PORGMUN

Environment Committee

Protection of the arctic

Introduction

The Arctic: the pristine, immaculate eggshell that caps the tip of the earth and holds unique life, ancient and new. Its hills of ice and snow are receding, making way for cruise ships, offshore oilrigs, and aggressive poaching.

Thousands of individuals join to protest and many organizations promise to protect. Nonetheless, preservation does not exactly go hand-in-hand with expansion and exploitation. The melting Arctic may present a temporary regional economical benefit, but will eventually have negative environmental consequences on a global scale. The rising sea level, the release of greenhouse gasses, and the endangerment and extinction of indigenous species are just a few. The Arctic itself lacks an effective environmental governance system to lay down definite, all-encompassing rules, thus intergovernmental consensus must be reached. Sustainable development may be the key, but is it worth the compromise?

Climate change

Weather pattern alteration is a naturally occurring phenomenon caused by biotic processes, the shifting of tectonic plates, and the fluctuation of solar radiation received by Earth. Since the late 20th century, climate change has received increased attention due to the unrelenting rise of average global temperatures, which many refer to as "global warming". This has been attributed to the increase in greenhouse gasses[1] present in the atmosphere, substantially caused by human activity[2,3]. The most visible acute effects of this anthropogenic climate change are taking place in the Arctic region. Understandably, the melting of sea ice increases with temperature, which leads to consequences on a local and global scale.

Locally, Arctic and adjacent habitats are harmed, polar bears being the most popular victims. Globally, jet stream[4] meandering amplifies, leading to extreme weather anomalies that affect habitat, livelihood, farming, tourism, and wildlife. Furthermore, permafrost melt in the Arctic tundra results in large-scale methane release, exacerbating the greenhouse effect and all its consequences. On the other hand, melting sea ice simplifies maritime transport, which is a substantial, although fleeting, economic benefit.

The issue of anthropogenic climate change has been assessed five times [5] by the Intergovernmental Panel on Climate Change ("IPCC"). The IPCC has recently concluded, that "warming of the

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[1] Water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), and chlorofluorocarbons (CFCs).

[2] This research paper does not cover the greenhouse effect. For information on its specific mechanics visit: https://en.wikipedia.org/wiki/Greenhouse_effect.

[3] According to the IPCC, the chance that global warming and rising sea levels are natural (not anthropogenic) is less than 5%.

[4] A jet stream is a channel of strong winds high in the atmosphere that blows from west to east with large meanders northward and southward.

[5] In 1990, 1995, 2001, 2007, and 2014.

atmosphere and ocean system is unequivocal," that "there is a clear human influence on the climate," and that "further warming will continue if emissions of greenhouse gasses continue." Moreover, annual United Nations Climate Change conferences[6] are held, the most significant product of which is the 1997 Kyoto Protocol, which outlined possibilities for greenhouse gas emission reduction. The 21st COP[6] and the 11th Meeting of the Parties of the Kyoto Protocol were held in Paris at the 2015 United Nations Climate Change Conference. The result is the Paris Agreement, the adaptation by 195 countries of a legally binding global climate initiative, which will become effective in 2020. Its goal is to limit global warming well below 2°C.

But how to protect the Arctic now from anthropogenic climate change?

Oil drilling

Since Arctic petroleum was first produced in 1968 in the Alaska North Slope, oil companies have been salivating over themselves thinking of the billions of barrels[7] buried in the Arctic Circle. Extensive exploration has taken place in Canada, Greenland, Norway, Russia, and the USA. As a result, the Arctic region has been a topic of fervent debate concerning conflicting territorial claims as well as environmental preservation. The primary danger of oil extraction with reference to the latter is oil spillage, which is not only at increased risk due to extreme weather and enormous icebergs, but the cleanup of such a disaster is complicated by the area's remoteness and the inadequacy of current techniques to remove the oil from freezing waters covered with ice. Nonetheless, even if the drilling is successful, harming natural habitats of plants, animals, and people is unavoidable[8].

Several NGOs including Greenpeace have started widespread campaigns protesting against oil exploitation in the Arctic. Greenpeace claims that "the oil industry has demonstrated time and time again that it is simply not prepared to deal with the risks and consequences of drilling in the Arctic" and many officials have confessed that they truly have no spill response capability. They believe that some method may be developed, so drilling continues.

But how to protect the Arctic now from aggressive oil exploration and drilling?

Additional issues

Though tourism appears hazardous in such a fragile environment, organizations such as the World Wildlife Fund or the SMART[9] project believe that as long as it is careful and responsible, it can have beneficial results – some call this "ecotourism."

But how to protect the Arctic now from the consequences of tourism that may not fall within the broad definition of ecotourism?

In addition to being severely affected by anthropogenic climate change, Arctic species such as the polar bear, the walrus, and the bowhead whale are being poached at a substantial rate, which may eventually lead to their extinction.

But how to protect the Arctic species now?

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[6] A formal meeting of the parties to United Nations Framework Convention on Climate Change ("UNFCC") is referred to as a "Conference of Parties" or "COP".

[7] According to a 2008 United States Geological Survey, circa 90 billion barrels of oil and 44 billion barrels of natural gas lie undiscovered north of the Arctic Circle.

[8] Over 4 million people live in the Arctic region.

[9] SMART is an acronym for Sustainable Model of Arctic Regional Tourism.

Sources and links:

- Basic information concerning the Arctic environment:
  http://naturalhistory.si.edu/arctic/html/resources_faq.html
- Indigenous peoples and renewable resources:
  http://www.acia.uaf.edu/PDFs/ACIA_Science_Chapters_Final/ACIA_Ch12_Final.pdf
- IPCC Fifth Assessment Report:
  http://www.ipcc.ch/report/ar5/wg1/
- The Paris Agreement:
  https://en.wikisource.org/wiki/Paris_Agreement
- Russian Arctic protection program:
  http://www.uarctic.org/media/14227/RussianEnvironment_SpuoC.pdf
- The SMART project:
  http://www.arctictourism.net/sat_what_is.htm
- UNEP:
  http://www.unep.org
- UNEP report on climate change in the Arctic:
  http://www.unep.org/gc/gc27/Docs/se/What%20Future%20for%20the%20Arctic.pdf