covers the marine areas north of the Aleutian chain, Hudson Bay, and parts of the North Atlantic Ocean including the Labrador Sea. This approach includes the Marginal Ice Zone, the transitional zone between open sea and dense drift ice. It spans from where 15% of the sea surface is covered by ice to 80% ice concentration, home to valuable and vulnerable ecosystems crucially important for several species and biological processes.

With the exception of German banker Helaba (not listed in the top 30 Arctic bankers),[47] **it appears that no other financial institution has so far based its Arctic exclusion policy on the AMAP Arctic area**. JPMorgan Chase refers to the AMAP Arctic area for its due diligence policy but uses the 10°C July Isotherm scope for its exclusion policy. Most financial institutions do not publicly clearly define the Arctic and those that do use a wide array of Arctic definitions. Each definition varies in scope, and implies that some projects in the Arctic can still be directly supported or insured.

AXA's very narrow Arctic scope

AXA has narrowed its Arctic exclusion zone to areas north of 70°N, including the Alaskan National Wildlife refuge but excluding the Norwegian and Barents seas,[48] meaning that it can still provide insurance for drilling projects within the Arctic Circle and in the Barents Sea. According to our research, AXA could still insure up to 535 assets (under production, under development/evaluation or discovered) in the Arctic region as defined by AMAP.

RESTRICTED ARCTIC EXCLUSION ZONES CANNOT STOP OIL AND GAS EXPANSION IN THE ARCTIC

70° North
is (partially) referenced by French insurer AXA. It does not cover 438 of the assets located in the Arctic. Axa's scope covers even less projects.

The Arctic Circle
is referenced by institutions such as Citigroup, Bank of America, Goldman Sachs, Citigroup, Unicredit, Mizuho Financial Group. It does not cover 168 of the assets located in the Arctic.

The IHO perimeter
is referenced by Crédit Agricole, Lloyds' Banking group, It does not cover 477 of the assets located in the Arctic.

The Polar Code
is referenced by institutions such as ING, Société Générale and Natixis. It does not cover 502 of the assets located in the Arctic.

The 10°C July Isotherm
is referenced by institutions such as JP Morgan Chase, Deutsche Bank and Natixis. It does not cover 358 of the assets located in the Arctic.

The widest sea ice extent
is referenced by institutions such as BNP Paribas. It does not cover 502 of the assets located in the Arctic.

The Arctic National Wildlife Refuge
is referenced by Royal Bank of Canada, Morgan Stanley, AXA and Swiss Re. It does not cover any of the 599 assets located in the Arctic.

The AMAP Arctic area

It was defined based on climate and environmental factors and is the area monitored by one of the Arctic Council's working groups: the Arctic Monitoring and Assessment Programme (AMAP).

Currently, none of the financial players listed in this report exclude support for oil and gas in this area.

b. The corporate financing loophole

Evidence shows that all **banks with Arctic policies are still supporting companies in the Arctic, even when their projects are located in their exclusion zone**. Why is that? In general, it is because most Arctic policies only exclude direct and dedicated support to projects in the Arctic. This means that the financial institution can still financially support the company owning or operating those projects.

According to the IEA,[49] around 90% of energy investments are financed on a primary basis from the balance sheet of companies, confirming that very few investments are raised through project financing. Yet, **only seven of the 21 leading banks with Arctic policies attempt to limit corporate financing**.

In those rare cases where policies also exclude companies active in the Arctic, the threshold is too high to exclude most companies active or developing in the Arctic. For example, **Barclays and Société Générale** vowed not to provide financial services to companies deriving a majority of their revenues or "primarily engaged" in the Arctic. However, 80% of companies active in the Arctic fall below these thresholds, including in the list of companies developing new oil and gas projects in the Arctic listed in this report. Similarly, others - including BNP Paribas, Santander, Intesa SanPaolo, Unicredit, and insurer Lloyd's of London - committed not to renew support to companies with more than 30% or a "significant" share of their activity based in the Arctic: yet, a large majority of the Arctic expansionists produced less than 30% of their oil and gas in the Arctic in 2020. Aviva's policy excludes underwriting for companies deriving more than 5% of their revenue from so-called "unconventional fossil fuels", including deepwater offshore oil and gas. This threshold leaves an open door to all oil and gas companies with shelf water and onshore oil and gas projects in the Arctic.

To simply reduce the relative exclusion threshold is not the solution. Some companies are not currently producing but are developing in the Arctic as is the case for JOGMEC, Oil Search and CNOOC. Others have minor shares of their activities based in the Arctic: oil and gas majors Shell and TotalEnergies respectively produced 1.1% and 5.1% of their total oil and gas production there in 2020 according to Rystad data. Although TotalEnergies and Shell are developing new projects in the Arctic, none of the policies evaluated would restrict finance to their Arctic expansion plans. The only way around this is to explicitly exclude finance to any developers in the Arctic region.

A loophole in Crédit Agricole's Arctic policy

Crédit Agricole's Arctic policy is a typical example of the corporate financing loophole: the policy excludes project financing but does not restrict access to corporate financing for companies expanding in the Arctic. As a result, Crédit Agricole can paradoxically support a company like oil and gas major Total even though some of Total's projects are located within Crédit Agricole's Arctic exclusion zone (e.g. the Snohvit gas and LNG project, currently under development in the Norwegian and Barents Sea).

A number of expansionists in the Arctic have a small share of their activity in the Arctic

Company	Share of production in the Arctic in 2020	Number of projects under development or field evaluation	Number of assets listed as discovered
Novatek	83.5%	21	19
Gazprom	74.5%	7	61
Wintershall Dea	55%	5	18
Vaar Energi	54.7%	11	28
Arctic expansionists producing less than 30% of their oil and gas in the Arctic			
Petoro	24.5%	13	33
ConocoPhillips	20.5%	4	30
Equinor	20.10%	14	52
Lukoil	15%	2	14
CNPC	14.5%	3	1
Rosneft	12.9%	2	30
Arctic expansionists producing less than 10% of their oil and gas in the Arctic			
Neptune Energy	6.8%	8	7
TotalEnergies	5.1%	9	13
Shell	1.1%	3	17
Repsol	0.4%	1	7
Companies expanding in the Arctic with zero production in 2020			
Mitsui	0%	3	1
JOGMEC	0%	3	1
Rusgazdobycha	0%	1	3
CNOOC	0%	3	1
Oil Search	0%	1	4
Siccar Point Energy	n/a	1	4

Source: Rystad Energy

c. Some policies restrict oil financing but still allow for gas

More than 1/3 of the financial players with an Arctic policy either restrict financing directed to oil drilling or offshore oil and gas, meaning they can still directly finance many of the onshore, gas/LNG projects in the AMAP Arctic area.

This is for instance the case for **Crédit Agricole, Société Générale, Goldman Sachs, Unicredit, Intesa Sanpaolo, and UBS**. This policy limitation will have an increasing impact on Arctic oil and gas drilling: more than half of the discovered fields that could go into development at a future stage are gas fields.

Fossil gas, an underestimated climate threat

In the Arctic AMAP area, 82.9% of the discovered reserves are fossil gas, also known as methane. Methane is a potent greenhouse gas with a global warming potential 84 times that of CO2 over a 20 year period. As gas is produced and transported, it is subject to methane leaks that are often underestimated or unaccounted for. In its most recent findings published in August 2021, the IPCC warned that methane levels had reached their highest point in 800,000 years and deep cuts in fossil gas production were required to limit global warming. According to the IEA's net zero scenario, there can be no new investments in either oil or gas in order to stay below the 1.5°C limit. Previously, the UN Production Gap Report also calculated that to reduce GHG emissions by 7.6% each year by 2030 requires annual 3% cuts in gas production.

Arctic restriction policies by bankers, investors and insurers listed in this report

Banks listed in the top 30 supporters of Arctic expansionists from 2016 to 2020, that have adopted Arctic policies.	Does the policy apply to the Arctic region as per the AMAP arctic area?	Does the policy cover dedicated support to Arctic projects (financing or coverage)?	Does it apply to midstream projects as well as upstream	Does the policy apply to both oil and gas?	Does it also cover corporate support to Arctic companies?	Support in 2020 to companies expanding in the Arctic (in bn USD)
1. Bank of America	No	Yes	No	Oil only	No	4.8
2. Barclays	No	Yes	Unclear	Both oil and gas	Partially (companies primarily engaged in exploration)	4.5
3. BPCE/Natixis	No	Yes	No	Oil only	No	1.9
4. BNP Paribas[50]	No	Yes	Yes	Both oil and gas	Yes (significant production, volume, reserves or revenue)	5.3
5. Crédit Agricole	No	Yes	Partially	Oil only	Yes (significantly exposed)	1.9
6. Citigroup	No	Yes	Yes (due diligence only)	Both oil and gas	No	3.8
7. Credit Suisse	No	Yes	Yes	Both oil and gas	No	0.8
8. Deutsche bank	No	Yes	No	Both oil and gas	No	2.2
9. Goldman Sachs	No	Yes	No	Oil only	No (enhanced due diligence only)	2
10. HSBC	No	Yes	Unclear	Offshore oil and gas only	No	5.7
11. Intesa SanPaolo	No	Yes	Partially	Oil and offshore gas only	Partially (if significant revenues from unconventional resources AND doesn't increase the Group's exposure)	n/a
12. JPMorgan Chase	No (AMAP scope mentioned for due diligence only)	Yes	Yes	Both oil and gas	No	4.7
13. Mitsubishi UFJ Financial Group	No	No (due diligence only)	No	Both oil and gas	No (due diligence only)	1
14. Mizuho Financial Group	No	No (due diligence only)	No	Oil only	No	1.6
15. Morgan Stanley	No	Yes	No	Both oil and gas	No	2.3
16. Royal Bank of Canada	No	Partially (due diligence in the Arctic and no project financing in the ANWR)	No	Unspecified	No	1.6
17. Santander	No	Yes	No	unclear	Yes (if Arctic oil represents a significant part of their reserves, or account for more than 30% of their activity)	2.7

18. SMBC Group	No	No (due diligence only)	Not specified	Both oil and gas	No	1.6
19. Société Générale	No	Yes	Partially	Oil only	Yes (majority of the revenue or reserves)	2.3
20. Unicredit[51]	No	Yes	Partially	All oil Offshore gas only	Yes (for clients deriving more than 25% of their revenue from the Arctic, with exceptions for existing clients)	1.1
Investors listed in the top30 supporters of Arctic expansionists in March 2021, that have adopted Arctic policies.						
1. BNP Paribas	No	N/a	Yes	Both oil and gas	Yes for companies with "significant share of reserves or revenue"	2.1 (as of March 2021)
2. State Street	Unspecified	N/a	No	Both oil and gas	No (screening only)	7.0 (as of March 2021)
Re/insurers listed in this report, that have adopted Arctic policies						
1. Allianz	Unspecified	No (due diligence only)	No	Both oil and gas	No	N/a
2. Aviva	Unspecified	Yes	No	Deepwater offshore oil and gas only	Yes (for companies making more than 5% revenue from unconventional fossil fuels)[52]	N/a
3. AXA XL	No	Yes	No	Both oil and gas	No	N/a
4. AXIS Capital	No	Yes	Yes	Both oil and gas	No	N/a
5. Generali	Unspecified	Yes	No	Both oil and gas	Yes (10% threshold for oil and gas upstream activities)[53]	N/a
6. Hannover Re	Unspecified	Yes	No	Both oil and gas	No	N/a
7. Lloyd's of London	Unspecified	Partially (from 2022 onwards, for exploration only)	No	Both oil and gas	Partially (only applies to exploration)[54]	N/a
8. MAPFRE	Unspecified	Yes	Yes	Both oil and gas	No	N/a
9. Munich Re	Unspecified	Yes (enhanced review by Arctic drilling panel)	Unclear	Both oil and gas	Unclear	N/a
10. QBE	Unspecified	No	No	Both oil and gas	Partially (for companies with 30% or more revenue from Arctic drilling from 2022 onwards, if they are also incons-istent with Paris Agreement).	N/a
11. RSA	Unspecified	Yes	No	Both oil and gas	No	N/a
12. Suncorp	Arctic Circle	Partially ("avoid")	No	Both oil and gas	Partially ("avoid any company")	N/a
13. Swiss Re	No	Yes	Yes in the ANWR	Offshore oil and gas in the Arctic. Both oil and gas, onshore and offshore, in the ANWR	No	N/a

4. THREE ROBUST SOLUTIONS TO PROTECT THE ARCTIC

Expansion is no longer an option. The International Energy Agency made clear this year that keeping global warming below 1.5°C means no new investments in oil and gas fields from now on. There is no better place to start than the Arctic, given its extremely fragile ecosystems and critical cooling role for the planet. There can only be one way forward: protect the Arctic once and for all from the oil and gas industry's expansion plans.

a. Protect the AMAP Arctic area from oil and gas expansion

In order to effectively protect the Arctic, financial players must base their policies on the most comprehensive and environmentally-relevant boundaries of the Arctic. Only one of the competing Arctic definitions ticks all the boxes: the perimeter defined by the Arctic Council's Assessment and Monitoring Programme (AMAP) to monitor climate change and pollution in the Arctic.

b. Commit not to support any new oil and gas developments in the Arctic region, be they onshore or offshore, upstream or midstream

The Arctic policies should be as comprehensive as possible. Financial players should pledge to exclude any kind of direct support, including financing, insurance, investment and advisory services, to both oil and gas projects and infrastructure development in the Arctic, be it onshore or offshore, upstream or midstream.

c. Blacklist all oil and gas companies expanding in the Arctic region

A robust Arctic policy should explicitly stop supporting any company that does not commit to stop developing new oil and gas projects in the Arctic by the end of 2022. Even when the Arctic operations represent a minor share of the company's business model, they represent a major threat to the Arctic and ecosystems.

METHODOLOGY AND SCOPE

How we defined the list of Arctic oil and gas assets

Scope. The list of oil and gas assets includes all upstream oil and gas and LNG located within the geographic coordinates of the Arctic used by the AMAP, the Arctic Monitoring and Assessment Program. Assets are classified according to their life cycle stage:

- discovered: this category includes assets where discoveries have been made, but have not yet entered the "field evaluation" stage.
- under field evaluation: this category includes assets that have been considered marketable, where development is planned, Plan for Development and Operation (PDO) prepared, and Front-End Engineering Design (FEED) is confirmed.
- under development: this category includes assets for which development has been approved by companies & government, but production has not yet started. For assets in this category, the Final Investment Decision (FID) is confirmed.
- under production: includes all assets that are currently producing.

The list does not include "relinquished" nor "abandoned" oil and gas fields. It also excludes all undiscovered assets, as their resources assessment does not rely on field-based estimations.

This list includes all discovered assets, and disregards their potential economic viability. Indeed, for assets at the discovery stage, it is too early to make strong assumptions on the economic costs of production. For the purpose of this study, focused on potential production levels, no economical assumptions were made.

Sources. The data regarding assets and volumes in millions of barrels of oil equivalent (mmboe) was collected in August 2021 through the Rystad UCube database.

How we defined expansion

Our metric for expansion is the same as the one used by Urgewald's upcoming Global Oil and Gas Exit list (GOGEL) for short term expansion. It combines all assets classified as under field evaluation or under development. These are the economically recoverable hydrocarbons, which a company intends to add to its production portfolio in the "short term" (approx. 1-6 years). Assets under field evaluation are clearly intended to be developed as this phase goes hand in hand with considerable investment because a plan for development and operation (PDO) is finalized and Front End Engineering and Design (FEED) has been confirmed. For Assets Under Development, all necessary permits are in place and a Final Investment Decision (FID) has been made. This is the most expensive phase during the life cycle of an oil/gas project as it includes the construction of wells and related infrastructure.

How we selected companies developing in the Arctic

Scope. In this report, we list as expansionists all companies with direct participation in assets under development or field evaluation (according to Rystad Energy data collected in August 2021) as per the AMAP Arctic area.

Companies are ranked as Arctic expansionists based on the total volume in mmboe under field evaluation or under development in the AMAP Arctic area. The companies were not selected based on their discovered reserves or on their annual volume of Arctic oil and gas production.

Sources. The data regarding assets and volumes in millions of barrels of oil equivalent (mmboe) was collected in August 2021 from the Rystad Energy database.

How we calculated the financial flows for these companies developing in the Arctic

In this report, we calculate how much financial support was channeled by banks and investors to the 20 companies listed in this report.

This data includes:

- Corporate loans, bond and share issuances by commercial banks. The scope of this research for credit activities was January 2016 to December 2020.
- Bondholding and shareholding, which were analysed at the most recent filing dates in March 2021.

The financial research also included the parent companies as well as financial vehicles of the 20 groups. Subsidiaries of these groups which have activities in upstream oil & gas in the Arctic have also been included in the scope. However, any subsidiary operating only outside the Arctic area has been excluded from the scope. Any subsidiary with only midstream or downstream oil & gas has also been excluded.

Given that the report aims to analyze future trends in the Arctic, the total value of the financing deals was considered. No adjustment was applied to reflect the attributable value of each deal to the upstream oil and gas activities in the Arctic specifically.

Sources: This data was collected by Profundo upon request. As per the Profundo methodology, the loans and underwriting services provided by financial institutions were retrieved from the financial databases Bloomberg and Refinitiv (formerly known as Thomson Reuters Eikon). Investments in bonds and shares by financial institutions were retrieved from financial database Refinitiv.

Financial transactions to three out of the 20 companies - Petoro, Gasruzdobycha and JOGMEC - could not be found.

REFERENCES

1. International Energy Agency, Net Zero by 2050, a roadmap for the global energy sector, 2021.
2. In this report, the asset list encompasses all assets located within the Arctic region monitored by the Arctic Monitoring Assessment Program (AMAP). See page 42 for more.
3. https://www.ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Polar_regions.pdf
4. according to the Rystad UCube database extracted in August 2021.
5. within the Arctic Monitoring Assessment Program (AMAP) perimeter. See page 31 for more.
6. According to our estimates, oil and gas production in the AMAP region accounts for 7.5% of global production in 2020 and could increase to 8.5% by 2030. This estimate is based on all 599 assets.
7. https://donnees.banquemondiale.org/indicator/EN.ATM.GHGT.KT.CE?most_recent_value_desc=true
8. either under development or under field evaluation.
9. Based on IPCC 6th Assessment Report Working Group 1 global carbon budget calculation giving the planet a 66% chance to stay below 1.5°C.
10. The United States Geological Survey estimates that the Arctic holds 89,983.21 million barrels of undiscovered technically recoverable oil and 47,256.39 billion cubic meters of undiscovered technically recoverable fossil gas, or 412 million barrels of oil equivalent—13% of the world's undiscovered oil and 30% of its natural gas
11. Deep waters are located between 125 and 1500 meters below the sea level, as per Rystad Definition. Ultra deep waters are defined as deeper than 1500 meters below sea level.
12. Data sourced on the Global Energy Monitor, https://globalenergymonitor.org/projects/global-fossil-infrastructure-tracker/tracker-map/
13. Within the Arctic region monitored by the AMAP, one of the Arctic Council's working groups.
14. comprising oil and gas fields either "under development "(the final investment decision has been approved) or "under evaluation" (i.e the last stage before a "discovered field" qualifies as "under development").
15. AMAP, The impact of black carbon on arctic climate, 2011.
16. AMAP, Arctic climate change update: key trends and impacts, 2021.
17. Ibid
18. Ibid
19. CAFF, Life linked to tundra, the leader's manual.
20. https://www.alaskawild.org/places-we-protect/teshekpuk-lake-special-area/
21. https://arcticwwf.org/newsroom/the-circle/underwater-noise/infographic/
22. Gwich'in Steering Committee, Arctic insurer scorecard, August 2021
23. Arctic Council's Arctic Monitoring and Assessment Programme working group, AMAP contribution to the preparation of a Rio+10 document, 2001.
24. https://www.bloomberg.com/news/articles/2020-06-06/giant-spill-in-russia-offers-a-glimpse-of-the-arctic-s-future?sref=tEHt46mu
25. UK Parliament, Protecting the Arctic - Environmental Audit Committee https://publications.parliament.uk/pa/cm201213/cmselect/cmenvaud/171/17106.html
26. https://www.greenpeace.org/international/story/43820/human-cost-oil-indigenous-ethnic-minorities-brunt-of-disasters/
27. https://totalenergies.com/fr/medias/actualite/communiques/russie-total-etend-son-partenariat-avec-novatek-au-travers-du-projet-arctic-lng-2
28. Annual gas consumption in France (2020) : 40,7 billion cubic meters, i.e. 262 mmboe; https://www.statista.com/statistics/703653/natural-gas-consumption-france/20
29. https://thebarentsobserver.com/en/arctic-lng/2021/03/push-global-lead-lng-moscow-takes-aim-arctic-tundra
30. https://www.kommersant.ru/doc/4751902
31. Ibid
32. https://www.norskpetroleum.no/en/facts/field/johan-castberg/
33. https://thebarentsobserver.com/en/industry-and-energy/2020/06/norway-proposes-open-125-new-oil-exploration-blocks-barents-sea
34. https://thebarentsobserver.com/en/industry-and-energy/2021/06/norway-offers-oil-firms-70-new-barents-sea-exploration-blocks
35. https://www.norskpetroleum.no/en/facts/field/johan-castberg/
36. https://www.eni.com/en-IT/media/press-release/2019/09/var-energi-acquires-exxonmobils-upstream-assets-in-norway.html
37. https://www.blackrock.com/corporate/literature/press-release/blk-vote-bulletin-equinor-may-2021.pdf
38. https://www.bloomberg.com/news/articles/2021-08-16/why-snow-hail-and-wildfire-are-expensive-for-the-insurance-industry?srnd=green&sref=tEHt46mu
39. https://www.bloomberg.com/news/articles/2020-06-06/giant-spill-in-russia-offers-a-glimpse-of-the-arctic-s-future?sref=tEHt46mu
40. Dellinger, A.J. (30 Jun 2020) There was an «ice quake» in Alaska, thanks to this monstrous heat wave. Mic. https://www.mic.com/p/there-was-ice-quake-in-alaska-thanks-to-this-monstrous-heat-wave-82348968
41. Curtis, H. (23 Sep 2020) Climate-related litigation could produce 'grey or black swan event.' Post Online. https://www.postonline.co.uk/risk-management/7686891/climate-related-litigation-could-produce-grey-or-black-swan-event-risk-managers-warned
42. https://www.londonstockexchange.com/news-article/MNOD/update-on-rosprirodnadzor-s-claim-in-relation-to-diesel-spill-accident-at-nornickel-s-heat-and-power-plant-3/14854833
43. AIG, Allianz, Aviva Group, AXA, AXIS Capital, Berkshire Hathaway, Chubb, FM Global; Generali Legal & General (L&G), Liberty Mutual, Lloyd's of London, MAPFRE MS&AD, Munich Re, Nationale Nederlanden (NN), Ping An, PZU, QBE, RSA Group, Samsung FM, SCOR, Sinosure, Sompo, Suncorp, Swiss Re, Hannover Re, Talanx - HDI Global, The Hartford, TIAA Family, Tokio Marine, Travelers, UNIQA, VIG, W. R. Berkley, Zurich
44. https://insureourfuture.co/wp-content/uploads/2020/06/InsureOurFuture-Oil-and-Gas-Insuance-Briefing-0620.pdf
45. https://www.amap.no/documents/download/3295/inline
46. https://www.amap.no/documents/download/88
47. https://www.helaba.com/media/docs/de/ueber-uns/die-helaba/nachhaltigkeit/nachhaltigkeit-in-der-kreditvergabe.pdf
48. https://www-axa-com.cdn.axa-contento-118412.eu/www-axa-com/5f415674-3984-4623-a90945bcf31ec877_axa_questions_ecrites_ag2021_vf.pdf
49. https://www.iea.org/reports/world-energy-investment-2020/key-findings
50. BNP Paribas' Arctic policy is currently under review
51. Unicredit's Arctic policy is currently under review
52. Aviva includes deepwater Arctic oil and gas drilling in its definition of unconventional fossil fuels https://www.aviva.com/climate-goals-glossary/
53. Generali has an overall oil and gas policy: the underwriting of these activities is allowed only if they are completely residual with respect to the insurance program in place with the client (it amounts to less than 10% of the value of the assets covered).
54. As our analysis is focused on production, we did not take into account Lloyd's of London's threshold to stop underwriting companies with "business models which derive at least 30% of their revenues from new Arctic energy exploration activities, from 1 January 2030".

Credits

Maria Orlova - Pexels | Matheus Bertelli - Pexels | Annie Spratt - Unsplash | Pixabay |ShutterStock

DRILL, BABY, DRILL
How banks, investors and insurers are driving oil and gas expansion in the Arctic

Reclaim Finance is an NGO affiliated with Friends of the Earth France. It was founded in 2020 and is 100% dedicated to issues linking finance with social and climate justice. In the context of the climate emergency and biodiversity losses, one of Reclaim Finance's priorities is to accelerate the decarbonization of financial flows. Reclaim Finance exposes the climate impacts of some financial actors, denounces the most harmful practices and puts its expertise at the service of public authorities and financial stakeholders who desire to to bend existing practices to ecological imperatives.

contact@reclaimfinance.org

RECLAIM Finance