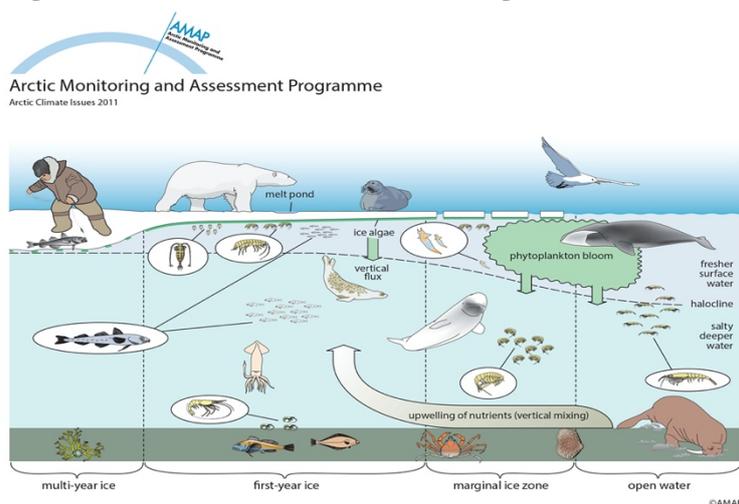


Marginal Ice Zone: Profit vs. Protection

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Introduction

On June 18th, 2020, the Norwegian Parliament disregarded calls made through the World Wildlife Funds' (WWF) MIZ (#SaveTheIceEdge) campaign and voted against a multidisciplinary scientific report provided by a group of Norwegian research institutions and state agencies regarding updated (advised) boundaries of the Arctic Marginal Ice Zone (MIZ), a transitional area between an open ocean and solid sea ice, and opened the area in the Barents Sea for oil and gas explorations.



for food security.

The MIZ is a very dynamic zone; the extent and width of it change depending on the season, wind, and the currents. It follows an annual cycle, and reaches maximum extent in spring, usually in April, before moving back towards the north (central Arctic) during the summer; reaching minimum extent in September. During this northward retreat, conditions are ideal for the growth of primary producers, such as ice algae and phytoplankton. The MIZ food web built on this

The significance of this decision comes from the fact that the MIZ is considered one of the world's most important biological hot spots with high biological productivity and rich biodiversity. It also has a unique ecosystem that supports some Indigenous peoples' traditional way of life. In other words, it is a key zone



foundation nurtures many species from different trophic levels. It is also a very important habitat for a number of ice-dependent mammals and seabirds that live partly in the MIZ. These are dependent on breeding areas on ice and on the food supplies available on the seabed in the shallow bank areas. Thus, the sea ice plays a key role in maintaining productivity and diversity in the Arctic ecosystem.

Figure 1 Photo of MIZ by Haakon Hop

Content of the Scientific Data

The recommendation of the scientific community was to define and draw the southern limit of the MIZ where the sea ice appeared at least 0.5% of the time in April – the annual maximum extent – which would move the line southward since the previous line was drawn where the sea ice probability was 30% according to 1967-1989 data, which was considered to be outdated.

However, the opposing view in Parliament, despite environmental concerns and scientific advice, supported the idea of keeping the line at 30% probability, which would move the line northward when calculated using the new data due to the decline and movement of the Arctic sea ice towards the north.

In Norway, oil and gas activities are prohibited on the north of the MIZ line. If drawn at 0.5% probability, this meant that the MIZ not only would cover a part of the aforementioned promising area for the future discoveries and drillings but also would affect some of the licenses that have

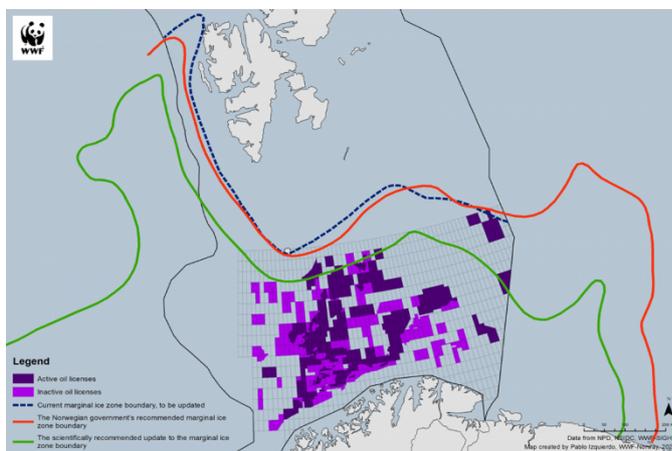


Figure 2 Map indicating MIZ and oil licenses before the voting of the parliament.

been already awarded to companies by the government. This at the very least would bring troublesome relations and legal complications with some of the biggest companies that are operating in the Norwegian Continental Shelf, undoubtedly affecting Norwegian economy.

Non governmental organizations (NGOs), such as WWF, carefully monitored the process and campaigned to defend the integrity of the Arctic marine environment over the profit of oil and gas

companies. The efforts were accelerated furthermore after the Norwegian government, upon reviewing the previous perspectives, announced its proposal to the parliament which instead of listening to the scientific advice drew the line at where the sea ice probability was 15%. Government suggested that they've gone for the middle ground but in reality, this new proposal

nearly corresponded to the same area of the old data's 30% line and did not affect any of the existing oil licenses or limited future exploration areas.

The Decision

The rationale behind the Norwegian Parliaments' decision can be traced back to Norwegian oil and gas sector. Norway is an oil dependent country. Its earnings from the sale of oil and gas have constituted one third of government revenue, as well as providing jobs for nearly a quarter of a million people who were employed not just in the energy industry but in providing the vital infrastructure - ships, buildings and essential services - that is needed to support it.

The oil production of the North Sea wells, after enjoying almost 40 years of virtually uninterrupted increase, reached its highest level in 1996 and has been gradually declining ever since. In 2019 combined oil output of Norway's all fields has been 55.1% lower than it has been in early 2000s. This year, the fluctuation of global oil prices and inconvenient conditions caused by COVID-19 pandemic additionally damaged the Norwegian industry, combined annual production of oil and gas sector has been 37.7% less than in 2019.

Therefore, Norwegians need to find new drilling fields and keep the production level high in order to compensate for the decline. In this perspective, the Arctic holds the greatest promise. Norwegian government has taken numerous actions towards moving the production activity northward, to new fields located above the Arctic Circle. It is also important to note that Norwegian tax rules allow private companies to deduct exploration costs from income generated elsewhere in Norway. This means that the state effectively covers 80 percent of the costs, a major incentive for exploration.

The recent actions of the government demonstrate the dedication to continue moving northwards. With the new line set, the Norwegian Ministry of Petroleum and Energy in June 2020 announced plans to open up eight new regions in the Barents Sea which would include 125 new exploration blocks for the 25th licensing round. About half of these would be in the High North, between 73°N and 74°N parallels. The proposal is now submitted for public consultation and the deadline for consultation comments has been set at 26 August 2020. After the assessment of comments, the 25th licensing round will be announced during the course of autumn 2020 and estimated to finish in the second half of 2021.

According to the Norwegian Petroleum Directorate (NPD), Norway's oil output will grow by 43% from 2019 to 2024 as new fields come on stream and older production facilities are upgraded. By 2023, combined output of oil and gas is expected to reach close to the record level seen in 2004, the agency said, although gas would have a greater share than before.

Threat to Ecosystem

The MIZ ecosystem is particularly vulnerable to the activities of the oil and gas industry. Substrate loss and smothering, underwater noise and abrasion can be given as examples for the pressures put on the ecosystem. The establishment of offshore oil rigs in the area would lead to an increasing number of maritime transportations, which would also put a huge pressure on the ecosystem by increasing the number of collision on marine mammals, marine littering, introduction of contaminating compounds, and consequently, disturbing the habitat and the food webs.

Furthermore, while offshore rigs' normal operational emissions and discharges to air and sea are also concerning, the obvious problem remains as the risk of an oil spill. The increasing activity combined with difficult conditions of the Arctic raises the risk of oil spill. Latest data available through the research of Nordea 'Analyses of Key Companies having Business Operations in The Arctic' clearly displays that errors leading to accidents and spills are already happening in the Arctic. Though Norway is constantly researching prevention and mitigation methods as well as preparing extensive response plans, the questions remain about the potential success of the spill response methods in MIZ's broken ice environment and the damage the vulnerable ecosystem will face. The Arctic Council previously argued that oil and gas activities in the Arctic should not be developed until proven response methods are available.

Legal Gap

Norway's decision, which will inevitably lead to more pressure on the vulnerable MIZ ecosystem, is a prime example for why a more extensive legal framework is needed to protect this area.

As a dynamic area, the MIZ is constantly changing the size and location which means it is a very difficult area to legally define and govern. The level of protection that can be provided for the MIZ would depend on whether MIZ falls within the coastal state's maritime jurisdiction or the high seas. If the MIZ fall within the coastal state's jurisdiction, then the United Nations Convention on the Law of the Sea (UNCLOS) would be the primary source that we have to turn to in order to legally protect the area. Under UNCLOS (clauses 3, 33, 55, 56, 210, 211) coastal states have jurisdiction until 200 nautical miles (nm), borderline for the Exclusive Economic Zone (EEZ), to regulate the marine activities and protect the marine environment. Beyond the EEZ is considered as high seas where the coastal states have no jurisdiction to regulate the MIZ under UNCLOS and customary international law. Thus, if the MIZ falls beyond the coastal state's jurisdiction, then there is no international legal instrument to protect the MIZ and the ecosystem services provided by this unique area.

Considering the gradual northward trend, protection the MIZ is becoming more prominent. The question is: what are the prospective regulatory frameworks in international law that we can use to protect MIZ?

Potential Pathways to Legal Protection

The current legal approach is largely sector-based and fragmented. Yet, the protection of the MIZ requires integrated transboundary ecosystem-based management that coordinates the competing ocean uses of stakeholders, such as the Integrated Coastal Zone Management. In addition to the hydrocarbon developments, the MIZ ecosystem is subject to threats from, for example, increased shipping, eco-tourism, and over-fishing in the Arctic.

As indicated earlier, developing an appropriate legal response will be challenging given the rapidly changing nature of the Arctic environment and MIZ in particular. The International Maritime Organization (IMO), the only United Nations (UN) agency with the mandate to regulate international shipping, has in 2017 adopted the IMO-Polar Code. But the Code in current form does not provide protection for the MIZ. However, there is an ongoing process to amend the Code, and this might present a great opportunity to introduce the MIZ concept and seek protection through the Agency.

The Arctic Council has evolved throughout the years as an intergovernmental forum and proved itself to be instrumental in shaping the governing structure of the Arctic. Under the Council's auspices and through the contribution of its working groups, the Arctic states have adopted a number of non-binding and regional legal instruments, such as the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response. The Arctic Council can be a viable option in creating a legal instrument to protect and regulate the MIZ. As a matter of fact, the Protection of the Arctic Marine Environment (PAME) working group has been developing an area-based management system under the marine protected areas network. It is possible to include MIZ as a sensitive area that requires recognition and protection and create a regional agreement to protect it.

It is also possible to designate MIZ as a Particularly Sensitive Sea Area (PSSA) under IMO. The designation of a PSSA provides special protection to ecologically important and vulnerable areas. The MIZ can be designated as a PSSA if the Arctic states mutually agree on this. However, since PSSA scheme only serves as a guideline it depends on the voluntary compliance of its signatory states. It is also important to note that, to date, IMO has not designated any PSSAs in areas beyond national jurisdiction, namely in high seas. Therefore, if offered and accepted, such a PSSA would be the first of its kind.

Lastly, the ongoing UN negotiations on an international legally binding instrument on the conservation and sustainable use of marine biological diversity in Areas Beyond National Jurisdiction (BBNJ process) would be a critically important tool to use in protecting the MIZ as well.

Conclusion

Norway's decision to allow oil and gas companies to conduct commercial marine activities beyond the advised borders of the MIZ opened the Pandora's box as it exposed one of the world's most important biological hotspots with rich biodiversity and ecosystem services to the potential serious marine pollution, such as oil spills in Arctic.

The industry is always swift to act upon financial opportunities and governments are sometimes prone to prioritize profit over protection. Therefore, legal protection of the environment is vital to ensure sustainable development. The most important aspect of this legalization process is to be proactive in our approach to environmental protection. We should not wait for a disaster to happen in the Arctic to regulate the MIZ.

There is a legal gap in international law to protect the MIZ and this gap should be immediately addressed. The international community should put this issue into their agenda and start discussing the most feasible way to regulate this productive and ecologically vulnerable zone.