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the Threat of Climate Change in the
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Perspectives Including the European
Union and the United States of America**

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Introduction

In recent history, the world has become increasingly more aware of the phenomenon that is global warming and its drastic effects on our planet's climate. The Arctic region receives the most negative consequences from said change, and unfortunately is an area often forgotten by many of us who are not situated close geographically. Interestingly enough, an intact and functioning Arctic environment protects our entire planet, and therefore its preservation is vital to our own wellbeing. Each Arctic state plus relevant international actors need to be prepared to define their geopolitical interests in the region. At a time where climate change is disrupting our weather patterns and creating a chain reaction of problems in our world, environmental protection of this region will be of key importance.

The object of this research study is to examine the Arctic region and its very relevant and current significance in international relations. With the rising threat of climate change slowly pushing international scientists, governments, and ordinary citizens to act, the question remains when the entire world will start to listen. While the international community has constructed forums, councils, and even binding agreements related to climate change and by extension Arctic protection, individual states or countries must decide where they stand on the issue, because climate change has no borders and affects us all. By examining the Arctic's significance in chapter 1, the international community efforts to protect the climate and Arctic in chapter 2, and additionally two grand international actors of the European Union in chapter 3 and the United States in chapter 4, we will begin to see the variance of styles in approaching the topics of climate change and Arctic policy. The ultimate point of this analysis is to examine which actors currently dedicate and will dedicate more efforts towards environmental protection, preservation, and sustainable development in the Arctic environment for future generations. Therefore, which international actor, between the EU and U.S., will play leading roles in future environmental protection and preservation of the Arctic against the increasing threat of global climate change?

The hypothesis I have proposed is such that the European Union will rise to become an international player in the Arctic and promote its climate and environmental values in the region, surpassing the actions of the United States in future Arctic protection endeavors.

The method of analyzing the works here was to collect a vast accumulation of detail from books, online scientific statistics, reports, treaties, policy documents, oral interviews, email correspondence, and online surveys. I tried my hardest to be dynamic in the process, searching for ways to collect information not solely from a book or online, since this issue is most certainly very relevant in international relations today. Many of my primary sources are personal interviews or policy, and my survey is a unique examination of U.S. public opinion conducted online. Difficulties arose when emails correspondence was not achieved, or literature tended to focus more on security. After the examination, a deductive process was carried out to arrive to conclusions suspected about the future of the Arctic with respect to the EU and U.S. policy.

1. The Arctic

1.1. The Significance of the Arctic

The Arctic is without a doubt an impressive part of nature and our global landscape. It remains one of the most extraordinarily wild and uncharted territories that few dare to venture into on a constant basis, for it is the northernmost part of our world. Nevertheless, it most certainly has been neglected within international relations due to its geographical remoteness and inhospitable conditions.¹ To be more specific, the Arctic region is most commonly defined as the area that is above 66°34'N which is considered the Arctic Circle. Most scientists use this common Arctic Circle definition, or it can also be defined as the regions in which the average temperature for the warmest month is below 10°C.² The eight Arctic states whose territory lies within or closest to the Arctic Circle boundary are Norway, Sweden, Finland, Iceland, Russia, Canada, the United States, and Denmark (Greenland). Each of these states has their own policy and interests in the Arctic, with their own idea of why the region is important. The Arctic hosts an impressive environment, regulates the earth's climate and has numerous geopolitical interests that entice each Arctic state.

During the Northern Hemisphere's winter, it is one of the coldest and darkest places on earth, and after the September equinox the Arctic actually sees no sunlight filtering into its darkness. The March equinox that follows boosts the light and heat able to reach the Arctic and then finally in June the Arctic experiences 24 hours of sunlight³. These facts make the Arctic a true environment of extremes. The Arctic Ocean basin is situated in the Arctic Circle, the majority consisting of frozen saltwater sea ice that covers it. The Arctic's freshwater is located inside glaciers and icebergs in the area, accounting for around 20% of the world's freshwater⁴. What is ideal for the international community to first understand is the significant impact the Arctic has on our world through its environment, biodiversity, indigenous communities, and climate regulating abilities.

Even though the Arctic yields extreme conditions to survive, there are about 4 million people living in the region year-round, whether they are city dwellers or native Arctic peoples⁵. Some belong to indigenous communities like the Inuit, Sami, or Yu'pik to name a few, and have adapted to this unique environment for ages. They offer vibrant cultures, languages, and a variety of customs that are irreplaceable. Due to the pristine and wild characteristics of the Arctic, the landscape is incredibly special, providing an unspoiled habitat for animals and organisms that are not present in other parts of the world. The extent of biodiversity in the Arctic is incredible, and each species is highly interconnected, including the indigenous peoples who reside there. The most common mammalian species found in the Arctic are polar bears, seals, walrus, narwhals, caribou, arctic foxes, and snowy owls. Additionally, there are many fish, bacteria, and microbes and in general up to 21,000 species of cold-adapted creatures that call the Arctic home⁶. Polar bears, who roam and live on top of Arctic sea ice, are an iconic, well-known species that is under protection in some countries like the United States, along with many others. Arctic habitats are far reaching and divergent, from lowland tundras, wetlands, mountains, ocean shelves, millennia-old ice shelves, pack ice and coastal cliffs⁷. The untouched nature of the Arctic and limited human influence have allowed ecological and natural processes to function

¹ CONDE, E. and IGLESIAS SÁNCHEZ, S. *Global Challenges in the Arctic Region: sovereignty, environment and geopolitical balance*. New York, NY: Routledge, 2017, pp. 1-2.

² NATIONAL SNOW AND ICE DATA CENTER. *What is the Arctic?* [online]. [Accessed 7 February 2017]. Available from: <https://nsidc.org/cryosphere/arctic-meteorology/arctic.html>.

³ NATIONAL GEOGRAPHIC SOCIETY. *Arctic*. [online]. 9 October 2012. [Accessed 20 February 2017]. Available from: <https://www.nationalgeographic.org/encyclopedia/arctic/>.

⁴ *Ibid.*

⁵ NATIONAL SNOW AND ICE DATA CENTER. *Arctic People*. [online]. [Accessed 20 February 2017]. Available from: <https://nsidc.org/cryosphere/arctic-meteorology/arctic-people.html>.

⁶ ARCTIC COUNCIL. *Biodiversity*. [online]. 13 May 2015. [Accessed 21 February 2017]. Available from: <https://www.arctic-council.org/index.php/en/our-work/biodiversity>.

⁷ *Ibid.*

in the past, but this fact of the Arctic is increasingly threatened nowadays due to climate change attributed to human activity.

The Arctic not only houses and cares for some of our world's most unique flora, fauna, and cultures but it possesses the impressive ability to regulate and manage global climate on an absolutely magnificent scale. Therefore, it is essential to keep the frozen nature of the Arctic intact because the world's climate and its own existence depends on it. The surface brightness of sea ice that is reflected back into space is scientifically referred to as the "albedo", and in the Arctic, it reflects back about 80% rate⁸. That light, or solar radiation, is absorbed by the Arctic Ocean at a 90% rate. So, the Arctic plays a critical role in the moderating of ocean temperatures globally, through a process called thermohaline circulation.⁹ Unfortunately, scientists have found that sea ice has been continuously declining in thickness and extent over the past 30 years, allowing more sunlight to be absorbed by the Arctic Ocean, detrimentally increasing temperatures. This has begun to affect our global weather patterns: the very nature of our climate. The poles feel the extreme repercussions of global the most, for they are the most sensitive to this absorption of light. Consequently, it is ironic that the Arctic plays such crucial role in moderating the very same climate that slowly is destroying it over time. This grand climate cycle is something that scientists are only recently beginning to fully comprehend. In this day and age the Arctic region is the spark where global warming effects are felt first, which then radiates outward to affect and change climate patterns around the world.¹⁰

1.2 Geopolitical Interests

As the ice in the Arctic Ocean increasingly deteriorates and is less present during winter and summer months, sea levels rise and the environment generally changes, questions about the geopolitics in the Arctic Ocean and region arise more fervently. When the sea ice fully disappears for entire summer seasons at a time, which some scientists estimate could happen within the next 30 years, these issues will completely dominate international relations. The Arctic Ocean area up for debate spans 14.06 million kilometers and shares borders with the key five Arctic states, namely: The United States, Russia, Canada, Norway and Denmark (Greenland). Each state has their own geopolitical interests in the region, and they will soon all claim parts of this Arctic territory more adamantly to access what the Arctic has to offer in the wake of climate change and its consequences on this specific environment.

The first principle geopolitical issue to be discussed in the Arctic is new trading routes and territorial boundaries. Once ice extent decreases in the future, more negotiations dedicated to establishing each Arctic country's sovereignty will need to be carried out. Russia for example is already planning for increased trade usage of their Northern Sea Route with the absence in quantity of seasonal sea ice. Their usage of "ice-breaker" crafts to plough through thick Arctic ice and continue trade already is prominent, and they are looking to develop further technology to advance these machines to keep routes open year-round. Many countries, including Russia, would like to see their outer continental shelf extended, in order to reach what may lie beyond the 200-nautical mile limit as outlined in the United Nations Convention on the Law of the Sea.¹¹

Other specific interests in the Arctic range from fishing, hunting, environmental and indigenous culture protection. Canada is particularly invested in upholding their solid relationship with the indigenous cultures (First Nations, Inuit, and Metis) that reside in the northernmost parts of their state within the Arctic Circle. They typically also comply and implement necessary environmental protection policy, as does Norway. A European Union ally and close partner, they work together to fund The Svalbard Integrated Arctic Earth Observing System research facility located in Norway's Svalbard archipelago. EU member state, Denmark, closely works with their autonomous state of Greenland, which boasts an extremely high

⁸ NATIONAL GEOGRAPHIC SOCIETY, *loc. cit.*

⁹ NATIONAL SNOW AND ICE DATA CENTER. *Quick Facts on Arctic Sea Ice*. [online]. 2017. [Accessed 12 March 2017]. Available from: <https://nsidc.org/cryosphere/quickfacts/sealice.html>.

¹⁰ *Ibid.*

¹¹ CONDE, E. and Yaneva, Z. Arctic outer continental shelf. In: CONDE, E. and IGLESIAS SÁNCHEZ S. *Global Challenges in the Arctic Region: sovereignty, environment and geopolitical balance*. New York, NY: Routledge, 2017, pp. 19-41.

indigenous population, with some 88% Inuit and 12% Danish, in 2012.¹² It could be said that the emphasis in these Arctic states leans more toward environmental and indigenous protection interests, while keeping their energy and sovereignty rights close as well.

Security, defense, and militarizing the Arctic are other important concepts to be examined. Russia deems this highly necessary, as they already have constructed numerous Arctic Ocean bordering bases, and just finished building a new military base this past April 2017.¹³ This demonstrates their eagerness to expand and construct in the Arctic, controversial and bold move to other states. They are stealthily plotting their expansion in the Arctic, in the wake of climate change. This should put countries like the United States on alert, as they could possibly start to compete with Russia to increase their potential in security and defense in the area, to then create oil drilling advantages. U.S. foreign policy is involved in numerous other conflicts and issues that have been considered higher priorities than the Arctic, and the funding for Arctic research and security is minor compared to other Arctic states. Depending on the views of each president and political leaders of the U.S., there will either be more interest to protect and preserve the Arctic environment, or more interest in militarizing and drilling for oil to find new energy resources. Time will tell if Russia's quick actions in the Arctic will trigger more response from the U.S. in the fight for geopolitical interests.

To continue, when our climate warms and sea ice melts that is precisely when more energy resources extraction opportunities, that previously were not reachable, become available. Global warming is opening the door to increased energy exploitation like we have never seen before, in the search for resources once previously hidden under the dense layers of ice. It is estimated by the U.S. Geological Survey that the Arctic contains 13% (90 billion barrels) of the worlds undiscovered oil reserves and 30% of natural gas resources.¹⁴ Naturally Arctic states that have legal claim to the icy Arctic waters are keen to take advantage of this prospect to improve their economies and their geopolitical status, as it is known that, “energía es un arma geopolítica de estrategia.”¹⁵ As scientific research prospers in the Arctic region, there could be new discoveries about energy resources that further drive the push in Arctic geopolitics. While certainly each country has their own national interests at heart, and the for new sources of energy is evident, we will inevitably see the relevance of environmental protection in the Arctic put into question by some political leaders, as the quest for more oil, militarization or battles for territory intensely take precedence.

Each Arctic state has issued its own variance of Arctic policy, demonstrating which interests are most valuable and important to each. Clearly the interests of others may not always coincide, and in addition many interests are equivalent regarding this complex Arctic region in the north of our planet. The important thing is that policy is in fact being made and continues to be reviewed and revised, to align with the ever-increasing conditions of the Arctic and the state of global warming that threatens it. Now and in the future, environmental protection is an interest that cannot be ignored in the region. The geopolitical tensions that are in the process of arising to even larger heights will soon turn into a dominance race to control the fate of the Arctic region. Environmental threats will increase as more sea ice continuously disappears for months at a time. Somehow, all roads lead back to one of the biggest threats facing our planet today; climate change.

¹² CIA. *The World Factbook: Greenland*. [online]. June 2012. [Accessed 12 March 2017]. Available from: <https://www.cia.gov/library/publications/the-world-factbook/geos/gl.html>.

¹³ BBC NEWS. *Russia's new Arctic Trefoil military base unveiled with virtual tour*. [online]. 18 April 2017. [Accessed 29 March 2017]. Available from: <http://www.bbc.com/news/world-europe-39629819>.

¹⁴ U.S. GEOLOGICAL SURVEY. *Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle* [online]. rep. 2008. [Accessed 15 June 2017]. Available from: <https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>.

¹⁵ DE LAS HERAS PÉREZ, BEATRIZ, Catedrática de la Universidad de Deusto [personal interview] April 20, 2017.

1.3. The Threat of Climate Change

Climate change is the most significant threat specifically to the Arctic at the moment and produces many detrimental consequences to life in this region. We live in a world in which the Arctic is being infiltrated and tainted by the global warming our planet is experiencing, which scientists adamantly insist derives mainly from human activity by industrialization and the release of toxic greenhouse gases (GHG) such as: carbon dioxide, nitrous oxide, and methane. Global warming creates climate change, and this change is increasingly challenging for the Arctic. It is the area of our planet where the dramatic consequences are the most obvious, and there are multiple tipping points that can cause catastrophic changes to our planet.¹⁶ The phenomenon will slowly destroy the Arctic over time, damaging our entire planet's future if we choose not to counteract. Scientific fact proves that this climate change is occurring; with 97% of climate scientists agreeing that the global warming we have been experiencing over the past centuries can be attributed to humans.¹⁷ Additionally, the "magnitude of temperature increase in the Arctic is twice as large as the global increase,"¹⁸ making our northernmost region absolutely and incredibly vulnerable at this moment. Scientists have been researching for years to uncover pure facts behind the sources and consequences of climate change and with each passing year combined with increased technology, we uncover more worrisome statistics about our warming Earth.

It is therefore obvious that climate change is now more than ever an international concern for many countries, clearly making it an essential topic within international relations. The Arctic states that are situated in the region are more than certain that action needs to be taken, and fast. Organizations have been created for this reason, like the Arctic Council, a high-level intergovernmental forum that produces environmental studies and reports. Also, the prominent United Nations, which been a frontrunner in climate change awareness over the past few decades, and has adopted treaties and protocols that help manage efforts to find solutions and act on them. The Intergovernmental Panel on Climate Change (IPCC) created by the United Nations has said scientific evidence for warming of the climate is unequivocal, and that "human evidence on the climate system is clear."¹⁹ The most recent universal step to combat climate change was the United Nations Paris Agreement in 2016 that has been ratified by 147 parties so far. However, while some countries are choosing to take these climate change prevention procedures seriously, others are lacking in efforts due to national interests or denial, even in the face of undeniable scientific facts from respected world leaders in climate science and research studies.

Scientific fact tells us that global warming and climate change does exist. We can see key facts through a variety studies, to name a few: temperature increase, decreased sea ice extent or mass, sea level rise, permafrost melt, or GHG emissions present the atmosphere. For a more statistical examination regarding earth's average temperature, we can see from Graph 1 that the average world temperature has drastically increased over time. The year 2016 was the warmest year on record since modern statistics have been collected, starting in 1880. The temperatures in 2016 were 1.78 degrees Fahrenheit (0.99 degrees Celsius) warmer than the mid-20th century mean according to the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) both American institutions.²⁰ It is true that there have been periods with varied increases and decreases, but the most important thing to note is the gradual increase from 1980-2016, where most warming has occurred. Notably some areas of the world did not have their hottest year on record in 2016, but the Arctic region most certainly did. Global surface temperatures are therefore highly relative indicators of the climate change we face.

¹⁶ DUARTE, C. and WASSMANN, P. *Arctic Tipping Points*. Bilbao, España: Fundación BBVA, 2011, p. 17.

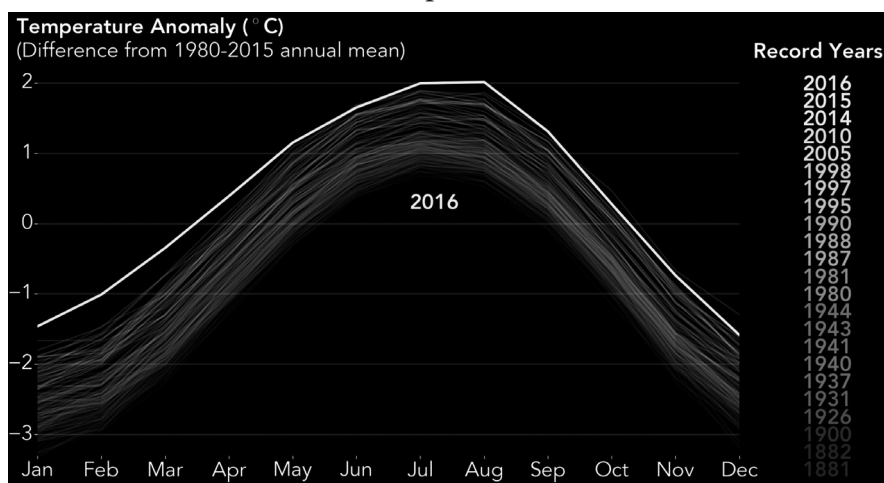
¹⁷ NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. *Climate change: How do we know?* [online]. 2017. [Accessed 17 March 2017]. Available from: <https://climate.nasa.gov/evidence/>.

¹⁸ ARCTIC COUNCIL. *Environment and Climate*. [online]. November 2016. [Accessed 17 March 2017]. Available from: <http://www.arctic-council.org/index.php/en/our-work/environment-and-climate>.

¹⁹ IPCC SECRETARIAT. *Headline statements from the Summary for Policymakers, Climate Change Synthesis Report 2014*. [online]. rep. 2014. [Accessed 19 April 2017]. Available from: https://www.ipcc.ch/news_and_events/docs/ar5/ar5_syr_headlines_en.pdf.

²⁰ NORTHON, Karen and NASA. *NASA, NOAA Data Show 2016 Warmest Year on Record Globally*. [online]. 18 January 2017. [Accessed 17 March 2017]. Available from: <https://www.nasa.gov/press-release/nasa-noaa-data-show-2016-warmest-year-on-record-globally>.

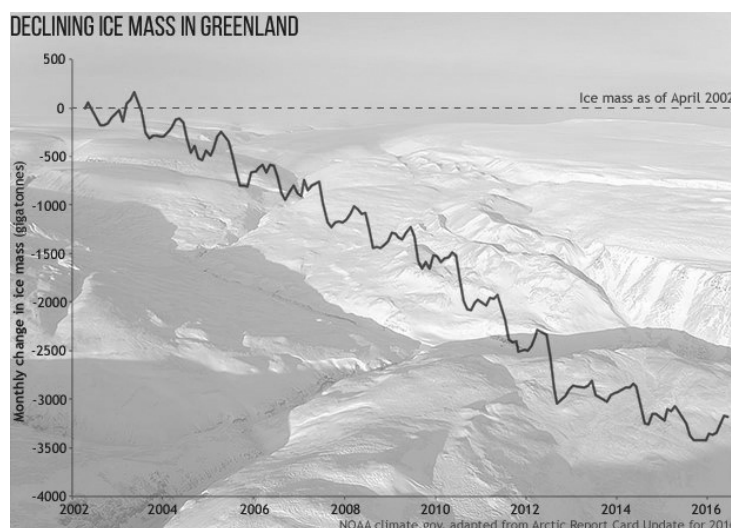
Graph 1



Source: NASA and NOAA

Consequently, rising temperatures produces a decrease in Arctic sea ice, permafrost, snow cover and glaciers, generating a rise in sea level as well. It has been said that ice melt is the starting point that “sets all the other tipping elements contained in the Arctic region in motion”,²¹ like a chain reaction in nature. Melting sea ice is also the most pertinent threat that is occurring at faster rates now than scientists have ever seen in the past. There was a record low for sea ice in the Arctic region during 2016 according to the NOAA’s 2016 Arctic Report Card, especially in the Greenland ice sheet that has continued to lose mass since 2002, as depicted in Graph 2.²² The Arctic sea ice minimum extent was the lowest from October-November 2016 since the satellite record began in 1979 and 28% less than the average for 1981-2010 in October.²³ When the average quantity of sea ice is less present than in past centuries, significant changes in world climate patterns occur, as mentioned previously. Additionally, it allows more geopolitical interests like energy resources, trade routes and to be explored, or exploited in the Arctic.

Graph 2



Source: NOAA

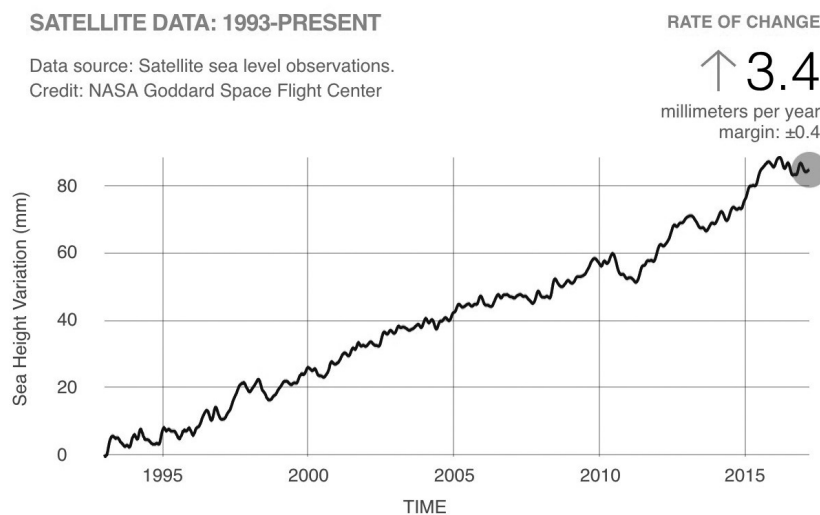
²¹ DUARTE, C. and WASSMANN, P., *op. cit.*, p. 17.

²² NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION. *Unprecedented Arctic warmth in 2016 triggers massive decline in sea ice, snow*. [online]. 13 December 2016. [Accessed 17 March 2017]. Available from: <http://www.noaa.gov/media-release/unprecedented-arctic-warmth-in-2016-triggers-massive-decline-in-sea-ice-snow>.

²³ *Ibid.*

Therefore, this sea ice is highly essential to our lives on this earth. It regulates our climate, and is distorted by human activity through carbon dioxide and other greenhouse gas emissions projected into our atmosphere at high amounts. Moreover, when permafrost temperature rises and melts, the powerful GHG methane trapped in the sediment or soil, begins to be released into our atmosphere. This currently is one of the most imperative points of scientific research and a definite Arctic tipping point of climate change, for methane is estimated to be 20 times as powerful as CO₂.²⁴ Many communities and people around the world have also begun to witness the unfortunate consequences of sea level rise as a result of melting sea ice and permafrost. NASA's last estimate in March of 2017 showed the rate of change in sea level increasing by 3.4 mm per year at the moment. Graph 3 certainly demonstrates the progression of this sea level rise since 1993.²⁵

Graph 3



Source: NASA

Our world is warming, and will continue to warm if we leave it in the state it is today, without critically thinking about changing our energy processes to cleaner and more sustainable solutions. Starting a dialogue in the international community is the first step, which has already begun. Organizations such as the Arctic Council, United Nations, and other NGOs such as Greenpeace are key leaders the world can look to when confronted with climate change issues and questions. The International Panel on Climate Change, the UN body dedicated to the issue, has stated previously that scientific evidence for “warming of the climate system is unequivocal”, and the implications can be felt directly in the Arctic region.²⁶ Scientists and the majority of international society firmly believe this statement in the year 2017.

The threats that climate change poses on our society are plentiful but are not always visible to us in the present moment. This depends on where we are located geographically and the communities in which we are immersed. Unfortunately, the remoteness of the Arctic can cause some of us to regrettably tune out and be unaware of the dangers posed to this extremely important environment in the North. An increase of global warming and climate change produces a chain reaction of actions that are threatening to the Arctic, such as; increased hunting and fishing further North, new transportation routes to be carved out through melting and fragile sea ice, tourism expansion in remote areas, and energy exploitation in the search for more oil.

²⁴ DUARTE, C. and WASSMANN, P, *op. cit.*, p. 18.

²⁵ NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. *Sea Level*. [online]. 2017. [Accessed 20 April 2017]. Available from: <https://climate.nasa.gov/vital-signs/sea-level/>.

²⁶ CORE WRITING TEAM, PACHAURI, R. and MEYER, L. *Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [online]. rep. Intergovernmental Panel on Climate Change, Geneva, Switzerland, 2014. [Accessed 20 March 2017]. Available from: http://ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.

Pollution and environmental degradation are effects of all of these threats to the Arctic, especially the issue of Arctic oil drilling.

Some fail to recognize the Arctic's relevance and choose not to understand why it should be protected above all else. Finding a balance between all interests in the Arctic is certainly challenging. However, it will not bode well for our future generations of all cultures if we do not deem the Arctic environment and climate important in this current moment in time. As a global community, we cannot forget that this environment is so uniquely fragile, containing multiple types of plant and animal species and biodiversity, plus a strong indigenous community that relies on this Arctic environment to remain intact for their lives to continue. Additionally, the climate processes of our world depend on the Arctic to function properly. This is why the significance of the Arctic environment is so important to focus on, and examining how to protect and preserve the Arctic is more crucial than ever before, in the face of increased activity and interest in the Arctic. There are a plethora of international organizations and institutions however that rightfully gives the Arctic the attention it deserves, and each will become increasingly more important in the future as the climate change threat takes its toll on the Arctic environment and ecosystem.

2. International Arctic and Environmental Protection

2.1. The Arctic Council

In order to investigate and manage the interests of the stakeholders of the Arctic, the high-level international cooperation forum called the Arctic Council was created in 1996 by the Ottawa Declaration to collectively research and debate the issues surrounding the region. It was an evolution of the Arctic Environmental Protection Strategy (AEPS) created in 1991, where some of the first Arctic working groups were established. Designed to be a forum first and foremost, it addresses the challenges the Arctic poses and set goals for improving intergovernmental communication, but with a main focus on promoting and researching environmental protection and sustainable development. The eight permanent member states are Canada, the Kingdom of Denmark (which includes Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden and the United States of America. Of these eight members, five of them are considered the original "Arctic Five" (Canada, Denmark, Norway, Russia, and the U.S.) and three are a part of the European Union (Denmark, Finland and Sweden). In addition, there are six international organizations that represent indigenous communities in the region that have Permanent Participant status within the Council. They are as follows: Aleut International Association (AIA), Arctic Athabaskan Council (AAC), Gwich'in Council International (GCI), Inuit Circumpolar Council (ICC), Russian Association of Indigenous Peoples of the North (RAIPON), and the Saami Council (SC). Also included are eight working groups and additionally observer states and organizations that are non-permanent members but would like to contribute to dialogue and cooperation.²⁷

The Arctic Secretariat, which provides an administrative and institutional base for the Arctic Council's activities, has been based in Tromsø, Norway since 2013. Each Arctic state member takes turns holding a two-year Chairmanship post in the Council. Ministerial meetings are generally held every two years to pass the Chairmanship to the next Arctic state, sign agreements, and present recent reports to all members and observers, while Senior Arctic Officials meetings generally take place every six months. The reunion of these Arctic indigenous communities, other Arctic locals, interested organizations, and Arctic state leaders is a cooperative way for all communities to have a part in the dialogue surrounding environmental preservation of the Arctic which is highly necessary in this day and age. The 20th anniversary of the Ottawa Declaration and inauguration of the Arctic Council was celebrated in 2016. Their original goals to, "enhance cooperation,

²⁷ ARCTIC COUNCIL. *Member States*. [online]. September 2015. [Accessed 18 March 2017]. Available from: <http://www.arctic-council.org/index.php/en/about-us/member-states>.

coordination, and interaction among the Arctic states with the active involvement of Arctic indigenous peoples,” still holds true, as they also look ahead to continued peace and stability as a result of its creation.²⁸ Since then, the Arctic Council has changed and been shaped dramatically, but still fully commits its goals of Arctic environmental preservation.

Understandably, the six Working Groups of the Arctic Council revolve mainly around the need for environmental protection and preservation. Biodiversity, marine protection, and the rights of the indigenous communities permanently residing in the Arctic are additionally main topics and core areas of interest. The work that is carried out in the Council is done through six Working Groups with additional specific functions, which are as follows: The Arctic Contaminants Action Program (ACAP), Arctic Monitoring and Assessment Program (AMAP), Conservation of Arctic Flora and Fauna (CAFF), Emergency Prevention Preparedness and Response (EPPR), Protection of the Arctic Marine Environment (PAME), and Sustainable Development Working Group (SDWG).²⁹ These six groups focus on efforts in a wide array of fields, but a more direct and specific approach is carried out through Task Forces or Expert Groups. During the last U.S. Chairmanship of the Council from 2015-2017, there were four specific Task Forces, including: Arctic Marine Cooperation, Telecommunications Infrastructure in the Arctic, and Enhancing Scientific Cooperation in the Arctic, with one Expert Group managing the Framework for Action on Black Carbon and Methane.³⁰ Many projects of working groups were carried out in the most recent U.S. Chairmanship including, the Circumpolar Local Environmental Observer Network (CLEO), Marine Protected Areas (MPA) Network Toolbox: Area-based conservation measures and ecological connectivity, and health projects directed at improving the standard of living and mental health of Arctic indigenous communities.³¹

Given that the most important goal for the Arctic Council is to protect the Arctic, they have fortunately achieved many successful accomplishments over the past 20 years that relate to environmental protection. The years 2004 and 2005 saw the Arctic Impact Climate Assessment (AICA) produced by a joint effort from the Arctic Council and the International Arctic Science Committee (IASC). This was truly a huge stride forward in global climate change awareness. They have been key in helping finish the International Maritime Organization's Polar Code and the Stockholm Convention on Organic Pollutants. In addition, joint frameworks created in the Arctic Council over the past 20 years have led to important successes such as: the Framework Plan for Cooperation on Prevention of Oil Pollution from Petroleum and Maritime Activities in the Marine Areas of the Arctic, the Framework for a Pan-Arctic Network of Marine Protected Areas, the Framework for Action on Black Carbon and Methane, the Circumpolar Biodiversity Monitoring Program, and the Project Support Instrument, which helps provide financial support to pollution mitigation projects in the Arctic.³² Additional regional structures have been facilitated under the Arctic Council to help assess the needs of this environment, like the University of the Arctic and the Arctic Coast Guard Forum for example.

The Arctic Council also pushes forward with prominence and success in UN proceedings. In recent news, the Arctic Council is presenting at the COP23 summit in Bonn, Germany in November 2017. An Arctic Council event is scheduled titled, “The Global Implications of a Rapidly Changing Arctic,” where scientists, indigenous leaders, and other Arctic experts on a panel will present key information gathered from Arctic Council Working Group reports. The main points will revolve around, “how climate change in the Arctic will affect sea level rise, storm tracks and weather in Europe and North America, and biodiversity in the Arctic

²⁸ ARCTIC COUNCIL. *The Arctic Council: A Forum for Peace and Cooperation*. [online]. 19 September 2016. [Accessed 7 November 2017]. Available from: <https://www.arctic-council.org/index.php/en/our-work2/20th-anniversary/416-20th-anniversary-statement-2>

²⁹ ARCTIC COUNCIL. *About Us*. [online]. 26 May 2017. [Accessed 20 March 2017]. Available from: <http://www.arctic-council.org/index.php/en/about-us>.

³⁰ *Ibid.*

³¹ ARCTIC COUNCIL. *Arctic Council Ministers meet, sign binding agreement on science cooperation, pass Chairmanship from U.S. to Finland*. [online]. 11 May 2017. [Accessed 18 May 2017]. Available from: <http://www.arctic-council.org/index.php/en/our-work2/8-news-and-events/451-fairbanks-04>.

³² ARCTIC COUNCIL. *The Arctic Council: A Forum for Peace and Cooperation*, *loc. cit.*

itself.”³³ The UN and the entire international community certainly recognizes the importance of the Arctic Council in COP summits, the highest-level form of climate dialogue, and rightly so.

Main achievements of the Arctic Council revolve around their collective research publications and the investigations of previously mentioned Working Groups and Task Forces. These research publications offer recommendations to Arctic states, participants, observers and non-members on how to manage their Arctic policy and how to structure their ambitions and goals regarding the Arctic. One of the most recent successful works in 2015 was a product and initiative of the SDWG called the Arctic Adaption Exchange. This study and examination focuses on bringing together individuals and organizations to explore how others have reacted to challenges they have faced in their own Arctic area, share their experiences, and then connect further to increase resilience for all.³⁴ In terms of working toward combating climate change, this effort is facilitating a conversation and action at the same time, within the Arctic communities that need to react the most and produce solutions quickly. Therefore, it is a highly effective tool that other states (non-Arctic) can follow when beginning to adapt their policies and debate in the climate change direction. It has helped to convert the challenge of climate change into a beneficial learning opportunity to increase knowledge of all who are affected by this global trend.

Additionally, in the history of successes in the Arctic Council, three legally binding agreements have been negotiated within their forum atmosphere, with the most recent taking place during the 10th Ministerial Meeting in Fairbanks, Alaska, on May 11th, 2017. The “Agreement on Enhancing International Arctic Science Cooperation” states its purpose in its own Article 2 and is described as aiming to, “enhance cooperation in Scientific Activities in order to increase effectiveness and efficiency in the development of scientific knowledge about the Arctic.”³⁵ Key points of the agreement state the recognition of climate change, the need for sustainable development in the Arctic, and conducting all development and research in a peaceful manner. Access to scientific research facilities and materials for all states is also stated, and facilitating the entrance and exit of people and equipment to conduct said research. The use of traditional and local knowledge is also highlighted. This was another great and successful product of the Arctic Council which helps further scientific understanding in order to ultimately help the environment.

Having the best available scientific analysis is essential for further examination of the Arctic, and helps detail how each Arctic state can better protect their own sovereign environment in the region. Additionally, the knowledge collectively shared and generated through the Arctic Council and scientific communities can be better used to communicate to non-Arctic states and international society about the dangerous threats to the Arctic involving climate change. The additional agreements that have been made in the Arctic Council forum are the “Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic”, signed in May 2013 at the Kiruna Ministerial Meeting, and the first being the “Agreement on Cooperation on Aeronautical and Maritime Research and Rescue in the Arctic” signed at the Nuuk Ministerial Meeting in 2011.³⁶

At the 2017 Fairbanks Ministerial meeting, the Fairbanks Declaration was signed by each Arctic state, which goes on to review the work that the U.S. made during its time holding the Chairmanship. Additionally, it specifically states that climate change is an essential threat, and that the Paris Agreement holds extreme importance to slow or stave off the warming of our Earth. The declaration also looks towards the future by passing the Chairmanship on to the next Arctic state, Finland. Finland highlighted their priorities for their

³³ ARCTIC COUNCIL. *Arctic Council at COP23: Climate change in the Arctic and its global impacts*. [online]. 7 November 2017. [Accessed 7 November 2017]. Available from: <http://www.arctic-council.org/index.php/en/our-work2/8-news-and-events/473-cop23>

³⁴ ARCTIC COUNCIL SUSTAINABLE DEVELOPMENT WORKING GROUP. *About Arctic Adaption Exchange*. [online]. 2014. [Accessed 12 April 2017]. Available from: <http://arcticadaptationexchange.com/about>.

³⁵ ARCTIC COUNCIL. *Agreement on Enhancing International Arctic Scientific Cooperation* [online]. rep. Fairbanks, AK, 2017. [Accessed 18 May 2017]. Available from: <https://oaarchive.arctic-council.org/handle/11374/1916>.

³⁶ ARCTIC COUNCIL. *Agreements*. [online]. 25 May 2017. [Accessed 1 June 2017]. Available from: <http://www.arctic-council.org/index.php/en/our-work/agreements>.

2017-2019 Chairmanship, stating that their efforts will be focused on environmental protection, connectivity, meteorological cooperation, and education.³⁷ The Foreign Affairs Minister of Finland, Timo Soini, stated his concerns about the rapidly increasing threats to the Arctic and leaned heavily on the “leading role of the Arctic Council in producing outstanding scientific assessments and addressing the impacts of globalization and climate change.”³⁸ This shows an explicit idea to push the Council’s focus supremely towards the area of climate change and the effects of global warming, after the world collectively experienced the warmest year on record in 2016.

There are limitations to the Arctic Council’s functioning, which make government and state involvement outside of Arctic Council forum meetings so vital in environmental protection efforts. The Council is a forum and a research hub primarily, it is not a state departments or ministry that can collectively make decisions to change or create international laws, nor enforce them. They hold soft power in regard to their oversight of the Arctic, although they can provide the space to negotiate a legally binding agreement. So, while it is true that within the Council, three legally binding agreements have been generated, which that obligates members to act, they are less frequent. The majority of their work revolves around the research and recommendations proposed in their meetings. The Arctic Council also cannot use or discuss military means as a way of inciting a response or fostering debate inside the Council, nor deal with any security or territorial matters in general, as stated in the Ottawa Declaration. It is an effective forum aiming to increase environmental protection and climate change research and discussions, but as mentioned, without the ability to actually shape international environmental policy. They do however possess great influence in the region and are constantly referred to as a framework forum for how to proceed in the Arctic and what to focus on, namely environmental protection.

The Arctic Council is often compared in effectiveness to another Arctic group meeting called the Arctic Five, which purely consists of the narrowed down list of foreign ministers from the United States, Canada, Russia, Norway and Denmark. The advantage that the Arctic Council contains is the voice and diverse opinions of multiple members, participants and observers, who all have a stake in the Arctic. The Arctic Five meetings can either function to foster more debate when Arctic Council Ministerial are held, or by contrast they can purposely avoid the opinions of other Arctic stakeholders not included. While some appreciate the efficiency of the Arctic Five, the inclusion of the Arctic Council is something that gives us a broader vision of what is at stake in the Arctic. Including the indigenous councils and leaders, plus additional observers and non-Arctic states provides a more international perspective.

All in all, the Arctic Council clearly shines in the sectors of environmental protection and sustainable development, and the sectors that Working Groups focus on help to show where priorities lie for these Arctic states with interests in the region. Their ability to include observers, indigenous cultures, and state ministers alike is incredible. Notably, they recognize the existence and consequences of climate change in the Arctic, which is absolutely imperative. As a result of this, the Arctic Council will continue be a crucial forum for indigenous culture affairs, and in upcoming years give these Natives a larger voice, to hear their worries, and work to improve living standards for them when faced with brutal climate change on their doorstep. Since its inception, it has evolved from being solely one of many arenas to foster discussion surrounding Arctic affairs, to becoming the primary one, namely, “*the arena in which important decisions regarding the future of the Far North will take place.*”³⁹ The Arctic Council is the true champion and worthy international forum dedicated to environmental protection, and governments around the world should heed their advice and published research findings.

³⁷ MINISTRY FOR FOREIGN AFFAIRS OF FINLAND. *Exploring Common Solutions: Finland's Chairmanship Program for the Arctic Council 2017-2019* [online]. rep. 2017. [Accessed 11 June 2017]. Available from: http://www.arctic-council.org/images/PDF_attachments/FIN_Chairmanship/Finnish_Chairmanship_Program_Arctic_Council_2017-2019.pdf.

³⁸ ARCTIC COUNCIL. *Finnish Chairmanship*. [online]. 2017. [Accessed 11 June 2017]. Available from: <http://www.arctic-council.org/index.php/en/about-us/arctic-council/fin-chairmanship>.

³⁹ NORD, D. *The Arctic Council: Governance within the Far North*. Routledge, 2016, pp. 1-16.

2.2. The United Nations

As the world's leading intergovernmental organization, the United Nations was formally established in 1945, and plays a prominent role in international cooperation and discussion regarding climate change. The UN's primary focus, given that it was created as result of World War II, is to maintain international peace and security. Therefore, some may believe this does not pertain to the issue of climate change. However, this assumption is drastically incorrect. Climate change threatens the peace and security of all nations and human life, so thankfully the UN has made advances to recognize this. The UN has a large history of international agreements in the climate change sector, some which have truly been proven to help protect the environment, including the Arctic, for the future.

The main and first example of this would be the Montreal Protocol, which was ratified in 1989 and aimed at eliminating the production of certain harmful toxins that contributed to the deterioration of the ozone layer. This international agreement was the first of its type to be ratified by all 197 UN members and is largely considered a success, as the large gap in the ozone layer over Antarctica is slowly recovering, as reported by the World Meteorological Association (WMO) in conjunction with the UN Environment Programme and more parties, who concluded that, "the Montreal Protocol and its amendments and adjustments have made large contributions toward reducing global greenhouse gas emissions."⁴⁰ As we all know, this layer provides a crucial role by protecting their earth from harmful UV sunrays, thereby controlling global warming as well. The Montreal Protocol gave member states and citizens hope when analyzing the success rate of such a large international agreement, and it encouraged more action on climate in the future.

To continue, the UN created the Intergovernmental Panel on Climate Change (IPCC) in 1988. This is currently the leading intergovernmental body surrounding the issue of climate change and the science behind it, created at the request of member governments of the UN. The IPCC is a highly respected scientific body that produces reports that follow the treaty called the United Nations Framework Convention on Climate Change (UNFCCC), which was adopted in 1992 at the Rio Earth Summit and entered into force in 1994. The treaty of UNFCCC calls on each country to achieve the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."⁴¹ Consequently, the target objective in this case was the reduction of harmful GHGs entering our atmosphere. As of 2015, all 197-member states of the UN have ratified it, and these members are formally called Parties of the Convention. The creation of the IPCC and the UNFCCC are two of the most influential advances towards global climate change awareness.

The UNFCCC was a phenomenal treaty for its time, for in 1992 there was significantly less scientific evidence than exists nowadays. The UNFCCC highlighted that developed and more industrialized countries (Annex 1 countries) needed to do the most to gradually eliminate their GHGs. Under the framework, UN Climate Change Conventions are held to discuss global climate and generate new policy. These summits are more commonly referred to as Convention of the Parties (COP). Since their inception, there have been multiple COP summits in which certain protocols have been adopted and ratified by UN members. Most notably, the Kyoto Protocol was adopted as part of the COP7 meeting regarding climate change and GHG emissions in the year 1997. It was actually officially adopted in 2005, but only included 37 developed countries and did not achieve all goals intended of it.

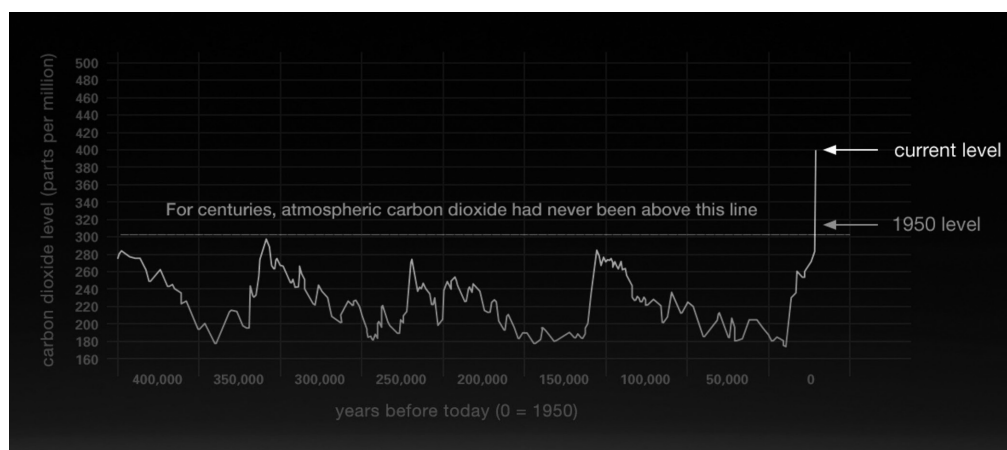
Therefore, the UN was poised to act on a new binding climate agreement in the years leading up to 2016. They took what they had learned from Kyoto, collectively analyzed more recent scientific studies, and fast tracked a cooperative approach to produce the Paris Climate Agreement (Accord), introduced in 2015. This

⁴⁰ WORLD METEOROLOGICAL ASSOCIATION. *Scientific Assessment of Ozone Depletion: 2014, World Meteorological Organization, Global Ozone Research and Monitoring Project—Report No. 55* [online]. rep. Geneva, Switzerland, 2014. [Accessed 1 May 2017]. Available from: http://www.wmo.int/pages/prog/arep/gaw/ozone_2014/documents/Full_report_2014_Ozone_Assessment.pdf.

⁴¹ UNITED NATIONS. *United Nations Framework Convention on Climate Change* [online]. rep. New York, NY, 1992. [Accessed 18 April 2017]. Available from: http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf.

is the most recent UN accomplishment regarding climate change to date. It was the first agreement of its kind, a legally binding framework regarding global climate change, and the final draft was approved by 195 Parties to the Convention at the time of its introduction. The agreement involves developed and developing countries, an improvement from Kyoto, and it entered into force on November 4, 2016 at the COP21 summit in Paris. Currently, 169 Parties have officially ratified the accord.⁴² Ratification signifies more than a verbal pledge or signature, it indicates a government has begun implementing the Paris Agreement goals, and are bound to work at them. The specific goals are numerous, but mainly focus on keeping the Earth's average temperature rise below 2 degrees Celsius in relation to pre-industrial levels. Additionally, it aims to limit general increase in Earth's temperature to 1.5 degrees Celsius. To achieve this, individual countries must set their own Intended Nationally Determined Contributions (INDCs) in order to limit GHG emissions in their home country, focusing heavily on their carbon output. As evidenced in Graph 4, the current CO2 levels in the atmosphere are surpassing anything our world has ever seen, and that is why the Paris Agreement highlights, "effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge."⁴³ In total, the Paris Agreement established these NDCs, a work program for its implementation including progress trackers, an innovative transparency framework, and for the first time invited all countries to the table to set highly ambitious goals and long-term resilience strategies toward combating climate change for future generations. The parties who ratify the Paris Agreement are meant to come together every 5 years for a global stockade to analyze progress and target new strategies.⁴⁴

Graph 4



Source: NASA and NOAA

Apart from climate change, the UN manages and inserts itself in other prominent international relations issues that concern the Arctic region including the management of the world's oceans and seas. It is important to note that unlike the Antarctic, which is considered a continent, the Arctic region is managed in terms of maritime law. Even though the Arctic Ocean and its cryosphere comprised of sea ice is the general terrain of the Arctic environment, there are international waters surrounding the ice masses too. It should be noted that, "there is no doubt about the fact that sea ice has the same legal status as sea water,"⁴⁵ putting the entire Arctic region in legal play for the 5 main states involved. Additionally, as more Arctic sea ice melts as a result of global warming, the Arctic Ocean will open up further and be available for transport usage including trade and other interests.

⁴² UNFCCC. *The Paris Agreement*. [online]. 2014. [Accessed 7 November 2017]. Available from: http://unfccc.int/paris_agreement/items/9485.php

⁴³ UNITED NATIONS. *Paris Agreement* [online]. rep. 2015. pp 1. [Accessed 19 May 2017]. Available from: http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

⁴⁴ UNFCCC, *loc. cit.*

⁴⁵ CINELLI, C. Legal Status and environmental protection of Arctic Sea Ice. In: CONDE, E. and IGLESIAS SÁNCHEZ, S. *Global Challenges in the Arctic Region: sovereignty, environment and geopolitical balance*. New York, NY: Routledge, 2017, pp.129-146.

The United Nations Convention on the Law of the Sea (UNCLOS) was created on December 10, 1982 and celebrated its 30th anniversary in 2012 and had a profound impact on how Arctic states manage these Arctic maritime territory and routes. Many of these articles put forth in UNCLOS are clearly relevant to Arctic management and approaching international relations in the area, but there are specific examples that deal with the sovereign rights of Arctic states and environmental protection. The first is in Part V, Article 61 and speaks about conservation in reference to a state's rights to its Exclusive Economic Zone (EEZ) including access to its outer continental shelves:

“The coastal State, taking into account the best scientific evidence available to it, shall ensure through proper conservation and management measures that the maintenance of the living resources in the exclusive economic zone is not endangered by over-exploitation. As appropriate, the coastal State and competent international organizations, whether subregional, regional or global, shall cooperate to this end.”⁴⁶

The convention also includes sections on the importance of environmental protection in our planet's oceans and bodies of water when navigating, highlighting Arctic areas. This can be found in Part XII of the treaty, titled “Protection and Preservation of the Marine Environment,” which contains Section 8, Article 234 “Ice-Covered Areas”, which reads:

“Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause major harm to or irreversible disturbance of the ecological balance. Such laws and regulations shall have due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence.”⁴⁷

As we can see, UNCLOS set the framework for Arctic governance in 1982, and now the states in the Arctic Five must adhere to it. The international treaty does insert environmental protection into maritime law, which is highly beneficial to Arctic protection. It calls on states to utilize the best scientific evidence and create policy accordingly, to protect Arctic marine waters. This is crucial given that some states may have motives to overexploit new territories in the search for energy reserves, especially looking into the future. It should be noted that one key state of the Arctic Five, holding Arctic Ocean sovereignty, is not a ratified member of UNCLOS: The United States. These implications will be further explained later in this analysis.

Due to the grand scale of the United Nations, there is no specific Arctic policy regarding the region and its environmental protection. The closest relatable legislation is clearly the UNCLOS agreement, which must be said, is very vital to the outcome of Arctic protection and management. It is worth mentioning that the International Maritime Organization (IMO) is another important organization under UN framework that seeks to foster international cooperation surrounding the world's oceans and maritime spaces, which clearly includes the Arctic. The UN encompasses so many different departments and initiatives that a specific Arctic environmental agreement will have to be debated in the future though. However, many countries are wary of this prospect of an Arctic treaty, and would like to see its protection remain primarily in the hands of each Arctic state and high-level forums like the Arctic Council.

The UN's urge to combat Earth's rising temperatures and GHG emissions will most certainly be beneficial to the Arctic environment however, and the continuing COP meetings are vital international dialogue that needs to be had. The next is COP23 in Bonn, Germany on November 6th-17th, 2017, and will no doubt cover all current and necessary talking points regarding the state of the Arctic environment. It will bring together a myriad of organizations, indigenous groups and governmental leaders, involving as many global partners as possible. In the end, the UN trusts its crafted bodies and agencies, but more importantly the workings of

⁴⁶ UNITED NATIONS. *United Nations Convention on the Law of the Sea [online]. rep. 1982. Part V, Art. 61. [Accessed 20 May 2017]. Available from: http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf.*

⁴⁷ UNITED NATIONS. *United Nations Convention on the Law of the Sea [online]. rep. 1982. Part XII, Sec. 8, Art. 234. [Accessed 20 May 2017]. Available from: http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf.*

groups such as the Arctic Council, Arctic states, and NGOs or other international organizations to carry out detailed specific motions regarding Arctic protection. The UN provides many international frameworks and guidelines with UNCLOS being the most specific recognition made regarding Arctic policy and law, and the IPCC and UNFCCC as crucial milestones in combating global warming and climate change.

2.3. Other NGOs and International Organizations

In addition to the Arctic Council and the United Nations many other non-governmental organizations and international organizations play a role in Arctic preservation and its environment. For example, the International Arctic Scientific Committee (IASC) is an international organization and prominent observer of the Arctic Council that regularly publishes scientific data and reports that deserve to be recognized. The organization itself contains five Working Groups that are as follows: Atmosphere, Cryosphere, Marine, Social and Human, and Terrestrial.⁴⁸ They were founded in the year 1990 by national scientific organizations of each of the eight Arctic countries and they continue working hard today to bring facts and science to the table internationally, to help the world fully understand the Arctic region and its effects on global climate.

Regarding Arctic Council and IASC cooperation, Allen Pope, a representative of the IASC, says that, “IASC contributes to support the work of various Arctic Council Working Groups and Task Forces. For example, IASC contributed quite a bit to the Scientific Cooperation Task Force and helps coordinate reviews for some Arctic Council assessments, including the original SWIPA report.”⁴⁹ This Snow, Water, Ice, and Permafrost Assessment report, as a part of the Arctic Council’s Arctic Monitoring and Assessment Program (AMAP) Working Group, was key in introducing even more scientific data about the Arctic environment into international dialogue. As mentioned, they also worked with the Council in 2004 and 2005 to produce the first Arctic Climate Impact Assessment, and additionally had a role in advising and inserting input into the recently signed Agreement on Enhancing International Arctic Science Cooperation in 2017 at the Fairbanks Ministerial.⁵⁰ IASC certainly promotes Arctic protection through research and they are a vital observer in Arctic Council affairs, proving the importance of Arctic and climate related organizations and the expert role they play in international forums when trying to protect this northern polar environment.

The non-governmental organization Greenpeace also plays a prominent role in Arctic environmental protection causes and addresses the increasing threats of climate change and oil exploitation. They are campaigning for a large marine sanctuary in the northernmost Arctic waters. This “Save the Arctic” movement continually asks global leaders to designate a large portion of this uninhabited area as a sanctuary to protect it from big oil companies and overfishing, which could upset the Arctic ecosystem. Therefore, Greenpeace’s other campaign centers on protesting big oil companies’ exploitation in Arctic waters. Most recently in 2015, Shell, one of the biggest oil companies on the planet, announced its plans to stop Arctic oil drilling off the coast of Alaska and in the Beaufort Sea. The company was met with vast opposition from the public during its search and Greenpeace reports they claim that, “oil it has been able to find isn’t worth the high costs of what has been one of the most dangerous and expensive projects in the history of fossil fuel extraction.”⁵¹ That is not to mention the cost of an oil spill that could ensue if drilling were to continue. Overall organizations like Greenpeace keep big oil and the government in check by getting the public opinion heard and rallying people behind a variety of causes. They promote polar bear protection as well and highlight the devastating effects of climate change on Arctic species.

⁴⁸ INTERNATIONAL ARCTIC SCIENCE COMMITTEE. *Working Groups*. [online]. [Accessed 10 March 2017]. Available from: <http://iasc.info/working-groups>.

⁴⁹ POPE, ALLEN, Executive Secretary of the International Arctic Science Committee [email correspondence] May 26, 2017.

⁵⁰ POPE, ALLEN, *Ibid*.

⁵¹ GREENPEACE INTERNATIONAL. *You did it! Shell abandons Arctic drilling*. [online]. 29 September 2015. [Accessed 18 May 2017]. Available from: <http://www.greenpeace.org/international/en/news/Blogs/makingwaves/save-the-arctic-shell-abandons-arctic-drilling/blog/54263/>.

3. The European Union and the Arctic

3.1. Introduction

Despite not having a direct border with the Arctic Ocean, the European Union is heavily interested in the outcome of foreign policy issues especially environmental protection and the effects of climate change that take place in Arctic region. Greenland, could be considered the link that proves EU legitimacy specifically regarding Arctic Ocean territory, but this legally falters considering Greenland is autonomous territory of Denmark and voted to exit the EEC eventually leaving in 1985.⁵² However, the EU, Denmark and Greenland all three still work closely together in Arctic affairs. The Arctic region, as we defined previously as the Arctic Circle, does additionally include the EU member states of Finland and Sweden. Norway has a territorial border with the Arctic Ocean, but unlike its other Nordic neighbors, is not a EU member state. Norway, along with Iceland, are members of the European Economic Area (EEA), and therefore do cooperate frequently with the EU economically, and nowadays concerning Arctic affairs.

The states of Denmark, Finland, and Sweden are permanent members of the Arctic Council, further pulling the EU into Arctic framework. Each of these EU member states and Arctic countries have produced versions of their own state Arctic Policy. As the world is increasingly gaining more knowledge about the Arctic and its importance, the EU is steadily catching on, intending to lead in global efforts. They work hard to cooperate with their democratic neighbors and other foreign powers to negotiate and manage Arctic issues surrounding its preservation and wellbeing first and foremost. The EU is considered a leader in policy creation and more importantly a leader in visible efforts that shape environmental protection and Arctic conservation. Their primary interests remain in this area, along with interests in fishery management and EU maritime area management. The European Commission has a branch of Maritime Affairs, which handles their fishing inquiries and ocean protection, and do in fact have a Polar Officer specializing in Arctic matters, named Kim Kuivalainen. Their first Arctic Policy was developed around 2008, reformed in 2011, but most recently in 2016 they published a very well thought out, fresh, and detailed Arctic Policy, which aims at a determined drive to keep the Arctic pristine in nature and protected.

Federica Mogherini, the High Representative for European Union for Foreign Affairs and Security Policy and Vice President of the Commission, noted the key environmental aspects of the policy in her speech presenting the newly formed Arctic Policy in 2016. She weighed in on the importance and symbolism of the EU recently having signed the Paris agreement as well, saying, “You know the European Union was key in achieving the climate change Agreement last December. We are committed to the full implementation of it. And our work on the Arctic is an important part of how we face the challenge of climate change and we avoid major catastrophes for the entire world.”⁵³ Furthermore, Karmenu Vella, the EU Commissioner for Environment, Fisheries, and Maritime Affairs, detailed the immense importance of the environment for the EU when developing policy and actions in the Arctic region by saying, “Global weather patterns, our oceans, ecosystems and local biodiversity – the Arctic influences them all. While increasing human development is inevitable, it is in our hands to do it in a sustainable way. We have to do this in full respect of the livelihoods of those who live in the region and by protecting its most valuable resource: the environment.”⁵⁴

Since its April 2016 release, the policy has undergone a few minor changes, but the majority of the policy remains intact. On June 20, 2016, the Council of the European Union offered up some conclusions about the

⁵² EUROPEAN COMMISSION. *Greenland-International Cooperation*. [online]. 2017. [Accessed 11 April 2017]. Available from: https://ec.europa.eu/europeaid/countries/greenland_en.

⁵³ EUROPEAN UNION EXTERNAL ACTION. *Remarks by High Representative/Vice-President Federica Mogherini at the presentation of the integrated EU policy for the Arctic* [online]. 27 April 2016. [Accessed 10 June 2017]. Available from: https://eeas.europa.eu/headquarters/headquarters-homepage/5093/remarks-high-representativevice-president-federica-mogherini-presentation-integrated-eu-policy_en.

⁵⁴ EUROPEAN COMMISSION. *A new integrated EU policy for the Arctic adopted* [online]. 27 April 2016. [Accessed 10 June 2017]. Available from: http://europa.eu/rapid/press-release_IP-16-1539_en.htm.

April 2016 policy, sincerely defining the need to “enhance socio-economic resilience”⁵⁵ of Arctic inhabitants and additionally putting increased emphasis on environmental resilience as well. The Council mentions as well that, “an ambitious cross-spectrum and well-coordinated Arctic policy will contribute to the EU’s engagement in an increasingly strategically important region. The Arctic is an area of active cooperation between major regional and global actors; reinforcing the EU’s engagement in the Arctic is also important from a foreign and security policy point of view.”⁵⁶ Therefore, the main theme in this policy and these declarations from high-ranking EU officials is that as a global actor, the EU has a legitimate responsibility to act in the Arctic. The European Parliament also adopted a resolution consisting of additional texts to add to its newly crafted Arctic Policy on March 2017. As will be explained, the EU is diving into Arctic affairs in a bold and astounding way, intending to become a global leader in environmental protection and sustainable development in the region.

3.2. EU Arctic Policy and Interests

The European Union compiled their most recent, comprehensive Arctic Policy through the EU External Action division, in accordance with the European Commission and the High Representative of the Union for Foreign Affairs and Security on April 27th, 2016 titled “An Integrated European Union Policy for the Arctic”. This joint communication to the European Parliament and the Council reflects the EU’s interest in the Arctic, acknowledging that three of their member states are Arctic states; Denmark, Finland and Sweden. While the engagement in these specific state governments is heavily necessary, the EU is positive it can play an affirmative role creating multilateral dialogue. Three key points the EU focuses on in the communication are: 1. Climate change and safeguarding the Arctic environment 2. Sustainable development in and around the Arctic and 3. International cooperation on Arctic issues.⁵⁷ Other matters that the EU is willing and disposed to focus on that make up their 39 points in the policy range from energy interests, security and territory. For now however, the EU has made clear that climate change comes as a priority in the Arctic. They believe it is necessary to project their collective feeling of responsibility to tackle these three priority issues and begin to make a permanent difference in the region. Furthermore, they promote the importance of science, research and innovation when working on these focal points. The EU Arctic Policy also explicitly mentions that this action plan should contribute to the implementation of the Agenda 2030, promoting the 17 UN Sustainable Development Goals.⁵⁸

3.2.1. Climate Change and Safeguarding the Arctic

The first key point of climate change and safeguarding the Arctic environment is likely the most significant interest of the European Union in the Arctic. The EU recognizes the scientific facts that are present, and the statistical analysis that show the Arctic is warming at twice the rate of the rest of the world, prominently due to human industrial activity and GHG release. They acknowledge NASA’s findings that Arctic summer sea ice extent has decreased by up to 40% since 1979.⁵⁹ The importance of the Arctic environment in their opinion must be safeguarded to “protect Arctic and global biodiversity as well as the livelihoods of Arctic inhabitants.”⁶⁰ So, the EU defines how they are mitigating and adapting to the global problem of climate change by explaining their personal actions. It is important to note that in all action they take, the EU states

⁵⁵ COUNCIL OF THE EUROPEAN UNION. *Council Conclusions on the Arctic* [online]. rep. The Council of the European Union, 2016. [Accessed 10 June 2017]. Available from: <http://data.consilium.europa.eu/doc/document/ST-10400-2016-INIT/en/pdf>.

⁵⁶ *Ibid.*

⁵⁷ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION. *An integrated European Union Policy for the Arctic* [online]. rep. April 27, 2016. [Accessed 7 April 2017]. Available from: http://eeas.europa.eu/archives/docs/arctic_region/docs/160427_joint-communication-an-integrated-european-union-policy-for-the-arctic_en.pdf.

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*

⁶⁰ EUROPEAN EXTERNAL ACTION. *Climate Change and the Arctic Environment*. [online]. 2 February 2017. [Accessed 15 May 2017]. Available from: https://eeas.europa.eu/arctic-policy/eu-arctic-policy/20955/climate-change-and-arctic-environment_en.

they will commit to continue implementing policy aligned with the UN Sustainable Development Goals, or Global Goals, and follow the UN Agenda for 2030.

Research is a necessary tool when trying to understand the effects that climate change has on the Arctic. Therefore, the EU has pledged that it will continue to maintain funding to Arctic research under the EU research and innovation program, Horizon 2020 (2014-2020), and is expected to give about 40 million euros to the 2016-2017 work program towards Arctic related research. This program will focus on studying the impact of climate change through an integrated observation system, the effects on permafrost, and the socioeconomic impact of climate change.⁶¹ The EU-PolarNet Initiative is another research effort that the EU will be funding. This initiative supports better EU polar research with the introduction of better infrastructure towards scientific and observational capabilities in the Arctic region. It will integrate 22 European research institutions that will be working to “deliver an integrated European polar research program” along with combined efforts from other research organizations in Canada, Russia and the USA.⁶² EU Space Programs will also be funded to provide research about climate change and its effects on the Arctic, through the Copernicus program and more.

They also announce in this policy that the EU will support the implementation of the Svalbard Integrated Arctic Earth Observing System, a multinational research system that is based in and throughout the archipelago of Svalbard, Norway. It was created to monitor the Arctic and address earth climate science questions, and has recently sent in an application to call for more funding to develop, upgrade and renew their scientific infrastructure necessary to continue monitoring efforts.⁶³ The EU funds through Horizon 2020 toward these pan-Arctic observing initiatives and works with groups like the Arctic Council to promote long-standing research infrastructure in the Arctic. This is the most vital way to truly be aware of the consequences in the Arctic, and thankfully the EU has been majorly involved in Arctic research over the past decades.

The EU recognizes that in order to safeguard the Arctic, it is highly necessary to reduce the amount of GHG emissions they contribute into the atmosphere, to try and curb the global warming of the earth. They align with the doctrine in the UN Paris Agreement and have pledged to work to keep the global temperature average increase below 2 degrees Celsius. The EU has committed to the reduction of GHGs like CO₂ by 40% by the year 2030 and an even higher 80% by 2050 in relation to the EU levels in 1990.⁶⁴ In addition, they have committed 20% of EU funding to go towards climate change initiatives and projects. The EU makes clear limitation of black carbon and methane should also be a point of interest alongside its commitments for CO₂ and GHG reduction by 2030 and 2050. The available routes that they can achieve these goals are through the Convention on Long-Range Transboundary Air Pollution (UNECE CLRTAP), the Gothenburg Protocol, the Air Quality Package proposal made by the EU Commission, the Climate and Clean Air Coalition, and engagement with Arctic Council Task Forces like the Black Carbon and Methane initiative⁶⁵.

The EU states that they are ready and prepared even further to work with Arctic states and indigenous peoples in multinational forums, like the prominent Arctic Council, to promote climate change adaption and resilience strategies. Adaptation also is a prominent focus of the European Union, as they have created the European Climate Adaption Platform, to collectively work to share data and information regarding climate change to seek better more intuitive solutions and ultimately learn for the future. In this multinational framework, the EU is also committed to continuing with multilateral agreements that have to do with the environment, such as Convention for Biological Diversity, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Convention on Migratory Species and Wild Animals, and

⁶¹ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁶² HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁶³ SVALBARD INTEGRATED ARCTIC EARTH OBSERVING SYSTEM. *Application to the call from the Research Council of Norway on new infrastructure of national significance*. [online]. 2016. [Accessed 20 May 2017]. Available from: <https://www.sios-svalbard.org/news20161130>.

⁶⁴ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁶⁵ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

Convention on Regulation of Whaling to name a few⁶⁶. They aim to follow the widely accepted international law within UNCLOS regarding the Arctic sea, in its determination to protect marine environment. Moreover, the EU believes that international cooperation could lead to a new instrument under UNCLOS that manages proper and sustainable use of marine environment in areas that are not under specific national jurisdiction. This is an important and interesting concept that will have to be examined further in the future.

Additionally, the EU wants to further its efforts to conserve and protect biodiversity and work to continue establishing marine protected areas in and around the Arctic in the face of the pollutants that taint the Arctic atmosphere and sea, interrupting natural processes. They highlight the support for global treaty under the Stockholm Convention in this sense, and think all Arctic states should support it. Organic pollutants specifically are the targets here, as well as the increasing need to prevent invasive species from entering the Arctic environment. Finally, they highlight the ever present and obvious need to protect the Arctic environment from oil and gas activities and those accidents associated with them. Oil spills are a huge threat to the environment, and in the Arctic, they can be detrimental, plus difficult to tame and clean. Upholding high standards to prevent accidents and maintain control of the Arctic environment are essential for the EU, and they state that they agree with and will follow the Arctic Council's Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic.⁶⁷

3.2.2. Sustainable Development

In addition to the necessary actions that the EU recognizes need to happen in the face of climate change, they note that development in the Arctic is inevitable. However, this development must be sustainable in nature and intend to avoid harming the Arctic environment even further. Around 4 million people do call the Arctic home, and within this challenging northern terrain development and infrastructure growth will happen over time, to connect this Arctic space with the rest of the world and more importantly, the Arctic communities amongst themselves. The Arctic is abundant in natural resources as well, which those indigenous cultures and other Arctic peoples rely on for food, shelter and overall growth and survival. It will be necessary to ensure that Arctic peoples have what they require to continue living their lives, and in a sustainable fashion.

In their Arctic Policy, the EU notes that a manner could be explored to connect the EU to the Arctic Ocean, open up trade routes or channels in a sustainable fashion to be able to connect the EU and Arctic regions better. Through their connections between close countries like Greenland (autonomous state of Denmark), Iceland, and Norway the EU can intend to enhance its role. Iceland and Norway are also both members of the EEA, and perhaps the EU can try to implement policy or strategy for development in the Arctic that aligns with EEA regulations or ideas. The EU highlights that it supports investments and capacity building in the Arctic, with a heavy emphasis on research and innovation, plus a shift towards a low carbon economy in the European Arctic region.⁶⁸ They recognize that building up infrastructure in the harsh Arctic environment is difficult, so perhaps they can better allocate their funds to sustain this type of specific durable architecture and initiatives needed in the region. National and regional authorities have told the EU that more coordinated effort towards Arctic sustainable infrastructure would be a positive.

The EU wants to focus on "Green Economy" here, to make sure that they are meeting the detailed environmental standards that are required to develop in the Arctic. In this "green" movement, the EU could try to implement more action regarding sustainable multi-source energy systems, eco-tourism and low emission food production.⁶⁹ New innovations in "Blue Economy" sectors also interest the EU, such as aquaculture, fisheries, offshore renewable energy, maritime tourism and marine biotechnology.⁷⁰ Their ideas

⁶⁶ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁶⁷ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁶⁸ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁶⁹ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁷⁰ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

within Blue Economy will most certainly be crucial parts of any Arctic efforts towards sustainable energy; it will be a primary focus in this region. Since the Arctic hosts such a distinct climate with often times below freezing conditions, the opportunities for innovation are numerous. Therefore, the EU chooses to support these initiatives within technology and infrastructure, working towards producing advanced technologies capable at working in extreme conditions, especially during the Arctic winter, to generate “investments in energy efficiency and renewable energy solutions”.⁷¹ The Commission states that they are going to explore how European Structural Investment Fund (ESIF) and Horizon 2020, specifically under the InnovFin program, can aide in the funding process and lead toward sustainable, environmentally friendly solutions that meet ‘Arctic standards’.⁷²

The EU notes that efficient and increased access to the European Single Market is essential for Arctic development in the EU Arctic states and EEA member states. Therefore, as the EU tries to update their Single Market to include strategies and plans for the Digital Single Market, they will continue to promote Arctic business opportunities and development here. Also, the European Enterprise Network has been relatively successful in “coaching Arctic small and medium sized businesses at their request,”⁷³ so the Commission says that they will continue to carry this out. Increased investment in the Arctic region is another key area of concern because the European Arctic is hardly receiving any investment endeavors.

A European Arctic stakeholder forum was suggested in order to increase cooperation and identify where funding can be allocated in the region, towards research and investments. It brings together EU institutions, member states (Norway and Iceland are included through the EEA, and Greenland through the EU-Greenland Joint Declaration), plus regional and local authorities that can include indigenous communities as well. An annual Arctic Stakeholder Conference has been proposed also, as a joint effort to help with collaboration and networking in the region. The most current event took place June 15th and 16th in Oulu, Finland titled “A Sustainable Arctic-Innovative Approaches.”⁷⁴ Both EU Foreign Affairs Minister Mogherini and Commissioner Vella were present representing the EU, along with the Finnish Foreign Affairs Minister, Timo Soini. Commissioner Vella stated of the high-level meeting, “On the Arctic, just as on the Paris Agreement I can assure you that the EU is solid. That is something that will not melt under any political heat.”⁷⁵ This was a clear display of EU integration and solidarity with Arctic affairs alongside the current European Arctic Council Chairmanship country. Sustainable transport links are also a key focus of the EU. Currently in the North, the upper territory of Finland, Sweden and Norway, a large part of the trans-European Network for Transport (TEN-T) exists, which supports the implementation of sustainable transport options that connect maritime and land transport.⁷⁶

The EU mentions their already prominent Copernicus program; a program in which they would like to increase research and further development. Copernicus is a satellite Earth monitoring and observation system managed by the European Commission and the European Space Agency which already provides great global data and satellite imagery that helps the EU understand key facts and trends regarding climate, the environment, among other safety and security information⁷⁷. In addition, once the European Global Navigation System (Galileo) is fully implemented, it will be able to provide key Arctic information for

⁷¹ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁷² HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁷³ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁷⁴ EUROPEAN COMMISSION. *Register to the high-level event A sustainable Arctic – innovative approaches*. [online]. 4 May 2017. [Accessed 1 June 2017]. Available from: https://ec.europa.eu/maritimeaffairs/content/register-high-level-event-sustainable-arctic-%E2%80%93-innovative-approaches_en.

⁷⁵ EUROPEAN COMMISSION-MARITIME AFFAIRS. *High Representative/Vice-President Mogherini and Commissioner Vella co-host a high-level event on EU Arctic Policy in Oulu (Finland), 15-16 June*. [online]. 14 June 2017. [Accessed 1 June 2017]. Available from: https://ec.europa.eu/maritimeaffairs/content/high-representativevice-president-mogherini-and-commissioner-vella-co-host-high-level-event_en.

⁷⁶ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁷⁷ EUROPEAN COMMISSION and EUROPEAN SPACE AGENCY. *Copernicus-Overview*. [online]. 2016. [Accessed 1 June 2017]. Available from: <http://www.copernicus.eu/main/overview>.

navigation purposes. The Arctic is not currently covered on geostationary satellites, and therefore can truly benefit from these space services the EU can provide.⁷⁸

Lastly, security issues are brought to the table, as the EU recognizes a need to have a specific security and defense policy put forward to compare with other Arctic states. They emphasize the importance of increased cooperation regarding the safety of navigation in the Arctic region. The increased opening of the Northeast Passage is something that the EU has to keep in mind. Due to changes in climate and global warming, this route is becoming increasingly more explored by countries including Russia, as mentioned before. The territorial boundaries here are necessary to define and security threats will be more prominent once the passage opens up for wider usage. The EU supports the International Polar Code, surrounding shipping matters and search and rescue in the Arctic, which came into effect on January 1, 2017.⁷⁹ There is also a newly established Arctic Coast Guard Forum that could help in “fostering safe, secure and environmentally responsible maritime activity”⁸⁰ in the Arctic region for years to come.

3.2.3. International Cooperation

As the third priority of the EU, increased and sustained international relations is highly important. Nothing will be solved in the Arctic with the efforts of one lone country, or multiple countries working separately without collaboration. Notably the EU states that a common base of interest should be the sharing, understanding, and acceptance of scientific research to combat climate change and protect the Arctic environment. Their world leadership regarding scientific endeavors should be recognized and they note the importance of spreading their expertise globally. The EU wishes to keep and generate a high level of peaceful and proactive cooperation with Arctic states, councils, and forums to make sure the region is being properly managed and protected.

There are many different forms of cooperation for the EU to assert active membership either multilaterally or bilaterally, and at the international or regional level. Multilaterally, they work at the international level with the United Nations and their subsequent agencies or conventions (UNFCCC, UNCLOS, IMO, UNEP etc.) and through international cooperative forums or councils like the prominent and leading Arctic forum, the Arctic Council. There are regional groups the EU works with on a constant basis, most frequently with the Barents-Euro Arctic Council, Northern Dimension, the Council of the Baltic Sea States, and the OSPAR Commission.⁸¹ Even though the EU is not a member of the Nordic Council of Ministers, they additionally work closely with this council seeing as Denmark, Finland and Sweden are all members. Furthermore, there are regional UN initiatives that the EU is also engaged in such as the UN Economic Commission for Europe and especially the UNECE Convention on Long-Range Transboundary Air Pollution (CLRTAP).⁸²

Bilaterally, the EU welcomes cooperation between all Arctic and even non-Arctic states. They certainly work with its EEA members of Norway and Iceland. Regarding the special autonomy of Greenland, the EU actually has a joint EU-Greenland Partnership that helps foster their bilateral cooperation. The EU seeks for further collaboration in the future with other non-European Arctic countries like Canada, the U.S. and Russia, especially cooperation in focus areas such as science and investment. The EU and Canada enjoy a strong bond and frequently speak about Arctic affairs. Additionally, the EU will seek to communicate increasing Arctic common interests with states such as China, India, Japan, the Republic of Korea and Singapore.⁸³ The importance and respect towards indigenous communities must not be forgotten as well, and the EU

⁷⁸ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁷⁹ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁸⁰ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁸¹ EUROPEAN COMMISSION. *An Integrated EU policy for the Arctic – Frequently Asked Questions*. [online]. 27 April 2016. [Accessed 1 June 2017]. Available from: http://europa.eu/rapid/press-release_MEMO-16-1540_en.htm.

⁸² HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁸³ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

recognizes that dialogue with native cultures and local communities only enhances Arctic understanding for the rest of the world.

In addition to international environmental protection cooperation, the EU places importance on security, fisheries management and as stated previously, global scientific research when it comes to international cooperation. Some recent international initiatives that the EU has participated in relative to security are its 2014 adopted Maritime Security Strategy. This strategy was a necessary addition considering the geopolitical tensions that could arise further in upcoming years regarding, territory, search and rescue, and the militarization of some countries, namely Russia, in the Arctic currently. Regarding fishing, the EU has recognized the legitimacy of a joint fisheries declaration in 2015, signed by the Arctic Five. A large aim in this declaration is to promote the research of said Arctic ecosystems to enrich understanding before opening this area up to increased and intense commercial fishing. The EU places high importance on fishing regulations and norms. They believe as the area becomes increasingly of more interest, new international norms will have to be formed, such as a new Regional Fisheries Management Organization perhaps.⁸⁴

As mentioned previously scientific research and studies will be necessary to carry out, and in a cooperative and global manner at that. The EU hopes to work further with the Transatlantic Ocean (and Arctic) Research Alliance, which was brought about by the Galway Declaration in 2013 to further study the Atlantic and Arctic Ocean patterns, and grasp a better understanding of climate change effects.⁸⁵ This initiative involves the EU, Canada, and the U.S., and each could benefit greatly from more joint cooperation here. The EU Commission has also declared a goal to create a “multi-resolution map of the entire seabed”⁸⁶ by the year 2020, which is most certainly an international effort, with over 100 organizations, the EU, and the countries of Iceland, Norway, and Russia contributing through the European Marine Observation Data Network (EMODnet).⁸⁷ Ultimately, the European Union deems the Arctic so important, that they wish to establish a Working Party on Arctic Matters and Cooperation within the European Council, and also a delegation on Arctic Matters and Northern Cooperation within the European Parliament, putting into place more functioning at the EU level. This would add more layers of integrated cooperation and organization to an international, geopolitical topic that deserves higher attention in 2017 and onwards.

Overall, the EU Arctic Policy is thorough and inclusive, recognizing the sovereignty and rights of the regional players noting that, “Arctic states have primary responsibility for tackling issues within their territories.”⁸⁸ The EU distinguishes that productive cooperation in the Arctic has to be carried out multilaterally to have an effect, and they certainly are pushing to take part in any efforts. The policy is highly detailed with specific initiatives listed in their ongoing effort to be a part of Arctic diplomacy and affairs with special attention paid to the environment and climate change for future generations.

3.3. Multilateral and Bilateral Cooperation

3.3.1. Arctic Council

To continue to highlight the European Union’s focus on international cooperation, crucial multilateral and bilateral relationships must be described further. When it comes to Arctic issues, clearly the EU gladly welcomes international dialogue, which is clearly stated in their third priority as a part of their most recent Arctic policy. Regarding multilateral international cooperation, evidently the states of Denmark, Finland and Sweden, all members of the EU, are permanent members of the Arctic Council forum and considered

⁸⁴ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁸⁵ EUROPEAN COMMISSION. *EU, U.S., Canada launch Atlantic Ocean research alliance*. [online]. 24 May 2013. [Accessed 1 June 2017]. Available from: http://europa.eu/rapid/press-release_IP-13-459_en.htm.

⁸⁶ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁸⁷ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

⁸⁸ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

Arctic states, residing inside the Arctic Circle boundary. The European Commission applied for observer status within the Council, but was denied in the Tromsø Ministerial Meeting in 2009, along with others who continued to be “ad hoc” observers.⁸⁹ This meant each of these observers needed to apply to attend Arctic Council meetings, a move frustrating to many European officials eager to engage in this forum with regularity.

In the 2013 Kiruna Ministerial Meeting, the EU request was received in an affirmative manner, although the Council has not formally made the final decision on their status yet.⁹⁰ The Arctic Council has updated their norms concerning observers, but even still the EU observer request is seemingly on hold. They are allowed at this current moment to observe proceedings in the Council and are actively interested in reports and agreements that are generated. This does not mean they are a ratified observer, despite Brussels’ attempts and failures to truly enter. So evidently, the EU has met challenges when it comes to the Arctic Council, as some consider that adding more international layers to the council threatens the sovereignty of Arctic states and indigenous peoples.⁹¹ Some Arctic Council members see the EU as unfit to qualify for observer status, being a supranational body instead of a mere international organization. Despite problems on their legal status in the international forum, the EU promotes and follows a number of Arctic Council Working Group reports and Task Forces, considering them worthy and vital for international Arctic governance.

Even though observer status has still technically not been handed to the EU, this next Finnish Chairmanship of the Council is in the hands of an EU member state. The future prospects of EU involvement with Arctic Council actions in this regard are extremely high. Finland’s main focal points for 2017-2019 are more environmentally driven with an intent focus on the increasing challenge of climate change that continually more omnipresent. Their official title of the Chairmanship is “Exploring Common Solutions”, and as previously mentioned, revolves around the main ideas of environmental protection, connectivity, meteorology, and education. The first Senior Arctic Officials Executive meeting for the Finnish Chairmanship took place in Helsinki, Finland on June 12th-14th, 2017, with Finnish EU members of parliament present. MEP from Finland, Sirpa Pietikäinen, spoke about and presented the most recent additions adapted to the EU Arctic Policy and their importance to the Finnish Senior Arctic Officials.⁹²

It can be said that with Finland at the helm, the EU will definitely be able to integrate itself more into Arctic Council activities and functions, despite technically not qualifying for full observer status quite yet. As mentioned before, the most recent EU hosted high-level Arctic meeting in Oulu, Finland on June 15th-16th, was a great display of EU and Finnish solidarity on Arctic issues, which should hopefully carry on into formal Arctic Council meetings over the next two years and lead to increased cooperation and more EU Arctic leadership. In his speech opening the EU high-level Arctic event, Timo Soini solidified why the EU is important to the Arctic region and Arctic Council by saying, “the EU has a strategic interest in the Arctic remaining a low-tension area, with on-going cooperation ensured by the Arctic Council. This, I trust, is a shared interest in this room. A strengthened EU engagement in the Arctic region will support the established international peaceful framework in the Arctic.”⁹³ Finland intends to count on the EU for definite cooperation in its upcoming two years leading the Chairmanship of the Arctic Council.

⁸⁹ DEPLEDGE, D. *The EU and the Arctic Council*. [online]. 20 April 2015. [Accessed 1 June 2017]. Available from: http://www.ecfr.eu/article/commentary_the_eu_and_the_arctic_council3005.

⁹⁰ ARCTIC COUNCIL. *Observers*. [online]. May 2017. [Accessed 1 June 2017]. Available from: <http://www.arctic-council.org/index.php/en/about-us/arctic-council/observers>.

⁹¹ DEPLEDGE, D., *loc. cit.*

⁹² GJERSTAD, KITTI, Parliamentary Advisor to MEP Sirpa Pietikäinen [email correspondence] June 19, 2017.

⁹³ MINISTRY FOR FOREIGN AFFAIRS OF FINLAND. *Minister for Foreign Affairs Timo Soini’s speech in EU High-Level event in Oulu*. [online]. 16 June 2017. [Accessed 18 June 2017]. Available from: <http://formin.finland.fi/public/default.aspx?contentid=363461&nodeid=50020&contentlan=2&culture=en-U.S>.

3.3.2. United Nations

Clearly the EU works within the United Nations, the largest multilateral forum and international organization in our world, to work towards achieving climate change goals. They are member of the UNFCCC, an official Party to the convention. As mentioned previously, the EU as a whole, including individual European state leaders and prime ministers, are avid supporters of the Paris Agreement put into place at the COP21 in 2015. They ratified the Paris Agreement in 2016 and have pledged specifically to eliminate their carbon emissions by 40% by the year 2030 and 80% by the year 2050, as mentioned previously in their Arctic Policy. The EU was present in the COP22 in Marrakech, Morocco, with MEPs being present and high-ranking EU officials alike and will be present in the next UN Climate Change Convention, COP23, in Bonn, Germany, November 6th-17th, 2017. The EU has even given money to support the leader of the COP23 summit, the Presidency of Fiji, a total of 3 million euros to go toward Fiji's preparations for the climate meeting.⁹⁴ They have also, as a collective union, signed and ratified the United Nations Convention on the Law of the Sea (UNCLOS), and are members of the International Maritime Organization (IMO), the agency of the UN. As a collective Union, they take UN matters seriously and normally highly prioritize UN agenda to align with EU agenda.

3.3.3. Barents-Euro Arctic Cooperation (BEAC)

Regarding regional cooperation, there are certainly a number of forums and councils that operate within these Northern European territories, including parts of Russia. The EU highlights in their Arctic Policy framework that they are ready and disposed to cooperate with all who share the same interests and vision for the Arctic. One of the more integrated and Arctic encompassing cooperative groups that the EU takes part in is called the Barents-Euro Arctic Cooperation, founded in 1993. The cooperation possesses an intergovernmental level, the Barents Euro-Arctic Council and an interregional level, the Barents Regional Council. Each level commits to the same goal and objective of introducing better and more sustainable development into the Arctic region, aiding in environmental protection. The members are Denmark, Finland, Iceland, Norway, Russia, Sweden and the European Commission. This cooperation contains working groups, similar to the Arctic Council, with sectors ranging from economy, investments, environment, rescue cooperation, transport, culture, education and research, health and social issues, energy, tourism, and youth.⁹⁵ BEAC also includes indigenous representation, through their Working Group of Indigenous Peoples (WGIP).⁹⁶

3.3.4. Northern Dimension (ND)

This specific multilateral cooperation is a joint partnership in policy between the European Commission, Norway, Iceland and Russia that was introduced in 1999 and further implemented in 2006. These countries along with the EU align through work in four different partnerships, directed at the environment, public health and social well-being, transport and logistics, and culture.⁹⁷ Their tasks can either be carried out in the form of financing projects or high-level coordination among experts in specific fields. Northern Dimension, along with the BEAC, work together with other intergovernmental cooperation forums previously mentioned, such as the Arctic Council, as well as the Nordic Council of Ministers and the Council of the Baltic Sea States, each one supports Northern Dimensions implementation. The U.S. and Canada are observers to this policy. Within the framework policy of ND is an environment specific Northern Dimension Environmental

⁹⁴ EUROPEAN EXTERNAL ACTION SERVICE. *COP23, Elections, EPA discussed with Acting Prime Minister and Minister for Economy, Public Enterprises, Civil Service and Communications, Hon. Aiyaz Sayed-Khaiyum*. [online]. 31 March 2017. [Accessed 17 June 2017]. Available from: https://eeas.europa.eu/headquarters/headquarters-homepage/23844/cop23-elections-epa-discussed-acting-prime-minister-and-minister-economy-public-enterprises_en.

⁹⁵ BARENTS-EURO ARCTIC COOPERATION. *About Us*. [online]. 2017. [Accessed 18 June 2017]. Available from: <http://www.barentscooperation.org/en/About>.

⁹⁶ *Ibid*.

⁹⁷ THE NORTHERN DIMENSION. *The Northern Dimension*. [online]. [Accessed 1 June 2017]. Available from: <http://www.northerndimension.info/northern-dimension>.

Partnership (NDEP) that works to tackle pollution related issues in the area, mostly in the Barents and Baltic Seas to improve the lives of indigenous cultures and species living in the zone.⁹⁸

3.3.5. Norway and Iceland (EEA)

In terms of bilateral cooperation, certainly Norway shares important goals and vision with the EU for the Arctic region. Norway is not an EU member state, but most certainly cooperates with the EU very frequently, and is considered a neighbour and cultural brother with the EU Arctic states of Denmark, Finland and Sweden. They are considered all Nordic countries with rich history and cultural ties. Norway shares a border with Sweden and Finland, linking the ties between the EU and this country even further. Norway and Iceland are in fact members of the European Economic Area (EEA). In terms of direct bilateral cooperation with Norway, the EU has committed, as stated in their highly detailed Arctic Policy, that the importance of the Svalbard Integrated Arctic Earth Observing System in Norway, an integral tool in scientific Arctic research. This is a global tool that can be used to understand the Arctic in large proportions.

Norway also possesses the Svalbard Global Seed Vault. Unfortunately, the rapidly increasing effects of climate change have taken its toll on the vault in recent months. Sea ice melt in the Arctic region has caused the vault to be penetrated and flooded, contaminating some of the guarded seeds and causing the Norwegian government to actually rethink its design and construction and increase their climate change efforts. In the future, perhaps the EU will commit funds in a bilateral manner to aid in this global endeavor of Norway's invention.

Nordic countries in general are known for being highly committed in environmental areas regarding its protection, preservation, and the overall sustainability in development. Therefore, the EU benefits greatly by having 3 Nordic states within its union, it can learn and grow immensely from their close cooperation on environmental and climate action, and additionally how they focus efforts in the Arctic. These EU Nordic countries are also the furthest north and located closest to the Arctic Circle boundary, and consequently have a unique grasp on what it means to live in the Arctic environment, and can communicate this to the EU institutions and other member states.

3.3.6. Indigenous Peoples

It is also highly important to speak about the many indigenous communities that call the Arctic region home, and comment on the consistent cooperation that the EU needs to maintain with those that reside within EU member states. The EU considers this communication important, as they highlight in their 2016 Arctic Policy that they will ensure indigenous "views and rights are respected and promoted in the ongoing development of EU policies affecting the Arctic."⁹⁹ An annual dialogue meeting hosted by the European Commission does exist, created to cooperate openly with indigenous cultures and exchange ideas particularly related to the fields of human rights and business. The EU supports these indigenous cultures through a variety of funding programs such as national ESIF programmes, the Territorial Cooperation programmes and the programmes under the European Neighbourhood Instrument, and additionally Northern Periphery and Arctic Programme.¹⁰⁰ The cultures that reside in EU Arctic member states are the Sami in Finland and Sweden, and the Inuit in Greenland, along with many additional cultures that are smaller in population.

⁹⁸ THE NORTHERN DIMENSION ENVIRONMENTAL PARTNERSHIP. *Environmental Challenges*. [online]. 2017. [Accessed 1 June 2017]. Available from: <https://ndep.org/about/overview/environmental-challenges/>.

⁹⁹ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

¹⁰⁰ HIGH REPRESENTATIVE OF THE UNION FOR FOREIGN AFFAIRS AND SECURITY POLICY and EUROPEAN COMMISSION, *loc. cit.*

3.4. Geopolitical Challenges

The Arctic Policy and dedication to environmental protection that the EU champion does not mean that it is without its fair share of geopolitical challenges among its neighbours and even allies in the region. Recently the EU and Norway have had disagreements regarding oil drilling in the Barents Sea. European Parliament had proposed a ban on drilling in the area. Norway saw this as problematic, given the mutual acceptance of UNCLOS as international law and the ability for the Arctic state to claim sovereignty to their specific parts of the continental shelf. They specifically do not want the EU dictating their rights in this area, despite being members of the European Economic Area, while the EU claims its right to propose it purely based of this Norway EEA membership fact. In the end, EU Parliament rejected the proposal in March 2017. Fishing rights and management is a top priority for all Arctic states, and the EU as well. There have been controversies regarding Norway and the EU in terms of the Svalbard waters.

The relationship that the EU maintains with Russia is a complicated one at that, specifically regarding Arctic interests. It should be noted that almost half of the people living in the Arctic region are in fact, Russian or indigenous cultures living in Russian Arctic territory. Therefore, Russia feels it possesses a significant claim on territorial boundaries, sovereignty, and overall legitimacy in Arctic activities and interests. Both the EU and Russia are members of the Barents-Euro Arctic Cooperation and Northern Dimension, but bilaterally they are trying to work together in future endeavors involving Arctic research and innovation technology. Generally, the Arctic interests of Russia and the EU do not align entirely. Russia is more concerned with achieving a perfected Northeast Passage route and securing new energy sources along their continental shelf claim in the Arctic waters, as highlighted in UNCLOS. In addition, they are continually militarizing their territory in the Arctic. Notably, the EU has had sanctions imposed on Russia in response to their action in the Ukraine and Crimea. This fact also does not foster a healthy space for cooperation and communication regarding other areas of equal interest. They have recently been at a cooperative stalemate regarding foreign policy in non-Arctic areas, so the actions taken within this Arctic relationship between the EU and Russia must always be carefully carried out. We must not forget that Finland an EU member state which shares a direct border with Russia.

Additionally, Canada and the EU have had their disagreements regarding Arctic matters as well, despite their tight and personal bilateral bond. In the year 2008, the EU tried to call for a ban of seal pelts sales within the Arctic region. This upset Canadian leaders who urged the EU to think harder about the repercussions for indigenous peoples who use the Arctic fauna to survive, and the EU later retracted said call. There have been other discussions such as this, which perhaps has led to Arctic states, like Canada, doubting the EU's right to be heavily involved in high-level forums such as the Arctic Council. Some question if the EU can fully engage to see key details and have an expansive viewpoint from all areas of the Arctic.

3.5. The EU and Climate Change

The EU is a world leader in the recognition of climate change existence and its detrimental consequences in our world today in a wide variety of sectors, the most important being the environment. The EU prides itself on being a ground-breaker that turns dialogue into action and confirmed policy when it comes to the environment, and they are an example for the world. Ever since the 1990's they have been setting ambitious goals in their policy and inserting themselves into climate negotiations.¹⁰¹ The objectives of EU climate and environmental policy are to “green the EU economy, protect nature, and safeguard the health and quality of

¹⁰¹ SKJÆRSETH, J. EU climate and energy policy: demanded or supplied? In: G. BANG, A. UNDERDAL, and S. ANDRESEN. *The Domestic Politics of Global Climate Change: Key Actors in International Climate Change Cooperation*. Cheltenham, UK: Edward Elgar, 2015, pp. 71-94.

life”.¹⁰² A main objective for the EU focuses on promoting their high environmental standards such as global sustainable development.

Furthermore, when speaking about the institutions and bodies that dedicate themselves specifically to EU environmental issues there are quite a few. The EU programme that deals with environmental concerns is called Environment Action Programme (EAP). In terms of policy, the current legislation the EU has up to the year 2020 is focused on plans drawn up in the 7th Environment Action Programme which was declared in January 2014, and places responsibility regarding environmental concerns on EU institutions as well as member state governments. The main goals of this 7th EAP are to “conserve natural capital, turn the Union into a resource-efficient, green, and competitive low-carbon economy, and safeguard the Union’s citizens from environment-related pressures and risks to health and wellbeing.”¹⁰³

Seeing as the priorities of the Commission of Jean-Claude Juncker, the current President of the European Commission, are to steer Europe toward an even lower carbon economy with excellent climate policy in place, it does not come as a surprise that the EU takes climate science seriously. They wish to base their energy resilience and environmental standards on the most up to date science there is relating to climate change. EU leaders realize the spotlight is on them, to take necessary action. EU Climate Action and Energy Commissioner, Miguel Arias Cañete, said in response to the IPCC 5th Climate Assessment Report, “science has once again made the case clear, and the spotlight is now on us as policymakers. That’s why in Europe we have done our homework by adopting ambitious 2030 targets.”¹⁰⁴ The EU manages a European Climate Change Programme (ECCP) to coordinate specific global warming combating efforts. As a general procedure they follow all United Nations initiatives and agreements regarding climate change and curbing GHG emissions. The most important mitigation that the EU adopted was in 2002, when the EU emissions trading system (ETS) was created as an “innovative market-based policy system” that contained an “international cap-and-trade system that targeting 11,000 industrial installations.”¹⁰⁵ The EU was also one of the first members of the Paris Agreement to turn in their Intended Nationally Determined Contributions (INDCs) in March 2015 with a clear outline.

Moreover, outside the UN framework, they have cooperated bilateral with some non-EU countries, including China, to combat this threat. In 2005, the EU and China established the EU-China Partnership on Climate Change, which was again enhanced in 2015.¹⁰⁶ This is highly significant, seeing as China is the biggest emitter of GHG in the world. Notably, the EU does not have a current agreement or partnership of this nature with its Western counterpart, the United States, the second largest GHG emitter.

Even though they are a large union with many differing member state opinions, the EU is able to channel the idea of climate awareness throughout their political system with ease. It is true that their decentralized nature means that it is up to member states to commit to the action, and while other states question how much climate policy can function with energy security, the EU is still able to lead through their non-partisan

¹⁰² EUROPEAN COMMISSION. *Environment*. [online]. 26 April 2017. [Accessed 1 June 2017]. Available from: https://europa.eu/european-union/topics/environment_en.

¹⁰³ EUROPEAN COMMISSION. *Environment Action Programme to 2020. Environment Action Programme to 2020* [online]. 2014. [Accessed 11 June 2017]. Available from: <http://ec.europa.eu/environment/action-programme/>.

¹⁰⁴ EUROPEAN COMMISSION. *EU Climate Action and Energy Commissioner Miguel Arias Cañete: “The science is clear. The time to act is now”*. [online]. 3 November 2014. [Accessed 11 June 2017]. Available from: https://ec.europa.eu/clima/news/articles/news_2014110301_en.

¹⁰⁵ SKJÆRSETH, J., *op. cit.*, pp. 71-94.

¹⁰⁶ EUROPEAN COMMISSION. *Climate Action-China*. [online]. 16 February 2017. [Accessed 11 June 2017]. Available from: https://ec.europa.eu/clima/policies/international/cooperation/china_en.

Commission and their capacity for long-term policy initiatives.¹⁰⁷ This is something that countries such as the U.S. most definitely lack. The EU boasts an efficient economy when managing GHG emissions and sets a global standard. They have been able to gradually grow more ambitious over time with their climate policy and become the, “primer promotor de planes nacionales del cambio climático,”¹⁰⁸ and a truly global example. This means that others should study how the EU has maneuvered climate policy and follow if they would like to see efficient climate action be achieved in their own nation.

4. The United States and the Arctic

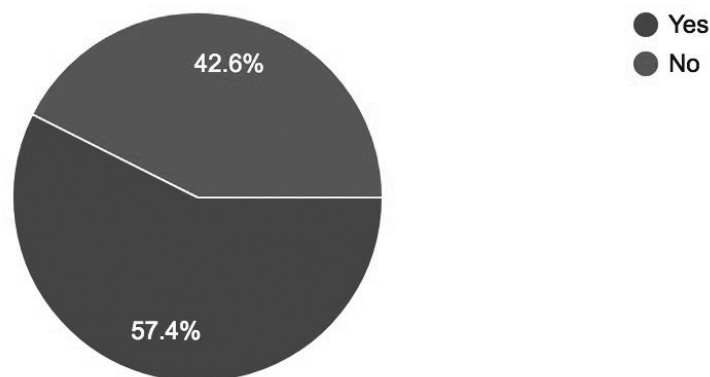
4.1. Introduction

The United States of America is unique in that it is one of the few countries in the world that has legitimacy as a “true” Arctic state, a member of the Arctic Five. They claim sovereignty of bordering territory along the Arctic Ocean through the state of Alaska. An interesting statistic found through a personal survey, as seen in Graph 5, actually showed that out of 54 random American surveyors, 42.6% thought the U.S. was not an Arctic state. This certainly says something about public awareness in the country. Perhaps American citizens do not realize the U.S. has such a large stake in Arctic affairs. The U.S. government has also only recently become more aware of the necessity to recreate and define their interests in the Arctic, at the federal level. They are accustomed to heavily relying on the Arctic Council structure as the forum to create and manage their Arctic diplomacy. They use this forum willingly and have generally been very cooperative and involved. Most recently from 2015-2017, the United States held Arctic Council Chairmanship in which they highlighted priorities they deemed most important for the Arctic at that time. As mentioned, the Arctic Council is not a governing body, so the U.S. must try to convert this forum discussion into actual federal action.

Graph 5

Is the US considered an Arctic state (country)?

54 responses



Source: Author Conducted Survey

There are many departments, agencies and branches of government that relate to the environment and specifically the Arctic within the U.S. federal government system. Most specifically, Arctic policy affairs are managed by the Department of State within the Bureau of Oceans and International Environmental and Scientific Affairs, and the Office of Ocean and Polar Affairs. Here is where the U.S. outlines their specific

¹⁰⁷ SKJÆRSETH, J., *op. cit.*, pp. 71-94.

¹⁰⁸ DE LAS HERAS PÉREZ, BEATRIZ, *loc. cit.*

agenda, their commitment to the Arctic Council, and highlights all interests in the Arctic. There are many other U.S. departments and organizations that manage Arctic affairs including, the U.S. Department of the Interior, the Fish and Wildlife Service, the National Park Service (NPS), the Environmental Protection Agency (EPA), Department of Commerce, Department of Energy, Department of Homeland Security (United States Coast Guard), National Science Foundation, U.S. Arctic Research Commission (USARC), and more. More specific scientific research and analysis is carried out through the National Aeronautics and Space Administration (NASA), National Snow and Ice Data Center (NSIDC), and the National Oceanographic and Atmospheric Association (NOAA), all very prominent institutions for climate related science and facts in our world today. The Department of Defense, which manages U.S. security and defense issues, also specifically has an Arctic Strategy, published in 2013, and are definitely incorporated in the region.

The U.S. is an Arctic state purely because of Alaska, as the land was purchased from Russia in 1867. Therefore, Alaska and their state government work with the federal level to ensure that U.S. interests in the Arctic are being met. Clearly being the country's link to the Arctic allows Alaskan leaders and local communities to possess a more developed and profound idea about Arctic issues that require the most attention. The states included in the 50 United States of America boast incredible power. Consequently, while the United States currently continues developing its own updated policy in Washington, initiated by Barack Obama's Administration, Alaska's state government has already written and produced a formal Arctic Policy report in 2015, written by the Alaska Arctic Policy Commission and includes a subsequent implementation plan.¹⁰⁹ The level and quality of collaboration between the U.S. federal government and Alaska on Arctic issues is also another topic to analyze. To highlight U.S. interests in the Arctic, and to analyze where environmental protection and climate change concerns are present, it will be beneficial to feature both the American federal government's point of view, the policy of Alaska, and later a brief summary of the recent focal points of the U.S. Chairmanship from 2015-2017 within the Arctic Council.

4.2. U.S. Arctic Policy and Interests

Under the 44th presidential administration of Barack Obama, the Arctic's worth and importance was further recognized. His words and actions took many steps towards environmental approaches instead of focusing mainly on Arctic security related interests. The U.S. Chairmanship of the Arctic Council from 2015-2017 was most likely a huge reason Obama saw fit to further define U.S. Arctic priorities. The most recent documents the U.S. has published are the "National Strategy for the Arctic Region," published May 10, 2013 and the "Implementation Plan" in January 2014. In his newly crafted strategy, the former President Obama states, "the Arctic is one of our planet's last great frontiers. Our pioneering spirit is naturally drawn to this region, for the economic opportunities it presents and in recognition of the need to protect and conserve this unique, valuable, and changing environment."¹¹⁰ These words resonate with many of the other Arctic states and world leaders, like the EU, who recognize this Arctic environment needs to be prioritized and protected from global warming and exploitation. The U.S. government normally is not so free with rhetoric involving climate change, so the discourse in Obama's strategy and his actions towards the region were a fresh approach. Ultimately, the Obama administration defined their Arctic vision as a region, "stable and free of conflict, where nations act responsibly in a spirit of trust and cooperation, and where economic opportunities are pursued in a sustainable and responsible manner."¹¹¹

There are three "lines of effort" listed on the strategy statement, which are as follows: 1. Advance United States Security Interests 2. Pursue Responsible Arctic Stewardship 3. Strengthen International Cooperation.¹¹²

¹⁰⁹ ALASKA ARCTIC POLICY COMMISSION. *Final Report of the Alaska Arctic Policy Commission* [online]. rep. 2015. [Accessed 10 June 2017]. Available from: http://www.akarctic.com/wp-content/uploads/2015/01/AAPC_final_report_lowres.pdf.

¹¹⁰ THE WHITE HOUSE, OBAMA ADMINISTRATION. *National Strategy for the Arctic Region* [online]. rep. 2013. [Accessed 9 June 2017]. Available from: https://obamawhitehouse.archives.gov/sites/default/files/docs/nat_arctic_strategy.pdf

¹¹¹ *Ibid.*

¹¹² *Ibid.*

Through these strategy goals we can see the direction that the Obama Administration was heading towards in terms of official Arctic legislation and policy. The updated U.S. Arctic policy the administration had hoped to finish crafting before the end of Obama's final term in 2017 was sadly not completed. So, it should be noted that this published "National Strategy for the Arctic Region" is not currently written in U.S. federal law but is a very driven proposal for the country. National Security Presidential Directive 66, also known as "Arctic Region Policy", put in place in 2009 under the George W. Bush Administration is technically still the Arctic policy of the U.S., which surprisingly did make references to climate change at the time.¹¹³ Therefore, Obama's updated strategy recognizes the existing policy structure and ongoing efforts of the previous Bush Administration, the State of Alaska, and Native Arctic communities.¹¹⁴ There are definite indications to continue implementing certain parts of this "Arctic Region Policy" (NSPD-66), while at the same time updating main strategic priorities specific to the Obama Administration's viewpoints.

As an introductory aspect of the strategy, Obama and his administration makes sure that details about our changing climate are put forward plainly and simply. The strategy notes that while the Arctic is most likely home to many valuable resources that will become more available as ice melts and Arctic maritime routes open up, the U.S. must be a leader and establish proper management of the region with the environment in mind. The additional implementation plan highlights guiding principles that the U.S. will intend to use as they start the process of reaching these Arctic priorities and details more specific efforts. The principles most notably include consulting and coordinating with Alaskan Natives who are the true stakeholders in the Arctic environment.¹¹⁵ The core principles remain the same to this day and hopefully will survive as the new policy is hopefully still being crafted based off the National Strategy and Implementation Plan.

4.2.1. Advance U.S. Security Interests

Under the first focus point of Obama's strategy, he declares the driving factor and top priority of the U.S. in the region, and that is to protect the American people, sovereignty, resources, territory and rights. This national security first approach to the strategy is most certainly common in U.S. policy rhetoric, and this strategy point goes further to note that security will be sought with careful attention paid to the environment, indigenous cultures, and international considerations. The main points here are to make sure the U.S. continues developing in their capabilities in Arctic infrastructure and strategic capabilities by water or air, including abilities to respond to natural or manmade disasters.¹¹⁶ The U.S. also wants to highlight the need to enhance Arctic domain awareness and preserve the Arctic regions freedoms protected under international law. This point references UNCLOS specifically, stating, "existing international law provides a comprehensive set of rules governing the rights, freedoms, and uses of the world's oceans and airspace, including the Arctic,"¹¹⁷ recognizing the international law in place, despite the U.S. not being a ratifying party of the treaty. Domain awareness can also be taken to mean increasing knowledge about the Arctic environment.

Furthermore, the U.S. wants to make sure their icebreaker ships are capable and strong in the face of increased Arctic activity, to maintain a strong U.S. presence. Another key point is the energy security that the U.S. is very keen on preserving. It is noted that for the U.S. the region holds vital energy supplies that will allow the country to continue meeting its needs, but a point is made to "enable the environmentally responsible production of oil and natural gas as well as renewable energy."¹¹⁸ The importance of these domestic energy

¹¹³ THE WHITE HOUSE, BUSH ADMINISTRATION. *NATIONAL SECURITY PRESIDENTIAL DIRECTIVE/NSPD-66, HOMELAND SECURITY PRESIDENTIAL DIRECTIVE/HSPD- 25, Arctic Region Policy* [online]. rep. 2009. [Accessed 17 June 2017]. Available from: <https://fas.org/irp/offdocs/nspd/nspd-66.pdf>.

¹¹⁴ THE WHITE HOUSE, OBAMA ADMINISTRATION. *National Strategy for the Arctic Region*, loc. cit.

¹¹⁵ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region* [online]. rep. 2014. [Accessed 16 June 2017]. Available from: https://obamawhitehouse.archives.gov/sites/default/files/docs/implementation_plan_for_the_national_strategy_for_the_arctic_region_-_fi....pdf.

¹¹⁶ THE WHITE HOUSE, OBAMA ADMINISTRATION. *National Strategy for the Arctic Region*, loc. cit.

¹¹⁷ THE WHITE HOUSE, OBAMA ADMINISTRATION. *National Strategy for the Arctic Region*, loc. cit.

¹¹⁸ THE WHITE HOUSE, OBAMA ADMINISTRATION. *National Strategy for the Arctic Region*, loc. cit.

resources aligns with the ideal to decrease the importance of importing foreign oil and other energy sources from abroad. The strategy specifically highlights the importance to align and coordinate with the state of Alaska to support renewable energy development, and cultivate an integration plan with local governments, tribal governments, Alaskan Native Corporations, and key stakeholders by the end of 2014.¹¹⁹ Clean energy systems in local communities are promoted in this agenda here as well, and additionally a need to publish insight into how to maneuver renewable energy projects like wind, solar, and biomass.¹²⁰ Responsible development and extraction of non-renewable energy resources is also mentioned, with the need to obtain more scientific information about pending future offshore drilling or leasing.

4.2.2. Pursue Responsible Arctic Stewardship

This next point is perhaps the most environmentally driven focus area of the National Strategy with an integrated importance on scientific research to properly manage the U.S. Arctic territory. It highlights that the U.S. must seek to actively conserve this Arctic environment as human activity increases in the region. Science is a crucial element when pursuing this responsible stewardship because being mindful of future scenarios in the Arctic keeps the U.S. prepared strategically. First and foremost, protecting the arctic environment and the conservation of its natural resources is a solid point, and this can be done through identifying scientific indicators of climate change and pollution. Additionally the U.S. government will seek to identify at risk species, habitats and sensitive areas in Alaska in need of monitoring and share these areas with the Identify sensitive Arctic areas to inform the final Chukchi and Beaufort leasing plans, Bering Strait Port-Access Route Study, Aleutian Islands Risk Assessment, and the Alaska Federal and State Preparedness Plan for Response to Oil and Hazardous Substance Discharges and Releases by 2016.¹²¹ Environmental risk assessment must also be placed into account with the National Environmental Policy Act, a historic American environmental policy directive, to help document rapid environmental changes. These Alaskan environment risk assessments can range from “impacts of climate warming, reduced permafrost, diminishing land/sea ice, and ocean acidification.”¹²²

The Arctic environment is also highly vulnerable to oil spills and pollution as a result of extraction from energy reserves, and therefore the U.S. highlights the need for a coordinated response plan. This includes exercises and drills surrounding worst-case scenarios for oil spills and hazardous material spills that could truly destroy Arctic ecosystems. The U.S. also wants to use Integrated Arctic Management, which is a science-based initiative that “integrates and balances environmental, economic, and cultural needs and objectives,”¹²³ and Ecosystem Based Management, as it is defined in their National Ocean Policy. This National Ocean Policy established in 2013 by the U.S. National Ocean Council will be a key guiding tool for U.S. Arctic affairs. The strategy also aims to address the key issues that were brought forward in the study “Managing the Future in a Rapidly Changing Arctic” produced by the Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska.¹²⁴

Continuing with research efforts, the U.S. established the Interagency Arctic Research Policy Committee (IARPC) and in February 2013 they produced an Arctic Research Plan to coordinate long-term observations in the Arctic. Most specifically by the end of 2017, this plan seeks to see through the launch of the Ice, Cloud, and Land Elevation Satellite 2, Gravity Recovery and Climate Experiment Follow-on and in addition more campaigns like NASA’s IceBridge acquisition of sea ice surface elevation to provide data for studies.¹²⁵ Continuing the efforts of the Distributed Biological Observatory in the Pacific Arctic marine environment is

¹¹⁹ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹²⁰ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹²¹ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹²² THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹²³ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹²⁴ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹²⁵ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

also a key priority area to help gain further information about Arctic ecosystems and how to manage them. This specific initiative will be led by NASA and carried out through IARPC principles, then internationally the data will be accredited to the Pacific Arctic Group of IASC.¹²⁶

The IARPC has many different teams that coordinate different Arctic efforts, as one can surmise. They will additionally work to enhance U.S. scientific analysis in teams consisting of: the Chukchi Beaufort Ecosystems Implementation Team, Glaciers and Fjords Implementation Team, Wildfires Implementation Team, Atmosphere Implementation Team, Arctic Observing System Implementation Team, Arctic Data Implementation Team, Modeling Implementation Team, and the Arctic Communities Implementation Team.¹²⁷ Having the data to chart the Arctic region better is a top priority for the U.S., and is a project that is being led by the NOAA and will continue into 2019. They aim to increase percentages of charted land data to create an accurate portrayal of Arctic outer continental shelf, shorelines, and more. This can be useful to Arctic communities in their adaptation strategies towards storm surges, energy development, emergency responses and ecosystem knowledge.¹²⁸ For this reason, U.S. federal efforts will work in close conjunction with Alaska's counterpart in their statewide Digital Mapping Initiative overseen by the Alaska Mapping Executive Committee.

4.2.3. Strengthen International Cooperation

The National Strategy highlights many different aspects of international cooperation that the U.S. can pursue to improve relations within the Arctic Region through two main bodies of U.S. participation, the Arctic Council and the International Maritime Organization. The U.S. is also a part of many multilateral defense organizations like the North Atlantic Treaty Organization (NATO), the Northern Chiefs of Defense Forum, and the Arctic Security Forces Roundtable, but each of these deals mainly with security and defense interests, instead of prominently environmental concerns.¹²⁹ First, in relation to the ever-important issue of preparedness in the face of oil spills in the Arctic, the U.S. reaffirms its commitment to the Arctic Council Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic by participating in joint international exercises. This includes specific coordination with Canada, with which the U.S. shares a border on the Beaufort Sea, so therefore they highlight an effort to implement a joint U.S.-Canada plan with relation to oil spills in the region. They also specify the need to participate in the Arctic Council Task Force on Oil Pollution and Prevention.¹³⁰ Enhancing coordinated international efforts and abilities in search and rescue is also a key factor, and the U.S. makes note that they will implement the 2011 Arctic Council Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic. The reaffirming of active participation in Arctic Council Working Groups and Task Forces is key because these efforts are not written into law. States therefore must reaffirm they are committed to prove their dedication to the Arctic Council and their Arctic state companions. Agreements are more binding, but still should be reaffirmed occasionally.

Fisheries management is a large concern, as the U.S. expresses an interest to create an international agreement to ensure that appropriate measures are taken with respect to commercial fisheries in the high Arctic North in the near future. Additionally, they will pursue to become a party to the Stockholm Convention on Persistent Organic Pollutants, and support the Arctic Council's Contaminants Action Program to make sure to reduce emissions of harmful and persistent contaminants into the Arctic and beyond, and reducing black carbon emissions.¹³¹ The U.S. is committed to analyzing and assessing the invasive species that exist in the region as well. Plus, the U.S. believes that science and research can be achieved and arrived at freely, with

¹²⁶ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹²⁷ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹²⁸ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹²⁹ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹³⁰ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹³¹ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

open access, and internationally, placing a great emphasis on working with the Arctic Council Task Forces, IASC, and another prominent organization called the Pacific Group.¹³² Finally the National Strategy speaks about the importance of UN initiatives like UNCLOS and the IMO, which will be discussed further under cooperation. Additionally, the President stressed the importance of creating a solid foundation and vision for their 2015-2017 Arctic Council Chairmanship that was being assumed, and the need to collaborate and create dialogue to pinpoint key Arctic issues for the U.S. and the globe at that present moment.

So, it is evident that attention is placed on input and coordination with Alaskan natives and government, environmental tasks in response to the changing climate and a need to increase international cooperation and efforts to make U.S. Arctic diplomacy more facilitating and functioning. The U.S. most definitely possesses the resources and tools to continue obtaining the most up to date scientific data, as seen through their many science and research based initiatives in the strategy aimed at understanding the Arctic environment further. Of course, being the leader of the largest and most capable military in the world makes security interests a top priority always, especially when the U.S. has legitimate stake in sovereignty in the region. The global economic power status the U.S. possesses also produces a need to constantly look for better fuel and energy sources, and therefore the U.S. places high priority on their energy interests. They are a land rich in national resources, and therefore are constantly at battle with the debate of increased extraction or by contrast, conservation.

In addition to this strategy, Obama carried out many other actions in regard to the Arctic region. Through his Presidential Executive Order on January 21, 2015 titled “Enhancing Coordination of National Efforts in the Arctic” he laid out more of the road map for U.S. Arctic management in the coming years.¹³³ He established key figures and groups to dedicate themselves to certain parts of Arctic management. President Obama also took bold action with respect to the Arctic environment by placing a moratorium on Arctic drilling for five years in 2016 along with a parallel policy implemented by Canada. This large and sweeping federal order was met with praise and criticism alike, as he used an, “Outer Continental Shelf Lands Act to protect large portions of the Chukchi and Beaufort seas in the Arctic.”¹³⁴ Obama intended to stave off the exploitation of this U.S. Arctic territory in order to gain more scientific research and understanding about the area, ultimately protecting the ecosystem in case of a future oil spill.

Clearly there was importance given to the environment, science, and international cooperation in Obama’s vision for the Arctic were leading the U.S. onto a path of more open Arctic communication and better environmental protection efforts in the face of climate change. As Obama stated as a final note in his strategy, “we must proceed, cognizant of what we must do now, and consistent with our principles and goals for the future.”¹³⁵ Although, the U.S. Arctic policy is quite less detailed regarding curbing CO2 and other GHG emissions as compared to the recently 2016 published EU Arctic Policy. Despite this fact, this strategy would lead the U.S. in a good direction if most points are included in the eventual U.S. Arctic policy for 2017 or 2018. As mentioned, the new Arctic policy is currently being written, and now this duty must pass into the hands of President Donald Trump and his staff. Needless to say, while security still remained a large part of Obama’s Arctic Strategy, environmental concerns played a larger role than ever before, as he was looking to improve U.S. Arctic Policy from the original George W. Bush Administration mandate for the region. Whether or not Trump will pay attention to calls for specific Arctic environmental protection remains to be seen, but one can

¹³² THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, *loc. cit.*

¹³³ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Executive Order-Enhancing Coordination of National Efforts in the Arctic* [online]. rep. 2015. [Accessed 17 June 2017]. Available from: <https://obamawhitehouse.archives.gov/the-press-office/2015/01/21/executive-order-enhancing-coordination-national-efforts-arctic>.

¹³⁴ FEARS, D. and EILPERIN, J. President Obama bans oil drilling in large areas of Atlantic and Arctic oceans. *The Washington Post* [online]. 20 December 2016. [Accessed 18 June 2017]. Available from: https://www.washingtonpost.com/news/energy-environment/wp/2016/12/20/president-obama-expected-to-ban-oil-drilling-in-large-areas-of-atlantic-and-arctic-oceans/?utm_term=.7871c3b7608c.

¹³⁵ THE WHITE HOUSE, OBAMA ADMINISTRATION. *National Strategy for the Arctic Region*, *loc. cit.*

certainly speculate about his future actions that will most likely counter his predecessor's immensely. He has not given any indication that he cares about climate change, nor the protection of our environment.

4.2.4. Alaska Arctic Policy

The Obama era Arctic vision is well-rounded for a piece of U.S. legislation, but it's not the only one that deals with Arctic matters within U.S. borders. The current Alaska Arctic Policy derives from an initiative of the state government. In 2012, the Alaska Arctic Policy Commission was created and in 2013 they began meeting regularly to craft a worthy Arctic policy to offer up to the state for consideration as the new strategy for Alaska's Arctic. On January 30, 2015, the Final Report of Alaska Arctic Policy Commission and the Implementation Plan was released. Then on May 11, 2015, Governor Bill Walker signed the policy bill into law making a profound statement saying, "our country is an Arctic nation because of Alaska. That is why it is absolutely critical that we have a seat at the table for Arctic development discussions."¹³⁶ The plan continually mentions climate change and details the need to respond to the phenomenon accordingly.

The importance of a state driven initiative regarding Alaska and its relationship to its Arctic environment is definitely crucial, because these local Alaskan communities and governments are the true stakeholders in this Arctic game. They feel the effects of climate change, increased energy exploitation in their region, and the many other Arctic struggles firsthand. The policy even notes that Alaska is, "on the verge of having some of the world's first climate change refugees."¹³⁷ This most certainly includes and concerns Native American populations in the state who feel the consequences of climate change detrimentally through eroding shores and permafrost melt. According to the 2010 U.S. Census, Alaska's population consists of 14.8% indigenous peoples, which can range from a number of specific tribes.¹³⁸

To continue, the four "strategic lines of effort" of Alaska's Arctic Policy are: 1. Promote Economic and Resource Development, 2. Addressing the Response Capacity Gap, 3. Support Healthy Communities, and 4. Strengthen Science and Research.¹³⁹ Heavy emphasis, as it rightly should, goes on the wellbeing of Arctic communities. This includes indigenous communities that could be struggling with a myriad of things in the far North, whether it be loss of resources, energy, or healthcare, including mental health. Although the literature contained in the Alaska Arctic Policy strategy is similar to that of the Obama federal vision and the Arctic Council 2-year plan, it should be noted that implementation processes differ.¹⁴⁰ This fact could most likely be due to Alaska's more relative and obviously more direct viewpoint. The lawmakers and citizens of Alaska know from firsthand experience how implementation processes should be carried out because they are the residents of this Arctic environment.

Resource development is clearly a large, important issue for their Arctic region. Alaska is a state rich in natural resources, and the jobs created from development are crucial to the people of Alaska. More development is inevitable, and although sustainably green practices are not directly mentioned in the policy's implementation, they note "prudent oil and gas exploration"¹⁴¹ will be sought out. Thankfully the final focal point on science and research will help sway more lawmakers, state or federal, to specifically promote more sustainable practices in the future. Alaska will work with its universities and local communities to assess all areas of research when it comes to the future of the Arctic. It's clear that with Alaska's trading routes gearing up to see an influx of traffic in the coming years, environmental protection cannot be forgotten. This is of course a result of prominent Arctic ice melt.

¹³⁶ OFFICE OF THE GOVERNOR OF ALASKA. *Governor Signs Arctic Policy Bill Into Law*. [online]. 11 May 2015. [Accessed 17 June 2017]. Available from: <https://gov.alaska.gov/newsroom/2015/05/governor-signs-arctic-policy-bill-into-law/>.

¹³⁷ ALASKA ARCTIC POLICY COMMISSION, *loc. cit.*

¹³⁸ U.S. CENSUS BRIEFS, NORRIS, T., VINES, P. and HOEFFEL, E. *The American Indian and Alaska Native Population: 2010*. [online]. 2012. [Accessed 17 June 2017]. Available from: <https://www.census.gov/history/pdf/c2010br-10.pdf>.

¹³⁹ ALASKA ARCTIC POLICY COMMISSION, *loc. cit.*

¹⁴⁰ FLEENER, CRAIG, Arctic Policy Adviser & Director of State and Federal Relations -State of Alaska [email correspondence] June 20, 2017.

¹⁴¹ ALASKA ARCTIC POLICY COMMISSION, *loc. cit.*

4.3. Multilateral and Bilateral Cooperation

4.3.1. Arctic Council

Multilaterally, the U.S. has been a member of the prominent high-level international Arctic forum ever since its inception in 1996. Their primary arena for Arctic diplomacy is most certainly the Arctic Council and continues to be to this day. U.S. Arctic interests and priorities can also be found inside the vision for their most recent Chairmanship of the Arctic Council from 2015-2017. John Kerry, U.S. Secretary of State during this time, played a crucial role in carrying out U.S. leadership and diplomacy during said Chairmanship, and aided in the crafting of the theme, “One Arctic: Shared Opportunities, Challenges and Responsibilities.” These highlighted priorities paint a broader, more universal picture of what the U.S. deems significant in the region, perhaps due to the international and inclusive atmosphere of the Arctic Council forum as compared to the U.S. federal government’s positions.

The key points of the most recent U.S. Chairmanship followed a more environmental and indigenous concerned path, really pushing to address challenges of a changing Arctic environment. Their crucial focus areas were as follows: 1. Improving Economic and Living Conditions in Arctic Communities 2. Arctic Ocean Safety, Security, and Stewardship and 3. Addressing the Impacts of Climate Change.¹⁴² As we saw under Obama’s National Strategy, he certainly aimed to insert environmental protection and climate change into the core of his politics regarding the Arctic, more so than ever before. It is quite a meaningful vision, considering the U.S. is a country polarized by the issue of climate change. As mentioned previously however, this Arctic Council vision is highly universal in nature considering all its participants, so the language is bound to be more encompassing than actual U.S. legislation. The U.S. Chairmanship did see progress, especially in within the Framework for Action on Black Carbon and Methane, as they assessed how to better reduce emissions in the present years through a Summary of Progress and Recommendations publication.¹⁴³ Additionally, the Task Force on Enhancing Scientific Cooperation in the Arctic was a huge component of the U.S. Chairmanship. Russia and the U.S. co-chaired this science cooperation Task Force which led to the signing of the third Arctic Council binding agreement, a huge step forward in Arctic diplomacy.

Newly appointed Secretary of State, Rex Tillerson, was present in Fairbanks at the 10th Ministerial meeting in 2017, and highlighted these successes of the U.S. Chairmanship, reaffirming U.S. Arctic Council commitment under the new administration. He joined the signing of the “Agreement on Enhancing International Arctic Scientific Cooperation”, the successful result of the recent Task Force. It supports the need for urgent and new climate change data, plus international cooperation strategies that are highly necessary to foster this. This was an interesting move seeing as Trump is a staunch opponent of climate change recognition and any binding international agreements. In his statement at the Ministerial, Tillerson assured those present that the U.S. would be examining their climate policies and would be making a solid decision on the Paris Agreement soon, making the correct choice for the U.S., but listening to all concerns in the Council.¹⁴⁴

Although reaffirming commitment to the Arctic Council, the shadow cast on climate change importance sends a clear message about what this new administration thinks about its relevance. It signals a lack of scientific knowledge, inability to heed universal, international recommendations, plus a pure unwillingness to examine a global issue that affects us all. Therefore, we might not know what to expect out of U.S. effort in Arctic Council functions in the upcoming years, because inevitably climate change is shifting to become the primary focus of the Council’s workings.

¹⁴² ARCTIC COUNCIL. *United States of America*. [online]. 15 September 2017. [accessed 7 November 2017]. Available from: <https://www.arctic-council.org/index.php/en/about-us/member-states/united-states-of-america>

¹⁴³ *Ibid*.

¹⁴⁴ TILLERSON, R. *Remarks at the Arctic Council Ministerial Meeting*. U.S. Department of State [online]. 11 May 2017. [Accessed 11 June 2017]. Available from: <https://www.state.gov/secretary/remarks/2017/05/270813.htm>.

Specifically regarding climate change research however, the drive of U.S. scientists and climate experts will not falter. The men and women of NASA, NSIDC, NOAA and other U.S. institutions will continue to analyze the data they find. The larger doubt lies with federal funding and its prominence. Hopefully the fact that Tillerson recently signed the third binding Arctic Council agreement will have sway in the White House. However, even though the U.S. highlighted climate change in their Obama-Kerry drafted Chairmanship focus areas, the conclusion of their leadership was met with a resounding question into what the country stands for. They soon will not align with many other Arctic state views in the Council, which could cause tension. Finland, the current Chairmanship holders, certainly took note of this and deeply crafted climate change as the core issue they aim to examine during their time in power. A message was sent to the world, and the U.S., in doing so.

4.3.2. United Nations

The United States of course is a member of the United Nations and many of its corresponding agencies, councils, committees and agreements. However, the U.S. does in fact have a history of bypassing certain international commitments held between nations around the globe. When speaking specifically about the Arctic environment, the U.S. has presently not ratified UNCLOS yet, an action, or lack thereof, that astounds many who look at the U.S. as a prominent Arctic state that wishes to solidify its territory and national security interests in the region. It frustrates even government leaders, as Obama's National Strategy calls for its urgent ratification, and even Alaska's state policy echoes the same. Past and present U.S. leaders have stressed its urgent ratification, but the polarizing nature of politics inside the U.S. Congress impedes ratification, and those in favor of less universal and international action have won the battle in the long run. This includes many Congressional Republicans who do not wish to cede so much power to the United Nations. However, being a part of the Law of the Sea treaty would only boost U.S. Arctic legitimacy in many opinions. Senate approval is the only thing halting this effort unfortunately. The U.S. also outlines a focus point in their international cooperation section of their strategy to be prominent in the International Maritime Organization (IMO) in the development of Polar Code, enhancing maritime communication through many sectors, to be completed by the end of 2014. Additionally, a Waterways Analysis and Management System in the Arctic was to be carried out and then submitted to have the IMO review it.¹⁴⁵ Ideally, these advances toward understanding maritime routes, communication and overall Arctic management will help the U.S. in the future.

Furthermore, the Obama Administration was dedicated to prominent participation in the development of the Paris Climate Agreement, and originally had pledged their INDC level to be 26-28% less in 2025 as compared to 2005 levels of GHG emissions.¹⁴⁶ President Obama and Secretary of State John Kerry worked very hard to achieve international and domestic support for this accord, and unfortunately now the world has seen Trump's reaction and distaste to the deal. He has decided to retract the U.S. entirely, famously stating, "I was elected to represent the citizens of Pittsburgh, not Paris."¹⁴⁷ UN leaders have since started to doubt U.S. leadership in international affairs through this action. Trump has also been vocal about his doubts in general UN management and functioning, questioning the worth and legitimacy of the international governing body. This does not bode well for future UN-U.S. interactions, considering every other country in the world is on board with this most recent climate accord. Trump will most likely retreat from any future UN agreements, especially ones related to the environment or climate.

4.3.3. Canada

The U.S. and Canada have a strong history of mutual understanding and most definitely call themselves allies. These two countries share a border, languages, indigenous cultures, natural landscape and so much

¹⁴⁵ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, loc. cit.

¹⁴⁶ UNFCCC. *U.S. INDC Submission*. [online]. 2015. [Accessed 2 June 2017]. Available from: <http://www4.unfccc.int/ndcregistry/PublishedDocuments/United%20States%20of%20America%20First/U.S.A.%20First%20NDC%20Submission.pdf>.

¹⁴⁷ SHEAR, M. Trump Will Withdraw U.S. From Paris Climate Agreement. *The New York Times* [online]. 1 June 2017. [Accessed 5 June 2017]. Available from: <https://www.nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html>

more. Additionally, they created the economic free trade area NAFTA to further enhance cooperation and are also members of many of the same international organizations. Both heads of state most recently came out with the “United States-Canada Joint Arctic Leaders’ Statement” on December 20, 2016, highlighting mutual areas of concern as Arctic states, and detailing the dedication that will be given in response to a changing Arctic. President Obama and Canadian Prime Minister Justin Trudeau made sure to continue to pledge their efforts to “Indigenous and Northern partnerships, and responsible, science-based leadership,”¹⁴⁸ whether through bilateral cooperation or the prominent Arctic Council forum. The comprehensive statement was a testament to the level of importance each leader gives to Arctic affairs. Canada is only second to Russia in terms of Arctic coastline territory, and therefore highly prioritizes efforts in the region. A strong U.S.-Canada partnership in the future is crucial to Arctic environmental protection efforts. While Obama and Trudeau were more similarly aligned in environmental political agenda, it remains to be seen the relationship that ensues with Trump and the Canadian Prime Minister. There could potentially be controversy regarding Arctic territorial waters between these two strong allies with vocally opposite leaders.

4.3.4. Indigenous Peoples

The relationship that the federal government has with indigenous groups or Native Americans spans a long and bitter history in the U.S. However, in Alaska the native populations are firmly built into the local communities, so therefore their policy reflects the importance of their health and wellbeing. Additionally, Obama’s National Strategy cites one of its guiding principles as “Consult and Coordinate with Alaskan Natives.”¹⁴⁹ This signifies local natives and indigenous groups alike. The most common indigenous groups in Alaska are the Inuit, Iñupiat, Aleut, and Yupik. Having a solid partnership with Canada helps in the coordination with many indigenous groups that span across the U.S.-Canada border. Ultimately, the importance of cooperation and dialogue with indigenous groups can never be forgotten. These peoples are the ones who are currently, and will be in the future, directly affected by the consequences of further climate change. These people will soon lose their homes, their food supplies, and ultimately their well-being at the hands of climate change. Those of us who do not live in Arctic environments must heed their advice and warnings. We must pay attention to any information they relay about the changes each group witnesses in their own backyards. The information is vital to have in order to combat climate change, and the U.S. should continue to engage regularly with indigenous groups at the local level, as they rightly do in the Arctic Council. The implementation of Alaska Arctic Policy and Obama’s National Strategy should be taken seriously, especially when it comes to consulting indigenous peoples of the Arctic environment.

4.4. Geopolitical Challenges

The U.S. is situated very close in proximity to two very prominent Arctic states, Russia and Canada. As mentioned, Canada and the U.S. do regularly cooperate in many sectors, including the Arctic, but that does not mean they are without their disputes. The U.S. and Canada both claim maritime territory which lies within the Arctic Circle: the Beaufort Sea. A territorial controversy involving this maritime area has been a constant source of tension between these two allies, especially in the 2000’s. President Obama and Canadian Prime Minister Justin Trudeau recently issued their joint leaders statement in 2016, to quell disagreements, and designated they would settle the dispute in a cooperative manner. Both leaders reacted to said dispute by freezing Arctic offshore oil drilling at least for the next five years, settling any territorial debates at the moment. The disputes clearly tend to be energy and resource driven, in the quest for sources of oil. It remains to be seen what the new Trump administration will do regarding this joint statement that denies oil drilling

¹⁴⁸ THE WHITE HOUSE, OBAMA ADMINISTRATION. *United States-Canada Joint Arctic Leaders’ Statement*. [online]. 20 December 2016. [Accessed 17 June 2017]. Available from: <https://obamawhitehouse.archives.gov/the-press-office/2016/12/20/united-states-canada-joint-arctic-leaders-statement>.

¹⁴⁹ THE WHITE HOUSE, OBAMA ADMINISTRATION. *Implementation Plan for the National Strategy for the Arctic Region*, *loc. cit.*

within the zone. It could quite possibly start a larger controversy between the U.S. and Canada in the future, as Trump is energy and oil driven and disregards environmental concerns.

Russia is clearly a controversial subject for the United States, and the two are by no means allies. Increasingly gaining more drive to militarize the Arctic, Russia is seemingly prompting a new Cold War outlook. At a time where tensions with Russia are high in U.S. domestic opinion, some wonder if and when the U.S. will respond to Russia's vast and direct approach to construct and claim their territory fervently in the Arctic. So far, the geopolitical interest of militarization has not been high on U.S. agenda, as they are involved in a plethora of conflicts and disputes around the world that require more attention. However, U.S. officials should be watching what Russia does as they increase activity in their Northern Sea route. Russia could strive to have the biggest military buildup in the Arctic, inherently challenging the U.S. to do the same, while at the same time perfecting their trade routes.

4.5. The U.S. and Climate Change

Energy and national security are usually the two top interests that rule United States politics. Freedom of sovereignty also resides in this group of key interests as well, and usually when the U.S. is mixed with international efforts to combat issues like climate change, some Americans see this as a threat to their core values. They prefer to not always to take part in international treaties and agreements, as seen through the exit from the Kyoto Protocol, non-ratification of UNCLOS and most recently the rejection of the Paris Agreement by current Republican President Donald Trump. This is due to the highly politicized and partisan debate that is climate change in the U.S., and therefore reluctance to include themselves in binding international agreements that some think threaten U.S. national security. The large differences in opinion from Democratic and Republican standpoints make participating in international efforts extremely difficult and consequently can have negative effects for U.S. foreign policy and their relationships with other countries. Concerning climate change, we can take the two key examples of the most recent Presidents of the United States to truly examine the differences in opinion, and what the diverse standpoints mean for global efforts to save our planet, and most certainly the Arctic, from this threat.

4.5.1. The Obama Administration (2009-2017)

During the Obama Administration, significant advances were made towards the Arctic, and evidently climate change and environmental protection were brought into the political spotlight as well. He made a conscious effort to show the world that the U.S. could try to change their habits, and begin to take measures countering their high GHG emission rates that rank second highest in the world, second to only China. Obama has protected more national land than any other U.S. president in history, including many maritime areas. All of his efforts however were not met with ease. Due to the gridlock in Congress on the issue, President Obama announced in 2013 his willingness to begin bypassing Congress and producing executive mandates on the crucial issue.

Later in June of 2013 he produced a Climate Action Plan, which outlined the approaches he was willing to take to start regulating the biggest GHG emitters inside the U.S. The three points of said plan were to, reduce domestic GHG emissions, prepare the U.S. for climate change impacts, and finally be true leader in international climate change action.¹⁵⁰ He also signed an Executive Order on Preparing the United States for the Impacts of Climate Change on November 1st, 2013. As mentioned, the Obama Administration worked hard to arrive to the Paris Agreement and insert themselves into the international climate cooperation agenda, and signed up with the majority of the world in an effort to consciously curb GHG emissions and

¹⁵⁰ BANG, G. The United States: Obama's push for climate policy change. In: G. BANG, A. UNDERDAL, and S. ANDRESEN. *The Domestic Politics of Global Climate Change: Key Actors in International Climate Change Cooperation*. Cheltenham, UK: Edward Elgar, 2015, pp. 160-181.

limit the rise in Earth's average temperature. John Kerry, Secretary of State, and President Obama were highly integrated in crafting the literature and agenda put forth in the Paris Agreement.

However, with proposals of domestic ambitious climate policy comes a wave of deterrence and objection. The U.S. political arena is highly partisan, and in recent years the climate change debate has proven to be a topic that almost certainly divides Congress and the public on the left and the right. Obama's Clean Air Act was proposed in 2015, and was a federal policy directive that allowed the EPA to make strict efforts to combat climate change, and was met by a highly contested protest by Congress. Many in Congress have introduced bills to counter the EPA's regulatory GHG emission actions, considering them controversial and overreaching in executive authority.¹⁵¹ Obama worked hard to push his environmental agenda right until his last days in office, before a new President with staunch opposite views on the environment arrived in Washington with the power to truly dismantle the system.

Even though his policy proposals were met with criticism, Obama will be a President of the United States who is truly remembered for his championing of the environment. He set out to encourage young people and their families to visit U.S. National Parks, protected more federal land than any previous president, guarded Arctic waters against eager oil companies, and additionally fought for indigenous rights. He was logically aware that the U.S. is largely responsible for the Earth's warming, and knew GHG emissions needed to be curbed. He was more eager to work with the international arena, along with lawmakers in the EU, more so than his predecessors.

4.5.2. The Trump Administration (2017-present)

In November 2016, the United States witnessed a giant political divergence with the election of the 45th president of the United States, Donald J. Trump. An outsider to Washington and its practices and running as a Republican, he has begun his first few months in the presidency with a staunch battle firmly against continued environmental protection and climate change awareness, reversing many Obama age policies. During his hotly contested campaign, he had even gone so far as to say that climate change was a hoax, created by the Chinese in an effort to decrease U.S. economic competition. This attitude has done nothing to calm Democratic supporters of Obama and Republicans alike, who note that the U.S. must keep the environment as a top priority. The U.S. is still to this day, the second largest emitter of greenhouse gases in the entire world.

From all the rhetoric and actions being taken, newly inaugurated President Trump will no doubt focus on an economy where the U.S. puts its energy security first. After all, the two most common concerns with regards to more climate regulations are energy security importance and sustained low energy prices. They often tend to overshadow the need for more environmental safety at all.¹⁵² Trump seems to be aiming in this precise direction; a complete lack of intended policy or action to protect the environment or our climate, calling Obama's climate politics outrageous, far-reaching, and detrimental to U.S. economic interests. Trump has signed many Presidential Executive Orders since entering the White House on January 20, 2017, and many have been directed at reversing Obama age climate policy in order to revamp America's coal industry. The coal mining jobs in the U.S. have been declining for decades but had taken a recent hit after more climate and GHG regulations were put into place by Obama's Executive Orders during his presidency.

Trump considers bringing back the coal industry and opening up U.S. land for more oil drilling as key priorities for U.S. energy. He is keen to kill any regulations that protect our environment at the moment, including decreasing funding to the Environmental Protection Agency and planning to dismantle it. The EPA works hard to ensure all areas of our environment are being protected, to the benefit of U.S. citizens. Unfortunately, this federal agency is viewed as a waste of funding for Trump as he cut the overall budget by

¹⁵¹ BANG, G. *Ibid*, pp. 160-181.

¹⁵² BANG, G. *Ibid*, pp. 160-181.

30%, the lowest its seen in 40 years.¹⁵³ Also, a bill has actually been introduced into Congress that simply calls for the complete elimination of the EPA by 2018; to give an idea into the anti-environmental climate the U.S. is entering. Trump is pushing forward to repeal climate change and GHG standards set by Obama, eliminate funding on watershed ecosystems protection projects, plus kill pollution regulation methods that help keep U.S. waterways clean. He states these norms are “job killers”.¹⁵⁴ Additionally, he will most likely look to reverse the moratorium on Arctic drilling that Obama put into place late into his presidency in 2016, protecting Arctic waters for at least 5 years. Clean energy practices or green efforts are not priorities for Trump, as he rules in favor of looking back into past energy practices for strength, instead of profiting off what could be a more sustainable future.

In the face of climate change policy reversal by the Trump Administration, the nation of the United States now will look toward local communities and state governments to set climate precedents and promote effective environmental leadership. Certain states and cities have already signed the UN Paris Agreement themselves in response to Donald Trump’s pulling out, including Hawaii being one of the first.¹⁵⁵ Many U.S. cities are bypassing their federal government’s mindset and aligning themselves with international UN initiatives regardless of U.S. leadership looking forward into 2018. As of November 2017, the U.S. is officially the only country in the world that has not pledged to formally implement the Paris Agreement, with even Syria finally declaring approval, their intention to sign, and ratify.¹⁵⁶ This sends a loud message that global warming, climate change, and environmental protection are not Trump Administration priorities. Unfortunately, this decreases U.S. legitimacy on the international stage. As one of the world’s largest GHG emitter sits out of the biggest global environmental protection effort, the U.S. will gain less credibility in aspects of international cooperation and foreign policy with the current state of affairs.

Conclusions

This analysis has intended to show the overall importance of the Arctic in this day and age, and discuss the overwhelming threat of climate change that is being seen in the region. This threat not only persists in the North but it is radiating around the world, inserting itself into international relations. Therefore, when contemplating how to overcome this global threat, the world needs to put policy and efforts into motion that clearly have a purpose to protect the environment for future generations. The Arctic states and international community therefore have an obligation to see this through in the North. The original hypothesis stated:

- 1. The European Union will rise to become an international player in the Arctic and promote its climate and environmental values in the region, surpassing the actions of the United States in future Arctic protection endeavors.**

We will find this, in fact, to be true in upcoming years, as the EU at this moment has put forth a very detailed climate driven policy that highlights their strengths and successes as avid climate policy creators and environmental protectors themselves. They are highly keen on proving themselves to gain legitimacy in the Arctic region. The EU by its nature is all encompassing, international, diverse, and generally open, and although different member states clash on climate regulations to some degree, the EU has successfully been able to channel the green light on climate policy action throughout Brussels and outward to surrounding states. There is a general consensus about the necessity of climate change policy in Europe that cannot be seen in the United States, and that is the underlying problem. The EU government is environmentally driven,

¹⁵³ DAVENPORT, C. Trump Budget Would Cut E.P.A. Science Programs and Slash Cleanups. *The New York Times* [online]. 19 May 2017. [Accessed 7 November 2017]. Available from: <https://www.nytimes.com/2017/05/19/climate/trump-epa-budget-superfund.html>

¹⁵⁴ *Ibid.*

¹⁵⁵ KENNEDY, M. Hawaii Signs Legislation to Implement Goals of Paris Climate Accord Anyway. *NPR* [online]. 7 June 2017. [Accessed 10 June 2017]. Available from: <http://www.npr.org/sections/thetwo-way/2017/06/07/531882630/hawaii-signs-legislation-to-implement-goals-of-paris-climate-accord-anyway>.

¹⁵⁶ FRIEDMAN, L. Syria Joins Paris Climate Accord, Leaving Only U.S. Opposed. *The New York Times* [online]. 7 November 2017. [Accessed 7 November 2017]. Available From: <https://www.nytimes.com/2017/11/07/climate/syria-joins-paris-agreement.html?mwrsm=Facebook>

and the U.S. is highly energy driven at the heart of internal government workings. The Obama National Arctic Strategy put security and energy as the first core interests in the Arctic, as did the state of Alaska with their policy. While the environment was touched on, these American policies simply didn't match up to the green driven, sustainable and low carbon emission solutions of the EU Arctic Policy that will ultimately benefit the environment and especially the Arctic. The U.S. projects universal, international ideas and agendas on paper, but does not or cannot always follow through with policy, depending on each President and administration that enters the Oval Office or the Congressional majority.

Furthermore, these problems stem from the climate change debate and its highly politicized nature in the U.S., which is astounding, as the international science that proves the facts should not be questioned. Therefore, the U.S. is incapable at the moment of reaching an environmental and climate change universal initiative in their country, even though they are an Arctic state and will experience impacts of climate change daily on their home soil. International cooperation, sharing of information, and research is key when talking about the environment and climate, and this is what the EU championed in their policy. Obama's recent vision pushed towards this as well, but the changing tides of Washington will put an end to international American mindsets. Unfortunately, Obama's environmental agenda will be kept on hold, or eliminated further. Ultimately, we all live on planet earth. Not one country or person can think they know what is correct or best for the entire planet. Sadly, this is the road where U.S. leadership is heading in 2017 with the introduction of the Trump Administration. The EU is consequently more poised to better develop environmental and climate change policy aimed at protection and preservation, while the U.S. is trapped in partisan divides and the plague of climate change denial.

To continue, after examining the international, European, and American policy and efforts towards the Arctic and climate change, and reexamining the original hypothesis, the following conclusions have been additionally reached to explain further analysis.

2. Our climate is increasingly warming and will not stop unless world leaders and local communities take action to combat it.

After careful examination of many forms and sources of relevant climate science it is absolutely clear that the evidence of climate change is astounding and the threat level is rising with each passing year. An overwhelming number of scientists from around the world agree that the consequences of climate change are spreading across the globe and the chain reaction begins in the Arctic region. Increased temperatures from a rise in GHG emissions start the chain reaction in the Arctic that alters the climate for the entire planet. The Paris Agreement is crucial for stopping the devastating impacts of climate change, and the EU is clearly poised to help in this regard, while the U.S. has obviously just retracted from said agreement sparking international outrage. The consequences of the world's second largest emitter of GHGs not being included in the agreement remains to be seen. Many U.S. states and cities are building up the resistance to fight government and push for implementing the Paris Agreement standards in their own neighborhoods. These efforts will no doubt become increasingly more important to Americans in the coming years, for U.S. public opinion does favor acting on the threats of climate change, a stark contrast with what can be achieved in Congress.

3. The Arctic Council will increasingly grow in importance the next few years as more observers wish to gain status, and more collaboration produces more relevant environmental protection initiatives.

Starting in the year 1996, this high-level forum has grown to be the most prominent and important organization for Arctic leadership, dialogue, and environmental protection. The Working Groups and Task Forces that have been put into place under the Council truly emphasize the key target areas of interest in the Arctic. Furthermore, their platform for indigenous communities is absolutely necessary and will increase in importance, as adaptation strategies must be examined to be resilient when facing climate change in Arctic communities. Just this year more observers were added, large organizations and non-Arctic states alike, who are realizing the strategic importance and environmental significance of the Arctic. This will continue as the world watches the region and sees climate change become drastically visible in each Arctic state. The Arctic

Council will remain the future of Arctic affairs management and dialogue, paving the way for more insight and strong global Arctic dialogue.

4. The European Union and its close ties with member state Finland will allow increased Arctic dialogue for the next two years during Finland's Chairmanship of the Arctic Council.

As Finland just assumed their Chairmanship in May 2017, the European Union has already hosted a high-level event with the Senior Finnish Arctic Officials and EU high-ranking officials alike. This is a signal that these two parties will be most certainly working together the upcoming months and years, and the EU will most likely observe and attribute to special environmental projects or initiatives carried out within the Arctic Council from 2017-2019. It could even be said that with the Finnish Chairmanship, the EU could finally be ratified as an official observer to the Council, but that remains to be seen. The EU has been searching for this kind of role regarding the Arctic and in these upcoming years they could be pleasantly surprised at the leadership position they arrive to. All in all, the closeness of EU and Finnish officials, and their joint efforts to promote Arctic sustainable development and protection, signify that the EU will be increasingly more involved in the region with the help of Finland's Chairmanship. This also means that two environmentally driven leaders will be strengthening bonds to bring true aide to the Arctic, at a time where the region needs it most. This can only bring positive outcomes for the Arctic region.

5. President Trump and his leadership the next four years will only lead to increasingly less Arctic environmental protection, favoring Arctic energy exploitation in the name of U.S. national security, and even U.S. alienation on the international stage.

President Trump will succumb to energy interests as Republican climate denying president, and a newfound tension with Russia and their military buildup will not help Arctic focus remain on environmental protection and climate change in the future. The creation of new official Arctic policy initiated by Obama will need to continue, and the final product may not vary drastically from his previously established National Strategy. However, if no large changes are made in crafting the new policy, Trump could purely adhere to the certain elements of the policy he agrees with, while disregarding the rest, namely the key environmental issues. This includes: responsible and sustainable energy extraction, preventing the release of harmful emissions like black carbon, and pollution preparedness. Or, the new Arctic policy could be put on hold indefinitely. Unfortunately, as we have analyzed, his reach to revamp the coal industry in the U.S., implement more oil pipelines, and drill in the Arctic does not indicate an environmentally conscious President, but rather a fossil fuel, energy driven one. He has already intended to retract Obama age policy and EPA regulations, and most likely will continue to do so, unraveling the U.S. framework for combating climate change. The Arctic could very well suffer under the Trump Administration, and be set back years in environmental protection.

Another key point is the U.S. global image under Trump. The international community recognizes that backing out of the Paris Climate Agreement is a somber indication of a transformed nation. Each U.S. president can certainly bring great change, but the U.S. is experiencing a domestic political crisis which ultimately produces a negative image around the world. The U.S. is no stranger to shifting presidential views and diverse foreign policy visions, but the U.S. retracting from the largest UN initiative in years is astounding. The international community is now more aware than ever that Donald Trump truly believes in his "America First" platform he ran on during the election. Now, the U.S. is not going to spend time on improving the world's environment that we all collectively share and inhabit. This is a daunting message, but perhaps could inspire other nations or unions, like the EU, to act more boldly in the climate change field and help the Arctic environment survive.

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Resumen: El cambio climático es un problema mundial polifacético, y la región ártica es una de las áreas más vulnerables actualmente en riesgo debido a sus efectos perjudiciales. El Ártico regula el clima de la Tierra y, por lo tanto, la protección ambiental del Ártico es un diálogo necesario que debe explorarse en las relaciones internacionales. Es un problema global de máxima importancia. Esta tesis destaca el papel de los diferentes protagonistas del Ártico, incluido el Consejo Ártico, el principal foro internacional en las relaciones diplomáticas árticas. Esto nos lleva a un examen del trabajo que las Naciones Unidas han llevado a cabo con respecto al cambio climático y, finalmente, a comparar la política ártica de dos fuerzas (o potencias) globales clave, la Unión Europea y los Estados Unidos. Sus perspectivas divergentes son claras; la UE es una unión política y económica colectiva sin un estado propio del Ártico, mientras que los EE. UU. es una nación independiente del Ártico con más intereses geopolíticos y territoriales en la región. Se explorarán las políticas, los intereses, la cooperación y los desafíos de la UE y los EE. UU. en el Ártico. Se discutirán puntos clave como la Política ártica de 2016 de la UE, la presidencia finlandesa del Consejo Ártico, la política divisoria de los EE. UU. respecto al cambio climático y las fuentes energéticas, y la tendencia de EEUU a rechazar los acuerdos colectivos internacionales. Al final, sus posturas sobre el medio ambiente son lo verdaderamente importante. El cambio climático y el Ártico están relacionados científicamente y, por lo tanto, la protección ambiental del Ártico es crucial en el debate sobre el cambio climático. Queda por ver cuáles de estos líderes mundiales se levantarán para encabezar la lucha por la protección del Ártico frente a su deterioro, y cuales sucumbirán únicamente a los intereses estratégicos de energía y seguridad. Una cosa es cierta: la cooperación internacional en el Ártico es fundamental para su supervivencia en el futuro.

Abstract: Climate change is a multi-faceted global issue, and the Arctic region is one of the most vulnerable areas currently at risk from its detrimental effects. The Arctic regulates the Earth's climate, and therefore Arctic environmental protection is necessary dialogue, which needs to be explored in international relations. It is a global issue of the highest importance. This thesis highlights the role of several Arctic players, including the Arctic Council, the leading international forum in Arctic diplomatic relations. This leads into an examination of the work that the United Nations has accomplished in respect to climate change and eventually the Arctic policy of two key global powers, the European Union and the United States, is compared. Their divergent perspectives are clear; the EU is a collective political and economic union with no distinct Arctic state of its own, while the U.S. is an independent Arctic nation with more geopolitical and territorial stake in the region. EU and U.S. policy, interests, cooperation and challenges in the Arctic will be explored. Some important key topics include the EU's recent 2016 Arctic Policy, the Finnish Chairmanship of the Arctic Council, divisive U.S. climate change and energy politics, and U.S. tendency to reject collective, international agreements. In the end, each of their stances on environmental protection are what is truly of importance. Climate change and the Arctic are scientifically linked, and therefore Arctic environmental protection is crucial in the climate change debate. It remains to be seen which of these world leaders will rise up to lead the fight for Arctic protection in the face of its deterioration, and which will succumb to only strategic energy and security interests. One thing is certain: international cooperation in the Arctic is fundamental for its survival in the future.

Palabras clave: cambio climático, medio ambiente, protección del medio ambiente, Ártico, región ártica, política ártica, Naciones Unidas, Consejo Ártico, Unión Europea, Estados Unidos, calentamiento global, ciencia, política exterior, relaciones internacionales, foro, política, geopolítica, multilateral, bilateral, intereses, cooperación, hielo marino, emisiones de carbono, gas de efecto invernadero, atmósfera, energía, seguridad, presidencia, sostenible.

Keywords: climate change, environment, environmental protection, Arctic, Arctic region, Arctic Policy, United Nations, Arctic Council, European Union, United States, global warming, science, foreign policy, international relations, forum, policy, geopolitics, multilateral, bilateral, interests, cooperation, sea ice, carbon emissions, greenhouse gas, atmosphere, energy, security, universal, chairmanship, sustainable.