



DIRECTORATE-GENERAL FOR EXTERNAL POLICIES
POLICY DEPARTMENT



THE GEOPOLITICS OF ARCTIC NATURAL RESOURCES

AFET

EN

2010

DIRECTORATE-GENERAL FOR EXTERNAL POLICIES OF THE UNION

DIRECTORATE B

POLICY DEPARTMENT

STANDARD BRIEFING

THE GEOPOLITICS OF ARCTIC NATURAL RESOURCES

Abstract

The paper assesses the importance of Arctic resources from geopolitical, economic and legal perspectives. It examines estimates of oil and gas deposits; the outlook for exploitation; jurisdictional and maritime claims; questions of governance, and the potential for geopolitical friction. While the Arctic is estimated to contain about 13% of the world's undiscovered oil and 30% of its gas, the extraction viability – in the foreseeable future – is questionable. This applies especially to gas because of the shale gas “revolution” and high development and production costs. Overlapping territorial claims do not require urgent solutions; they are more likely to postpone resource development than to create inter-state conflicts. There is, however, ambivalence about governance due to the absence of a UN enforcement mechanism to resolve disputes; the Arctic Council's lack of political influence; and uncertainty over whether the meetings of the Arctic Ocean states will be turned into an institutionalized decision-making venue. This ambiguity – when coupled with increased pressure by actors, such as the European Union and China, for increased internationalization of the Arctic – could produce friction among the Arctic states and between them and non-Arctic states and organizations. Thus, while the Arctic is currently a low tension area, the long-term geopolitical conflict risks are much greater.

This study was requested by the European Parliament's Committee on Foreign Affairs.

AUTHOR(S):

Valur INGIMUNDARSON, University of Iceland

Standard briefing carried out within the framework agreement between TEPSA and the European Parliament.

ADMINISTRATOR RESPONSIBLE:

Stefan SCHULZ

Directorate-General for External Policies of the Union

Policy Department

WIB 06 M 085

rue Wiertz 60

B-1047 Brussels

LINGUISTIC VERSIONS

Original: EN

ABOUT THE EDITOR

Manuscript completed on 31 August 2010.

© European Parliament, [2010]

Printed in [Belgium]

The study is available on the Internet at

<http://www.europarl.europa.eu/activities/committees/studies.do?language=EN>

If you are unable to download the information you require, please request a paper copy by e-mail : xp-poldep@europarl.europa.eu

DISCLAIMER

Any opinions expressed in this document are the sole responsibility of the author and do not necessarily represent the official position of the European Parliament.

Reproduction and translation, except for commercial purposes, are authorised, provided the source is acknowledged and provided the publisher is given prior notice and supplied with a copy of the publication.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
INTRODUCTION	6
1 ARCTIC NATURAL RESOURCES: AN ASSESSMENT	6
1.1 ESTIMATES OF UNDISCOVERED OIL AND GAS DEPOSITS IN THE ARCTIC	8
1.2 DISCOVERED OIL AND NATURAL GAS FIELDS	11
1.3 THE CURRENT OUTLOOK FOR ARCTIC OIL AND GAS EXTRACTION	12
2 THE LEGAL IMPLICATIONS: JURISDICTIONAL AND MARITIME BOUNDARIES AND DISPUTES	13
2.1 OVERLAPPING TERRITORIAL CLAIMS	14
2.1.1 Canada and Denmark	14
2.1.2 Russia versus Canada and Denmark	15
2.1.3 Norway and Russia	15
2.1.4 Canada and the United States	16
2.1.5 Canada and the European Union	17
2.1.6 Russia and the United States	17
2.2 ARCTIC GOVERNANCE: THE INTERACTION BETWEEN SOVEREIGN RIGHTS AND MULTILATERAL REGIMES	18
2.3 THE POTENTIAL FOR GEOPOLITICAL CONFLICT OVER ARCTIC RESOURCES OR JURISDICTIONAL DISPUTES	20
CONCLUSION	22
BIBLIOGRAPHY	24

EXECUTIVE SUMMARY

The international focus on the Arctic is driven by climate change, demand for natural resources, and concerns about the division of the Arctic Ocean's outer continental shelf. According to a 2008 appraisal by the U.S. Geological Survey, which is considered the most reliable, the Arctic contains 30% of global undiscovered gas and 13% of oil. Of the total reserves, about 85% are estimated to be in offshore areas. The bulk of the gas reserves are located in Russian territory, but the main oil deposits in Alaska, Canada, and Greenland. Far less optimism remains about the exploitation of Arctic natural resources than was the case only a couple of years ago. Arctic oil resources are generally not considered sufficient to shift the world oil balance from the Middle East. Moreover, they would only be produced incrementally. Despite the huge gas resource potential in the Arctic, the shale gas "revolution" in the United States, which could spread to Europe, and high development and production costs have made it uncertain whether the production of Arctic gas will become viable in the foreseeable future. This development has kept LNG prices relatively low and raised serious questions about the profitability of huge Arctic gas fields, such as that of Shtokman in the Barents Sea – a project that was postponed in 2010 for, at least, three years by the Russian energy company, Gazprom, which plans to develop it together with its French and Norwegian partners, Total and Statoil. At current gas prices, it is considered economically unviable,¹ and its future development is uncertain. Russia might encounter similar problems in other, onshore gas fields in the gas-rich Yamal Peninsula, which are to be developed first.² Since 20% of Russia's GDP and 22% of its exports are already produced in Arctic regions much is at stake here. Finally, the political fall-out of the oil disaster in the Gulf of Mexico is not only likely to dampen interest in offshore resource production, but will make it more costly because of environmental concerns.

The Arctic states have stated their commitment to the UN Convention on the Law of the SEA (UNCLOS) when settling claims and territorial rights. Yet there are overlapping claims and disputes between the five Arctic Ocean states – Russia, Canada, the United State, Denmark (Greenland) and Norway – over the Lomonosov Ridge, the Beaufort Sea, Hans Island, Svalbard, the Northwestern Passage, and the Northern Sea Route. There is also considerable ambivalence about Arctic governance due to several factors: (1) the absence of a UN enforcement mechanism to resolve potential territorial disputes; (2) the Arctic Council's lack of decision-making power; (3) the question of whether the two meetings of the Arctic Ocean states in Ilulissat, Greenland (2008), and Chelsea, Canada (2010) will, despite assurances to the contrary, be turned into an institutionalized, decision-making venue to resist the internationalization of the region.

While overlapping claims could trigger high-stakes future conflicts, they do not require urgent solutions; they are more likely to delay resource development. Most oil and gas deposits are in non-disputed areas and within the Exclusive Economic Zones (EEZ) of stakeholders. The Lomonosov Ridge, which has been seen as the most coveted territory, is, for example, not rich in natural resources. The only exception is the dispute between the United States and Canada over the Beaufort Sea region, but given the close bilateral relationship, it is not likely to lead to a confrontation. The same can be said about the U.S.-Canadian disagreement over the Northwest Passage. And while Russia has forcefully insisted on its sovereign rights, including the Northern Sea Route, it has up to now adhered strictly to international law in the Arctic.

The Arctic is a low tension area, with the major stakeholders abiding by international norms. The Arctic Ocean states have an incentive to settle their disputes in an orderly manner. There is, however, bound to be more pressure from non-coastal states or organizations, such as China or the EU, for some kind of internationalization of the Arctic because of the transnational effects of climate change, resource exploitation, and prospects for the opening of new sea lanes. This could create friction

¹ See Paal Sigurd Hilde, "Polar Politics: Norway and the Arctic: The End of Dreams?" ATLANTIC-COMMUNITY.ORG.

http://www.atlanticcommunity.org/index/articles/view/Norway_and_the_Arctic%3A_The_End_of_Dreams%3F.

² Katarzyna Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," *Joint Force Quarterly* (JFQ), 57, 2 (2010), 104–105.

among the Arctic states and between them and external actors given their reluctance to open up the Arctic for outside regulations. Thus, the while the Arctic has been a stable and peaceful area since end of the Cold War, the long-term geopolitical conflict risks are far greater.

Introduction³

The current geopolitical and media interest in the Arctic has been driven by questions over the control of Arctic oil and gas deposits and the division of the Arctic Ocean's outer continental shelf; climate change and the prospects for an ice-free Arctic in the summer; the potential for economic opportunities associated with the opening of new sea lanes; and political and nationalistic acts of symbolism, such as the Russian decision to put a flag on the seabed of the North Pole. This paper assesses the importance of Arctic natural resources from geopolitical, economic and legal perspectives. It puts forward three arguments: first, despite the resource potential, the exploitation of Arctic gas and oil faces serious obstacles, including a harsh climate, distance from markets, and the existence of deposits in other world regions. Moreover, the extraction of shale gas in the United States is already threatening the viability of Arctic gas exploitation. Second, there is considerable uncertainty over Arctic governance due to the following factors: the lack of a multilateral enforcement role for such bodies as the UN Commission on the Limits of the Continental Shelf to resolve potential disputes between Arctic states; questions of whether the Arctic Council, which has no say over territorial disputes or the exploitation of natural resources, will remain the main vehicle for dealing with Arctic issues; speculations of whether the meetings of the five Arctic Coastal states will lead to the institutionalisation of a new Arctic decision-making body. Third, while conflict scenarios should not be ruled out, the Arctic is likely to remain a low tension area in the foreseeable future.

The paper is divided into two sections. The first one analyzes estimates of undiscovered oil and gas deposits on the basis of a 2008 appraisal by the U.S. Geological Survey (USGS); the importance of discovered oil and natural gas fields within the Arctic Circle: in Russia, Alaska, Canada's Northwest Territories, and Norway; and the current prospects for oil and gas development in the Arctic, with a focus on factors such access to Arctic natural resources, the viability and profitability of extraction, the impact of alternative resources, especially shale gas, and developments in the global oil and gas market. The second section deals with the geopolitical and legal implications of Arctic natural resources by concentrating on (1) overlapping territorial claims by the Arctic Ocean states and jurisdictional disputes among them; (2) the role of the United Nations Convention on the Laws of the Sea (UNCLOS) in determining the rights and limits of such territorial claims; (3) problems posed by Arctic governance, especially with respect to the tension between sovereign claims and multilateralism, to the privileged position of the Arctic Ocean states, and to the role of the Arctic Council; (4) the potential for geopolitical tension or conflicts among the Arctic Ocean states or between them and other external actors, with stakeholding aspirations, such as the European Union and China.

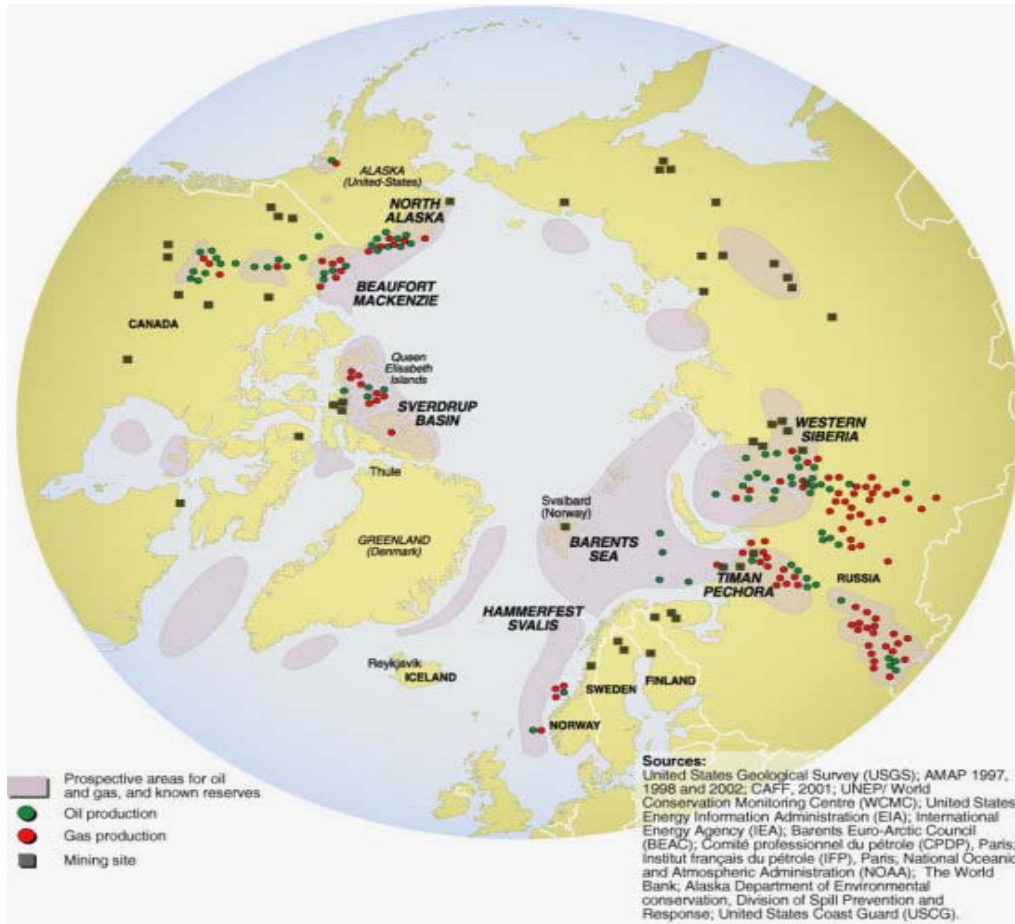
1 ARCTIC NATURAL RESOURCES: AN ASSESSMENT

According to a 2008 appraisal by the U.S. Geological Survey (USGS), the Arctic contains 30% of undiscovered gas and 13% of oil – or 412 BBOE (billion barrels of oil equivalents) of hydrocarbons. The estimate for oil is about 90 BBOE, natural gas 1,669 trillion cubic feet and 44 billion barrels of natural gas liquids. About 85% of the total oil and gas reserves are in offshore areas⁴⁵. The bulk of the gas reserves are located in Russian territory, but the main oil deposits in Alaska, Canada and Greenland.

³ I want to thank EDDA – Center of Excellence in Critical Contemporary Research at the University of Iceland for supporting my research on the Arctic.

⁴ U.S. Geological Survey, "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle" (Washington, DC: U.S. government, 2008), <http://www.usgs.gov>.

FIGURE 1



The USGS findings are considered the most accurate of such estimates,⁶ even if they can only be verified with 50% certainty because they are based on geological probabilities, not actual finds. Other oil and gas appraisals, including those of the Russian government,⁷ are higher, but most experts view them as being less reliable. No economic considerations are included in the USGS survey (or in the Russian estimates) and its results were presented without reference to costs of exploration and development – a major factor when assessing the viability of oil and gas production in offshore areas and inhospitable Arctic climate terrain.⁸

⁶ Nanna Hvidt and Hans Mouritzen, "Danish Foreign Policy Yearbook 2009" (Copenhagen: DIIS, 2009), 36.

⁷ See A.E. Kontorovic et al., "Geology and hydrocarbon resources in the Russian Arctic seas and their prospects of their development," *Russian Geology and Geophysics*, 51 (2010), 3–11.

⁸ See "USGS Arctic Oil and Gas Report: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," [geology.com, http://geology.com/usgs/arctic-oil-and-gasreport.shtml](http://geology.com/usgs/arctic-oil-and-gasreport.shtml).

1.1 ESTIMATES OF UNDISCOVERED OIL AND GAS DEPOSITS IN THE ARCTIC

Eurasia is estimated to hold about 63% of the total Arctic resource base and North America about 36%.

TABLE 1
Arctic Mean Estimated Undiscovered
Technically Recoverable, Conventional Oil and Natural Gas Resources
By Arctic Province, Ranked by Total Oil Equivalent Resources

USGS Petroleum Province Name	Crude Oil (billion barrels)	Natural Gas (trillion cubic feet)	Natural Gas Liquids 1/ (billion barrels)	Total Resources, Oil Equivalent 2/ (billion barrels)
West Siberian Basin	3.66	651.50	20.33	132.57
Arctic Alaska	29.96	221.40	5.90	72.77
East Barents Basin	7.41	317.56	1.42	61.76
East Greenland Rift Basins	8.90	86.18	8.12	31.39
Yenisey-Khatanga Basin	5.58	99.96	2.68	24.92
Amerasia Basin	9.72	56.89	0.54	19.75
West Greenland-East Canada	7.27	51.82	1.15	17.06
Laptev Sea Shelf	3.12	32.56	0.87	9.41
Norwegian Margin	1.44	32.28	0.50	7.32
Barents Platform	2.06	26.22	0.28	6.70
Eurasia Basin	1.34	19.48	0.52	5.11
North Kara Basins and Platforms	1.81	14.97	0.39	4.69
Timan-Pechora Basin	1.67	9.06	0.20	3.38
North Greenland Sheared Margin	1.35	10.21	0.27	3.32
Lomonosov-Makarov	1.11	7.16	0.19	2.49
Sverdrup Basin	0.85	8.60	0.19	2.48
Lena-Anabar Basin	1.91	2.11	0.06	2.32
North Chukchi-Wrangell Foreland Basin	0.09	6.07	0.11	1.20
Vilkitskii Basin	0.10	5.74	0.10	1.16
Northwest Laptev Sea Shelf	0.17	4.49	0.12	1.04
Lena-Vilyui Basin	0.38	1.34	0.04	0.64
Zyryanka Basin	0.05	1.51	0.04	0.34
East Siberian Sea Basin	0.02	0.62	0.01	0.13
Hope Basin	0.002	0.65	0.01	0.12
Northwest Canadian Interior Basins	0.02	0.31	0.02	0.09
Total	89.98	1,668.66	44.06	412.16

Source: U.S. Geological Survey, "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," USGS Fact Sheet 2008-3049 Washington, DC (2008), Table 1, page 4.

Note: The column totals do not equal the sum of the rows due to rounding. USGS website URL is: <http://pubs.usgs.gov/fs/2008/3049/>. The relative location of these provinces is identified in Appendix B.

1/ Natural gas liquids are composed of ethane, propane, and butane.

2/ The USGS uses a natural gas to oil conversion factor in which 6 thousand cubic feet of natural gas equals 1 barrel of crude oil.

The Eurasian resource base is predominantly natural gas and NGL (natural gas liquids), which account for about 90% of the total. The Eurasian West Siberia Basin and East Barents Basin are estimated to hold 194.3 billion barrels of oil equivalent of undiscovered resources, which is about 75% of the total Eurasian resource base.⁹ Arctic oil and gas resources are concentrated in just a few sedimentary provinces. The three largest Arctic provinces account for 65% of the total Arctic oil and natural gas resources, and the largest 10 oil and natural gas provinces account for 93% of the total. The remaining 15 provinces (out of 25 qualitatively evaluated provinces) are estimated to hold only 7% of the Arctic resource base.¹⁰

TABLE 2
Arctic Crude Oil, Natural Gas, and Natural Gas Liquids Resource Concentration
for Provinces with the Greatest Share of Total Resources,
Based on the USGS Mean Estimates

Largest Arctic Resource Provinces	Cumulative Percent of Total Arctic Oil, Natural Gas, & NGL Resources (Percent)
Largest Resource Province	32
Largest 2 Resource Provinces	50
Largest 3 Resource Provinces	65
Largest 5 Resource Provinces	78
Largest 10 Resource Provinces	93

Source: Table 1.

TABLE 3
Regional Concentration of Arctic Oil and Natural Gas Resources
By Continental Land Mass,
Based on the USGS Mean Estimates

Region	Crude Oil (billion barrels)	Natural Gas (trillion cubic feet)	Natural Gas Liquids (billion barrels)	Total Resources, Oil Equivalent (billion bbl)
Eurasia	30.70	1,219.39	27.55	261.49
North America	58.09	435.40	16.20	146.85
Indeterminate	1.20	13.87	0.31	3.82
Total	89.98	1,668.66	44.06	412.16
Eurasia	34.1 %	73.1 %	62.5 %	63.4 %
North America	64.6 %	26.1 %	36.8 %	35.6 %
Indeterminate	1.3 %	0.8 %	0.7 %	0.9 %
Total	100.0 %	100.0 %	100.0 %	100.0 %

Source: Table 1. The column totals might not equal the sum of the rows due to rounding.

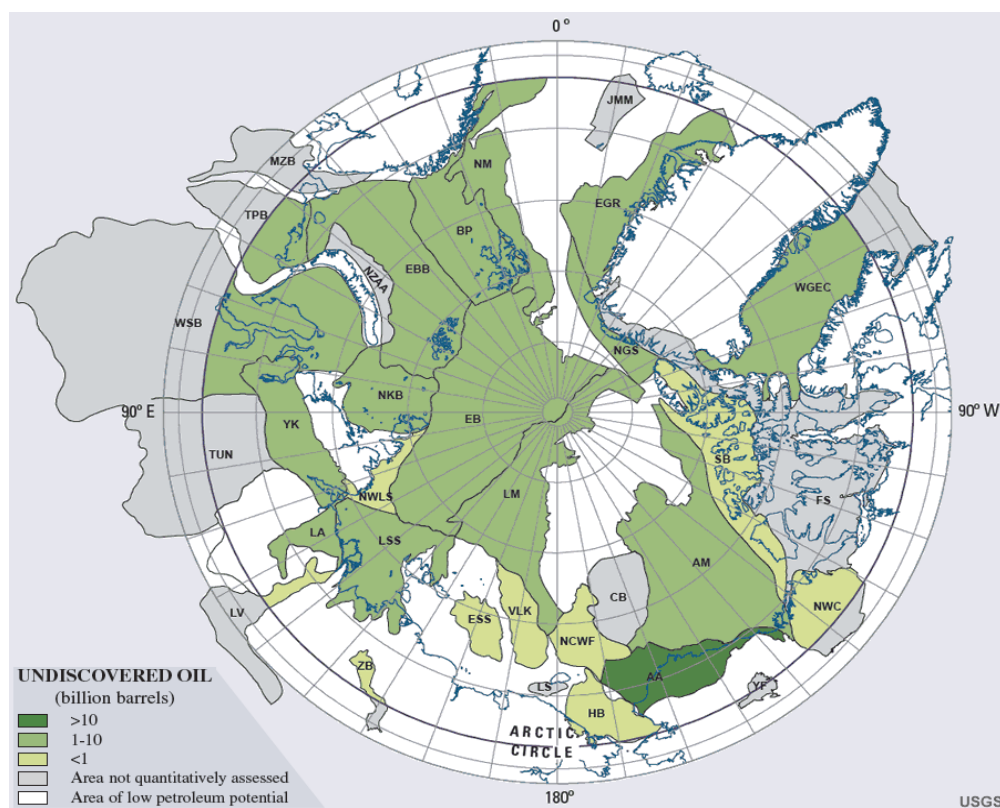
Indeterminate regions are those that could not conclusively be assigned to either continent; includes: Lomonosov-Makarov, Hope Basin, and North Chukchi-Wrangel Foreland Basin.

⁹ U.S. Energy Information Administration (EIA), "Arctic Oil and Natural Gas Potential," 19 October 2009, <http://www.eia.doe.gov/oiaf/analysispaper/arctic/index.html>.

¹⁰ U.S. Energy Information Administration (EIA), "Arctic Oil and Natural Gas Potential."

More than 70% of the mean undiscovered Arctic oil is estimated in five provinces: Arctic Alaska, Amerasia Basin, East Barents Basins, East Greenland Right Basins, and West Greenland-East Canada. The North American side of the Arctic is considered to have about 65% of the undiscovered Arctic oil and the Alaska region to hold the largest deposits, about 30 billion barrels. The second largest oil province is the Amerasia Basin, located just north of Canada, and estimated to have about 9.7 billion barrels of undiscovered oil. The third largest province is the East Greenland Rift, which is estimated to hold about 8.9 billion barrels of oil. Collectively, these three provinces are expected to hold about 48.6 billion barrels, which is about 55% of the total undiscovered Arctic oil. If developed, oil deposits would not come into production at once but be added to reserves and produced incrementally. Despite Russian claims that that the Arctic will become the main oil producing region in the second half of the 21st century,¹¹ Arctic oil resources are generally not considered sufficient to shift the world oil balance from the Middle East.¹²

FIGURE 2



Source: U.S. Geological Survey, "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle" (Washington, DC: U.S. government, 2008), <http://www.usgs.gov>.

It is estimated that in excess of 70% of the undiscovered natural gas resources are located in three provinces: the West Siberian Basin, the East Barents Basins, and Arctic Alaska. Although substantial amounts of gas may be found in Alaska, Canada, and Greenland, the undiscovered gas resource is primarily concentrated in Russian territory.¹³ Only 26% of the undiscovered Arctic natural gas resources are thought be found in North American geological areas. Despite the huge gas resource

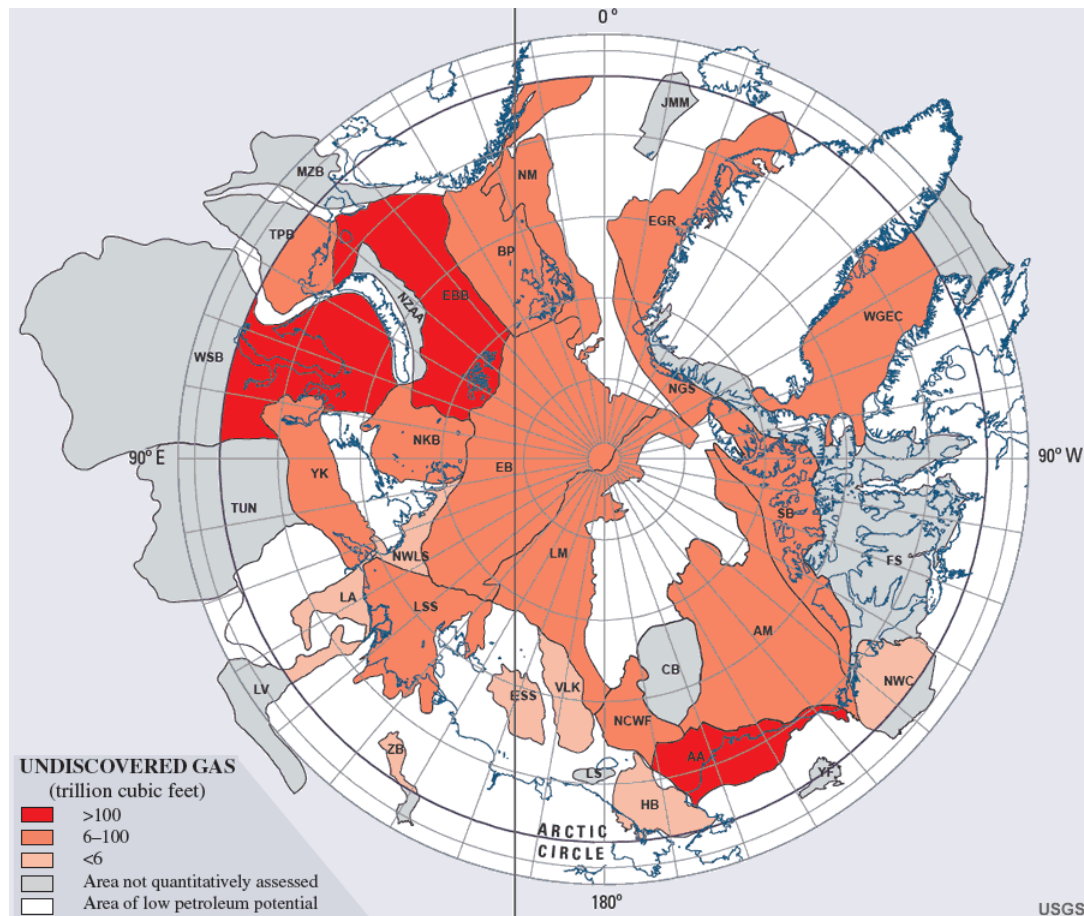
¹¹ See A.E. Kontorovic et al., "Geology and hydrocarbon resources in the Russian Arctic seas and their prospects of their development," 11.

¹² U.S. Geological Survey, "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle."

¹³ See "USGS Arctic Oil and Gas Report: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," <http://geology.com/usgs/arctic-oil-and-gasreport.shtml>.

potential, amounting to one-third of the undiscovered gas resources in the world, the extraction of shale gas – in addition to the high development and production costs – has made it questionable whether the production of Arctic gas will become viable in the foreseeable future.

FIGURE 3



Source: U.S. Geological Survey, “Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle” (Washington, DC: U.S. government, 2008), <http://www.usgs.gov>.

1.2 DISCOVERED OIL AND NATURAL GAS FIELDS

About 61 large oil and natural gas fields have already been discovered within the Arctic Circle: in Russia, Alaska, Canada’s Northwest Territories, and Norway. 15 of the 61 have not yet gone into production; 11 are in Canada’s Northwest Territories, two in Russia, and two in Arctic Alaska. Forty-three of the 61 large Arctic fields are located in Russia. Thirty-five of these large Russian fields (33 natural gas and three oil) are located in the West Siberian Basin. Of the eight remaining large Russian fields, five are in the Timan-Pechora Basin, two are in the South Barents Basin, and one is in the Ludlov Saddle. Of the 18 large Arctic fields outside Russia, six are in Alaska, 11 are in Canada’s Northwest Territories, and one is in Norway.¹⁴

More than 400 oil and gas fields, containing 40 billion barrels of oil (BBO), 1136 trillion cubic feet (TFC) of natural gas, and 8 billion barrels of natural gas liquids have been developed onshore north of the Arctic Circle, mostly in the West Siberian Basin of Russia and the North Slope of Alaska. But

¹⁴ U.S. Energy Information Administration (EIA), “Arctic Oil and Natural Gas Potential.” On Norwegian oil and gas deposits within Norway’s EEZ, see The Ministry of Petroleum and Energy and the Norwegian Petroleum Directorate, “Facts 2010 – The Norwegian petroleum sector,” 5 July 2010, <http://www.npd.no/en/Publications/Facts/Facts-2010/>.

remoteness and technical difficulty, coupled with low-cost petroleum, have ensured that limited exploration has taken place offshore. Even where offshore wells have been drilled, in the Mackenzie Delta, the Barents Sea, and offshore Alaska, most discoveries have not been developed.¹⁵

1.3 THE CURRENT OUTLOOK FOR ARCTIC OIL AND GAS EXTRACTION

There is far less optimism about the exploitation of Arctic natural resources, in the foreseeable future, than was the case only a couple of years ago. While the price of oil has slowly recovered since the start of the global economic turndown in 2008, oil extraction already has far less potential than that of gas because of the more limited deposits. While the Arctic is especially rich in natural gas and NGL resources, their exploitation poses many difficulties. The natural gas market is far from the Arctic, and the long-distance transportation of natural gas and NGL is considerably more expensive than oil transportation because of the far lower energy density of these fuels compared to crude oil. Although they can be offset by liquefaction or pressurization, transportation as liquefied natural gas (LNG) is expensive due to the large capital costs required to build the facilities required and the LNG tankers.¹⁶ Even more important, the shale gas “revolution” in the United States, which has the potential of spreading to European countries despite environmental concerns,¹⁷ is already threatening the viability of Arctic gas extraction. Shale gas has not only sharply reduced the demand for U.S. LNG imports but also affected the size of the world market.

This development has kept LNG prices relatively low and raised serious questions about the profitability of huge Arctic gas fields, such as that of Shtokman in the Barents Sea – a project that was postponed in 2010 for, at least, three years by the Russian energy company, Gazprom, which plans to develop it together with its French and Norwegian partners, Total and Statoil. At current gas prices, it is considered economically unviable,¹⁸ and its future development is uncertain. Russia might encounter similar problems in other onshore gas fields in the gas-rich Yamal Peninsula, which are to be developed first.¹⁹ Since 20% of Russia’s GDP and 22% of its exports are already produced in the Arctic much is at stake here. Finally, the political fall-out of the oil disaster in the Gulf of Mexico is not only likely to dampen interest in offshore oil production but make it more costly because of environmental concerns.

Thus, the development of Arctic oil and natural gas resources will be considerably more expensive, risky, and take longer than comparable deposits found elsewhere in the world. The importance of Arctic oil and natural gas resources is likely to be affected by the growing realization that shale beds in existing petroleum provinces around the world might be capable of producing 5,000 to 16,000 trillion cubic feet of natural gas. This scenario is by no means certain. Growing European demand for natural gas, the depletion of existing North Sea and Russian natural gas fields, and disappointing European shale gas exploration and development results could act as a counter-incentive to develop Russia’s Arctic natural gas resources in the West Siberian Basin and East Barents Basin. Nonetheless, the shale gas resource potential has already postponed development of Arctic natural gas

¹⁵ Donald Gautier et al., “Assessment of Undiscovered Oil and Gas in the Arctic,” *Science*, 324 (2009), 1175–1179.

¹⁶ U.S. Energy Information Administration (EIA), “Arctic Oil and Natural Gas Potential.”

¹⁷ See Daniel Yergin, “America’s Natural Gas Revolution: A “shale gale” of unconventional and abundant U.S. gas is transforming the energy market,” *Wall Street Journal*, 2 November 2009. Yergin notes that in 1990, unconventional gas – from shales, coal-bed methane and so-called “tight” formations – was about 10% of total U.S. production. Today it is around 40%, and growing fast, with shale gas by far the biggest part. The potential of this “shale gale” only really became clear around 2007, and it was not until 2009 that politicians began to take notice. It is already changing the energy outlook in the U.S. and could deeply affect the global natural gas balance.

¹⁸ See Paal Sigurd Hilde, “Polar Politics: Norway and the Arctic: The End of Dreams?” ATLANTIC-COMMUNITY.ORG.

http://www.atlanticcommunity.org/index/articles/view/Norway_and_the_Arctic%3A_The_End_of_Dreams%3F.

¹⁹ Katarzyna Zysk, “Russia’s Arctic Strategy: Ambitions and Constraints,” *Joint Force Quarterly* (JFQ), 57, 2 (2010), 104–105.

resources. High costs, high risks, and lengthy lead-times can all lead to the development of more accessible oil and natural gas resources outside the Arctic.²⁰

2 THE LEGAL IMPLICATIONS: JURISDICTIONAL AND MARITIME BOUNDARIES AND DISPUTES

All the eight Arctic states – Canada, Denmark (Greenland), Finland, Iceland, Norway, Russia, Sweden, and the United States – agree that the United Nations Convention on the Laws of the Sea (UNCLOS) is the appropriate mechanism by which to determine the rights and limits of territorial claims in the Arctic. UNCLOS permits states to make additional territorial claims if it is proven – and accepted by a UN Commission on the Limits of the Continental Shelf – that certain areas reach beyond their respective continental shelves of 200 miles or up to 350 miles (within which they may claim sovereign control over all licensing and mineral resources). Three of the Arctic Ocean states, Russia, Canada, and Denmark (on behalf of Greenland) plan to do so within the next few years. Norway has already settled its claim with the commission. Polar areas beyond the 350 mile limit constitute an open sea Arctic space. Thus, what is at stake is the partition of the Arctic Ocean's outer continental shelf into zones under nominal national jurisdiction. The most sought-after territorial area is the undersea Lomonosov Ridge, which stretches about 1000 nautical miles from north of Greenland across the Arctic Ocean to Siberia, and which Russia, on the one hand, and Canada and Denmark, on the other, claim as a natural extension of their respective continental shelves. It is still an open question of how the UN Commission will treat overlapping demands, as they come in, and whether there will be a possibility of inter-state agreements on partition lines.²¹

In 2009, Norway became the first country to settle its claim to the extent of its continental shelf with the U.N. Commission and was granted 235,000sq. km. of Arctic and Atlantic Ocean seabed. In addition, a major political agreement between Russia and Norway on the delineation of their Arctic maritime border in the Barents Sea was concluded in the spring of 2010, resolving a 40-year dispute. The deal will make it possible to develop considerable oil and gas in the Norwegian sector (it has been estimated that it contains 10 million barrels of oil equivalents, but more studies are needed). It will, however, prove difficult because of the problems with tapping oil and gas from deep Arctic waters.²² Like Russia, Norway is highly reliant on its petroleum industry, which amounted to 22% of its GDP in 2009.²³

Russia filed its first request with the UN Commission in 2001, arguing that the waters off its northern coast extending to the North Pole belong to its maritime territory because the Lomonosov Ridge was an extension of its continental territory. The commission refused to accept it, requesting more documentary evidence. Russia plans to submit a revised claim by 2013 in its efforts to settle the outer limits of its continental shelf.

Canada plans to submit its claim to the commission in 2013.²⁴ It has sponsored research – much of which has been carried out jointly with Danish and American scientists – with the aim of identifying potential extension of Greenland's continental shelf. The results should provide more scientific evidence on the Lomonosov Ridge.²⁵ Russia has floated the idea of a joint Russian-Canadian-Danish

²⁰ U.S. Energy Information Administration (EIA), "Arctic Oil and Natural Gas Potential."

²¹ Nanna Hvidt and Hans Mouritzen, "Danish Foreign Policy Yearbook 2009," 43.

²² "Norway eyes exploration in new Barents Sea region", Reuters, 27 April 2010, <http://in.reuters.com/article/idINOSN00440120100427>.

²³ On the Norwegian petroleum industry and resources within the Norwegian EEZ, see The Ministry of Petroleum and Energy and the Norwegian Petroleum Directorate, "Facts 2010 – The Norwegian petroleum sector," 5 July 2010, <http://www.npd.no/en/Publications/Facts/Facts-2010/>.

²⁴ The Government of Canada, "Canada's Northern Strategy: Our North, Our Heritage, Our Future" (The Government of Canada: Ottawa, 2009), <http://www.northernstrategy.gc.ca/cns/cns.pdf>.

²⁵ "Pushing to the Pole before Arctic seabed deadline," Canwest New Service, 19 October 2009, <http://www.canada.com/Technology/Pushing+Pole+before+Arctic+seabed+deadline/1606705/story.html>.

submission to the UN to settle sea floor claims around the North Pole, but so far no such coordinated tripartite efforts have taken place.

The Danish government has launched a scientific project together with the Greenlandic and Faroese Home Rule governments to present documented claims within the next few years to the continental shelf of Greenland. Apart from the continental shelf north of Greenland, Denmark also collects data for claims to the shelf northeast and south of Greenland.

The United States is abiding by UNCLOS, even if the U.S. Senate has not ratified it. The Obama Administration has – like its predecessor – pressed for Senate approval of UNCLOS. But the United States cannot submit a claim to the UN Commission on the Limits of the Continental Shelf in the Arctic until it becomes a party to the treaty.

2.1 OVERLAPPING TERRITORIAL CLAIMS

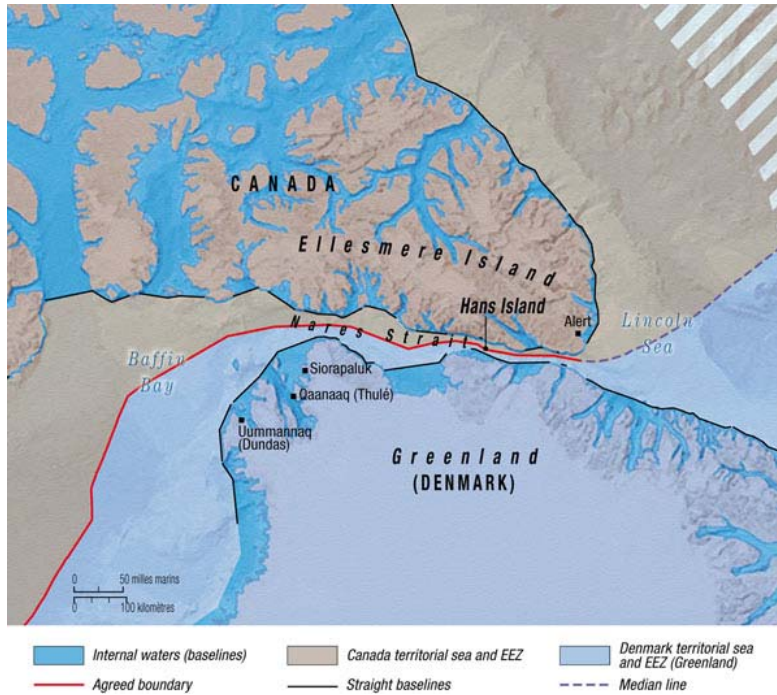
All the Arctic states have reiterated their commitment to international law when it comes to settling territorial disputes in the Arctic. The most important overlapping territorial claims or legal interpretations of international norms are the following:

2.1.1 Canada and Denmark

Both Canada and Denmark make claims to the tiny Hans Island, which is located in the center of the Kennedy Channel of the Nares Strait, which separates Ellesmere Island from northern Greenland and connects Baffin Bay with the Lincoln Sea. The dispute is about the island itself not about the waters, seabed, or the control of navigation. The island has played some role in the new Canadian Arctic policy by being seen as the guardian of the northeastern access route to the Northwest Passage. But after a highly symbolic and politically charged “flag planting” war, which culminated in a visit by the Canadian defence minister to Hans Island in 2005, the two countries decided to opt for a diplomatic solution. In 2007 Canada conceded that the border line went right across the island, but Denmark has kept up its claim to the entire island.²⁶ Canada and Denmark also disagree over part of the maritime boundary in the Lincoln Sea.

²⁶ Nanna Hvidt and Hans Mouritzen, “Danish Foreign Policy Yearbook 2009,” p. 52.

FIGURE 4



Source: Martin Pratt, "Droit de la mer: À qui appartient l'océan Glacial arctique," http://www.lecerclapolaire.com/articles_archives/Pratt_maritime_Arctic.html.

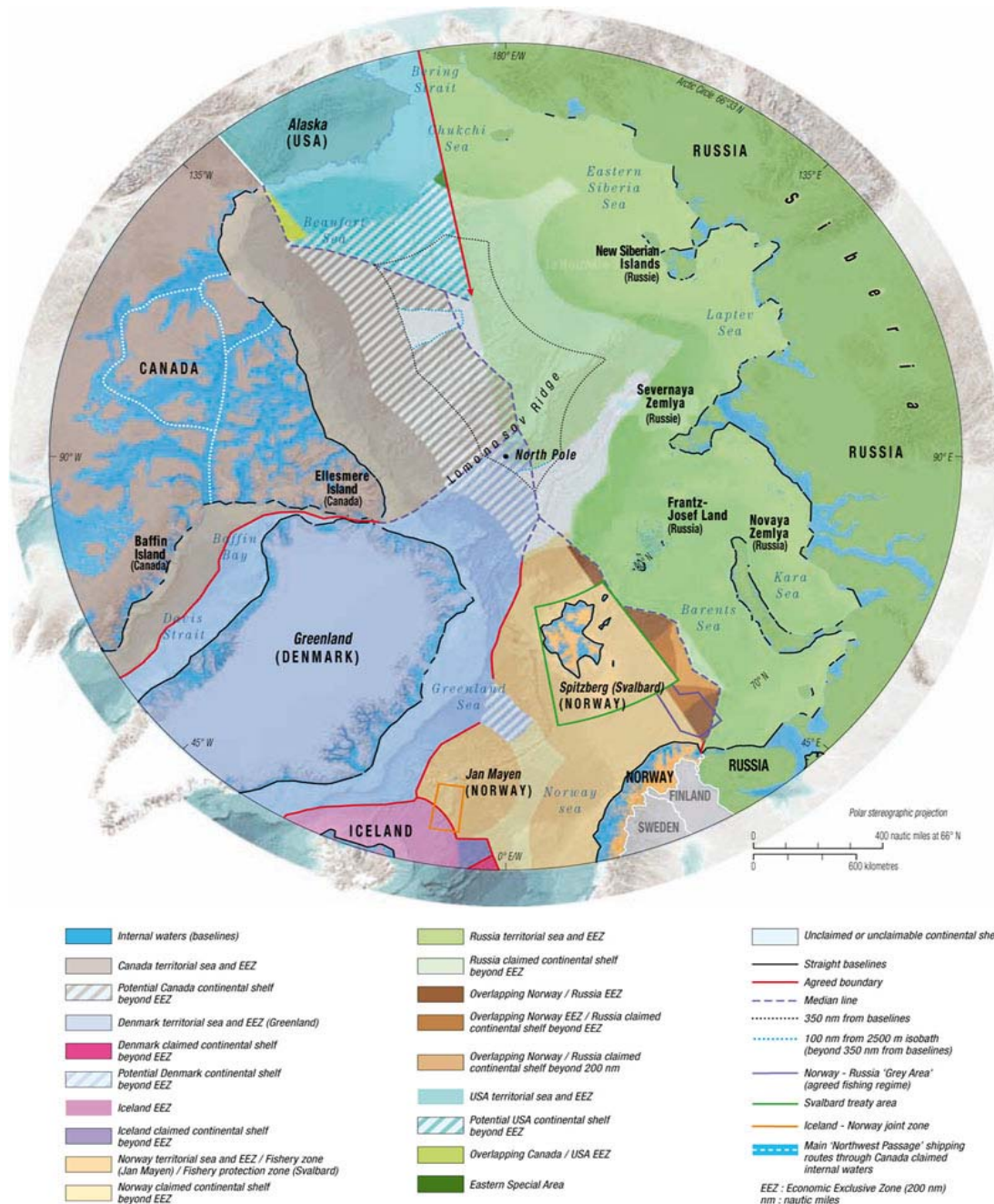
2.1.2 Russia versus Canada and Denmark

Russia's claim to the Lomonosov Ridge is contested by Denmark and Canada, which have been working together to find evidence of a connection between the Greenland-Canada continental shelf and the Lomonosov Ridge.

2.1.3 Norway and Russia

The Norwegians are seeking international acceptance of their position on Svalbard, in particular the 200 nautical miles "Fishery Protection Zone" declared round the archipelago. It is contested by Russia and many other states and not recognized by Norway's allies, including the United States. Norway's Svalbard sovereignty claims are based on the 1920 Svalbard Treaty. But what restricts them is that the non-discriminatory rights to practice peaceful economic activities of the parties of the 1920 Svalbard Treaty apply.

FIGURE 5



Source: Martin Pratt, "Droit de la mer: À qui appartient l'océan Glacial arctique," http://www.lecerclepolaire.com/articles_archives/Pratt_maritime_Arctic.html.

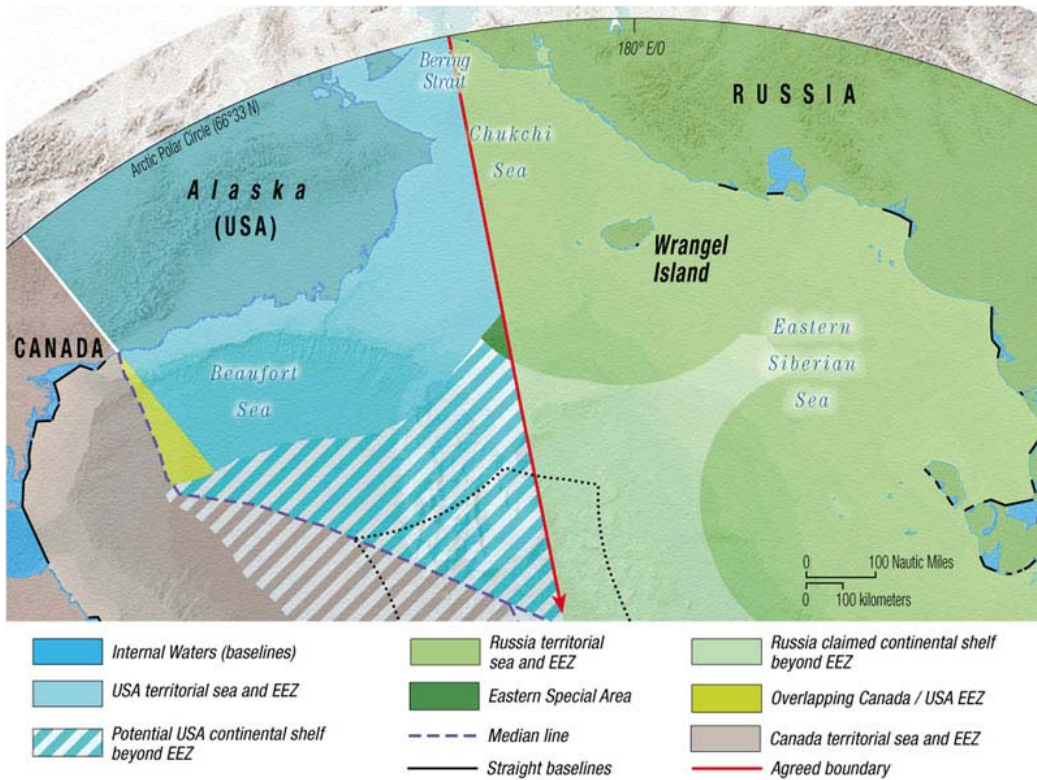
Nota bene: The 2010 Russian-Norwegian agreement over maritime boundaries in the Barents Sea, which solved a long-standing dispute between the Russia and Norway, makes the area no longer overlapping (as is still in figure 5).

2.1.4 Canada and the United States

There is a disagreement between the United States and Canada regarding the maritime boundary in the Beaufort Sea. In line with its historical support for the "freedom of the seas," the United States

also rejects Canada's claim to the Northwestern Passage. Instead of interpreting the waterways comprising the Northwestern Passage as Canadian internal waters, it views them as a strait used for international navigation.²⁷ In the U.S. Presidential Directive of 2009, the U.S. legal position is reconfirmed.²⁸

FIGURE 6



Source: Martin Pratt, "Droit de la mer: À qui appartient l'océan Glacial arctique," http://www.lecerclpoleaire.com/articles_archives/Pratt_maritime_Arctic.html.

2.1.5 Canada and the European Union

In a policy statement on the Arctic in December 2008, the EU, like the United States, affirmed that the principle of freedom of navigation through the Northwest Passage must be maintained.²⁹

2.1.6 Russia and the United States

The Russian government considers the Northern Sea Route [NSR] (the Northeastern Passage) – the shipping lane from the Atlantic Ocean to the Pacific Ocean along the Russian coast – as part of its own jurisdiction. Other states, notably the United States, consider the straits of the NSR as international and, thus, subject to the right of passage. This position was confirmed in the U.S. Presidential

²⁷ The Government of Canada, "Canada's Northern Strategy."

²⁸ The White House, "National Security Presidential Directive/NSPD 66 Homeland Security Presidential Directive/HSPD 25 – Arctic Region Policy" (The U.S. Government: Washington, D.C., 9 January 2009).

²⁹ The Commission of the European Union, "Communication from the Commission to the European Parliament and the Council. The European Union and the Arctic Region" (the European Commission: Brussels, December 2008). See also Rob Huebert, "Canadian Arctic Sovereignty and Security in a Transforming Circumpolar World" (Canadian International Council: Ottawa, July 2009), 6.

Directive. Russia has warned that attempts by other countries to change the NSR's legal status and to transform it into an international transit corridor would be in conflict with Russia's national interests. Its interpretation is based on article 234 of UNCLOS, which gives coastal states the right to adopt and enforce non-discriminatory laws and environmental regulations in the EEZs, where ice coverage and particularly severe climate conditions cause exceptional hazards to navigation, and where pollution could cause major harm to the ecological balance. A complicating factor is that the passage is not a single shipping channel, but a series of different shipping lanes. The NSR may, thus, include sea lanes running beyond Russia's EEZ as long as part of the voyage includes waters under undisputed Russian jurisdiction.³⁰

2.2 ARCTIC GOVERNANCE: THE INTERACTION BETWEEN SOVEREIGN RIGHTS AND MULTILATERAL REGIMES

The increased strategic importance of the Arctic, which has attracted huge global media attention and exaggeration in recent years, has been driven by various transnational and national processes: (a) the debate on global warming and the prospects for an ice-free Arctic in the summer within 20-30 years; (b) the control over Arctic oil and gas deposits and the potential for other commercial opportunities tied to the opening of a new sea lanes; and (c) symbolic political acts, such as the Russian decision to put a flag on the seabed of the North Pole in 2007. This new geopolitical reality has put increased spotlight on governance and future management of the Arctic region. It is reflected in the interaction between the Arctic states themselves and between them and multilateral organizations, such as the UN, regional bodies, including the European Union and NATO, and non-Arctic states, such as China.

The eight Arctic states, which are the permanent members of the Arctic Council – the central international and intergovernmental organizations of the region – view UNCLOS as the only comprehensive multilateral regime that applies to the Arctic and have opposed the idea of concluding an international treaty on the Arctic modelled on the Antarctica Treaty of 1959. But the Arctic states want to have a privileged role in managing the region, which they interpret as being consistent with UNCLOS, based on their geographic location, sovereign rights and economic and political interests.

There is, however, considerable ambivalence about Arctic governance due to several factors:

1) While the UN Commission on the Limits of the Continental Shelf can determine the size of the continental shelf, it has no power to resolve potential disputes between states. After issuing recommendations, it will most likely be up to the five parties to negotiate with one another with regard to setting maritime boundaries and rival claims. They have an incentive to do so in a peaceful and orderly manner, but interstate conflicts cannot be ruled out.

2) What restricts the role of the Arctic Council is that it is only a decision-shaping, not a decision-making body. It is respected for its scientific environmental work³¹, and its structural make-up provides for multilateral cooperation. In addition to the eight Arctic states, it includes permanent participants representing indigenous peoples as well as several observer states and organizations. Nonetheless, it does not deal with politics or security issues in the Arctic, and it only meets every two years at a ministerial level. Thus, it has been questioned whether it can serve as the main vehicle for dealing with Arctic issues, especially since it has no say over territorial disputes or the exploitation of natural resources.

3) The most controversial attempt to influence Arctic governance was the decision by the five Arctic Ocean states – Canada, Russia, the United States, Denmark/Greenland and Norway – in 2008 to stress, collectively as part of a forum, their privileged role in the region. At the Ilulissat meeting in

³⁰ Katarzyna Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 107–107.

³¹ Nanna Hvidt and Hans Mouritzen, "Danish Foreign Policy Yearbook 2009," 52.

Greenland, they committed themselves to the “orderly settlement of any possible overlapping claims” on the basis of the extensive international legal framework that applies to the Arctic Ocean, notably UNCLOS.³² The Arctic five saw the meeting as being important in assuring stability, predictability, peace and security in the Arctic. But the exclusion of the other three Arctic states, Iceland, Finland and Sweden, from the venue prompted strong adverse reactions on their part. The Icelandic government was especially vocal in its protests, not least because Iceland’s EEZ extends into the Arctic. Representatives of Arctic indigenous people were also critical of being sidelined. The main charge levelled at the Ilulissat initiative was that it undermined the Arctic Council and its legitimacy as the primary institutional Arctic body and that it signalled a return to 19th century Great Power politics, with the Arctic five seeking territorial control of the Arctic region. According to this scenario, the Ilulissat meeting was the first step toward institutionalizing a new Arctic decision-making body.

This interpretation was denied by the Arctic Ocean states; to them, the Ilulissat Declaration underscored their commitment to UNCLOS and international law. But its purpose was also to reiterate what the Arctic littoral states saw as their sovereign rights and to resist any attempts to the internationalize the region – either through an Arctic treaty, like the Antarctica Treaty, or ideas about a moratorium on the exploitation of Arctic natural resources.³³

Even if the Ilulissat meeting was projected as a one-time affair, the Canadian government followed up on it in March 2010 by organizing another gathering of the Arctic five in Chelsea, Canada. This meeting can be characterized as a failure. It was not only because it produced no new results or because it prompted renewed protests by the three other Arctic states and by the representatives of Arctic indigenous peoples. U.S. Secretary of State Hilary Clinton publicly reprimanded the host, the Canadian government, for not inviting these stakeholders. The rebuke forced the Canadian Foreign Minister, Lawrence Cannon, to declare publicly – as his Danish counterpart had done following the Ilulissat meeting – that that the forum was not meant to be a permanent institution.³⁴

At this stage, it is too early to tell whether the Arctic Ocean states will continue their exclusive deliberations on Arctic governance. The Arctic non-littoral states, Iceland, Finland and Sweden, which make no territorial or natural resource-based claims in the Arctic Ocean, are bound to resist the development of a hegemony exercised by the Arctic five. There are, of course, arguments to be made for increased cooperation between the Arctic Ocean states as part of efforts to prevent territorial disputes from escalating. Prospects for joint rules concerning oil and gas exploitation are not likely. And experience from shared oil regions, such as the North Sea, indicate that states prefer national to international regulation.³⁵ There are, however, incentives for international solutions relating to disaster readiness or pollution control. A case in point is the initiative – under the aegis of the Arctic Council – on multilateral cooperation in aeronautical and maritime search and rescue operations. If successful, negotiations on such cooperation could lead to the signing of the first legally binding pan-Arctic agreement within the Arctic Council next year.³⁶

Nonetheless, there is bound to be more international pressure from non-Arctic states or the EU for some kind of internationalization of the Arctic or at least the establishment of regimes over which they can have some influence designed to protect their interests, for example with respect to the effects of climate change and maritime issues.³⁷ There is, as noted, no interest among the Arctic states

³² See “The Ilulissat Declaration” issued by Arctic states at the Arctic Ocean Conference in Ilulissat, Greenland, 27-29 May 2008,

³³ Nanna Hvidt and Hans Mouritzen, “Danish Foreign Policy Yearbook 2009,” 57.

³⁴ “Clinton rebuke overshadow Canada’s Arctic meeting,” Reuters, 29 March 2010, <http://www.reuters.com/article/idUSTRE62S4ZP20100330>.

³⁵ Nanna Hvidt and Hans Mouritzen, “Danish Foreign Policy Yearbook 2009,” 65.

³⁶ Anton Vasiliev [the Senior Russian Arctic Official in the Arctic Council], “Is the Ilulissat Declaration adequate?” Lecture given at the conference “Arctic – Changing Realities” – sponsored by the Nordic Council of Ministers,” 26 May 2010.

³⁷ Nanna Hvidt and Hans Mouritzen, “Danish Foreign Policy Yearbook 2009,” 64.

to open up the Arctic for outside regulations, except for UNCLOS. Yet, they differ among themselves on how non-Arctic states and organizations should be allowed to have a voice in Arctic affairs.

Russia's policy is that the less external involvement in the Arctic the better. It has used the Ilulissat Declaration to stress that the Arctic littoral states are responsible for governance of Arctic areas under their jurisdiction and that other states or organizations have no legal basis for such claims. It is against EU and NATO involvement in the Arctic

Canada has also used sovereignty rhetoric to stress the rights of Arctic Ocean states. It has stood in the way of the European Commission's application for observer status in the Arctic Council, not least because of its ban on the sale of seal products. Even if four out of the Arctic five are NATO members, Canada has not been keen on providing the Alliance with an Arctic role or, in contrast to the United States, on using the NATO-Russia Council as a forum for discussing Arctic matters.

The Nordic states are far more open to EU influence in the Arctic as would have been expected given the EU membership of three Arctic states, Denmark, Sweden, and Finland. There are limiting factors, to be sure. Finland and Sweden do not border the Arctic Ocean and are the only Arctic countries without jurisdictional claims in the Arctic Ocean and adjacent seas. Denmark is the only Arctic Ocean state, which is an EU member. But it is acting on behalf of Greenland, which left the EU in 1985. It is an open question whether Greenland will secede from Denmark on the basis of the independence clause contained in the Self Rule Act, if its rich natural resources will be developed within the next decades. It has the potential of becoming self-reliant, but is a small community of only 57,000 and lacks many of the institutional resources that might be required by an Arctic Ocean coastal state.³⁸ Like the Nordic EU members, Norway and Iceland support the EU Commission's application for an observer status in the Arctic Council. If Iceland's EU accession negotiations prove successful, its membership could also strengthen the EU's presence in the region. Yet, while seeing the EU Commission's commitment to UNCLOS as a valuable asset, the Nordic Arctic states are opposed to the resolution passed by the European Parliament on an Arctic Treaty and to a proposal, which has not been approved, for a moratorium on commercial exploitation of Arctic resources.

Norway, with the support of Iceland, has pushed for a limited maritime surveillance role by NATO in the Arctic, with the aim of "showing the flag" and holding military exercises. It is, however, against the securitization of the Arctic through an extensive NATO military presence. Thus, the involvement of international organizations is controversial: some Arctic states are supportive of EU and NATO roles, while others are opposed. The same applies to China, which has shown much interest in the Arctic. Its application – together with those of Japan and South Korea – for an observer status in the Arctic Council is facing hurdles. What explains China's interest is the prospect for the opening of new shipping lanes and transportation routes linking the Pacific and the North Atlantic. To be sure, China is hamstrung by the fact that United States and Russia control the Bering Strait or the Pacific entryway to the Arctic Ocean, the Northern Sea Route and Northwest Passage. But as a Great Power, China – together with the European Union – is bound to have more influence on future Arctic developments. If these powerful actors continue to be excluded by the Arctic states, they will probably – in the name of their political and economic influence – force themselves, eventually, to the negotiating table.

2.3 THE POTENTIAL FOR GEOPOLITICAL CONFLICT OVER ARCTIC RESOURCES OR JURISDICTIONAL DISPUTES

The media hype, political rhetoric and posturing on the Arctic, captured in the phrase "The Scramble for the Arctic", have created an exaggerated picture of Arctic resource possibilities and conflict scenarios. Yet, from a long-term perspective, the potential for geopolitical conflict should not be dismissed. The United States, Canada or Russia have not ruled out unilateralism to protect what they

³⁸ Nanna Hvidt and Hans Mouritzen, "Danish Foreign Policy Yearbook 2009," 67–68.

term as their sovereign interests.³⁹ Some stakeholders, such as Russia, Norway, and Canada have increased their preparedness. While the Russian act of planting a flag on the North Pole seabed was designed to remind the whole world that Russia was a great polar and scientific power, it mostly served internal political aims within the context of Russia's presidential succession after Putin and parliamentary elections in 2007. Yet, geopolitical realities can be created wholly irrespective of whether they correspond to internal or scientific realities. The flagplanting episode had deep impact on other Arctic stakeholders. It spurred intense nationalistic reaction in Canada, sped up the development of the U.S. Presidential Directive on the Arctic, and provided, among other things, the incentive for the Ilulissat meeting among the five Arctic Ocean states.

The Russian decision in 2007 to resume regular bomber flights in the North Atlantic, Arctic and the Pacific – a practice that had been abandoned following the demise of the Soviet Union – was not only made for domestic public consumption but also by a desire to restore, symbolically, Russia's Cold War military prowess and to underscore its geostrategic interests in places such as the Arctic. It has also much to do with political psychology: to overcome the perceived humiliation associated with the loss of global status and internal social and economic disintegration in the 1990s. As was the case during the Cold War, these flights have been monitored and/or patrolled by individual NATO countries. While these acts represent recycled military symbolism, Russian strategic aviation is not seen as posing a territorial threat. And the global economic downturn has made Russia cut back on the bomber flights missions.⁴⁰ What has further reduced their significance is the considerable improvement in U.S.-Russia relations as part of U.S. President Obama's "reset" agenda.

The Russian government has announced a plan to establish an Arctic force to protect Russia's continental shelf.⁴¹ Hence, it wants to make security preparations in response to an increase in economic and other activities in the Arctic. The Russians have devoted much attention to the development of search and rescue capabilities, surveillance and navigation systems to provide safety for and control of the economic, military, and ecological activities. One of the Russian goals is the creation of a comprehensive security system by 2015, including early warning, prevention, and crisis management capabilities. The Russian authorities underscore, however, that the main purpose of such military preparations is to combat terrorism at sea, smuggling, illegal migration, and unsustainable use of biological resources. A strong emphasis has been put on the development of a coastal defence infrastructure and advanced technological capabilities, including satellites and radars.⁴²

The Canadian government has also announced plans for the creation of cold-water patrol ships and a 500-strong Army unit to protect its Arctic interests, which will augment the Arctic Rangers charged with Arctic border control.⁴³ And Norway has been beefing up its defences in Northern Norway while resisting any notion of a militarization.

³⁹ "U.S. National Security Presidential Directive and Homeland Security Presidential Directive (NSPD-66/HSPD-25); see also Canada's Department of Foreign Affairs and International Trade, "Defining Canada's Extended Continental Shelf," 14 August 2008; Dmitry Medvedev: "Protecting Russia's National Interests in the Arctic" (Speech at a Meeting of the Russian Security Council), 17 September 2008. <http://www.kremlin.ru/eng/text/speeches/20078/0917/1945>; Russian Security Council, "Foundations of the Russian Federation National Policy in the Arctic Until 2020 and Beyond," 27 March 2009, <http://www.scrf.gov.ru/>.

⁴⁰ See Ingimundarson, Valur, "Iceland's Post-American Security Policy, Russian Geopolitics, and the Arctic Question," *The RUSI Journal*, 154, 4 (August 2009), 74–80.

⁴¹ See Russian Security Council, "Foundations of the Russian Federation National Policy in the Arctic Until 2020 and Beyond," 27 March 2009, <http://www.scrf.gov.ru/>; see also, "Russia's Security Council turns to the Arctic," *RIA Novosti*, 30 March 2009.

⁴² Katarzyna Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 107–110.

⁴³ See "Canada, Russia Build Arctic Forces," *Defense News*, 6 April 2009; <http://www.defensenews.com/story.php?i=4025065>; see also Canada's Department of Foreign Affairs and International Trade, "Defining Canada's Extended Continental Shelf," 14 August 2008, <http://www.international.gc.ca/continental/limits-continental-limités.aspx?lang=eng>; Canada's Department of Foreign Affairs and

In contrast, the United States government has so far not shown much military interest in the region.⁴⁴ It has reaffirmed its territorial claim (Alaska) and its support for the U.S. Senate ratification of the UN Law of the Sea Convention. And in the 2009 Presidential Directive, it reasserted its intentions to protect its “broad and fundamental national security interests in the Arctic and to operate either independently or in conjunction with other states.”⁴⁵ This underscores the ongoing tension between unilateralism and multilateralism in U.S. foreign policy. To the Americans, it is a waste of money and resources to engage in Arctic sovereignty controls. The buzzword is “scientific timeline” – to know when to intervene and start investing in the Arctic at some future date. The United States does not see the Arctic as a likely high-tension region and is still betting on being able to deal with the question when it suits its own geopolitical interests irrespective of the flurry of geopolitical and propaganda activities of other Arctic states.

Denmark, which has refrained from actions that could be construed as a “hard security” approach toward the region, signalled in a recent strategy paper a shift from an emphasis on sustainable development and protection of the vulnerable Arctic environment to a more a more offensive exploitation approach.⁴⁶ A defence plan for the period of 2010-2014, which was approved in June 2009, foresees the creation of an Arctic military command structure and task force.

While there are many overlapping territorial claims by the Arctic Ocean states, which could trigger high-stakes disputes, they do not present a sense of urgency. Territorial disputes usually delay natural resource exploitation instead of leading to securitization or military confrontation. It will take decades before exploitation of gas and oil in many of the Arctic regions will be possible.

Conclusion

Disputes over the control of Arctic resources and jurisdictional and maritime boundaries are currently managed. Despite the huge gas resource potential in the Arctic, the exploitation of shale gas and high development and production costs have made it uncertain whether the production of Arctic gas will become viable in the foreseeable future. And there is nothing to suggest that the pre-eminence of the oil resources in the Gulf states will be shifted to the Arctic.⁴⁷ From an energy perspective, the media hype about the Lomonosov Ridge is mostly unwarranted. According to the USGS, the area is devoid of valuable natural resources,⁴⁸ and given the distance, it will be very difficult and expensive to develop it. The dispute over the ownership of Hans Island only involves the ownership of the rock itself, not the surrounding waters. Most oil and gas deposits are in non-disputed areas and within the EEZ of stakeholding states. The only exception is the disagreement between the United States and Canada over the maritime border in the Beaufort Sea. But given the existence of a U.S.-Canadian “security community,” there is no reason to believe that it will lead to a confrontation. The same can be said about the disagreement over the Northwest Passage. While Russia has the most to gain from the Arctic and has sometimes used bellicose language⁴⁹ to assert its territorial claims, it has so far adhered to international law. A worst case scenario requires a deterioration of relations between the United States/NATO and Russia, which is unlikely given the mutual desires to improve them, or

International Trade,” The Northern Dimension of Canada’s Foreign Policy,” 13 June 2008, <http://www.international.gc.ca/polar/polaire/ndfp-vnpe2.aspx?lang=en>.

⁴⁴ See, for example, Scott G. Borgerson, “Arctic Meltdown: The Economic and Security Implications of Global Warming,” *Foreign Affairs*, 87, 2 (March/April 2008), 63-77; idem, “The Great Game Moves North,” *Foreign Affairs*, 25 March 2009. <http://foreignaffairs.com>.

⁴⁵ See “National Security Presidential Directive and Homeland Security Presidential Directive,” <http://www.whitehouse.gov/news/releases/2009/01/20090112-3.html>

⁴⁶ Nanna Hvidt and Hans Mouritzen, “Danish Foreign Policy Yearbook 2009,” 54.

⁴⁷ See *The Guardian*, 29 May 2009.

⁴⁸ See Paal Sigurd Hilde, “Polar Politics: Norway and the Arctic: The End of Dreams?” ATLANTIC-COMMUNITY.ORG.

http://www.atlanticcommunity.org/index/articles/view/Norway_and_the_Arctic%3A_The_End_of_Dreams%3F.

⁴⁹ “Russia warns of war within a decade over Arctic oil and gas,” *The Times*, 2009.

linkages to other disputes (such as the Georgian war, which did, however, not have long-term impact on the Russian-Western relations).

The argument has been made here that there is considerable ambivalence about Arctic governance due the absence of multilateral enforcement mechanisms to resolve potential disputes; the Arctic Council's lack of decision-making power; and the question of whether the Arctic Ocean States will form an institutionalized decision-making venue. The Arctic Ocean states have an incentive to settle their disputes. There is, however, bound to be more pressure from non-coastal states or organizations, such as the EU and China, for some kind of internationalization of the Arctic because of the transnational effects of climate change, resource exploitation, and prospects for the opening of new sea lanes. This could create friction among the Arctic states and between them and external actors given their reluctance to open up the Arctic for outside regulations.

What is currently happening in the Arctic is a mobilization for preparedness, not for a real military build-up or a showdown, but for a political and legal jostle for interpreting a region-to-be. The Arctic is currently a low tension area, with the major players abiding by international norms. But since the inbuilt logic of "identity politics" – based on overlapping sovereignty discourses mixed with nationalistic rhetoric – does not necessarily favour inter-state cooperation, the long-term risks of geopolitical conflicts are much greater.

BIBLIOGRAPHY

Borgerson, Scott G., "Arctic Meltdown: The Economic and Security Implications of Global Warming," *Foreign Affairs*, 87, 2 (March/April 2008), 63–77.

Borgerson, Scott G., "The Great Game Moves North," *Foreign Affairs*, 25 March 2009. <http://foreignaffairs.com>.

"Canada, Russia Build Arctic Forces," *Defense News*, 6 April 2009; <http://www.defensenews.com/story.php?i=4025065>.

Canada's Department of Foreign Affairs and International Trade, "Defining Canada's Extended Continental Shelf," 14 August 2008, <http://www.international.gc.ca/continental/limits-continental-limités.aspx?lang=eng>

Canada's Department of Foreign Affairs and International Trade, "The Northern Dimension of Canada's Foreign Policy," 13 June 2008, <http://www.international.gc.ca/polar/polaire/ndfp-vnpe2.aspx?lang=en>.

"Clinton rebuke overshadow Canada's Arctic meeting," Reuters, 29 March 2010, <http://www.reuters.com/article/idUSTRE62S4ZP20100330>.

Gautier, Donald, et al., "Assessment of Undiscovered Oil and Gas in the Arctic," *Science*, 324 (2009), 1175–1179.

Huebert, Rob, "Canadian Arctic Sovereignty and Security in a Transforming Circumpolar World" (Canadian International Council: Ottawa, July 2009), 6.

Hvidt, Nanna and Hans Mouritzen, "Danish Foreign Policy Yearbook 2009" (Copenhagen: DIIS, 2009).

Ingimundarson, Valur, "Iceland's Post-American Security Policy, Russian Geopolitics, and the Arctic Question," *The RUSI Journal*, 154, 4 (August 2009), 74–80.

Kontorovic, A.E., et al., "Geology and hydrocarbon resources in the Russian Arctic seas and their prospects of their development," *Russian Geology and Geophysics*, 51 (2010), 3–11.

Medvedev, Dmitry: "Protecting Russia's National Interests in the Arctic" (Speech at a Meeting of the Russian Security Council), 17 September 2008. <http://www.kremlin.ru/eng/text/speeches/20078/0917/1945>;

"New survey of Arctic's mineral riches could stoke international strife," *The Guardian*, 29 May 2009.

"Norway eyes exploration in new Barents Sea region," Reuters, 27 April 2010, <http://in.reuters.com/article/idINOSN00440120100427>.

Paal Sigurd Hilde, "Polar Politics: Norway and the Arctic: The End of Dreams?" ATLANTIC-COMMUNITY.ORG.

[http://www.atlanticcommunity.org/index/articles/view/Norway and the Arctic%3A The End of Dreams%3F](http://www.atlanticcommunity.org/index/articles/view/Norway%20and%20the%20Arctic%3A%20The%20End%20of%20Dreams%3F).

Pratt, Martin "Droit de la merÀ qui appartient l'océan Glacial arctique," http://www.lecerclepolaire.com/articles_archives/Pratt_maritime_Arctic.html.

"Pushing to the Pole before Arctic seabed deadline," Canwest New Service, 19 October 2009, <http://www.canada.com/Technology/Pushing+Pole+before+Arctic+seabed+deadline/1606705/story.html>.

"Russia warns of war within a decade over Arctic oil and gas," *The Times*, 2009.

Russian National Security Council, "Foundations of the Russian Federation National Policy in the Arctic Until 2020 and Beyond," 27 March 2009, <http://www.scrf.gov.ru/>.

"Russia's Security Council turns to the Arctic," *RIA Novosti*, 30 March 2009.

"The Ilulissat Declaration" issued by Arctic states at the Arctic Ocean Conference in Ilulissat, Greenland, 27-29 May 2008, http://www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf.

The Commission of the European Union, "Communication from the Commission to the European Parliament and the Council. The European Union and the Arctic Region" (the European Commission: Brussels, December 2008).

The Government of Canada, "Canada's Northern Strategy: Our North, Our Heritage, Our Future" (The Government of Canada: Ottawa, 2009), <http://www.northernstrategy.gc.ca/cns/cns.pdf>.

The Ministry of Petroleum and Energy and the Norwegian Petroleum Directorate, "Facts 2010 – The Norwegian petroleum sector," 5 July 2010, <http://www.npd.no/en/Publications/Facts/Facts-2010/>.

The White House, "National Security Presidential Directive/NSPD 66 Homeland Security Presidential Directive/HSPD 25 – Arctic Region Policy" (The U.S. Government: Washington, D.C., 9 January 2009).

U.S. Energy Information Administration (EIA), "Arctic Oil and Natural Gas Potential," 19 October 2009, <http://www.eia.doe.gov/oiaf/analysispaper/arctic/index.html>.

U.S. Geological Survey, "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle" (Washington, DC: U.S. government, 2008), <http://www.usgs.gov>.

"USGS Arctic Oil and Gas Report: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," [geology.com, http://geology.com/usgs/arctic-oil-and-gasreport.shtml](http://geology.com/usgs/arctic-oil-and-gasreport.shtml).

Vasiliev, Anton, "Is the Ilulissat Declaration adequate?" Lecture given at the conference "Arctic – Changing Realities" – sponsored by the Nordic Council of Ministers," 26 May 2010.

Yergin, Daniel, "America's Natural Gas Revolution: A "shale gale" of unconventional and abundant U.S. gas is transforming the energy market," *Wall Street Journal*, 2 November 2009.

DIRECTORATE-GENERAL FOR EXTERNAL POLICIES

POLICY DEPARTMENT

Role

Policy departments are research units that provide specialised advice to committees, inter-parliamentary delegations and other parliamentary bodies.

Policy Areas

- Foreign Affairs
- Human Rights
- Security and Defence
- Development
- International Trade

Documents

Visit the European Parliament website: <http://www.europarl.europa.eu/studies>

