Hacettepe University Graduate School Of Social Sciences

Department of International Relations

International Relations MA

ANALYZING THE IMPACT OF CLIMATE CHANGE ON ENERGY SECURITY POLICY OF RUSSIA IN THE ARCTIC REGION

Ali BERKUL

Master's Thesis

Ankara, 2019

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The jury finds that Ali BERKUL has on the date of 31.05.2019 successfully passed the defense examination and approves his Master's Thesis titled "Analyzing the Impact of Climate Change on the Energy Security Policy of Russia in the Arctic".

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Ali BERKUL

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ETİK BEYAN

Bu çalışmadaki bütün bilgi ve belgeleri akademik kurallar çerçevesinde elde ettiğimi, görsel, işitsel ve yazılı tüm bilgi ve sonuçları bilimsel ahlak kurallarına uygun olarak sunduğumu, kullandığım verilerde herhangi bir tahrifat yapmadığımı, yararlandığım kaynaklara bilimsel normlara uygun olarak atıfta bulunduğumu, tezimin kaynak gösterilen durumlar dışında özgün olduğunu, **Dr. Öğr. Üyesi Şebnem UDUM** danışmanlığında tarafımdan üretildiğini ve Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Tez Yazım Yönergesine göre yazıldığını beyan ederim.

Ali BERKUL

ABSTRACT

BERKUL, Ali. *Analyzing the Impact of Climate Change on Energy Security Policy of Russia in the Arctic Region*, Master's Thesis, Ankara, 2019.

Of all topics on the international political agenda, climate change is regarded as one of the most important issue. Climate change threats the ecosystem of the Earth by putting the existing environmental settings in its regions at stake. The Arctic region experiences more of the effects of it when compared with the other regions of the Earth. In fact, Climate change denudated the Arctic region for the first time in recorded history. Moreover, the climate change made possible to inquire and exploit the resources in the seabed of the Arctic Ocean. So, the importance of the region, in the eyes of littoral states and great powers, has increased slightly since Arctic region holds great amount of untouched energy and mineral resources along with navigable shipping routes like Northern Sea Route (NSR) and North West Passage (NWP). These resources and routes whet the appetite of the littoral states to utilize those for their interests while arising boundary issues among them. Russia, as one of the littoral state, perceived climate change as a blessing and wanted to establish its Arctic energy security policy to benefit from energy resources and new maritime route in the Arctic as soon as possible. In this regard, Russia followed her Realism dominant security policies for the Arctic region to secure its borders, NSR and interests. However, Russia widen its Realist base of security policies with Liberal assumptions for energy and environment related issues while establishing energy security policy towards the region. It is argued in the thesis that this combination created a hybrid base for Russia to pursue for its Arctic energy security policy. Therefore, this thesis aims to inquire and answer the impact of climate change on the energy security of Russia in the Arctic region.

Keywords:

Climate Change, the Arctic Region, Russia, Energy Security.

ÖZET

BERKUL, Ali. *İklim Değişikliğinin Rusya'nın Arktik Bölgesindeki Enerji Güvenliği Politikasına Etkilerinin İncelenmesi*, Yüksek Lisans Tezi, Ankara, 2019.

İklim değişikliği, uluslararası siyasi gündemdeki konuların arasında en önemli konulardan biri olarak kabul edilmektedir. Çünkü iklim değişikliği, Dünya'nın bölgelerindeki çevresel koşulları riske atarak, Dünya'nın ekosistemini tehdit etmektedir. Dünya'nın diğer bölgelerine nazaran, iklim değişikliğinin etkileri Kuzey Kutbu bölgesinde daha fazla görülmektedir. Hatta insanlığın kayıt edilen tarihi süresince, iklim değişikliği sebebiyle buzullarının geniş ölçekte erimesi sonucu Kuzey Kutbu bölgesi ilk defa çıplak hale gelmiştir. Bu durum, Kuzey Kutbu Okyanusunun tabanında bulunan ve bölgenin önemini artıran enerji kaynaklarının araştırılıp çıkarılmasını mümkün kılmıştır. Kuzey Kutbu bölgesi, Kuzey Deniz Yolu (NSR) ve Kuzey Batı Geçişi (NWP) gibi ulaştırmaya açık nakliye deniz yollarının yanı sıra el değmemiş büyük miktarlarda enerji ve mineral kaynaklarını bulundurmaktadır. Bu kaynaklar ve deniz yolları, kıyı devletlerinin bunları kendi çıkarları doğrultusunda kullanması konusunda iştahlarını kabartırken aralarındaki sınır uyuşmazlıklarını gün yüzüne çıkarmıştır. Kıyı devletlerinden biri olan Rusya, iklim değişikliğinin Kuzey Kutbu bölgesindeki etkilerini bir nimet olarak görerek bölgedeki enerji kaynaklarını ve NSR'ı kullanabileceği bir enerji güvenliği politikası oluşturmak istemektedir. Bu bağlamda, Rusya, bölgedeki sınırlarını, NSR ve çıkarlarını güvence altında tutmak için Realizmin baskın olduğu güvenlik politikalarını uygulamaya koydu. Fakat Rusya, bölge için enerji güvenliği politikasını oluştururken, genel olarak enerji ve çevre ile ilgili konularda güvenlik politikalarının Realist tabanını Liberal varsayımlarla genişletmektedir. Rusya bu iki anlayışı birleştirerek Kuzey Kutbu bölgesi için melez bir enerji güvenliği politikası oluşturmuştur. Bu nedenle bu tez, iklim değişikliğinin Rusya'nın Kuzey Kutbu bölgesindeki enerji güvenliği politikasını araştırmayı ve analiz etmeyi amaçlamıştır.

Anahtar Sözcükler:

İklim Değişikliği, Rusya, Kuzey Kutbu Bölgesi, Enerji Güvenliği.

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LIST OF ABBREVIATIONS

AC	Arctic Council
APERC	Asia Pacific Energy Research Centre
BAM	Baikal-Amur Main Line
CIS	Commonwealth of Independent States
CLCS	Commission on the Limits of the Continental Shelves
EBAC	Euro-Barents Arctic Council
EEZ	Exclusive Economic Zone
ENSO	El Niño – Southern Oscillation
EU	European Union
FDI	Foreign Direct Investment
FSB	Federal Security Service
GHG	Greenhouse Gases
IAEA	International Atomic Energy Agency
IASC	International Arctic Science Committee
ICJ	International Court of Justice
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
NATO	North Atlantic Treaty Organization
NC	Nordic Council
NOAA	National Oceanic and Atmospheric Administration
NSR	Northern Sea Route
NSS	National Security Strategy
NWP	North West Passage
OPEC	Organization of Petroleum Exporting Countries
UN	United Nations

UNCLOS	United Nations Convention on the Law of the Sea
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on the Climate Change
SWIPA	Snow, Water, Ice and Permafrost in the Arctic
WRI	World Resources Institute
WWI	World War I
WWII	World War II

LIST OF FIGURES AND MAPS

INTRODUCTION

The increasing average temperature of the Earth's surface is regarded as one of the most important issue of the 21st century. The distortion in the Earth's climate patterns, namely climate change, have certain impact on its linked ecosystem. Indeed, the frequency of the extreme weather events combined with the rapid thaw of sea ice proved the shift in climate patterns of the Earth.[1] The impacts of this change felt in the every region of the world. However, the rates of change are much more in "the Arctic where the average temperature has increased twice as much than the global rate over the past four decades".[2]

The Arctic region offers mixed results to littoral states in terms of economic and strategic gains in line with the impacts of climate change to the region. The fate of the Arctic region, which is previously regarded as the ground for ideological confrontation, would shift to prosperous one. Short-term economic gains provided by the Arctic region for energy and mineral resources extraction, protein sources existence, and tourism potential has increased its importance slightly,[3] although long-term negative environmental consequences remain as a question mark. However, all alone the increasing navigable period of sea routes in the Arctic Ocean combined with the existence of the energy sources in the seabed of it, lead littoral states to focus on the short-term economic gains.

Moreover, the increasing importance of the Arctic region, pave the way for positioning it into the center of international politics. Because, the "melting of the Arctic ice transforms the region from one of primarily scientific interest"[4] into a vortex which fed itself from energy, commercial and environmental concerns of littoral states. Surely, the resemblance of the Arctic as the last known place with untouched energy and mineral

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[1] Hooman Peimani, "Introduction", in *Energy Security and the Geopolitics in the Arctic: Challanges and Opportunities in the 21st Century*, ed., Homan Peimani (London: World Scientific Publishing Company, 2013), 1-2.
[2] Rob Huebert, "Climate Change and International Security: The Arctic as a Bellwether," *Center for Climate and Energy Solutions*, May 2012, 5.
[3] Peimani, *Energy Security and the Geopolitics in the Arctic: Challanges and Opportunities in the 21st Century*, 4.
[4] Charles K. Ebinger and Evie Zambetakis, "The Geopolitics of Arctic Melt," *International Affair* 85, no.6 (2009): 1215, https://www.brookings.edu/wp-content/uploads/2016/06/11_arctic_melt_ebinger_zambetakis.pdf (Accessed April 2, 2018).

sources, and transportation routes, positively contributes to its fame while revoking the territorial disputes among littoral states.[5] Indeed, the existence of energy resources that are equivalent to "at least 90 billion barrels of undiscovered oil, 47 trillion cubic natural gas and 44 billion barrels of natural gas liquid"[6] incurred the eyes of littoral states and great powers to the region. Furthermore, the emerging reality of Northern Sea Route (NSR) and North West Passage (NWP) as an alternative short cut routes via Arctic Ocean with the increasing duration, turned the Arctic region into an attraction center that requires state strategies to exploit its richness.

The shift in global climate patterns and the consequences of it seem to continue in the following years that guarantees the Arctic sea ice melt. In this regard, five littoral states, Russia, the U.S, Norway, Denmark, and Canada, seem to be in an advantageous position to set the strategies for utilizing the richness of the Arctic.[7] Nevertheless, because of the astatic nature of the Arctic region and its feature of being no man's land make hard to directly utilize the benefits of it for littoral states.

Among those littoral states, Russia remains in a much better position than others when uneven oil, gas, and mineral distribution in the exclusive economic zones of littoral states are taken into account.[8] Furthermore, the dependence of Russian economy to energy rent money and exhaustion of existing energy rigs in the territories of it, urged it to form energy security policy for the Arctic region.[9] The location of NSR combined with the energy resources delivery of it, certainly will put a positive effect on Russia's economy by boosting its energy exports. In this regard, Realist base of Russia for security and energy security understanding, put Russia under the pressure to take some security measures for the region to defend its interests. It also pushes Russia to set hybrid base to be relied on cooperation with littoral and great powers in the multilateral and bilateral relations for its energy security formulation for the region.

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[5] Paul R. Josephson, *The Conquest of the Russian Arctic* (Massachusetts: Harvard University Press, 2014), 331 – 332.
[6] Peimani, *Energy Security and the Geopolitics in the Arctic,* 4.
[7] Kathrin Keil, "The Arctic: A New Region of Conflict? The Case of Oil and Gas," *Cooperation and Conflict* 49, no. 2 (2014): 162- 163.
[8] Scott Stephenson. "Collaborative Infrastructures: A Roadmap for International Cooperation in the Arctic." *Arctics Knowledge Hub,* 2013, http://www.arctis-search.com/Collaborative+Infrastructures%3A+A+Roadmap+for+International+Cooperation+in+the+Arctic (Accessed January 5, 2018).
[9] Vincenzo Ligorio, "The New Russian Energy Strategy: The Future of the Economic Development Process Between Old and New Players," *International Scientific Journal,* no. 9 (2015): 191.

Russia, as a member state of the Arctic Council (AC) and as the great power whose coastline in the Arctic is longer than the others', perceives climate change and its short-term consequences as an opportunity. Indeed, Russia hopes to regain its superpower status through establishing full sovereignty over NSR and forming energy security policies for the region. Undoubtedly, Russia has five hundred years presence in the Arctic and for the control of NSR when Tsarist and Soviet history is revisited.[10] To utilize NSR for international shipping and because of the existence of energy resources in the region, Russian Arctic policies have been theoreticaly widening its base during the past years. Because, besides Russia, other littoral states are also after these economic gains of the Arctic as well that creates a conflictual environment to operate in. Indeed, lack of boundary drawing for the Arctic and territorial disputes among littoral states contributes to this situation in a negative direction. Russia, for that purpose looks for alternatives to strengthen her Arctic security and resource management through sustaining security of its resources.

However, Russia and other littoral states action to secure large shares of the regional resources, resolve of territorial disputes and to control maritime sea routes, hard power projection regarded as necessary tool. Indeed, the increasing numbers of littoral states army units have justified growing military presence in the region especially from the perspective of Russia to protect her respective national interests.[11] Russia, like it used to do throughout its history, follows Realist premises and pursues the same security perception for Arctic region in line with its security and energy security understanding, which is based on further expansion and domination over the energy resources to use it as a leverage in international affairs.

Indeed, Russia pursues muscle-flexing policies for the protection of its national interest and boundaries in the Arctic. Also, it pursues policies to strengthen the cooperation between littoral states for the Arctic affairs to extract energy resources and resolve territorial disputes among them. The combination of both of the policies of Russia set a hybrid base for its energy security policies the Arctic. This hybrid base even shaped her

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[10] Marlene Laurelle, *Russia's Arctic Strategies and the Future of the Far North* (New York: M.E. Sharp Inc, 2014), 24.

[11] "From Neutrality to NATO," *Nordic News Network,* September 2012, 69. http://www.nnn.se/nordic/americult/nato/steps.pdf (Accessed June 16, 2018).

foreign policy and Arctic strategy for the region. Basing United Nations Convention on the Law of the Sea (UNCLOS) and related regulations of the Commission on the Limits of the Continental Shelves (CLCS) both at the center of its territorial claims and for resolving territorial disputes are the examples of this. Furthermore, developing AC mechanisms to gather around with other littoral states is another example of this hybrid base. Thus, this base is used to realize technology transfer among littoral states but especially for Russia who is infamous for its lack of expertise and technology to operate under harsh conditions of the Arctic. Additionally, it is used to solve the disputes in a peaceful manner that creates difference with the Russia's general security policies. In this regard, the purpose of this thesis is to inquire and analyze;

How did Russia formulate its energy security policy in terms of the implications of climate change in the Arctic region?

To answer this question, sub-questions are needed to be asked. Within this context,

1-) *What are the determinants of Russia's energy security policy?*

2-) *What are the political implications of climate change in general and for the Arctic region in respect to territorial claims, a division of continental shelf and newly projected sea routes and energy extraction?*

3-) *How did Russia's security policies change in the Arctic region?*

will be inquired and answered in the thesis.

On the grounds of main research question, main argument of the thesis asserts that climate change put an impact on Russian energy security policies for the Arctic region to be relied on the hybrid base that are represents the difference in general energy security policies of Russia which is mainly based on Realist assumptions. Here, the hybrid base represents the widening of Realism based Russia's energy security policies with Liberal IR theory assumptions. In other words, the thesis argues that Russia uses its hard power for the purpose of deterrence in order to realize the security dimension of its Arctic energy security policy in the domain of Realism. For the energy part, Russia uses a hybrid base that base on international law, cooperation, mutual respect, and technology transfer to extract energy sources in the Arctic seabed. In this regard, climate change put an effect on Russian energy security policies for the Arctic region by

stressing cooperation and international law, along with the Realist background of general Russian perception.

Although the Arctic region and its correlation with climate change has been studied widely in the literature of IR in respect to geopolitics, territorial conflicts and international law,[12] the impact of climate change on the energy security policies of littoral states towards the region remains underexplored. Differently than existing works in the literature of the Arctic region and climate change, this thesis aims to contribute the literature of IR from the perspective of energy security. In this regard, Russian energy security formulations towards the region on the grounds of climate change will be examined in this thesis from the perspective of IR.

To achieve that, deductive approach will be adopted for the sections of the thesis which will set a base for merging theoretical and conceptual framework, climate change, the Arctic region, Russia's security and energy security perception from the defined theoretical framework of the thesis. Furthermore, in the explanation phase of the terms and the state policies, primary documents ranging from conventions, doctrines and to decisions of international organizations are to be used in the thesis. Thus, secondary sources including books, articles, and reports in the journals about the related topics will be utilized. Also, to follow the latest developments about the Arctic and the energy strategy of Russia, internet based sources will be used as well.

On the grounds of these and main research question, the thesis is divided into four chapters. To answer the main question of the thesis from the perspective of International Relations (IR), theoretical base and the conceptual framework of the thesis will be provided in the first chapter. Namely, Realism with its variants and the energy security concept are going to be defined and examined in this chapter. Also, Liberalism with its main assumptions will be provided in this chapter for creating a hybrid theoretical base to analyse Russia's Arctic energy security policy under the impact of climate change.

[12] For example, for International Law see; Nataly Nemkova Panagiota, *Shifting Arctic Boundaries: Rethinking Territory – New Understanding of Arctic Region*, School of Architecture Architectual Association, London, 2015 / 2016. For geopolitics see; Veera Pauliina Suvanto, *Geopolitics of the Arctic: Challanges and Prospects*, Universitat De Barcelona Master en Estudios Internationale, 2015 / 2016. For territorial conflicts see; Congressional Research Service, "*Changes in the Arctic: Background and Issues for Congress*," March 4, 2019. Also see authors like Rob Huebert, Alexander Sergunin, Valery Konsyhev, Marlene Laurelle and Hooman Peimani.

Lastly, the examination of the concept of energy security from the perspective of Realism will be provided to grasp the frame of the thesis.

The notion of climate change and its causes with its possible impacts on the Earth will be explained in the second chapter of the thesis. Then, the increasing importance of the Arctic region as the direct consequence of climate change will be inquired after defining the region geographically. The impacts of climate change on territorial conflics among the littoral states will be mentioned to draw the boundaries of littoral states in the end of the chapter.

In the third chapter Russia's general security perception will be defined in order to understand the Russian way of thinking for its security. Also, the place of the Arctic will be inquired within the security perception of Russia. As an example of Russian security perception, its energy security understanding will be explained as well. Furthermore, to overcome the astatic nature of the region and territorial conflicts in there, the perception of Russia towards those effects and boundary issues will be given. The relevance of the Arctic region and its resources for Russia will be discussed at the end of this chapter in order to link Russia, climate change and Arctic region together for its energy security policy towards the region.

The official state strategies of Russia to relate energy security and the Arctic with each other will be examined in the fourth chapter of the thesis. By doing so, the impact of climate change on Russia's energy security policy for the Arctic region will be assessed under three subtitles. Lastly, the findings of the chapters will be evaluated from the defined theoretical framework of the thesis in the evaluation part of this chapter.

CHAPTER 1

THEORETICAL AND CONCEPTUAL FRAMEWORK

The impact of energy sources over international relations has been increasing. The examination of this effect requires theories of IR to make sense of it. For that purpose, Realist theory of IR with its main concepts, arguments, and background will be provided in this part of the thesis. Realism will be used as a theoretical ground to explain Russian energy security policy. In addition to that, Liberalism and some of its main arguments to supply Realism and to create hybrid base in favor of Realism will be given. Also, the term energy security with its ranging definitions will be covered to form a basis for examining Russia's Arctic energy security policy. In the end of this chapter, theoretical examination of term energy security will be provided from defined theoretical framework to set the ground for understanding the impact of climate change on the Russia's Arctic energy security policy.

1.1. THEORETICAL FRAMEWORK

As the oldest theory of IR in the literature, Realism and its political tradition dates back 2500 years before to the writings of Thucydides. Besides Thucydides, Niccolo Machiavelli and Thomas Hobbes are also known as important early thinkers that contributed to the theory while Edward H. Carr and Hans J. Morgenthau are known as the 20th century thinkers of Realism. As a result of the intellectual accumulation of those thinkers, motives of Realism ranging from interest, greedy desire for power and conflictual relations under anarchical conditions provide a basis for all variants of Realism, but especially for the Classical Realism.[13]

[13] Dylan Kissane, *Moving Beyond Anarchy: A complex Alternative to Realist Assumption*, PhD diss., University of South Australia School of International Studies Division of Education, Arts and Social Sciences, 2009, 27, search.ror.unisa.edu.au/media/researcharchive/open/9915953300001831/53111925560001831 (Accessed January 3, 2018).

The very base of the theory is structured over unwieldy nature of the mankind for endless desires of it in an "environment that is based on jungle law".[14] Preordained position of unwieldy nature is taken as statically determinant by Realist theory of IR. In line with it, the actions of man is considered as "wicked which feeds itself from egoistic and greedy desires of it".[15] Furthermore, men have a desire to control the environment, in which they live, in a continuous way by its nature. Consequently, states, which are formed by the men, are expected to take "evil actions in their political actions" since they are ruled by the people who are after power.[16]

From the perspective of Realism, all states resembled as the unitary key actor in which "sphere of domestic and international politics cannot be separated" but singled out.[17] States accepted as rational actors that operate in an anarchic environment where sovereign higher entity above them lacks.[18] However, only powerful states and their behavior under the anarchic international system are taken into account in the terminology of Realism. It is mainly because of those states weight and power to influence others in international politics. Because, capabilities of great powers exceed greatly when compared with the weak states. Furthermore, Realism assumes to play down the effects of other actors in international politics.[19] Indeed, international organizations regarded as the tool of great powers.[20]

In this regard, the main concern of Realism based on survival of the state is yet to be sustained. Under anarchical conditions, interstate relations resembled in a conflictual manner in the domain of Realism. Rationally, states aim to survive under those conditions through increasing their power.[21] Very basic reasons for such a tendency lie

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[14] Jack Donnely, *Realism and International Relations* (Cambridge: Cambridge University Press, 2010), 10.
[15] Ibid.
[16] Ibid.
[17] Richard Ned Lebow, "Classical Realism" in *International Relations Theories: Discipline and Diversity*, eds., Tim Dunne, Milja Kurki and Steve Smith, 3rd Edition (Oxford: Oxford University Press, 2013), 60.
[18] Jack Donnely, "Realism" in *Theories of International Relations,* eds., Scott Burchill, Andrew Linklater and Richard Devetak et al., 3rd Edition (Palgrave Macmillan: New York, 2005), 30.
[19] Jennifer Sterling Folker, "Realist Approaches" in *Making Sense of International Relations Theory,* ed., Jennifer Sterling Folker (Boulder: Lynne Rienner Publisher, 2013), 18.
[20] Randal L. Schweller and David Priess, "A Tale of Two Realisms: Expanding the Institutions Debate," *Mershon International Studies Review* 41, no.1 (1997): 3. Pp. 1- 32 toplam sayfa sayısı.
[21] Ned Lebow, "Classical Realism", 63.

on the bad nature of mankind that feeds itself from greedy desires of it.[22] For that purpose, what is proposed by Realism is that states should rely on their own power capabilities through which they can project self-help elements.

Consequently, states can survive in the anarchical environment and assert their own national interests over the others in line with their volume of power. In this regard, power is intertwined with interest in the domain of Realism that urge states to acquire power and base their relations with others on the grounds of it.[23]

Also, states formulate their foreign policy agenda based on rational concerns and its own national interest in order to maintain their survival under "Hobbesian state of nature".[24] Indeed, since those conditions of the international system cannot be overcome or defeated, rather pessimistic thoughts over war and peace directed ongoing relations among nation states under "war is inevitable" motto.[25] Undoubtedly, war can be seen as the continuation of diplomacy by other means as Clausewitz stated from the Realist perspective of IR.[26] This urged the increasing need for power projections while decreasing the desire for dependency over the others to achieve greater goals and to keep gains relatively more than them. In this regard, cooperating on high politics related issues like security remain unlikely in the domain of Realism when compared with the possible cooperation on low politics like environmental issues.[27]

Nevertheless, because of the very existence of anarchic conditions in the international arena, power projections of unitary nation-states might end up with the security dilemma.[28] Indeed, developing hard power capabilities can alert opposing or other states. Since relations among states relies on the zero-sum game, in which one state gain

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[22] Jill Steans, Lloyd Pettiford and Thomas Diez et al., *An Intrdocution to International Relations Theory: Perspectives and Themes*, 3rd Edition (London: Pearson, 2010), 57.
[23] Hans J. Morgenthau revised by Kenneth W. Thompson. *Politics Among Nations: The Struggle for Power and Peace*, 7th Edition (McGraw-Hill Higher Education: Boston, 2005), 4-10.
[24] Donnely, "Realism", 32.
[25] Wlodzimierz J. Korab-Karpowicz, "Political Realism in International Relations," *Stanford Encyclopedia of Philosophy*, Last Modified on May 24, 2017, https://plato.stanford.edu/entries/realism-intl-relations/ (Accessed January 5, 2018).
[26] Robert Ayson, "The Changing Character of Warfare" in *An Introduction to International Relations*, eds., Richard Devetak, Anthony Burke and Jım George (Cambridge: Cambridge University Press, 2012), 208.
[27] Robin Eckersly, "Green Theory" in *International Relations Theories: Discipline and Diversity*, eds., Tim Dunne, Milja Kurki and Steve Smith, 3rd Edition (Oxford: Oxford University Press, 2013), 266.
[28] John J. Mearsheimer, "Structural Realism" in *International Relations Theories: Discipline and Diversity*, eds., Tim Dunne, Milja Kurki and Steve Smith, 3rd Edition (Oxford: Oxford University Press, 2013), 80.

upper hand against the losing state,[29] hard power projections might end up with negative consequences in the terminology of Realism. Although the power projections is pursued by states to survive under anarchy, competition for power to survive in those conditions can have devastating results on the contrary to the very first Realist assumption.[30]

To further block to realize such consequences, states in a rational manner end up with alliance formulations in order to check and balance the superior one under the balance of power formulations.[31] However, the balance of power formulations might not fulfill its original purpose and might set a base for conflictual relations for several reasons. First of all, states cannot know other states intentions when allies needed to counter the opposing power that might result in bail out of some of the allies as well.[32] Also, that sort of mechanism can be considered as two-sided medallion that aims to block the realization of armed conflict but set a base for embarking on a new one.[33] In addition to those, states in alliance formulation can decide to not to engage war with superior one but left in a position to do so.

The framed limitations of classical Realism have been categorized under six features with the work of Hans J. Morgenthau which is titled as *Politics among Nations: The Struggle for Power and Peace*. Accordingly, the base of "politics and the philosophy of Realism rely on objective law which can be found in the roots of human nature".[34] Furthermore, Realist beliefe over the human nature and objective law is associated with the historical past of mankind which is believed to be static. According to him, politics and their implications are pursued to get power can be initiated with the fundamental thinking of mankind.[35] Indeed, policymakers set or pursue policies based on rational datas to increase respective states power. Accordingly, the definition of power is made in line with the interest.[36] In this regard, power and interest are correlated by

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[29] Scott Burchill, "Liberalism" in *Theories of International Relations*, eds., Scott Burchill, Andrew Linklater and Richard Devetak et al., 3rd Edition (Palgrave Macmillan: New York, 2005), 65.
[30] Ibid., 80-81.
[31] Michelle Laurizzi. "Realism" in *An Introduction to International Relations,* eds., Richard Devetak, Anthony Burke and Jım George (Cambridge: Cambridge University Press, 2012), 36- 41.
[32] Lebow, "Classical Realism", 62-64.
[33] Ibid.
[34] Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace,* 7th Edition (McGraw-Hill Higher Education: Boston, 2005), 3.
http://www.drmalikcikk.atw.hu/wp_readings/morgenthau.PDF (Accessed March 3, 2019).
[35] Ibid., 9.
[36] Ibid., 4-10.

Morgenthau that both terms are used to explain and support each other, and to exclude differences in the idiosynacracies of political elite.[37] Furthermore, the importance of the time of an event to single out interest for any occasions in an astatic manner is highlighted. Namely, interest or power is regarded as something which is not static and it can be changed in line with the necessities of a time period.[38]

As another principle of political Realism, Morgenthau takes "moral significance of the political actions"[39] into consideration. However, there cannot be single abstract moral principles to follow. These "universal moral principles cannot be applied to actions of states"[40] as Morgenthau stated but they can be used to understand the reasons and the consequences for the specific period of time. In line with it, political Realism does not single out nation's moral principles and make a clear distinction between universal moral law and a nation's moral law.[41] In this regard, Realism of Morgenthau created an independent zone for politics. Accordingly, Realism has an "autonomous sphere for politics"[42] in which power politics remain at the heart of this zone. In this autonomous sphere, "How does this policy affect the power of nation?"[43] is asked to put power and the human factor at the center of international politics.

In this context, power is elaborated in a wide manner in line with the Realist paradigm by Morgenthau. Indeed, power does not only refer physical or coercive capability but also political one. Accordingly, power has different elements ranging from size, military force, percentage of natural resources, morale, the character of a nation, government, quality and quantity of the population, diplomacy, and to industrial capacity.[44] If those elements are supplied or established enough, it grants great power status to the individual states. Besides concrete power elements, an abstract element like diplomacy is highlighted as well. In line with that, the coercive mean of power gained another dimension based on political and economic sanctions.[45] Combination of those elements of the power under one roof minimizes the risks for survival in the scope of Realism

[37] Ibid., 9-10.
[38] Ibid.
[39] Ibid., 10.
[40] Ibid.
[41] Ibid.
[42] Ibid., 12.
[43] Ibid.
[44] Joshua S. Goldstein and Jon C. Pevehouse, *International Relations*, (London: Pearson, 2014), 47.
[45] Ibid.

that every single convertible element including technology, economy, territory and etc. plays a crucial role to reach it.

In fact, a combination of all those elements together creates three different version of power which includes hard, soft and smart one.[46] Not only relying on hard military power, states can merge all these elements together in order to influence others actions. Through using geographical settings, alliance formulations, and agenda setting to control the others, states do not only increase their hard power capabilities but also soft and smart one.[47] In return, the sort of power that is projected by a state can be used during foreign policy formulations and chasing national interest from the perspective of Realism.

However, the need for more precise knowledge about the actions of individual states becomes obvious at the height of Cold War, "especially after Cuban Missile Crisis of 1962".[48] Focusing power and bad human nature alone for every reason, shaken the explanatory scale of the classical Realism when exact timing to take actions for the states is needed. For that reason, "Realism turned into more scientific one under the name of Neorealism with the work of Kenneth Waltz which is titled as *Theory of International Politics* in 1979".[49]

Neorealism explained international system through excluding human nature. According to Neoralism, survival of states in anarchic conditions is based on systemic features, not intangible ones.[50] To be more clear, the embedded actions of states can best be elaborated by the constraints on their actions which are preordained by the structure of the international arena. Here, the structure of international arena refers not to a chaotic environment but an ordering anarchic structure that differentiate states in line with the distribution of capabilities from the perspective of Neorealism.[51] In other words, the distribution of capabilities among states plays a decisive role here that can vary and change in line with their capacities and capabilities while anarchical conditions of the

[46] Ibid., 46-47. See also; Matteo Pallaver, *Power and Its Forms: Hard, Soft and Smart*, PhD diss., London Schools of Economics Department of International Relations, London, 2011, 3.
[47] Pallaver, op. cit., 106.
[48] Korab-Karpowicz, "Political Realism in International Relations".
[49] Ibid.
[50] Mearshemier, "Structural Realism," 78.
[51] Ibid, 82. Sea also; Helen Milner. The Assumption of Anarchy in International Relations Theory, *Review of International Studies* 17, issue.1 (1991): 75- 77.

system remain solid. This led to an emergence of the understanding of self-help in the neorealist terminology as well. Because, the anarchical conditions of international system restrain the cooperation among states on the grounds of insecurity and unequal gains.[52]

Uuncertainty about the actions of each state towards one another when combined with the undefined intentions of states, created an environment that cooperation among actors remains short-lived and interest based.[53] In this regard, dependency and cooperation reflected rather negatively to reach an ultimate goal, which is survival. In this sense, power reflected as an end to survive in the context of neorealism.[54] However, this created a debate within the theory about how much power is needed to survive in anarchical conditions under the defensive and offensive camp of neorealism.

According to the perspective of defensive realism of Waltz, states pursuing power for security maximization is the main concern in order to survive in the anarchic international system.[55] Although being strong and powerful enough is needed for the security maximization for the states, it can also create a counterbalance or aggressive actions against them to check and balance the power structure. Because power can create power insecurity and decrease the efficiency of the balance of power. Indeed, when the allied forces action is taken into account against the Napoleonic France and the revisionist Germany, the point stressed by the Waltz prove its validity.[56] On the other hand, the offensive realism of Mearsheimer argues that gaining as much as power is the main concern for the states in order to survive in anarchy under the states preponderance of power against the others.[57] In this regard, operating under an anarchical condition with full of revisionist states perception urged states to increase

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[52] Robert Powel, "Anarchy in International Relations Theory: The Neorealist- Neoliberal Debate," *International Organization* 48, no.2 (1994): 315- 316, http://www.rochelleterman.com/ir/sites/default/files/Powell%201994.pdf (Accessed January 12, 2018).
[53] Felipe Mendes Sozzi Miquel, "Threat Perception in International Relations: The Realist and the Liberal Accounts," *Brazilian Journal of International Relations* 2, no. 3 (2013): 487-488, http://www2.marilia.unesp.br/revistas/index.php/bjir/article/viewFile/3052/2610 (Accessed February 12, 2018).
[54] Mearsheimer, "Structural Realism", 79.
[55] Peter Rudloff, "Offensive Realism, Defensive Realism and the Role of Constrains," *The Midsouth Political Science Review* 14, (2013): 46, http://uca.edu/politicalscience/files/2014/02/Rudloff-2013.pdf (Accessed January 13, 2018). See also; Mearsheimer, "Structural Realism", 81.
[56] Mearsheimer, "Structural Realism", 81.
[57] Rudloff, "Offensive Realism, Defensive Realism and the Role of Constrains," 45, See Also; Mearsheimer, "Structural Realism," 83.

their power no matter what happens to meet their security needs and to assure their survival.

Nevertheless, changing nature of international relations and the emergence of critical approaches have shaken the trust over problem solver mainstream theories of IR to make sense the changing nature on domestic developments prior to the end of Cold War. When this thinking combined with the end of Cold War, Neorealism and Realism lost their credit and predictability capacity. Change in the bipolar structure of international arena and philosophical thinking behind the classical realism, set a base for neoclassical realism to reread IR from these lenses.

Neoclassical realism merges both theory under one roof and adds new explanatory lenses to Realism. Indeed, a combination of hardline key concepts of Realism in respect to the anarchy, power, and relative material distribution with behaviorist foreign policy approach, it gained its status back in the literature of IR as a foreign policy lens.[58] Taking domestic developments into consideration, neoclassical realism aims to identify states behaviors and strategies that they pursue in the international arena.[59] However, it does not put a distance with Realist paradigm. Because, key concepts of Realism and domestic developments combined to make sense the effect of material distribution over states foreign policy formulations. In short, neoclassical realism mainly set a base for explaining the foreign policy attitudes and actions of states by taking international and domestic levels into consideration at the same time.[60]

To sum up, Realism with its variants developed throughout the history upon the teachings of classical realism that based on primitive thinking of human psychology, namely instinct for survival and greedy nature of it. When this combined with the Hobbesian anarchic feature of the international system, bad nature of human beings, and control over resources to survive, Realism provides a lens to asses conflictual relations

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[58] Jalal Dehghani Firoozabadi and Mojtaba Zare Ashkezari, "Neo-classical Realism in International Relations," *Canadian Center of Science and Education* 12, no.6 (2016): 95, www.ccsenet.org/journal/index (Accessed January 13, 2018). See also; Korab-Karpowicz, "Political Realism in International Relations".

[59] Dehghani, "Neo-classical Realism in International Relations," 95- 98.

[60] Gideon Rose, "Neoclassical Realism and Theories of Foreign Policy," *World Politics* 51, no. 1, (1998): 150- 151. https://edisciplinas.usp.br/pluginfile.php/1553184/mod_resource/content/1/Neoclassical%20Realism%20and%20Theories%20of%20Foreign%20Policy.pdf (Accessed January 14, 2018).

among the states that war is considered as a legitimate tool. Because, as one can grasp from the assumptions of Realism, states are after power to assure their security and survival under the anarchical conditions. Although the immoral attitude of war is considered as legitimate, the question of justice and order also highlighted by the Realism. Neorealism, on the other hand, disgraced sociological base of the theory while giving reference to the relative material distribution among states and the structure of the international system to make sense the behaviors of them under anarchical conditions. Furthermore, the relative gains and zero sum game remain in the domain of Realism that can be modified with every single field in its domain rangin from trade to power and even for security. The political wisdom of Realism began to reappear with neoclassical Realism that fed itself from both types of Realism and domestic developments.

Even though Realism will be the fundamental theoretical base of the thesis, some concepts of the liberalism will be used as well. Contrary to the Realist thinking about human nature, Liberalism assert its assumptions over the good nature of human beings that based on reason and progress.[61] The belief over progress in human history and reasoning in Liberalism place itself against the power politics of Realism. For that purpose, state, which is the product of human reasoning and progress, pledged with limited duties to secure the rights of individuals under constitutional formulations and to set a base for free trade regulations.[62] Because free trade regulations would only be possible under the limited existence of state in order not to disrupt market regulations. In this regard, there is a high correlation between capitalism and liberalism since capitalism defends an environment for free and just relations base on the rule of law concept that eventually end up with the realization of a society which is regulated by the rules.[63]

This thinking of Liberalism, which dates back to the 17th and 18th century, aims to establish democratic domestic consolidations so that it can be applied for international

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[61] Steans et al., "*An Intrdocution to International Relations Theory: Perspectives and Themes,"* 31- 32.
[62] Tarık Oğuzlu. "Liberalizm" in *Uluslararası İlişkilere Giriş: Tarih, Teori, Kavram ve Konular*, eds., Şaban Kardaş and Ali Balcı, 4th Edition (İstanbul: Küre Yayınları, 2015), 97. https://www.academia.edu/7691696/_Liberalizm_Uluslararas%C4%B1_%C4%B0li%C5%9Fkilere_Giri%C5%9F_Kibab%C4%B1. (Accessed March 3, 2019).
[63] Ibid, 97-98.

sphere as well through inside-out regulations.[64] In fact, basing on these democratic regulations, anarchic structure of international order is aimed to be overcome through establishing peaceful negotiations based on cooperation and realization of international organizations. In this regard, although states remain as an important actor, they are not the only actor from the perspective of Liberalism.[65] By embedding constitutional arrangements in the domestic sphere and establishing contacts among states in international level, federation alike organizations can be sustained.[66] In the long run, as a result of dependent and mutually beneficial relations, a conflictual feature of international relations would wane. Moreover, war can be replaced with perpetual peace as Immanuel Kant stated.[67] This is further developed by Democratic Peace Theory of Liberalism. It relies on the spread of democracy and international laws to further block realization of war under the motto of "democracies do not fight one another".[68]

As a result of increased volume of contact between states, international organizations can replace anarchical conditions of the international arena in order to solve problematic issues among them and to have a say about those issues. Because, common interests of the actors of international relations are exist in the international politics according to Liberalism.[69] Among these common interests, international security and trade, and diminishing the possibility of wars can be achieved collectively under the umbrella of international regimes.[70] In that case, Neoliberal Institutionalists argue that cooperation is possible and needed to handle problems among international actors.[71] Moreover, states and other actors of IR would be bounded by them and solve their problems in line with the rules that were set. In this regard, international law and norms are regarded as necessary guidelines for actors to follow in their interactions among each other. Post-

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[64] Lerna K. Yanık, "Liberalizm: Bir Yazın Derlemesi," *Uluslararası İlişkiler* 12, no: 46 (2016), 38.
[65] Burchill, "Liberalism," 64.
[66] Bruce Russett. "Liberalism" in *International Relations Theories: Discipline and Diversity,* eds., Tim Dunne, Milja Kurki and Steve Smith, 3rd Edition (Oxford: Oxford University Press, 2013), 95.
[67] Burchill, "Liberalism," 58.
[68] Ibid, 96. Also See; Thomas Risse, "Democratic Peace- Warlike Democracies? A Social Constructivist Interpretation of the Liberal Arguments," *European Journal of International Relations,* vol. 1, no.4 (1995): 24, http://poli.vub.ac.be/publi/orderbooks/myth/03Risse.pdf (Accessed on January 14, 2018).
[69] Oğuzlu, *Uluslararası İlişkilere Giriş: Tarih, Teori, Kavram ve Konular,* 101.
[70] Jennifer Sterling Folker, "Neoliberalism" in *International Relations Theories: Discipline and Diversity,* eds., Tim Dunne, Milja Kurki and Steve Smith, 3rd Edition (Oxford: Oxford University Press, 2013), 114 - 115.
[71] Miquel, "Threat Perception in International Relations: The Realist and the Liberal Accounts,"493- 494.

World War II (WWII) structures like the United Nations can be given as a successful example to that since states come together to resolve their problems.

In order not to be punished by the international community and to continue to get benefits out of it, states would not engage in conflictual relations one another and follow the rule of law.[72] As a result of established contacts among states without ranking it as low and high politics, complex interdependence among the states[73] is expected to be realized from the perspective of Liberalism. Because, it asserts cooperation ideals around the understanding of absolute gains in which interacting actors receive benefits out of established contacts.[74] On the grounds of that, actors will not risk these benefits by following irrational thoughts. This may set an environment for much deeper integration that wholly diminishes the emergence of war as it was the case for the European Union.

In short, liberalism base its arguments on the good nature of human beings and human progress through cooperation, on the contrary to Realism and its variants. Furthermore, Liberalism offers peaceful way to sustain international relations that based on democratic institutionalization process to solve disputes and to establish relations among the states. Through international institutionalization, the complex nature of international relations aimed to be settled down. In this regard, cooperation based peaceful relations, international law and importance to settle the dispute and the importance of institutions will be mixed with the assumptions of Realism, in favor of Realism, to make sense of Russian Arctic energy security policy.

1.2. ENERGY SECURITY AND ITS HISTORICAL BACKGROUND

Energy constitutes the main vein of human life. As a result of its vital importance for human life, securing its flow has become a major universal concern for the individual states. Without any doubt, the progress within the history of mankind in terms of "economy, health care, industrialization, and military affairs",[75] pluralizes the scale of

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[72] Ibid.
[73] James L. Richardson. "Liberalism" in *An Introduction to International Relations,* eds., Richard Devetak, Anthony Burke and Jım George (Cambridge: Cambridge University Press, 2012), 55-56.
[74] Sterling Folker. "Neoliberalism", 119.
[75] Aleh Cherp, eds., *Energy and Security in Global Energy Assesment: Toward a More Sustainable Future* (Cambridge: Cambridge Press, 2012), 327, https://www.iiasa.ac.at/web/home/research/Flagship-Projects/Global-Energy-Assessment/GEA_Chapter5_security_lowres.pdf (Accessed February 5, 2018).

usage of the energy. Indeed, industrialization ended up with the more energy demand to keep machines working for the military and civilian purposes. Consequently, individual states concern shifted over the control and uninterrupted flow of energy sources. In this regard, this part of the thesis will introduce the background of the term energy security, various definitions of it from the perspective of different international organizations and scholars, and lastly the elements of the notion.

1.2.1. Brief History of Energy Security

A clear "definition of energy security is critical since energy security is a concept rather than a policy or a strategy".[76] Since the notion of energy security consist of two words, each of them has to be defined in order to reach a better understanding. Energy is defined as the "strength or power that can be converted in the work"[77], according to the Oxford dictionary. In addition to that, astatic nature of it gives another dimension to the definition of energy which can also be generated from heat as well. On the other hand, security has many definitions and aspects as the society evolves. However, in an inclusive manner, security can be defined as "the state of being free from danger or threat".[78] The combination of both abstract words ends up with the notion of energy security which can be defined as the safe flow of energy to generate power out of it for the related area.

Chronologically, humans with the discovery of fire had to secure the source of it in order to defend themselves, to cook something and for heating purposes to survive starting from the early ages.[79] Energy needs of human beings could be formed under these categories and it could be met with a solid source of the fire. Nevertheless, with the Industrial Revolution and machinization of the production phase as a result of it,[80] securing energy flow and sources became more important and complex for individual states. Especially in the 20th century, securing the supply of main vein for human

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[76] Abdelrahman Azzuni and Christian Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," *Wiley Interdisciplinary Reviews:Energy and Environment* 7 (2017): 2, https://onlinelibrary.wiley.com/doi/full/10.1002/wene.268 (Accessed January 13, 2018).
[77] Oxford Dictionary, "Energy", https://en.oxforddictionaries.com/definition/energy (Accessed February 5, 2018).
[78] Oxford Dictionary, "Security", https://en.oxforddictionaries.com/definition/security (Accessed February 5, 2018).
[79] Zou Chaineng et al. "Energy Revolution: From a Fossil Energy Era to a New Energy Era", *Natural Gas Industry*, B 3, 2016, 2.
[80] Ibid.

activity often cited for economy but more importantly for military purposes. As "Winston Churchill or Georges Clemenceau stated, oil supply security is essential to fuel their armies for World War I (WWI)".[81] After that, energy security perceived in this way up until to the very last quarter of 20th century. States needed to include energy security policies in line with their geopolitical and tactical projections to survive under anarchical conditions with a strong military capabilies. Indeed, establishing "control over the oil supply and the places was a major aim for Germany and Japan during World War II"[82] to eliminate other warring parties in the field. Furthermore, for the WWII in general and WWI in particular, securing energy sources and "its flow was equal to national security since energy sources were crucial for the war machines to work".[83]

After these wars, states pursued economy policies starting from the 1950s in order to heal their economies. As a result of it, world "energy demand more than doubled" across the globe in the period between 1950 and 1960s.[84] To sustain economic growth and better living standards, the demand for energy has increased slightly in the following periods. The consequence of it can be seen in the rise of oil demand that four times more than before.[85] However, growing gap between the host states and energy extracting companies caused problematic relations among states which are after the continuation of their economic growth.

This growing gap combined with the nationalization process of the resources by the host states, end up with the idea of deciding what to do with their peoples' energy resources.[86] Organization of Petroleum Exporting Countries (OPEC) was formed in 1960 by oil producer states as a result of this understanding.[87] It can be argued that

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[81] "Common Concept for Energy Producing, Consuming and Transit Countries", *Energy Charter Secretariat*, 2015, 6, https://energycharter.org/fileadmin/DocumentsMedia/Thematic/International_Energy_Security_2015_en.pdf (Accessed January 15, 2018). Also see; Daniel Yergin, *The Quest… Energy Security and the Remaking of the Modern World* (New York: The Penguin Press, 2012), 508.
[82] "Common Concept for Energy Producing, Consuming and Transit Countries", 6.
[83] Ibid. Also see; Aleh Cherp and Jessica Jewell, "The Three Perspectives on Energy Security: Intellectual History, Disciplinary Roots and Potential For Integration," *Current Opinion in Environmental Sustainability* 3 (2011), 202.
[84] "Common Concept for Energy Producing, Consuming and Transit Countries," 6.
[85] Ibid.
[86] Paasha Mahdavi, "Why Do Leaders Nationalize the Oil Industry? The Politics of Resource Expropriation," *Energy Policy* 75 (2014), 229- 230.
[87] Ibid.

OPEC further affected the emergence of energy security concept. Because, cartelization of the resources might be used as a weapon to assure energy exporting states political goals in the international relations. For that reason, the following decade is considered as the era of "energy insecurity".[88] The 1970s bore with two oil crisis that consolidates the term energy security. Although the emergence of the term energy security has an equal history with mankind, the literature wised introduction of it dates back to 1970s.

As a direct consequence of the Western support for Israel in Arab – Israel War of 1973, major oil producer Arab states asserted oil embargoes towards the West that threaten their energy security. Thus, a metaphor for the oil as 'weapon' formulized afterward in line with military and political aspects of the energy after 1973 events.[89] As a result of it, the International Energy Agency (IEA) was established in 1974 in order not to be caught unprepared in the case for such an event.[90] Furthermore, energy security from that point forward located itself in the high priority issue for the states.

The second oil crisis shot up international energy prices and caused a short time increase in dollars equivalent for the barrel.[91] Indeed, the regime change in Iran in 1979, whose ideological stance was previously in line with the Western part of the world, resulted in scarcity for the availability of the oil. Furthermore, this oil insecurity urged new adjustments for the importing states while the demand for energy stalled and economies of the Western states shrunk in general.[92]

Consequently, importing states took some countermeasures in line with the newly developed concept of energy security that identified as "the uninterrupted availability of

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[88] "Common Concept for Energy Producing, Consuming and Transit Countries." See Also; Hisham Khatib, Alexander Barnes and H. Steeg et al., "Energy Security" in *World Energy Assesment: Energy and the Challanges of Sustainability*, 2000, 112-114, http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.463.774&rep=rep1&type=pdf (Accessed January 15, 2018).

[89] Daniel Yergin, "Ensuring Energy Security: Old Questions New Answers," *Foreign Affairs* 85, no.2 (2006): 75, http://www.un.org/ga/61/second/daniel_yergin_energysecurity.pdf (Accessed January 13, 2018).

[90] Ibid.

[91] "Energy Security: Oil Shortages and Their Implications." *CSS Analyses in Security Policy* 1, no.2, 2006, 1, http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/CSS-Analyses-2.pdf (Accessed January 13, 2018).

[92] Xavier Labandeira and Baltasar Manzano, "Some Economic Aspects of Energy Security," *Economics for Energy*, 2012, 11- 12.

energy sources at an affordable price"[93] by the IEA. Based on that, diversification and energy efficiency policies with the ways for stocking energy has been researched and pursued by the importing states. Up to that period, namely the first three-quarters of the 20th century, the scope of energy security for the states was based on the protecting oil supplies to run their economy and project their hard power capacities. For that reason, the interruption of the oil flow considered as the hostile action in the content of warfare. Nevertheless, globalizing world and emerging economies added new customers to the energy race and pluralized the definition of the energy security concept.

1.2.2. Various Definitions of Energy Security and Possible New Dimensions for It

The adjustments made by states after 1973 might not meet the need of the states with the active involvement of developing economies, especially from Asia, to the energy market, whose energy security perceptions differ in line with their positions.[94] Indeed, definition of energy security from supply security perspective needed to be widened with new perspectives such as demand security. Furthermore, especially after the 'environmental awakening' of the late 1970s and 1980s, need for demand, technological effectiveness for energy efficiency and etc. has to be added in the definition of the term.[95] Since the definition of energy security depends on different aspects, the geopolitical thinking for transportation routes are to be taken into account. In line with those, new dimensions with new features added to the definition of energy security by various scholars and organizations in the late 20th and early 21st century.[96]

The narrow and simple definition provided by IEA has different meanings for the international actors. IEA defines energy security as "uninterrupted availability of energy sources at an affordable price".[97] Under long and short-term arrangements, it also includes "environmental needs and economic development within long-term arrangements"[98]. Reacting "sudden changes in the supply and demand balance"[99]

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[93] "Energy Security," *International Energy Agency (IEA)*, https://www.iea.org/topics/energysecurity/ (Accessed February 6, 2018).
[94] Yergin, "Ensuring Energy Security: Old Questions New Answers," 71.
[95] Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 3- 10.
[96] Ibid., 3, 7- 16.
[97] "Energy Security," *International Energy Agency (IEA)*
[98] Ibid.
[99] Ibid.

remained in the scope of the short-term arrangements. It should be noted that IEA's definition was upgraded after 1985 and dimensions about environment and sustainability were added later on. Furthermore, defining energy security only from the perspective of IEA will not be sufficient enough, although disgracing it fully is also misleading.

World's global government and powerful organization, United Nations (UN), also have a say on this global concern. For energy-related issues, UN does not have one single agency but several ones as Sovacool stated.[100] Among those agencies, United Nations Development Program (UNDP) and International Atomic Energy Agency (IAEA) remain most important ones. According to the UNDP definition, energy security has six elements. Energy production has to be "adequate, sustainable, and environmentally sound in order to fuel global economic growth under greater international cooperation with greater efficiencies both in energy production and use".[101] IAEA defines energy security from the "perspective of supply and safe import of energy fuels in an uninterrupted way to ensure individual states' welfare in environmental friendly manner through self-sufficient technologies".[102]

As a partner institution of UNDP, World Bank defines energy security from the perspective of economy that "sustainable production and use of energy has to be at 'reasonable cost to facilitate economic growth for all' through which poverty can be reduced".[103] In addition to those, security of transit routes and competitive market for the distribution of energy sources in line with liberal values are also added in the definition of World Bank for energy security.[104]

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[100] Benjamin K. Sovacool and Ann Florini, "Examining the Complications of Global Energy Governance," *Journal of Energy and Natural Resources Law* 30, vol. 3 (2012): 257- 260.
[101] "United Nations Forum on Energy Efficiency and Energy Security for Sustainable Development: Taking Collaborative Action on Climate Change," UN Sustainable Development Knowledge Platform, Seoul, December 17, 2007, https://sustainabledevelopment.un.org/index.php?page=view&type=13&nr=359&menu=1634 (Accessed January 11, 2018).
[102] "Analyses of Energy Supply Options and Security of Energy Supply in the Baltic States," International Atomic Energy Agency (IAEA), Foreword, *IAEA*, 2007, https://www-pub.iaea.org/MTCD/Publications/PDF/te_1541_web.pdf (Accessed on January 11, 2018).
[103] "Energy Security Issues," The World Bank Group, 2005, 3, http://siteresources.worldbank.org/INTRUSSIANFEDERATION/Resources/Energy_Security_eng.pdf (Accessed February 12, 2018).
[104] Ibid.

Apart from international regimes which are related with economy, regional emphasis made through various international organizations such as Asia Pacific Energy Research Centre (APERC). Accordingly, the definition of energy security associated with the "ability of an economy to guarantee the availability of energy sources supply with affordable price in a sustainable and timely manner"[105] to sustain economic performance.

Another organization, World Economic Forum (WEF) defines energy security in a much complex way than the others. According to the WEF, definition of "energy security is framed under sustainable, autonomous, affordable and reliablity"[106] features. These features represent the flow of energy in an uninterrupted, cheap and environmentally sustainable way where the market remains risk-free from disruptions.

More strictly than the other definitions, the European Commission's definition of energy security relies much more on green energy. In its "Green Paper of 2000, besides uninterrupted physical availability of energy products at affordable prices on the market for all consumers', environmental concerns for sustainable development"[107] was also highlighted.

Nevertheless, geopolitical and socio-cultural concerns mostly underrated in those definitions. Definition of the World Resources Institute (WRI) includes those aspects. According to WRI, "incomplete definition of energy security that includes sufficiency, reliability, and affordability", needed to be widened with the "addition of geopolitics, the social dimension of acceptability and environmental concerns of energy security".[108] Because, the absence of those in the scope of a state or an organization may causes international or domestic problems.

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[105] "A Quest for Energy Security in the 21st Century: Resources and Constrains," *Asia Pacific Research Centre*, 2007, 6, https://aperc.ieej.or.jp/file/2010/9/26/APERC_2007_A_Quest_for_Energy_Security.pdf (Accessed February 12, 2018).

[106] "Energy Acces and Security." *World Economic Forum*, 2016, http://reports.weforum.org/global-energy-architecture-performance-index-report-2016/energy-access-and-security/?doing_wp_cron=1539289205.0534229278564453125000 (Accessed February 13, 2018).

[107] "Green Paper: Towards a European Stategy for the Security of Energy Supply," European Union, European Commision, Brussels, 2000, 2-3, https://iet.jrc.ec.europa.eu/remea/sites/remea/files/green_paper_energy_supply_en.pdf (Accessed on January 16, 2018).

[108] Jeffrey Logan and John Venezia, "Weighing U.S. Energy Options: The WRI Buble Chart," *WRI*, July 2007, 1, https://www.researchgate.net/publication/279532250_Weighing_US_Energy_Options_The_WRI_Bubble_Chart (Accessed January 16, 2018).

Interestingly, the NATO, collective defense organization, also introduced the definition of energy security to stress the importance of the routes for energy transportation. Accordingly, the vital importance of energy sources for military and economy urged the need for securing energy infrastructures while aiming to create strategic awareness about the notion of energy security.[109]

Apart from these eight different definitions from the perspective of economy, military, and energy, there are 37 more different definitions exist in the literature according to Savacool while Azzuni et. al argues 29 definitions exist besides those.[110] It should be noted that those different definitions represent various perspectives in line with the purpose of the organizations or states. On the ground of this fact, there cannot be single agreed definition of energy security even though the main argument of the definitions remains the same. Also, term energy security keep itself evolving through following latest developments. In this regard, the addition of geopolitics and the place of transportation items like pipelines and routes are also found their place in the definition.[111] Indeed, this has to do with the place of the states whether they are importing or exporting energy sources and/or scope of the organization as provided above.

In respect to the importance of energy for a state there cannot be a single question about the strategic and crucial importance of it.[112] Furthermore, free from development ranking of the states and from their position in the equation of energy security, all states formulate energy security agendas in order to meet their needs. For that purpose, the difference between energy poor and energy rich states in the definition of supply and demand security of the term energy security can be seen. In that equation, "security of supply is a general term to indicate the access to and availability of energy at all times".[113] In line with it, energy security policies of those importing states highlight the

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[109] "Energy Security," *North Atlantic Treaty Organization*, Last updated September 14, 2018, https://www.nato.int/cps/ic/natohq/topics_49208.htm (Accessed October 10, 2018).
[110] Benjamin K. Sovacool and Ishani Mukherjee, "Conceptualizing and Measuring Energy Security: A Synthesized Approach," *Energy* 36 (2011): 5345. See also, Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 4.
[111] "Energy Security", *North Atlantic Treaty Organization.*
[112] Hannah Ritchie and Max Roser, "Energy Production and Changin Energy Sources," *Our World In Data*, 2018, https://ourworldindata.org/energy-production-and-changing-energy-sources (Accessed January 17, 2018).
[113] Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 3- 10.

importance of available and accessible energy sources in order to meet their needs. In contrast to that, the demand side of the definition reflects "generation of economic benefits out of energy sale in a continuous way".[114] However, focusing on one side of the features of the notion and existing definitions of it makes hard to understand the concept. For that reason, the features of the energy security that are provided by different scholars and organizations ranging from cost, transportation, and culture has to be examined fully to have a better understanding.

Within the parameters of the energy security notion, roughly three dimensions ranging from producers, consumers, and transportation occupies main positions in the definitions that is supplied with other features.[115] Availability feature in this sense occupies both places in the general definition of the energy security since it reflects the views of consumer and producer. The reason for this same reflection mainly lies on the definition of availability, because it means the existence of energy sources.[116] In the absence of it, economic growth in the same consumption patterns cannot be expected.[117] Thus, according to the energy security definition of Sovacool, this feature of the term represents scientific and social welfare views that basic activities of humans are based upon.[118] This perspective does not reflect the whole perception of availability on its own. Within the same feature, the producer also takes place under the name of demand security. However, various definitions neglected the demand side of the energy security like UNDP. The miss of the perspective of producers means the underestimation of desire of producer to generate economic benefits from the sale of those energy sources.

Last but not least, transfering the resources from one place to another, occupies the vital place under the same feature. Indeed, having access to those resources with infrastructures is necessary to transfer and to process these resources.[119] In this regard, secured infrastructures with safe transportation routes remain crucial otherwise energy

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[114] Mohamed Hamel, "Energy Supply and Demand Security", *Organization of the Petroleum Exporting Countries*, 2006, https://www.opec.org/opec_web/en/1097.htm (Accessed January 16, 2018).
[115] Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 3- 10.
[116] Ibid., 6.
[117] Christian Winzer, "Conceptualizing Energy Security," *Energy Security* 46 (2012): 38, https://www.sciencedirect.com/science/article/pii/S0301421512002029 (Accessed January 16, 2018).
[118] Sovacool and Mukherjee "Conceptualizing and Measuring Energy Security: A Synthesized Approach," 5345. See also, Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 5-7.
[119] Hamel, "Energy Supply and Demand Security".

security of producer and consumer states would be in danger.[120] Furthermore, the location of energy sources and distance between the producer, the source, and the consumer can be related with availability feature of the energy security as well.

The distribution of energy resources and the existence of it in not wide but rather limited locations can distort the flow of energy in line with the developments in those locations. In fact, the accessibility of resources might be frozen up as a result of the military conflict as it was the case for WWII or terror eruption in Iraq[121] and Syria. This situation might require hard power projection to secure the flow of it. Moreover, the location of the state might determine the type of its regime and its market type assertion that make energy purchase costlier for the consumer.[122] In this regard, reliability of the source and producer puts an impact on states energy securities. Indeed, combination of this feature with the location of producer might result in disruption in the energy flow that comes with another cost for states and their economies.

To reduce the negative cost for states economy and their energy security formulations, diversity of the sources and producers remain as another dimension to enhance energy security.[123] Actually, even in the early years of the modern understanding of the concept, namely first decade of the 20th century, the importance of variety of the source and the producer were highlighted. The dependency of energy flow on one single source creates less energy security formulations as it was the case for some "European states dependency over Russian energy sources for especially gas and oil".[124] The outcome of such dependency in the case of crisis might end up with the use of "energy weapon" like in 2009 and 2012 energy crisis.[125] In short, diversified use of sources and suppliers are necessary for a state to make energy insecurity more preserved.

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[120] Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 7. See also; Yergin, "Ensuring Energy Security: Old Questions New Answers," 74. ; Winzer, "Conceptualizing Energy Security," 37.
[121] "Common Concept for Energy Producing, Consuming and Transit Countries," 22.
[122] Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 7- 8.
[123] Ibid., 7. See also; Benjamin K. Sovacool and Marilyn A. Brown, "Competing Dimensions of Energy Security: An International Perspective," *Annual Review of Environment and* Resources 35, no.1, 80- 82.
[124] Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 7. See also; Katja Yafimava, "European Energy Security and the Role of the Russian Gas: Assessing the Feasibility and the Rationale of Reducing Dependence," *Instituto Affari Internationali,* Working Paper 15 (2015): 2-3, http://www.iai.it/sites/default/files/iaiwp1554.pdf (Accessed January 16, 2018).
[125] Ibid.

Diversifying energy sources and suppliers alone may not be enough to realize energy security. Time frame of the energy deals in expense to the volatility of the prices demonstrates one way to sustain energy security.[126] In this regard, the definition of IEA for energy security under the short term and long term arrangements to secure energy flow work as a supplementary force of the term.[127] In any case, depletable energy sources provided by the suppliers expected to be cheap and saved for consumers to secure energy flow to stand alive. The effects of the 1970s energy insecurity fuel the need for extended time frames while economic dimension for the supplier is looking for short-term arrangements.[128] Miscalculations in the equation for both supplier and consumer in regards to timeframe might end up with the threat for each side. This can put the affordable dimension of the energy security in danger as well.

Amongst the dimensions of energy security, affordability of the available energy sources regarded as one of the most important dimensions of it. In general view and according to Sovacool's dimensional definition, affordability reflects the economic aspect of energy security.[129] Namely, this dimension represents the trade phase of the energy as a product.[130] The unexpected volatility of the price of the sources and the sharp rise in the price creates vulnerability for consuming party. In return, it eventualy ends up with the reduction in demand. In such cases in which energy prices remain high, economic development is discouraged for the consumer while limiting the flow of energy to the market for producer states.[131] Consequently, unexpected changes and volatile prices of sources depicted as a nightmare in the 21st century. Because, the change in price puts a negative impact on the energy security formulations of states and hamper global sustainable economic growth.

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[126] Abdelrahman Azzuni and Christian Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 7-10.
[127] What is Energy Security?, *International Energy Agency*, https://www.iea.org/topics/energysecurity/whatisenergysecurity/ (Accessed on January 14, 2018).
[128] Abdelrahman Azzuni and Christian Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 7-10. See also "Energy Security," IEA; Sovacool and Brown, Competing Dimensions of Energy Security: An International Perspective," 81-83.
[129] Sovacool and Mukherjee, "Conceptualizing and Measuring Energy Security: A Synthesized Approach, 5343.
[130] Ibid.
[131] Carmine Difiglio, "Oil, Economic Growth and Strategic Petroleum Stocks, *Energy Strategy Reviews*, vol.5 (2014): 50, https://ac.els-cdn.com/S2211467X14000443/1-s2.0-S2211467X14000443-main.pdf?_tid=391c67d4-5166-4d3c-ad37-14fd51c5a85b&acdnat=1541526802_e44d9baea850ff94ae18f9176d8aa8db (Accessed January 18, 2018).

The events that took place in 1970s caused such fear. Volatile prices in the energy market pave the way for researching alternative sources and efficient energy systems. "Since technology is required for utilizing energy"[132] not only use it to generate power efficiently but also to sustainably extract it, technology lately finds its place in the dimension of energy security. In this regard, latest technological developments for producing new machines to reach energy sources, transportate, and store with a capability to scatter them effectively,[133] put an impact on the energy security formulations. Indeed, the sustainability dimension that is combined with technology advancement, prioritized in this part of the energy security concept to have better environmental conditions for the living on earth.

Other than these dimensions, culture as a new dimension in the energy security concept fulfills the definition. The humane part of the term would be discredited without the inclusion of culture in the equation.[134] Indeed, the effects of culture on individuals or societies behavior to handle problematic issues cannot be disregarded.[135] In the case for energy security, the interest of the states and stance for the political formulation of the term are intertwined to decide energy systems. Moreover, the political base of the concept framed only with the involvement of culture in the equation.[136] In this regard, when culture and its effects on politics are taken into account, national security level status of the energy security gain another dimension besides military base one.

Last but not least, military gained well-earned dimension in the concept of energy security definitions. With this dimension, energy security concept gains concrete phase as well to reflect the life worthy aspect of the energy for the states. The direct effects of the military to reach stabile energy security cannot be disregarded with the involvement of its elements on the field.[137] Moreover, security of energy sources with military elements also paves the way for getting political aims in the conflictual circumstances.

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[132] Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 6-8, 10-11. Şebnem Udum, "Class Notes on Energy Security," Hacettepe University, 2016.
[133] Florian Baumann, "Energy Security as Multidimensional Concept," *Center for Applied Policy Research*, March 2008, 6-8.
[134] Udum, "Class Notes on Energy Security". See Also; Azzuni and Breyer, "Definitions and Dimensions of Energy Security: A Literature Review," 16- 17.
[135] Udum, "Class Notes on Energy Security".
[136] Sebastian Mang, "The Need for a New European Union Energy Policy," *E-International Relations*, August 16, 2013, https://www.e-ir.info/2013/08/16/the-need-for-a-new-european-union-energy-policy/ (Accessed January 18, 2018).
[137] "Energy Security," *North Atlantic Treaty Organization*.

Indeed, newly introduced energy security definitions by collective defense organization like NATO shows the importance of the term for our century that almost everything based upon.

In short, single definition of the term cannot be formed. Because, main focus and points of the definitions differ in line with the scope of the organization or a state. In this regard, more inclusively introduced definition of APERC and WRI have to be modified with other dimensions ranging from technology, culture and military point of view to reach full and analytical understanding of the term. Again, it should be noted that the way to perceive energy security depends on the stance of the individual to define. For instance, Russian energy security perception mainly relies on the perspective of security of demand which is modified with the latest elements of the term energy security. In addition to that, defining and positioning it also differ in line with the lenses that provided to read it. For that purpose, realist perception of energy security will be provided in the following title.

1.3. EXAMINING ENERGY SECURITY FROM THE PERSPECTIVE OF REALISM

The compact analyses of energy security still lack visible ground while examining states or organizations actions. Even if the concept fully defined and examined, without the lenses of IR to focus on the term, related research would be missing. In this regard, the realist theory of IR which would suit for examination of the concept should be taken as a theoretical base. Furthermore, the inclusion of technology and geopolitics in the definition of energy security when combined with the "materialistic, ontological and epistemological base of Realism, creates an alternative ground to examine energy security".[138]

Through positioning state into the center of international affairs, a statue of the state as a key actor rather than a secondary actor is stressed. The same position of state represented in the realist read of energy security by giving reference to almost fully

[138] Giedrius Cesnakas, "Energy Resources in Foreign Policy: A Theoretical Approach," *Baltic Journal of Law and Politics* 3, no.1 (2010): 31, https://www.researchgate.net/publication/271052236_Energy_Resources_in_Foreign_Policy_A_Theoretical_Approach (Accessed January 17, 2018).

established control of "states over energy sources through their companies".[139] The impetus behind this control of energy sources relies on the correlation between state and inherently greed human nature perception of Realism. In this regard, states follow the same rationality for energy sources that based on domination over the others with power relations and established control.

In line with this desire, understanding of energy security concept for states differs in the context of the realist paradigm. Indeed, since there are three types of state in this division, producer, transit and consumer states, the perception and projection of energy security remain diversified. Producer state aims to gain power out of energy sales to increase its capabilities while protecting the road to transfer energy flow around its geopolitical orientation.[140] On the other hand, transit states will try to get some benefits in terms of money and energy flow to sustain its development that ends in power projections. Additionaly, importing states directly focus on conversion of energy sources into power elements. However, even in this projection, position of the states and stance to acquire energy security, expected to "depend on conflicts, bargaining, and consolidation of interests of most powerful states".[141] Because those three types of states wanted to acquire relative power out of it in realist terminology.

The very reason for that relies on the basic realist perception about constant 'state of fear' under anarchical conditions in which states never know the true intentions of other states. This core perception of the theory provides its wisdom for energy security formulation and perception of states. Since states can survive under those conditions only through maximizing their power, energy sources depicted as one of the vital element of the power that "has strategic value beyond market price".[142] As a concrete material, more possession of energy under the control of state means a stronger state when compared to others. Even if technological means in terms of extraction and infrastructures are needed to conclude this equation, energy rich states considered as the powerful ones from this perception. Indeed, besides the military dimension, power has other dimensions with different elements as Morgenthau stated once. For that purpose,

[139] Noelo De Freitas Peigo and Jose Augusto Gaspar Ruas, "Rethinking Energy Nationalism: A Study of the Relationship Between Nation States and Companies in the Oil Industry," *Brazilian Journal of Political Economy* 35, no.3 (2015): 558- 559.
[140] "Energy Security," *North Atlantic Treaty Organization*.
[141]Cesnakas, "Energy Resources in Foreign Policy: A Theoretical Approach," 37.
[142] Ibid, 32.

securing energy and energy security policies remains vital in the context of Realism. More than dominating energy sources alone, states needed firm energy security policies in line with their interests.

Furthermore, even if power means hard power capabilities of a state in Realism, merging it with the concept of energy security as another dimension of the power, also lead to an expansion of influence and capabilities of states over the others. Indeed, asymmetric dependency relations can be established which can paralyze heavily dependent state as a direct consequence of it.[143] In this regard, energy is counted under material power that uneven distribution of it plays a decisive role in power politics. Ever-changing desire of states to sustain their unlimited gains out of limited sources[144] makes energy security formulations precious and reading it from the perspective of realism under zero-sum gains valid. This suggests that material power when combined with strong state power shapes the actions of other states through influencing them.

Moreover, through controlling the supply ratio of the energy sources, the influence can be spread out of the producer states borders as it was the case in 1973 Arab embargo towards the West. Asserting Russian energy security relies on Realist assumptions would not be wrong when its perception of energy sources, and actions "in Ukraine and Belarus to achieve its political goals by using energy card"[145] are taken into account. In addition to that, detection of new reserves on the Earth fuels the desire for expansion for a state to increase its power that comes with high influence and control over consumer and transit states. Indeed, it is the case for Russian activism in the Arctic as a direct consequence of climate change to regain its status and power. Even though climate change does not remain in the domain of Realism, possible outcomes of it to get upper hand in the material distribution capabilities remain in the scope of the theory.

Thus, detection of new reserves means relatively increase in power of the state in the context of energy security from "defensive and offensive neorealism, classical and

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[143] Cherp and Jewel, "The Three Perspectives on Energy Security: Intellectual History, Disciplinary Roots and Potential For Integration,"3- 8.
[144] Korab-Karpowicz, "Political Realism in International Relations".
[145] Gabriel Collins, "Russia's Use of Energy Weapon in Europe," Issue Brief, *Baker Institute*, 2017, 1-5. https://www.bakerinstitute.org/media/files/files/ac785a2b/BI-Brief-071817-CES_Russia1.pdf (Accessed January 18, 2018).

neoclassical realism perspective".[146] Since energy can be converted into other fields ranging from economy to diplomacy, it is regarded as the convertible power element in the domains of these theories. With that reading of energy security which modified with geopolitical, technological and military dimension, it becomes more concrete and visible to see full picture. In fact, notions like war, energy sources and their scarcity end up with the formulations of terms such as resource wars that represents the conflict for resources among the powers from the perspective of Realism.[147]

Although states actions initiated with the lust for power from the perspective of realism, the "double-edged effect of power maximization"[148] has to be kept in mind that unrestrained power might end up with immoral actions. Same thing can be said for the correlation between the states and energy resources to acquire power by using it in the international politics. Therefore, energy resources and their possible utilization as policy tool reflects vital importance of energy security formulation for both producer and consumer states. So, it should be used responsibly in order to achieve power both in domestic and international scale from the perspectives of neoclassical realism and classical realism and neorealism.

In short, Realism offers valuable insights to examine energy security. As an element of power, energy resources means more power for states that urged them to establish control over those resources. Concordantly, states can use this strategic resources to convert its power into other fields. Therefore, energy resources can be used as a trump card in international relations by states to achieve their goals. To sustain this desire of states, existence of energy resources means a lot. Within this context, detection of new energy reserves sets possible ground for states to compete over them. Russian activism in the Arctic and the impact of climate change over the energy security formulations for that region will be examined from defined perspective that will be supplied with Liberal assumptions to reach deeper analyses and understanding. However, before examining Russia's activism and Russia's energy security policy for the region, climate change and its impact towards the region is needed to be examined first.

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[146] Cesnakas, op. cit., 49- 51.
[147] John Andrew McNeish, "Rethinking Resource Conflict." Background Paper, 2011, 1- 2. http://web.worldbank.org/archive/website01306/web/pdf/wdr%20background%20paper%20-%20mcneish_0.pdf (Accessed January 17, 2018).
[148] Ned Lebow, "Classical Realism", 62- 64.

CHAPTER 2

CLIMATE CHANGE AND THE INCREASING IMPORTANCE OF THE ARCTIC REGION

The climate system of the World has been in the tendency to change naturally in the period of millions of years and short time spans since its four and a half billion years of history.[149] As a direct consequence of it, the end of Ice Age periods and warming of planet followed each other in a natural way that set up the proper conditions for living on the Earth's surface. Nevertheless, the disruption of a natural way of systemic change through human activities ranging from industrialization, burning of fossil fuels, deforestation to unconscious change in patterns of land usage put an effect on climate system of the Earth.[150] Starting from the 19th century, the constant repetition of those actions when combined with natural developments coming from the Earth's own activities, has increased the average temperature that ended up with change in climate patterns. The Arctic region experiences more of the effects of it.[151] As a result of it, importance of the Arctic region has increased slightly. Indeed, no man's land has occupied central place in the political agenda of littoral states and great powers to have the biggest share from it. Furthermore, climate change set a base for conflictual relations in the Arctic region since it revoked the territorial issues among the littoral states. Russia, as one of the biggest Arctic power, strongly remains in the Arctic race and territorial issues when compared with the other littoral states. In this regard, the notion of climate change and its causes; the Arctic region and its increasing importance after the effects of climate change; and boundary issues in the Arctic both to draw the

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[149] Bank of Greece, "The Environmental, Economic and Social Impacts of Climate Change In Greece," Eurosystem, June 2011, 1, https://www.bankofgreece.gr/bogekdoseis/climatechange_fullreport_bm.pdf (Accessed February 27, 2019).

[150] Janet Swim, Susan Clayton and Thomas Doherty et. al. "Psychology and Global Climate Change: Addressing a Multi-faceted Phenomenon and Set of Challanges," A Report by the American Psychological Association's Task Force on the Interface Between Psychology and Global Climate Change, 2009, 25, http://www.uvm.edu/~vtstclim/Documents/pdfs/climate-change.pdf (Accessed March 5, 2018).

[151] "Arctic Monitoring and Assesment Programme," *Snow, Water, Ice and Permafrost in the Arctic (SWIPA)*, Oslo, 2017, vii.

boundaries of the Arctic states and to deductively assess the effect of climate change to the Arctic region will be inquired in this part of thesis.

2.1. DEFINITION OF CLIMATE CHANGE AND ITS CAUSES: HYSTERIA OR A FACT?

Climate elements and atmospheric events ranging from sunniness, rain, sea surface temperature to soil temperature are regularly recorded for scientific purposes but especially for climatological data formulation.[152] In this context, the statistical data about the weather that represents the changing processes between heating and cooling of the temperature is collected to map the atmospheric events in every part of the Earth.[153] The observation of this changing process and the length of it are required to identify and understand one of the air events. As a direct consequence of the monitoring process, the climate of a specific place or region is defined in line with the calculated weather conditions.[154] Moreover, this calculation is created the terms of the Earth for its own climate conditions as well.

In this regard, climate can be defined as the average results of observed weather events of a place, region or the Earth throughout a year in comparison to all recorded years.[155] Thus, the definition of climate includes "extreme weather events, frequency distributions, probabilities and variability of them"[156] since they put an impact over weather calculations. Lately, it has become clear that the average condition of weather events or conditions are needed to be taken into account together in order to describe 'climate'. On the other hand, 'change' refers to "a process through in which something becomes different".[157]

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[152] Climate Indices, *Universitat Hamburg Integrated Climate Data Center (ICDC)*, Last modified Dec. 5, 2011, https://icdc.cen.uni-hamburg.de/1/daten/climate-indices.html (Accessed March 5, 2018).
[153] Charlotte Werndl, "On Defining Climate and Climate Change," *The British Journal for the Philosophy of Science* 67 (2016): 342.
[154] Ibid.
[155] Muhammad Ishaq-ur Rahman, "Climate Change: A Theoretical Review," *Interdisciplinary Descriptions of Complex System* 11, no. 1 (2013): 3. See also; Climate, *Oxford Dictionary*, https://en.oxforddictionaries.com/definition/climate (Accessed March 6, 2018).
[156] "Climate Change," *WIRE's* 7, January-February, (2016): 24, Doi: 10.1002/wcc.380, https://onlinelibrary.wiley.com/doi/pdf/10.1002/wcc.380 (Accessed March 6, 2018).
[157] Change, *Oxford Dictionary*, https://en.oxforddictionaries.com/definition/change (Accessed March 6, 2018).

Merging of two words, namely climate change, refers to "a statistically significant variation in either the state of the climate or in its variability of the Earth that is persisting for an extended period".[158] However, constant climate changes of the Earth from the early years of its history pluralized the definition of the notion. Indeed, since climate change can be realized through "natural internal developments and external forcing including anthropogenic changes",[159] the definition of the term pluralized to understand its main causes.

Historically, the Earth's climate has been changing starting from its early years. Although the Earth experiences a warm period at this moment, it was not the case 100,000 years ago. Indeed, the ice age periods with 100,000 years' period in the past 700,000 years repeatedly advanced and let its place to the warm periods.[160] According to Milankovich, the return of ice ages and the warm periods are mainly related with "small differences in Earth's orbit that consequently fluctuate the volume of solar activity of the sun which the Earth receives"[161] under natural causes (See Figure 1).

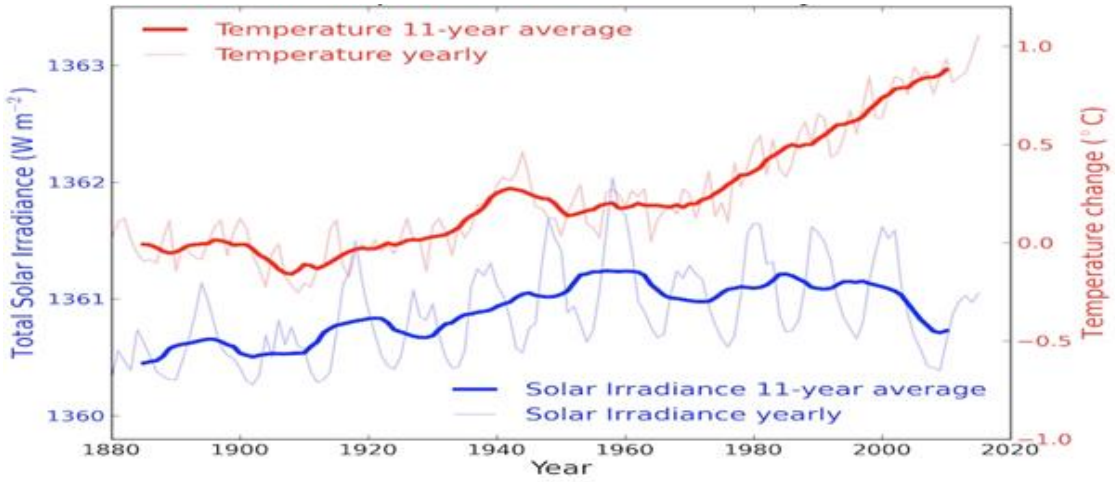

Figure 1: Sun & Climate: Moving Opposite Direction, Skeptical Science **Source:** https://www.skepticalscience.com/solar-activity-sunspots-global-warming.htm

[158] Sanjairaj VijayaVenkataRaman, S. Iniyan and Ranko Goic, "A Review of Climate Change, Mitigation and Adaptation", *Renewable and Sustainable Energy Reviews* 16 (2012): 879.
[159] J. T. Houghton, Y. Ding, D. J. Griggs, N. Noguer, eds., *Climate Change 2001: The Scientific Basis* (Cambridge: Cambridge University Press, 2001): 789.
[160] Jung-Eun Lee, Aaron Shen, Baylor Fox-Kemper, Yi Ming, "Hemispheric Sea Ice Distribution Sets the Glacial Tempo," *American Geophysical Union* (2016): 8.
[161] The United States of America, National Aeronautics and Space Administration (NASA), *Milutin MILANKOVICH: Orbital Variations*, https://earthobservatory.nasa.gov/Features/Milankovitch/milankovitch_2.php (Accessed March 10, 2018).

Besides that, extreme events such as volcanic eruptions and ENSO[162] and following changes in the climate patterns after those are also added under natural causes of climate change. For those reasons, climate change notion represented as hysteria both in the literature and media. Scholars such as John Cristy, William Happer and R. M. Carter assert their ideas in line with the climate change 'hysteria' group since the Earth's climate have been experiencing glacial retreats naturally in line with its "changing orbit, Carbon Dioxide (CO2) level and, external and internal natural causes".[163] Nevertheless, focusing on only one side of the dimension of the notion and neglecting man-made causes in the definition of climate change erases the human fingerprints behind it.

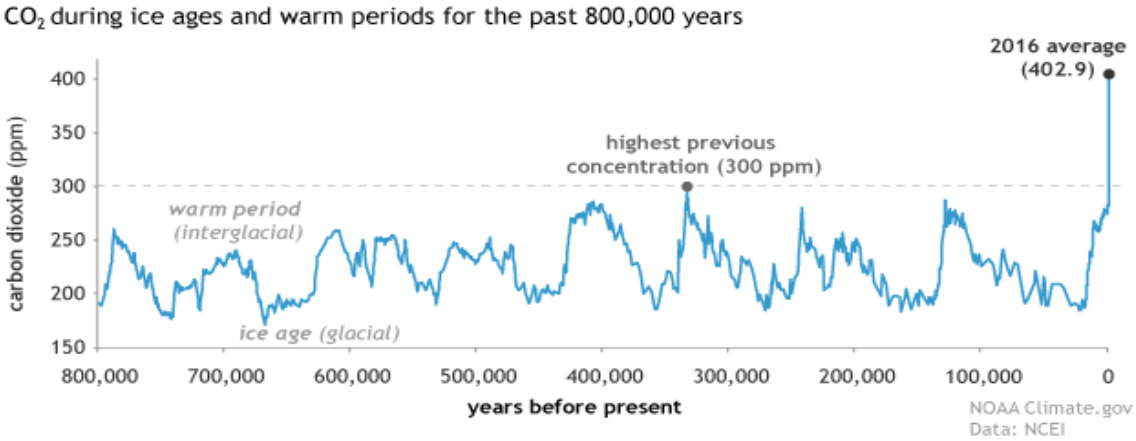

Figure 2: Climate Change: Atmospheric Carbon Dioxide / NOAA, **Source**: https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide

On the other hand, man-made causes remain in the definition of the climate change that is mostly neglected before. Ever since the Industrial Revolution began in the early years of 19th century, the balance of atmosphere was started to be distrupted. Undoubtedly, human activities ranging from miss land-use, deforestation, and to "burning of the fossil fuels released a substantial amount of CO2"[164] to the atmosphere (See Figure 2). On the

[162] "Refers to El Nino and Southern Oscillation interaction which is in between ocean and the atmosphere that cause the shift in temperature both in land and sea". See; "What is ENSO?", Columbia University, https://iridl.ldeo.columbia.edu/maproom/ENSO/ENSO_Info.html (Accessed March 10, 2018).

[163] William Happer. "Independence Now," *International Conferences on Climate Change*, March 24, 2017, http://climateconferences.heartland.org/william-happer-iccc-12-keynote-independence-now/ (Accessed May 19, 2018). Also see; R. M. Carter. "The Myth of Dangerous Human-Caused Climate Change," *The Lavoisier Group's 2007 Workshop,* Melbourne, 29-30 June, (2007): 67, https://pdfs.semanticscholar.org/0973/35f9797f70c513cb8708a54793ae01df53fb.pdf (Accessed March 11, 2018).

[164] "Climate Change: *Evidence and Causes*", U.S National Academy of Sciences and The Royal Society, 2014, 5, http://dels.nas.edu/resources/static-assets/exec-office-other/climate-change-full.pdf (Accessed March 14, 2018).

grounds of human fingerprints in the process for climate change, the definition of climate change has included anthropogenic dimension as well.

Industrial Revolution and following CO2 release to the atmosphere has a substantial effect for climate change. Moreover, the release of CO2 when combined with other greenhouse gases (GHGs) like methane (CH4) and nitrous oxide (N20) release to the atmosphere, disrupt the concentration level of those gases eventually lead to warming of weather in a global scale. According to the World Meteorological Organization's Greenhouse Gas Bulletin 2017 data, the concentration level of GHGs has increased in a huge amount when combined with the era before Industrial Revolution. Concentration levels of CO2, CH4, and N20 in the atmosphere shows increasing difference with the pre-industrial period by %145, %257 and %122 respectively.[165] Consequently, sharp rise within this concentration levels of the substances pave the way for more heating of the Earth (See Figure 3) that eventually end up with the climate change. In this regard, United Nations Framework Convention on Climate Change (UNFCCC) defined climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere over observed comparable time periods".[166]

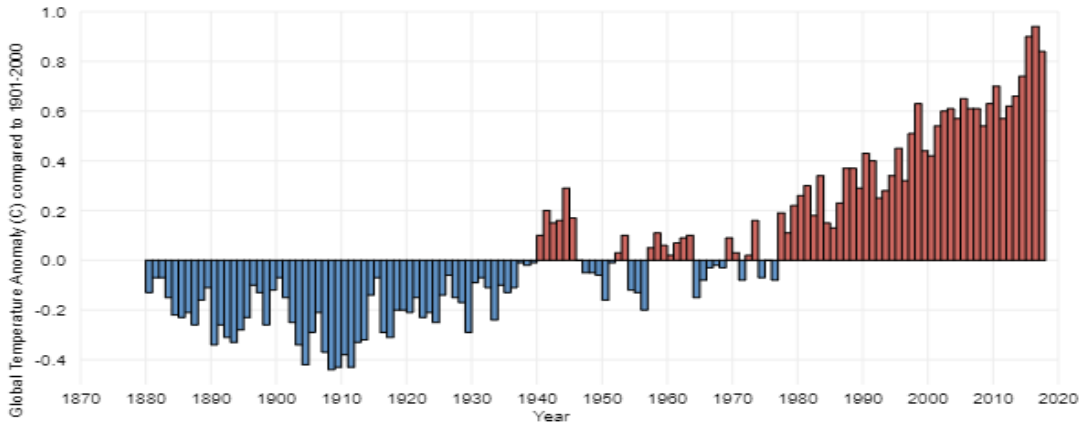

Figure 3: Climate Change: Global Temperature / NOAA / **Source:** https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature

[165] "Greenhouse Gas Concentration Surge to New Record," *World Meteorological Organization*, October 30, 2017, https://public.wmo.int/en/media/press-release/greenhouse-gas-concentrations-surge-new-record (Accessed March 14, 2018).

[166] United Nations, United Nations Framework Convention on Climate Change, *Article 1*, 1992, 7, https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf (Accessed March 15, 2018).

As it can be extracted from the graph, global temperature average has been going in a positive direction. In fact, according to NOAA's 2016 global report, since the recorded history of temperature put down "21st century marked the warmest 16 years with 5 average temperature records"[167] that accelerate the climate change (See Figure 3). Accelerated climate patterns and shift in weather conditions in line with it, cause global environmental damage that has other dimensions as well.

Starting from the environmental damages, increasing amount of carbon dioxide concentration is also means that it is ingested by the oceans. In return, it paves the way for increase in the level of the seas (See Figure 4) and its acidification.[168] The result comes with negative connotations for the marine life that threatens all of its living elements.[169] Moreover, when ingested heat in the oceans combined with the increasing average temperature of Earth's surface, ecological balance of environment is put at stake. This can end up with the disruption of ecological habitats and extinction of some species.

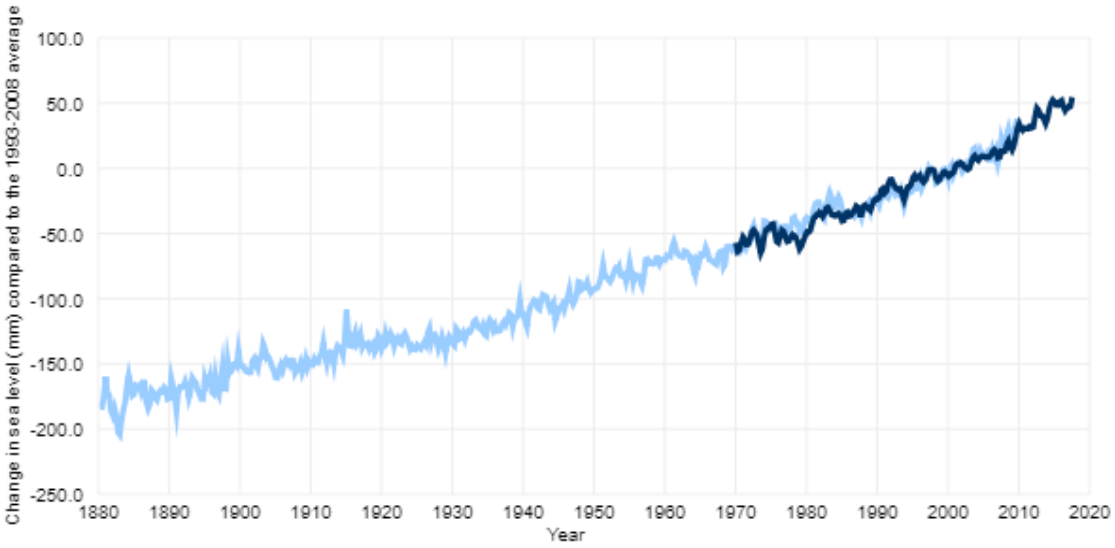

Figure 4: Climate Change: Global Sea Level / NOAA / **Source:** https://www.climate.gov/news-features/understanding-climate/climate-change-global-sea-level

[167] LuAnn Dahlman, "Climate Change: Global Temperature," *National Oceanic and Atmospheric Administration (NOAA)*, 11 September, 2017, https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature (Accessed March 12, 2018).
[168] Alexandra Simon-Lewis, "What is Climate Change? The Definition, Causes and Effects," *WIRED*, 6 February, 2018, http://www.wired.co.uk/article/what-is-climate-change-definition-causes-effects (Accessed March 13, 2018).
[169] Ibid.

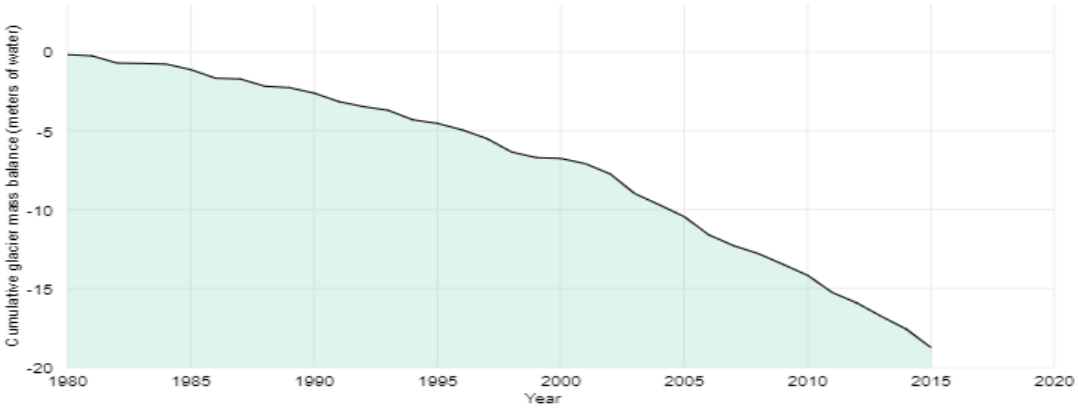

Figure 5: Climate Change: Glacier Mass Balance, NOAA / **Source**: https://www.climate.gov/news-features/understanding-climate/climate-change-glacier-mass-balance

Increasing volume of GHGs when combined with the increasing human population of the Earth put the Earth's cooling system in the Arctic and the Antarctic in danger. Indeed, land forms and sea surface which are full with retreating multilayered glaciers cause increase in temperature and lesser fresh water for human beings.[170] However, it should be noted that glacier retreats "does not directly impact sea levels since it is already displaced sea water while floating in the ocean in contrast to ice sheets on land like Greenland that contributes directly to sea level increase"[171] (See Figure 5 and Figure 6).

Figure 6: Climate Change: Minimum Arctic Sea Ice, NOAA / **Source**: https://www.climate.gov/news-features/understanding-climate/climate-change-minimum-arctic-sea-ice-extent

[170] Rebecca Lindsley, "Climate Change: Global Sea Level," *NOAA Climate,* August 1, 2018, https://www.climate.gov/news-features/understanding-climate/climate-change-global-sea-level (Accessed June 12, 2018).

[171] Shawn J. Marshall, "From White to Blue: The Shrinking Arctic Cryosphere" in *Energy Security and Geopolitics in the Arctic: Challanges and Opportunities in the 21st Century*, ed., Hooman Peimani (World Scientific Publishing Company: London, 2013), 34.

Moreover, the environmental damages of climate change cannot be isolated in one region or a place. In other words, the ecological base of the Earth represents one unified chain that incident in one place affects the other regions which can create a systematic effect. Indeed, increase in the amount of extreme "weather events changed the seasonal periods and rainfalls, and drought and floods as a result of it"[172] that accelerate the climate change. On the grounds of those extreme weathers and increasing temperature, desertification remains as the last ecologic problem that can lead to scarcity of food.[173]

Although desertification and warming of the weather remains under the ecological problems category, their direct results of "scarcity, malnutrition, health problems"[174] and socio-economic problems represent another categories of climate change. In this regard, inhospitable side of climate change over man-kind can work as an accelerator of instability as well.[175] Indeed, the interaction between environment and human beings can also be intertwined by the relations between economy, military, geopolitics, societal risks and climate change. In other words, infrastructures that economic relations based upon and lands to produce agricultural products, military facilities, and technological devices can get lethal damage by the climate change.[176] Furthermore, newly found resources might become the next battlefield to establish control over them. Lastly, societal unrests because of climate change related migration flows[177] reflects its other accelerant dimensions over inter and intra relations among people and states.

In line with causal and consequential findings, climate change notion remains as a fact rather than a hysteria that has both natural and man-made causes with devastating

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[172] Noyan Turkkan, Nassir El-Jabi and Daniel Caissie, "Floods and Droughts Under Different Climate Change Scenarios in New Brunswick," *Canadian Technical Report of Fisheries and Aquatic Sciences, no. 2928* (2011): 12, http://www.dfo-mpo.gc.ca/Library/343700.pdf (Accessed March 19, 2018).

[173] "Desertification, Drought and Climate Change", United Nations, http://www.un.org/esa/sustdev/publications/trends_africa2008/desertification.pdf (Accessed March 19, 2018).

[174] Alessandra Potenza, "From Heat Stress to Malnutrition, Climate Change Already Make Us Sick," *The Verge,* October 30, 2017, https://www.theverge.com/2017/10/30/16572350/climate-change-health-heat-waves-extreme-weather-infectious-diseases (Accessed on 20.03.2018).

[175] Caitlin E. Werrel and Francesco Femia, "Climate Change as Threat Multiplier: Understanding the Broader Nature of the Risk," *The Center for Climate and Security,* No. 25, February 12 (2015); 2, https://climateandsecurity.files.wordpress.com/2012/04/climate-change-as-threat-multiplier_understanding-the-broader-nature-of-the-risk_briefer-252.pdf (Accessed March 20, 2018).

[176] Ibid.

[177] Peter Halden, "The Geopolitics of Climate Change: Challanges to the International System," Sweedish Defence Research Agency, December, (2007): 22, https://www.klimatilpasning.dk/media/1154179/The%20geopolitics%20of%20CC.pdf (Accessed March 22, 2018).

environmental and multiplied risk consequences. However, although the reality of climate change and its possible consequences understood by scientists, this issue was regarded as low politics in the heydays of Cold War that undermined its importance. Yet, lots of initiatives introduced by UN prior to the end of Cold War. As a result of that, initiatives and conferences were held in different parts of the world by UNFCCC to define and mitigate the consequences of the notion. The fight against climate change is further developed with the Kyoto Protocol to reduce carbon emissions and the Paris Agreement to tackle it globally.[178] Moreover, in line with the United Nations Environment Program (UNEP) and IPCC reports, an awareness aimed to be created about the notion since 1990.[179] As a result of those, adaptation policies to prepare every single individual state for their survival under new conditions of our era and mitigation policies in order to mitigate carbon emissions in the atmosphere have been introduced.[180]

However, as provided in the introduction part of this part and the thesis, not every region of the world is affected by climate change at the same level. Indeed, the Arctic region has affected more than other regions. Moreover, rather than its environmental consequences to mitigate climate change, short-term benefits are to be pursued by the states in order to keep continue in the development path. In this regard, the Arctic region, effects of climate change towards the region and its increasing significance in the global affairs with boundary issues will be covered in the following titles.

2.2. THE ARCTIC REGION

Geographically, the Arctic region refers to an area that is circled around the North Pole which is bordered by U.S through Alaska, Canada, Russia, Denmark through Greenland

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[178] Carlotte Streck, Paul Keenlyside and Moritz von Unger, "The Paris Agreement: A New Beginning," *Journal for European Environmental and Planning Law* 13 (2016): 5-6, https://climatefocus.com/sites/default/files/The%20Paris%20Agreement%20A%20New%20Beginning.pdf (Accessed March 11, 2018).

[179] "Climate Change Information Kit," *United Nations Environment Program*, https://unep.ch/conventions/info/ccinfokit/Infokit%20-%202001.htm (Accessed March 11, 2018).

[180] Bruno Localetti, "Synergies Between Adaptation and Mitigation in a Nutsheel," *COBAM*, August 2011, https://www.cifor.org/fileadmin/fileupload/cobam/ENGLISH-Definitions%26ConceptualFramework.pdf (Accessed March 15, 2018).

and Norway (See Map 1).[181] In a broad manner, the Arctic region includes the areas that do not exceed 10°C in summer which put Sweden, Finland and Iceland in the definition. Also, since "the Arctic means near the bear in ancient Greek"[182] those states remain in the Arctic circle although they don't have any shores to the ocean.

Map 1: The Arctic Region **Source:** Encyclopedia Britannica https://.britannica.com/article/Arctic-Regions/352777

Historically, constant changes in weather patterns of the Earth and the climate of the Arctic has challenged political and social life in the region. Indeed, the military campaigns of littoral states to possess land could not be long living. However, with the advancement of technology and evolvement in the means of trade, the Arctic region have become the center of attraction for the great powers of respective periods. The region "even put an effect over national myths of some littoral states".[183] Also, to show the superiority of mankind over nature, the Arctic region offers a valid place to the littoral states. Surviving through hard climate conditions and scarcity in the region for its living elements especially for human beings, it becomes a matter of pride for states to defend their lands in the region. Also, by installing military elements and technological advancements including during and after the Cold War period the region turned out to be a place for tense relations.

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[181] Oleg Anisimov and Blair Fitzharris, "Polar Regions: Arctic and Antarctic" in *Climate change 2001: Impacts, Adaptation, and Vulnerability*, eds., James McCarthy et al. (Cambridge: Cambridge University Press, 2001), 807.
[182] Oxford Dictionary, "Arctic", https://en.oxforddictionaries.com/definition/arctic
[183] Shelagh Granth, "The Weight of History in the Arctic," *OpenCanada*, February 25, 2013, https://www.opencanada.org/features/the-weight-of-history-in-the-arctic/. (Accessed January 20, 2018).

Nevertheless, the rough conditions of the Arctic region have not always been affected the relations between littoral states, and domestic groups with the states in a negative way. Indeed, the establishment of regional organizations between the littoral states, especially with the end of Cold War, shifted the course of relations in a positive direction. Like Arctic Council, which includes "all littoral states and domestic ethnic groups through established bodies"[184] in it, Euro-Barents Arctic Council and Nordic Council (NC) were founded by the littoral states to solve regional issues peacefuly. Furthermore, the opening of the region for scientific purposes by both individual states and international organizatios like International Arctic Science Committee (IASC), set a base for good relations to tackle the regional problems in sustainable manner.

Under the terms of the new millennia for the region that based on climate change, ongoing relations between regional actors started to shift again mainly because of the Arctic region's increasing importance. Indeed, the importance of the Arctic has rose sharply, differently from the Cold War context, with the melting of ices. Because, the resources in the seabed of the region and strategic sea routes have become more accessible with the impact of climate change. Although climate change has major negative impact towards the Arctic region in respect to "disruption of flora and fauna of the region in the long term"[185] and revoked the boundary issues among littoral states, it is considered as a blessing by the littoral states. In this regard, climate change in the Arctic region and the increasing importance of the region as a result of it will be examined in the following part of this chapter.

2.3 THE EFFECTS OF CLIMATE CHANGE AND INCREASING SIGNIFICANCE OF THE ARCTIC REGION

According to Snow, Water, Ice and Permafrost in the Arctic (SWIPA) report, increased concentrations of GHGs in the atmosphere caused enormous effects on the climate of the Arctic that has twice as much heating average than other parts of the Earth (See the Figure 7 below).[186] Moreover, fast disruption of the Arctic climate expected to have negative impacts over the other climate system of the Earth's regions. Indeed, duration

[184] Russian Federation, "International Cooperation," The Arctic, https://arctic.ru/international/ (Accessed March 22, 2018).
[185] "The Future of the Arctic Region: Cooperation or Confrontation?", *Advisory Council on International Affairs*, No.90 (2014): 10.
[186] "Arctic Monitoring System", *SWIPA*, vii.

of rainfalls and periods in Asia and America are expected to be affected from rapid Arctic climate change that caused by both human and natural causes.[187]

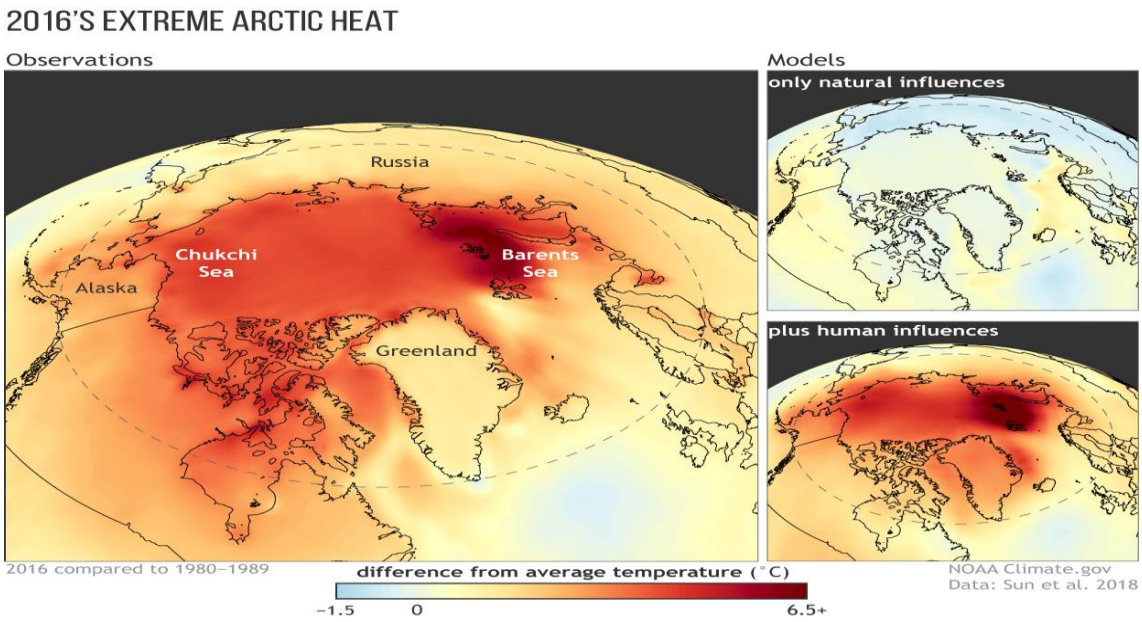

Figure 7: 2016 Arctic Heat / NOAA, **Source**: https://www.climate.gov/news-features/featured-images/2016-arctic-heat-would-have-been-virtually-impossible-without-global

Like the change in the duration of rainfalls and seasonal climate events, other effects of climate change in the Arctic region can be associated with the increase in average temperatures. This ends up with the melting of the multilayered ice sheets and permafrost in general. Consequenly, "melting of ice on the sea and ice sheets on lands lead to decrease in sea ice level with %40, ice-free seasons, increase in sea level rise, and carbon concentration level"[188] in the region. The ecosystem of the Arctic is also at stake through an increase in freshwater level, ice erosion and disruption in the food chain.

Moreover, another outcome of climate change for the region would be the change in waterways and wind patterns which also put an effect over temperature rates of other parts of the world.[189] However, those environmental effects of the climate change

[187] Gunnar S. Eskeland and Line Sunniva Flottorp, "Climate Change in the Arctic: A Discussion of the Impact on Economic Activity," *The Economy of the North*, 2006, 81.
[188] Ibid., vii- viii.
[189] Damian Carrington, "The Arctic Melt Already Affecting the Weather Patterns Where You Live Right Now," *The Guardian*, December 19, 2016,

remain under the category of long-term consequences that even if they are to be seen now, they can be adopted in the following years.

In this regard, focusing on short term economic and strategic gains considered as rather profitable by regional states, although the environmental long-term consequences are regarded as hazardous. As a direct consequence of climate change and ice-free Arctic projections, the richness of the region in terms of energy, mineral and protein resources become obvious that put the region in the center of resurrected boundary conflicts.[190] Thus, the significance of the region has increased sharply when this richness combined with tourism and the possible emerging routes in the region.[191] In this regard, the Arctic region might make economic activities of littoral states more profitable.

2.3.1. Newly-Found Energy Basins

The potential of the Arctic region for energy sources whet littoral and great powers appetite when the effects of climate change towards the region become visible. Consequently, the amount of natural resources was investigated by scientists to get valuable data about whether there are large energy basins or not. According to the US Geological Survey of 2008, which is reviewed in 2017, this "region holds %13 of undiscovered oil and %30 gas resources of the world that is equal to 90 billion barrels of oil, 1,669 trillion cubic feet of natural gas with 44 billion barrels of natural gas liquids".[192] In other words, the seabed of the Arctic is full of energy sources which are "in total almost equal to Russia's total proven gas reserves and one-third of Saudi

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https://www.theguardian.com/environment/2016/dec/19/arctic-ice-melt-already-affecting-weather-patterns-where-you-live-right-now (Accessed March 16, 2018).

[190] "High North-High Stakes: Maritime Opportunities in the Arctic," *Norwegian Shipowner Associations*, Oslo, March 2013, 6- 19, https://rederi.no/globalassets/dokumenter/alle/rapporter/maritime_opportunities_in_the_arctic.pdf (Accessed March 26, 2018).

[191] Albina Pashkevich, Jackie Dawson and Emma J. Stewart, "Governance of Expedition Cruise Ship Tourism in the Arctic: A Comparison of the Canadian and Russian Arctic," *Tourism in Maritime Environment* 10, no. 3-4 (2015): 225- 226, https://core.ac.uk/download/pdf/35469674.pdf (Accessed March 26, 2018).

[192] U.S Department of the Interior, U.S Geological Survey, *Circum- Arctic Resource Apprasial: Estimates of Undiscovered Oil and Gas North of the Arctic Circle*, *USGC*, 2008, 1, https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf (Accessed March 26, 2018). Also see; Ronald R. Carpentier, "Methodology for Assesment of Undiscovered Oil and Gas Resources fort he 2008 Circum-Arctic Resource Apprasial", in *The 2008 Circum-Arctic Resource Apprasial: U.S Geological Survey*, eds., E. Moore and D. L. Gautier, Proffesional Paper 1824, 2017, 5, https://pubs.usgs.gov/pp/1824/b/pp1824b.pdf (Accessed March 26, 2018).

Arabia's proven oil reserves".[193] Thus, energy resources are unequally distributed in favor of Russia (See Figure 8).

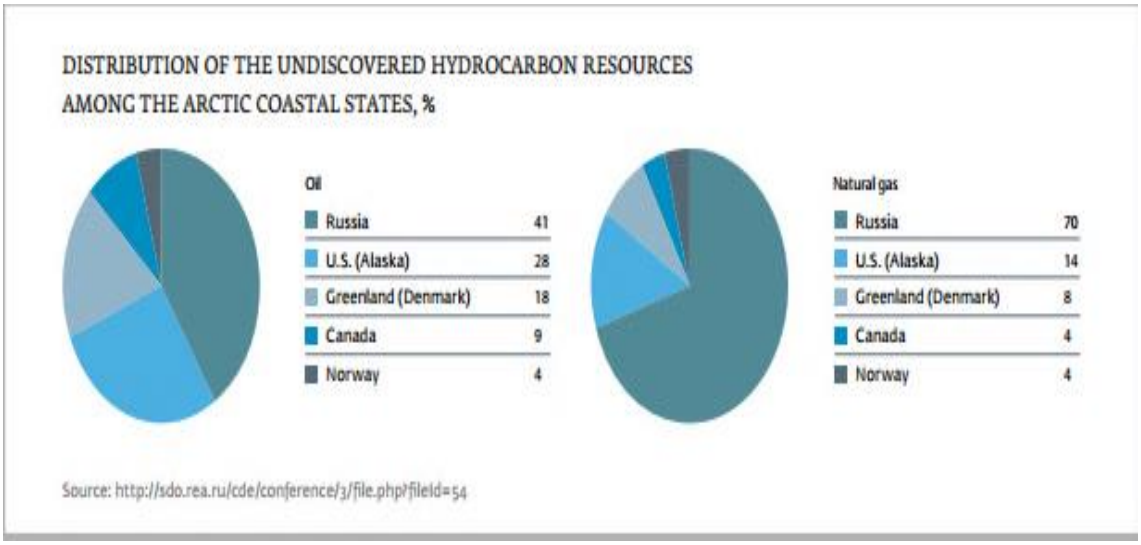

Figure 8: Distribution of Undiscovered Hydrocarbon Resources Among The Arctic Coastal States, **Source**: http://sdo.rea.ru/cde/conference/3/file.php?field54

When increasing population growth of the world and energy hunger of the states combined with the physical existence of the energy sources in the region, Arctic region gained strategic importance from energy importer states perspective for the continuation of their growth. In this context, the Arctic region regarded as new energy province and strategic resource base by Norway and Russia respectively in whose economy pie energy sales occupies great space.[194] Moreover, from the perspectives of other littoral states like Denmark, U.S, and Canada, this region regarded as a "place to generate economic benefits and valuable place to decrease energy dependency in their energy security policies".[195] For this reason, increased volume of state-owned or international

[193] Peter F. Johnston, "Arctic Energy Resources and Global Energy Security," *Military and Security Studies* 12, no.2 (2010): 3, http://oceans.mit.edu/wp-content/uploads/arctic_energy_security.pdf (Accessed March 27, 2018).

[194] Philip Bagnoli, Jean Chateau and Yong Gun Kim, "The Incidence of Carbon Pricing: Norway, Russia and Middle East," *OECD Economic Studies, no.44* (2008): 8-9, https://www.oecd.org/norway/42505369.pdf (Accessed March 28, 2018). Also see; "Russia Economic Report", *World Bank Group*, no.35, April 2016, 8, https://openknowledge.worldbank.org/bitstream/handle/10986/24028/rer35_E.pdf?sequence=1 (Accessed March 29, 2018).; Somini Sengupta, "Both Climate Leader and Oil Giant? A Norwegian Paradox," *The New York Times*, June 17, 2017, https://www.nytimes.com/2017/06/17/world/europe/norway-climate-oil.html (Accessed March 29, 2018).

[195] Dmitri Trenin and Pavel K. Baev, *The Arctic: A View From Moscow*, (Moscow: Carniege Endowement, 2010), v, https://carnegieendowment.org/files/arctic_cooperation.pdf. (Accessed March 29, 2018).

energy companies' involvement to the region is expected. In addition to that, states are expected to utilize these energy resources for both to flourish their economies and to compensate exhausted energy basins of them.

Rather than littoral states, regional states of the Arctic such as Sweden, Finland, and Iceland are also interested in the energy sources in the region to establish joint exploration and extraction projects. Moreover, since energy hunger of the developed and developing states are increasing year by year so as the interest over the region by non-regional economic powers like China, South Korea, India, and Japan.[196] In this regard, Arctic energy sources occupy important space in the geopolitics of energy security as well. Thus, from the perspective of supply security of great powers and littoral states, the Arctic region is regarded as "the way out from geopolitically unstable regions like the Middle East and Africa".[197] However, the discovered richness of the region in terms of energy resources would seem to create problematic relations. Indeed, unequal distribution of energy sources between the states can create asymmetric and less trustworthy relations between interacting parties. Other than energy resources, the existence of minerals and other precious materials also increase the importance of the region that increases the number of eyes over the region.

2.3.2. Minerals, Sea Routes, Fishery and Tourism Activities

The Arctic region is not only rich in terms of energy resources but also minerals and elements. Even though mineral extraction has already well established with inland projects of the littoral states, their offshore exploration and extraction projects lacks behind. With the impact of climate change littoral states has embarked on to investigate their off shore mineral and rare earth potential in the Arctic Ocean.[198]

Among precious minerals and materials that are found in the seabed of the Arctic, "diamonds, uranium, nickel, tin, copper, titanium, barite, gold, and iron ore remains one

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[196] Stephen J. Blank, "Enter Asia: The Arctic Heats Up," *World Affairs*, March/April 2014, http://www.worldaffairsjournal.org/article/enter-asia-arctic-heats (Accessed March 30, 2018).
[197] Anne-Sophie Cre´pin, Michael Karcher, Jean-Claude Gascard, "Arctic Climate Change, Economy and Society (ACCESS): Integrated Perspective," *The Royal Swedish Academy of Sciences, Ambio*, no.46, *2017*, 345, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5673869/ (Accessed March 30, 2018).
[198] Uttam Kumar Sinha, "Arctic: A Paradox and Antithesis", in *Asia and the Arctic*, eds., V. Sakhuja and K. Narula (Springer Geology, 2016), 18, https://www.springer.com/.../9789811020582-c2.pdf (Accessed March 27, 2018).

of the important ones that worths for about 2 trillion U.S dollars in total".[199] However, it should be noted that those precious minerals and materials are not equally distributed between littoral states. Like energy resources, each state has upper hand in one precious material. For example, Russia's Arctic is full of diamond, platinum, copper, and palladium while U.S, Canada, Norway and Denmark's Arctic land full of with zinc, lead, tungsten and iron ore respectively.[200]

The abundance of rare minerals and materials on the seabed of the Arctic paves the way for formulating policies to extract those elements not only by littoral states but also for non-regional powers like EU and China. Furthermore, with the contributions of China, United Kingdom (UK), EU, Canada and Russia, exploitation of those materials increased sharply.[201] Because, these rare earths are being used to produce up to date technological devices.[202] In this regard, the Arctic region perceived as a leading place to initiate mining actives after the impacts of climate change towards the region. Littoral states and great powers aim to achieve unlimited desires over the limited sources through extracting and supplying precious minerals. In return, they aim to generate economic benefits out of it. However, melting of the ice not just means extraction of energy sources, minerals, and materials but also new shipping lanes that increase geopolitical contestation over them.

The continuous decrease in the Arctic sea ice combined with the increase in the duration of seasonal ice-free periods of the Arctic Ocean, another economic interest in terms of shipping have become possible as well. Indeed, the emergence of two important sea lanes of communication, NWP starting from Canadian Arctic zone to the North America and NSR stretching from Russian Arctic zone to the Pacific Ocean via Arctic Ocean"[203], seem to be new routes for trade activities that can stimulate trade interactions between global economies.

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[199] Peimani, Introduction", 4.
[200] Lindolth, "Arctic Natural Resources in a Global Perspective," *The Economy of the North,* 30.
[201] Ed Struznik, "China Signals Hunger for Arctic's Mineral Riches," *The Guardian,* June 4, 2013, https://www.theguardian.com/environment/2013/jun/04/china-arctics-mineral-riches (Accessed April 1, 2018).
[202] Ibid.
[203] Rob Huebert et al., "Climate Change and International Security: The Arctic as a Bellwether," *Center for Climate and Energy Solutions,* 2012, 8, https://www.c2es.org/site/assets/uploads/2012/04/arctic-security-report.pdf (Accessed April 2, 2018).

Map 2: Current Sea Routes and NSR and NWP, **Source**: Grid-Arendal

What makes those routes significant is the shorter amount of time to reach the destination (See Map 2). In return, these routes help to cut fuel usage with a huge amount of money savings. In this regard, NWP sea lane via North America is expected to shorten the route among Asia and east coasts of America by 5000 miles.[204] Accordingly, NWP remains much more "economic when compared with the current routes via Panama Canal that cuts at most 600,000 U.S dollars of shipping cost in line size of the ships".[205] However, it should be noted that great sized ships which pass Panama Canal cannot pass through this sea lane. Furthermore, since 2013, this route started to be used by commercial ships that paved the way for the realization of tourism activities starting from 2016.[206]

On the other hand, NSR which is also known as Northeast Passage cuts the distance between Yokohama and Rotterdam for about %30 percent that previously takes more than 20000 kilometers.[207] Indeed, under the conditions of the 21st century, reducing transition cost through fuel and day save means economic profit that international corporations desire. For that reason, the number of passages through "NSR shows increasing pattern that 498 voyages was granted permission to foreign flagged vessels in

[204] Ebinger and Zambetakis, "The Geopolitics of Arctic Melt," 1221.
[205] Dongqin Lu, Gyei-Kark Park, Kyounghoon Choi and Shangjin Oh, "An Economic Analysis of Container Shipping Through Canadian Northwest Passage," *International Journal of e-Navigation and Maritime Economy* 1 (2014): 70, https://www.sciencedirect.com/science/article/pii/S2405535214000023 (Accessed April 3, 2018).
[206] Norman Middlemiss, "Arctic Shipping and Trade Routes," *Shipping*, April 11, 2017, https://www.shippingtandy.com/features/arctic%E2%80%88shipping-and%E2%80%88trade%E2%80%88routes/. (Accessed April 3, 2018).
[207] Mehmet Ersan, *"Future of Arctic Maritime Activities in the Light of Climate Change,"*, M.Sc. Thesis, Istanbul Technical University Graduate School of Science Engineering and Technology, 2016, 13.

between 2013 and 2016".[208] Especially between "2011 and 2014 remarks record for the route when 41, 46, 71, 53"[209] commercial ships used this lane respectively.

In other words, the emergence of these routes and healthy passage through them led to save of travel days and money through shortening the route. Also, these routes bypass the pirates of Somalia and one of the narrowest choke points of the world like Malacca Strait. Moreover, in line with the findings of the scientists, these routes will be "ice free in between 2040 and 2060"[210] that can have vital effect on global trade transactions.

For this reason, Russia and Canada aim to develop these routes and commercialize it in order to gain benefits out of it and to establish their own sovereignty over the routes. Moreover, on the grounds of the warming of the Arctic sea and realization of ice-free seasons for shipping purposes, tourism facilities and fishery fields are expected to develop as well which will generate economic benefits in the end.

Although the exact number of living stocks of the Arctic is not being documented, the increase in heat is expected to affect the number of fish in the Arctic in a positive direction.[211] In this regard, rather than fossil and mineral sources of the Arctic, protein sources of the region can also be cultivated by littoral states "which is already accounted for %10.1"[212] in littoral states economy pie. Indeed, for Norway and Greenland, it means more profit in whose economy pie fish sales occupies important space. However, as a result of easy access to the region, the ecological balance of the region remains at stake. Overall, the benefits of climate change also spread over the fishery field.

More granted access by the climate change to the Arctic region and its oceans means that "reaching its wildlife, cultures and landscapes"[213] as well. Littoral states aim to formulate policies through advertising Arctic region for tourism purposes. Furthermore,

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[208] Valery Konyshev, Alexander Sergunin and Sergei Subbotin, "Russia's Arctic Strategies in the Context of the Ukranian Crisis," *The Polar Journal* (2017): 2. For the data between 2011 and 2014, See: Middlemiss, "Arctic Shipping and Trade Routes".
[209] Middlemiss, "Arctic Shipping and Trade Routes".
[210] Peimani, "Introduction," 6.
[211] Eskeland, "Climate Change in the Arctic: A Discussion of the Impact on Economic Activity," 83.
[212] Eleonora Milazzo, "Opportunities and Challanges: Economic, Social, and Political Impacts of Climate Change in the Arctic," The Arctic Climate Change Emerging Leaders Program, September 18, 2014, https://accelfellowship.wordpress.com/opportunities-and-challenges-economic-social-and-political-impacts-of-climate-change-in-the-arctic/ (Accessed April 5, 2018).
[213] "Arctic Matters: The Global Connection to Changes in the Arctic", National Research Council of the National Academies, 2015, 26, http://dels.nas.edu/resources/static-assets/materials-based-on-reports/booklets/ArcticMatters.pdf (Accessed April 5, 2018).

local economies of the indigenous population also profit from the tourism boom. Other than littoral states, China is interested in the tourism activities in the Arctic. Indeed, climate change related impacts created such conditions for states to advertise this region since ports in the region remain accessible for longer periods.[214]

In short, although the effects of the climate change regarded as environmentally devastating, the warming of the weather and melting of the ices perceived as a blessing from the perspective of littoral states. Indeed, the impacts of climate change offered short term benefits to the littoral states ranging from extraction of energy sources, minerals, and materials, tourism, fishery to the emergence of shipping routes that has increased the importance of the region. However, this resulted with the underestimation of the long-term negative consequences of the climate change. Furthermore, these benefits revoked the old disputes among the littoral states in terms of border conflicts to get the biggest share from Arctic Ocean.

2.3.3. Territorial Disuputes Among Littoral States

Melting of ice is flaring the competition among regional states but especially between the littoral states in the Arctic. The desire of littoral states to get a large share from the Arctic seabed and maritime routes provoked the territorial disputes. In fact, ownership problem of the Arctic Ocean relies on the ground of this dispute. Because "it is not owned by a single power but littoral states, where permafrost of the ocean was block further expansion of states territorial claims before".[215]

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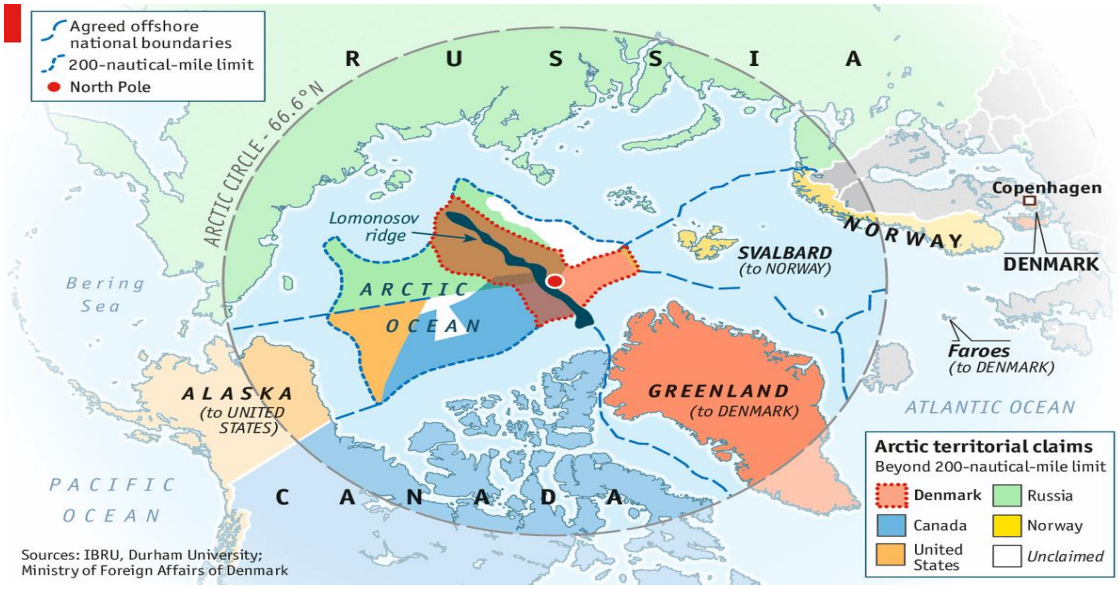
[214] Milazzo, "Opportunities and Challanges: Economic, Social, and Political Impacts of Climate Change in the Arctic".

[215] United Nations, *UN Security Council SVP MUN 2017*, Arctic Conflict, 2017, 5-6, http://mun.svpsmart.sch.id/wp-content/uploads/2017/08/UNSC-Study-Guide-Sekolah-Victory-Plus-2017-MUN-public.pdf. (Accessed April 5, 2018). See also; Mikkel Runge Olesen, "Arctic Rivalries: Friendly Competition or Dangerous Conflict?," *Center for Security Stduies*, October 23, 2017, 3-4, http://www.css.ethz.ch/en/services/digital-library/articles/article.html/1715b92e-54aa-496f-8be7-381227569a1a/pdf. (Accessed April 5, 2018).



Map 3: Conflictual Arctic Territorial Claims of Littoral States , Source: http://teimun.org/wp-content/uploads/2016/06/SC_TEIMUN_ArcticTerritorialDisputes.pdf

Combination of both reasons directs the governing issue in the Arctic region. Since the regional issues handled through bilateral mechanisms and littoral states own regulations, territorial issues lack a framework to be based upon. In this regard, the 2008 Ilussiat Declaration was taken as a reference by the littoral states to solve territorial issues base on UNCLOS and its provisions (See the Map 3).[216] Accordingly, states territorial sea boundaries, exclusive economic zones (EEZ) and extended continental shelves defined to be 12, 200 and, 350 miles respectively.[217] In return, fair base aimed to be formed with this regulation. Moreover, international mechanisms like UN Continental Shelves Commission accepted as the authority by littoral states to define their borders.[218]

Under this new scenario that presented by the climate change, the territorial dispute between U.S and Canada about the Beaufort Sea and the status of NWP flared again. Although the base of the problem is not directly related with the climate change but both states colonial past,[219] problem between two states yet to be solved. Thus,

[216] Klaus Dodds, "The Ilulissat Declaration (2008): The Arctic States, "Law of the Sea," and Arctic Ocean," *SAIS Review* XXXIII, no. 2 (2013): 45-46.
[217] Jonathan Masters, "The Thawing Arctic: Risk and Opportunities," *Council on Foreign Relations*, December 16, 2013, https://www.cfr.org/backgrounder/thawing-arctic-risks-and-opportunities. (Accessed April 6, 2018).
[218] Wei-en Tan and Yu-tai Tsai, "After the Ice Melts: Conflict Resolution and the International Scramble for Natural Resources in the Arctic Circle," *Journal of Politics and Law* 3, no.1 (2010): 91, http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.659.3936&rep=rep1&type=pdf. (Accessed April 8, 2018).
[219] Michael Byers and Andreas Osthagen, "Why Does Canada Have so Many Unresolved Maritime Boundary Disputes?," *The Canadian Yearbook of International Law* 54 (2016): 12,

conflictual issues regarding the NWP when combined with the possible existence of energy resources and minerals in the seabed of the conflicted zone, the disputes between Canada and U.S remain unsolved (See Map 4). However, defacto solution between two important Western states was reached with the permanent access of U.S by Canada if U.S asks before passing from NWP.[220] Official resolution could not be reached since then, although the leaders of both states gathered around the table to solve this issue lastly in 2016.[221]

Map 4: Beaufort Sea Dispute Between the U.S and Canada, **Source**: http://www.montrealgazette.com/boswell+beaufort/2663050/story.html

It is easy for each party since both states represent and defend the Western perception of the world. This conflict seems to be set down unofficially as it was the case for Canada and Denmark for Hans Island. Canada and Denmark experience territorial dispute for 45 years over Hans Island. The position of the island, "which has a size of large rock"[222], located in the middle of the territorial boundaries of both states. Under this circumstance, both states can claim this island in line with their extended economic zones under the international law (See Map 5).

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http://www.uio.no/for-ansatte/enhetssider/jus/nifs/arrangementer/2017/2017%20-%20illustrasjoner/17-12-12-why_does_canada_have_so_many_unresolved_maritime_boundary_disputes.pdf (Accessed April 13, 2018).

[220] Ibid.

[221] Aaron Wherry, "12 Things Trudeau and Obama Agreed on," *CBC*, March 10, 2016, http://www.cbc.ca/news/politics/trudeau-obama-agreements-1.3485496 (Accessed April 14, 2018).

[222] Huebert, "Climate Change and International Security: The Arctic as a Bellwether," 18.

Map 5: Hans Island Dispute **Source:**http://www.hansuniversalis.org/hans_island_claim.html

Nevertheless, series of undiplomatic actions had been conducted for planting their flags on the Island from 1984 to 2005[223] left its place to diplomatic negotiations. To settle this dispute, in May 2018 both parties agreed on the terms for equal division of the island.[224] In short, one of the long-standing territorial issues of the Arctic region seems to come to an end with two state formulations.

However, when it comes to the territorial disputes between Russia and the littoral states in Western camp, solving these issues are not easy. Indeed, the existing psychological barriers between these camps make hard to reach a compromise on territorial issues with each other. Within this context, the disputes between Russia and U.S on the delimitation of the borders in the Bering Sea and between Russia, Denmark and Canada for the Arctic Ocean still remain alive.

Chronogically, amongst the existing disputes on Bering Sea between Russia and U.S remains as the oldest one. Existence of protein and energy resources in the seabed of the Bering Sea when combined with the conflicting extended right for economic zone of both parties, created territorial dispute between Russia and the U.S.[225] Although, the Soviet Union and the U.S concluded an agreement in 1990 about this part of the region

[223] Dan Levin, "Canada and Denmark Fight Over Hans Island With Whisky and Schnapps," *The New York Times*, November 7, 2016, https://www.nytimes.com/2016/11/08/world/what-in-the-world/canada-denmark-hans-island-whisky-schnapps.html (Accessed April 12, 2018).
[224] Jeremy Luedi, "Hans Off! Canada and Denmark Arctic Dispute," *World Facts*, April 25, 2017, https://www.worldatlas.com/articles/hans-island-boundary-dispute-canada-denmark-territorial-conflict.html (Accessed April 12, 2018).
[225] Valery Konyshev and Alexander Sergunin, "Russia's Policies on the Territorial Disputes in the Arctic," *Journal of International Relations and Foreign Policy* 2, no.1 (2014): 56 - 57.

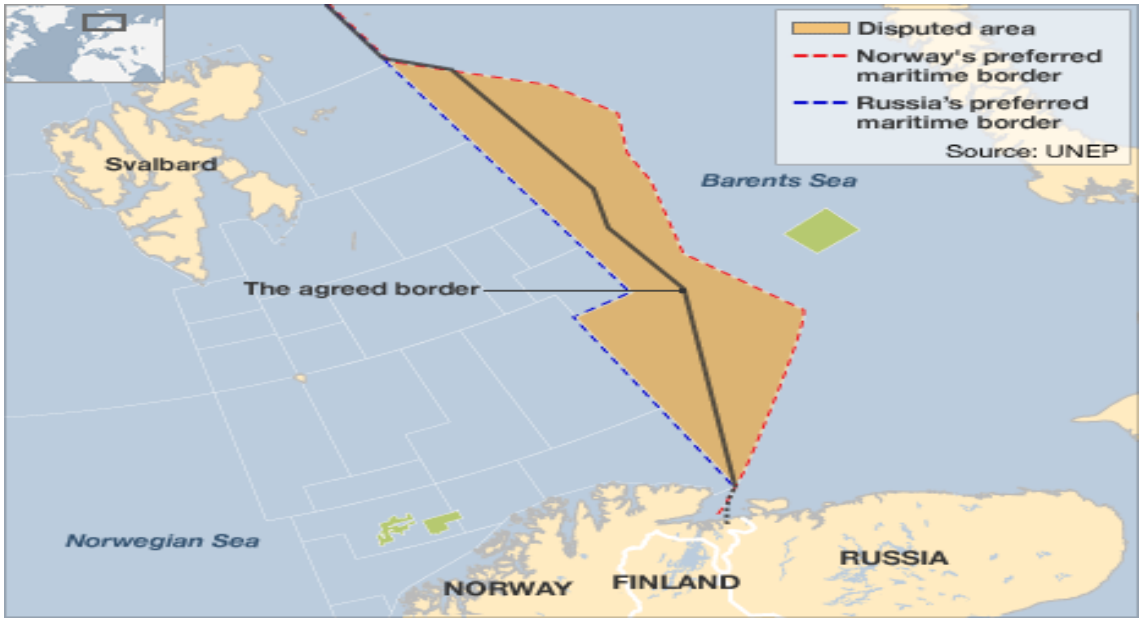
to settle their disputes, territorial dispute still remains alive.[226] Because, the agreement still is not ratified by Russia. In short, today this territorial dispute and delimitation issue regarded as still alive although the terms of the 1990 agreement still applied for this part of the world (See Map 6).

Map 6: Bering Sea Conflict, **Source**: https://tr.pinterest.com/pin/319192692332453355/

The dispute between Russia and Norway on the Barents Sea represents the exact opposite of the perception between Russia and the U.S. Because boundary drawing for the Barents Sea became a matter of concern for both states with the impact of climate change to the region. Indeed, the desire of both states to exploit the seabed of the Barents Sea, and ambition to solve the dispute for technology transfer among each party ended border dispute that "dates back to 1926 Declaration of the Soviet Union".[227] Although Russia claimed the lands up to the North Pole with that declaration, it reached an agreement with Norway in 2010 to end the dispute.[228] The protein sources and newly found "11 billion barrels of oil and 380 trillion cubic feet of natural gas"[229] in the seabed of the Barents Sea can finally be exploited by the both parties. Reasons that made territorial dispute unsolved for many years when combined with the Russia's ambition for the NSR projections left no choice but to compromise. Consequently, both states embarked on to enjoy their sovereign right over deliminated zones (See Map 7).

[226] Ibid.
[227] Ibid., 67-68.
[228] Ibid.
[229] World Petroleum Resources Assesment Fact Sheet, Assessment of Undiscovered Petroleum Resources of the Barents Sea Shelf, United States Geological Survey, 2009, 1, https://pubs.usgs.gov/fs/2009/3037/pdf/FS09-3037.pdf (Accessed April 13, 2018).

Although Russia solved its territorial dispute with Norway in 2010 by relying on international law and bilateral negotiations, the perceived image of Russia by the other Western states led to contuniation of existing territorial disputes.

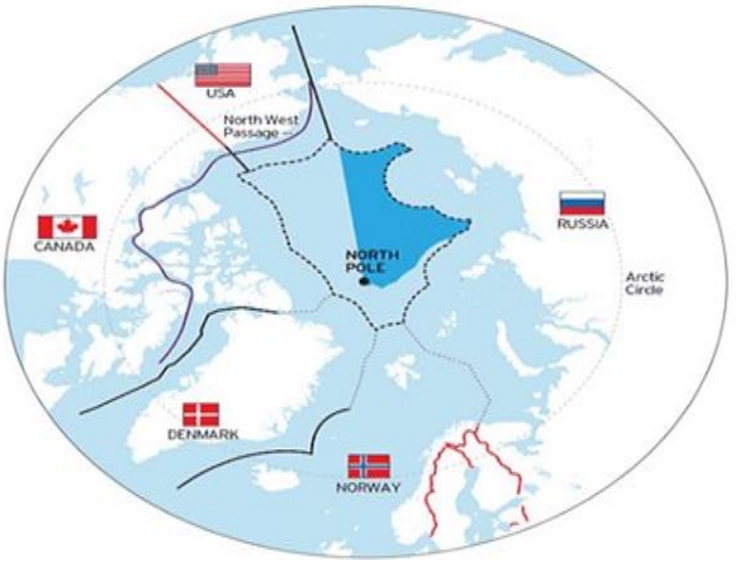


Map 7: Delimitation of Maritime Border Between Russia and Norway, **Source**: https://www.bbc.co.uk/news/business-11299024

Lastly, climate change came with new territorial issues for the Arctic region especially for the Russia, Denmark and Canada to get the largest share from the Arctic seabed. The littoral states who ratified UNCLOS has to present their territorial claims consistent with their extensive continental shelves within 10 years.[230] In line with UNCLOS and international arrangements, those states made terriroial claim over and towards the North Pole which overlapped with each other. Because, they all believed Lomonosov Ridge is a natural extension of their respective lands.[231] Moreover, combination of overlapping territorial claims with the "existence of energy sources in the region up to

[230] Megan L. Campbell, "United States, Arctic Ocean, Management & the Law of the Sea Convention," *NOAA*, May 8, 2008, 3, https://www.gc.noaa.gov/documents/US_Arctic_Ocean_Mgt_08-05-08.pdf (Accessed April 15, 2018).
[231] Patrick Barkham, "Why Does Denmark Think It Can Lay Claim to the North Pole?," *The Guardian*, December 16, 2014, https://www.theguardian.com/world/shortcuts/2014/dec/16/why-denmark-thinks-it-can-lay-claim-to-north-pole (Accessed April 15, 2018).

which is %22 of the total resources"[232], emergence of the latest territorial conflict in the region have become inevitable.



Map 8: Continental Shelf Claims of Littoral States, **Source**: https://www.zerohedge.com/news/2015-08-06/russias-latest-land-grab-attempt-arctic

However, the Russian expedition to the North through implanting its flag in 2007 made this situation worse although Russia had achieve nothing legaly after it planted its flag.[233] Furthermore, the resolve of this dispute requires geographical data which requires long-term examinations and costs too much. Russia, Canada and Denmark revitalized claims based on geographical findings for the extensive economic zones and continental shelves in 2015, 2013 and 2014 respectively.[234] Still, this conflict remains one of the most problematic and unresolved one because of the big price in terms of the energy sources and territorial expansion.

In short, as of 2018 boundary drawing for the Arctic region with continental shelves extension could not be finalized among littoral states. The territorial disputes U.S and Canada, U.S and Russia, and Russia, Denmark and Canada remain still alive in addition to the dispute between Denmark and Canada. However, the territorial dispute between Denmark and Canada about to be solved through new regulations. Above all, it is obvious that the richness in the Arctic seabed and emerging sea routes, provoked the old

[232] Ibid.
[233] Ibid.
[234] Olesen, "Arctic Rivalries: Friendly Competition or Dangerous Conflict?," 4.

territorial disputes among littoral states. Littoral states want to resolve these disputes and start exploiting those benefits in respect to energy and protein sources, and maritime routes. Without any doubt, the benefits and negative outcomes offered by the climate change urged littoral states to form policies for the Arctic region. Since they all wanted to adapt to this new environment with solid policy formulations in general and energy security policies in particular. In the light of this information, Russia's energy security formulations for the Arctic region after the climate change related impacts will be examined. In this regard, the security perception of Russia, the place of Arctic and its energy security in general are needed to be examined. In the following chapter, those subjects and the relevancy of these sources for Russia will be questioned to set a base for reading its Arctic energy security policy.

CHAPTER 3

RUSSIA'S SECURITY PERCEPTION AND ITS ENERGY SECURITY

The security concept has strong correlation with anthropogenic and geographically fixed factors, which range from landscape, climate, size of the state to idiosynacracies of the leaders, that creates variety in the understanding it. Indeed, this correlation puts an impact on the security perception of the ruling elite and influences the security perception of a state. Russian security perception has also been affected from these factors. In fact, security perception of ruling elite or a state even set the base for understanding of and responding to not only events and developments but also to new phenomenons like energy security. In this regard, the security perception of Russia and the place of the Arctic region in this perception will be inquired in this chapter of the thesis. Thus, energy security policies of Russia, which can be considered as an example of its security understanding, will be examined as well. Lastly, the relevance of the Arctic region and its resources will be questioned to understand whether Russia has a base to establish Arctic energy security policy or not.

3.1. RUSSIA'S SECURITY PERCEPTION

Throughout the last 800 years, Russia's security perception was shaped in line with aforementioned geographical settings and idiosynacracies of the leaders. Amongst other elements, geography remains as the most important element in the Russian security perception. Indeed, being geographically located in the heart of "Europe and Asia stretching from Norway to Pacific Ocean and from Black Sea to the Arctic Ocean",[235] strongly influenced Russia's security policies and foreign policy making. Since

[235] "Country Profile: Russia," *Library of Congress – Federal Research Division*, October 2006, 1, https://www.loc.gov/rr/frd/cs/profiles/Russia.pdf (Accessed March 3, 2019).

landscapes of Russian territories do not form physical barriers, borderlines of the country are defined by the cultural identity of Russians.[236]

Although the absence of natural barriers makes hard to defend Russian territories and provides proper conditions for the raiders coming from the East and the West to attack its territories, it also helped Russians to learn the features of its territories and settle under these conditions. Naturally, because of the lack of natural barriers in Russian geography to block enemy advance, the use of climate patterns and desire for territorial expansion to defend core Russian territories found their place in the Russian security perception. Otherwise, "Russia's political center, Moscow, and its territories would be vulnerable in the case of foreign attack".[237]

The size of the state has been another factor affecting the formation of Russia's security perception. Security policies of Tsarist, Soviet and today's Russia are based on the total size of the state which evolved throughout Russian history. Accordingly, starting from 14th century, "Moscow princes aimed to collect Russian lands under the control of Moscow" to meet its security needs.[238] In the following centuries, Tsarist Russia under the expansionist rulers like Ivan the Terrible, Peter the Great and Catherina the Great had expanded its territories with the "annual average of 80 kilometres per day".[239] The reason for that can be found in the attacks of Chengiz Khan's, Polish, Swedish, French and German armies towards Russian territories in the 13th, 17th, 18th, 19th and 20th century respectively.[240] Undoubtedly, this has affected the formation of Russian security perception that based on the total size of the state to protect Moscow from the enemies.

The Soviet Union, which was founded on territories of Russian Empire also adopted the same security perception. Indeed, territory of the Soviet Union was equal to %14 of the lands of the earth surface in the second decade of the 20th century.[241] Although the

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[236] Dmitri Trenin, *The End of Eurasia: Russia on the Border Between Geopolitics and Globalization*, (New York: Carniege Moscow Center, 2001), 11.
[237] Fritz W. Ermarth, "Russia's Strategic Culture: Past, Present, And …. In Transition?," *Defence Threat Reduction Agency*, Advanced Systems and Concepts Office, 31 October 2006, 4, https://fas.org/irp/agency/dod/dtra/russia.pdf (Accessed April 16, 2018).
[238] Trenin, *The End of Eurasia: Russia on the Border Between Geopolitics and Globalization*, 41, 47.
[239] Stephen Kotkin, "Russia's Perpetual Geopolitics: Putin's Return to the Historical Patterns," *Foreign Affairs* 95, no.3 (2016): 2, http://www.aab.it/staticpages/Downloads/95n3-May-Jun-2016.pdf (Accessed April 18, 2018).
[240] Trenin, *The End of Eurasia: Russia on the Border Between Geopolitics and Globalization*, 47, 56- 60.
[241] Ibid.

territories of the Russian Empire and the Soviet Union expanded in line with the understanding of importance of the size of the state for its security, the security concerns of the Empire and the Soviet Union could not be eased because of the lack of natural barriers in Russian geography. For that reason, the lack of natural barriers in the Russian geography and the vastness of its territories aimed to be used as an advantage through relying on "Russia's strategic depth".[242] The depth of territory notion was tested by both Russian Empire and the Soviet Union through retreating to the other parts of the Russian territories and proved its validity especially during Napoleon's and Hitler's invasion of Russian territories in the 19th and 20th centuries.[243]

Undoubtedly, Russia used the hard conditions of the "climate of the Russian territories on its behalf"[244] during those military campaigns as well that merges climate, size and its geographical patterns together. The correlation between the size of the state, geography, security and the influence can be seen in the security perception of Russia even in the 21st century. As President Putin stated, "for a country to become a great, size matters and without it, there cannot be any influence".[245]

Other than those elements, ideology is articulated to the elements of Russian security perception right after the Bolshevik Revolution of 1917.[246] Russian security perception singled out with its ideological base afterwards. Indeed, more than two decades after the end of Russian Civil War, the Soviet Union under the leadership of Stalin continued expansionist policy of the Tsarist Empire to meet the security needs of it when her existence was put at stake during the World War II. In other words, the delicate balance between territorial expansion and ideological base in security perception of the Soviet Union was put in an imbalanced situation when its "struggle for existence was threatened by Nazi attacks during WWII".[247] This resulted with the further tightening of its security policies. As a result of it, Russia's old psychological frame, which defines

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[242] Ibid., 76.
[243] Ibid., 76-77.
[244] Andrey Makarychev, "Russian (IN)Security: Cultures, Meanings and Contexts," *Security in Transition*, Working Paper, 2016, 10, http://www.securityintransition.org/wp-content/uploads/2016/12/WorkingPaper_Makarychev.pdf (Accessed April 16, 2018).
[245] Marcel H. Van Herpen, "Putin's Wars: *The Rise of Russia's New Imperialism,*" 2nd Edition, (Rowman & Littlefield: Lanham, 2015), 81.
[246] Ermarth, "Russia's Strategic Culture: Past, Present, And …. In Transition?," 4-5.
[247] Benn Steil, "Russia's Clash with the West Is About Geography not Ideology," *Foreign Policy*, December 2, 2018, https://foreignpolicy.com/2018/02/12/russias-clash-with-the-west-is-about-geography-not-ideology/ (Accessed March 1, 2019).

the environment around it full with hostile powers that are waiting for to attack Russian territories, was also adopted by the Soviet Union. Thus, Russian Empire and the Soviet Union's policy making elite believed that both of them are resembled as unfriendly power from the eyes of other powers so that they can only rely on their own power capabilities[248] to survive in international arena. In short, Soviet Union set the parameters of its security perception on the grounds of expanding size, climate patterns, and geography which was further widened with the inclusion of ideological base and psychological restrictive frame to those.

The psychological reasons behind the Russian security perception could not be understood by the Western states, although they have vital importance to relate Russian Empire and Soviet Union's foreign policy actions as George Kennan elaborated by giving reference to the Russian history.[249] The main arguments of his words extracted by the Western policy makers through "containing the communist expansionism"[250] rather than understanding the reasons behind it. Main reason for that lies on the imperial and ideological impetus of the Soviet Union that aims to "spread its influence and establish control all over the neighboring regions and places"[251] as Kissinger stated as well. The actions of Stalin prior to and after the end of WWII to install sister socialist republics in newly gained lands for the security of the Soviet Union, and the misunderstanding of historical and ideological premises behind the security perception of Soviet Union by the West, end up with the following strict security policies for the Soviet Union. Security policies was further deepened by Khrushchev and aggressively modified by Brezhnev through suppressing the revolts by use of force in Hungary and Poland in 1955 and Prague in 1968 respectively.[252] In this regard, although these actions of Soviet leaders considered as communist expansionism by the Western states, they are

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[248] Ibid. See also; Van Herpen, "Putin's Wars: *The Rise of Russia's New Imperialism,*" 81.
[249] Robert Skidelsky, "Kennan's Revenge: Remembering the Reasons for the Cold War," *The Guardian,* April 23, 2014, https://www.theguardian.com/business/2014/apr/23/project-syndicate-robert-skidelsky-kennan-revenge-russia-ukraine (Accessed April 17, 2018).
[250] George Kennan, "The Sources of Soviet Conduct," *Foreign Affairs* 25, no.4 (1947): 575.
[251] Henry Kissenger, *Diplomacy*, (Simon and Schuster: New York, 1994), 24- 26.
[252] Mark Kramer, "Hungary and Poland, 1956, Khruschev's CPSU CC Presidium Meeting on East European Crises, 24 October 1956", *Woodrow Wilson International Center for Schoolars,* Issue 5, Spring 1995, https://www.wilsoncenter.org/sites/default/files/CWIHP_Bulletin_5.pdf (Accessed April 17, 2018). Also see; United States of America, The Department of State, Office of The Historian, "Soviet Invasion of Czechoslovakia," 1968, https://history.state.gov/milestones/1961-1968/soviet-invasion-czechoslavkia (Accessed April 17, 2018).

the clear signs of Russian security perception since those countermeasures were taken in line with security needs of the Soviet Union.

However, geographical, psychological, ideological and historical settings in the security perception of the Soviet Union were shattered during its dissolution period. Consequently, Soviet Union was started to lose its political control over territories of the sister republics in between 1988 and 1991. It means that the dissolution of the Soviet Union costs the loss of control over almost %25 of its territories for Russia[253] that put traditional security perception of Russia at stake. Indeed, the borders of Russia were pulled back that put Moscow in a physical and psychological threat. Additionaly, strategic naval bases that work as a gate to sail in the Black Sea and existing energy basins were lost to the newly founded states.[254] Ports in the Baltic region were lost as well that eventually put Russian security understanding in danger and circled its territories with newly independent states. Consequently, these lands become available for NATO and the European Union's enlargement policies which even worsen the security scenarios for Russia that forced it to follow more aggressive policies.[255] Indeed, the old "security perception was revoked by President Putin to fight against these expansions and to reestablish control over neighboring regions and places"[256] in Europe, Ukraine, the Caucasus, Central Asia, and the Arctic region.

To sum up, Russian security perception has set the base for expansion of borders as far away from its political center for both defensive and offensive reasons. Furthermore, this security perception is resurrected again by President Putin to secure Russia's geopolitical goals in the international arena. In fact, this security perception of Russia even put an impact on its energy security formulations. Indeed, through establishing control over the weak energy-rich neighbors and newly founded energy sources in the Arctic region Russia aims to set its energy security in a general frame. In this regard,

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[253] Archie Brown, "Reform, Coup and Collapse," *BBC,* Februay 17, 2011, http://www.bbc.co.uk/history/worldwars/coldwar/soviet_end_01.shtml (Accessed April 18, 2018).
[254] "The Geopolitics of Russia: Permanet Struggle," *Stratfor,* Assessments, April 15, 2012, https://worldview.stratfor.com/article/geopolitics-russia-permanent-struggle (Accessed April 19, 2018).
[255] Andrew C. Kuchins and Igor Zevelev. "Russia's Contested National Identity and Foreign Policy" in *Worldviews of Aspirin Powers: Domestic Foreign Policy Debates in China, India, Iran, Japan and Russia,* eds., Henry R. Nau and Deepa Ollapally (Oxford: Oxford Press, 2012), 187- 203.
[256] Kotkin, "Russia's Perpetual Geopolitics: Putin's Return to the Historical Patterns," 5-7.

first the Arctic region and then the energy security policies of Russia will be examined in the following parts of this chapter.

3.2. PLACE OF THE ARCTIC IN THE RUSSIAN SECURITY PERCEPTION

The geopolitical value of the Arctic in Russia's history and security policies has five-century long past.[257] This coincides with the Tsarist Russia's territorial expansion towards the region.[258] Since then, the Arctic region becomes an indispensable part within the history of Russia. In line with the unification process for all lands under Moscow, the Arctic region, which is regarded "as an extension of Russia, became the target goal of Ivan the Terrible in the 16th century".[259] Russian military expedition towards the North molted with the unification process and defeat of Siberian peoples in the 18th century.[260] The full conquest of the Russian Arctic was accomplished in the 18th century with the establishment of political control over Alaska in 1741. Tsarist Russia was strengthening its political control in the region through opening military outposts there starting from the 16th century.[261]

Furthermore, a gateway to open up to the high seas through the Arctic Ocean was investigated by leading figures of Tsarist Russia. The initiatives of Peter the Great in the 18th century to navigate via Arctic Ocean were further inquired by his successors to "map Russian shores in the region and to reach the American continent" through Arctic routes.[262] Consequently, new islands were discovered in the Arctic Ocean that Tsarist Russia laid claim on them. Tsarist Russia's desire to expand its influence towards the North Pole continued in the 19th century as well. Indeed, under the rule of Alexander the First, Tsarist Russia officially "claimed the land and maritime control on her Arctic section with *Ukaz* (Decree) of 1821".[263] Even if this decree was not recognized by other littoral states, it set the base for Russia to claim this region in line with her security

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[257] Colin Reisser, "Russia's Arctic Cities: Recent Evolution and Drivers of Change," in Sustaining Russia's Arctic Cities: *Resource Politics, Migration and Change*, ed., Robert Orttung, (Berghahn, 2016), 1.
[258] Ibid.
[259] Marlene Laurelle, *Russia's Arctic Strategies and the Future of the Far North*, (New York: M.E. Sharp Inc, 2014), 24.
[260] Reisser, "Russia's Arctic Cities: Recent Evolution and Drivers of Change," 2.
[261] Ibid.
[262] Laurelle, *Russia's Arctic Strategies and the Future of the Far North*, 25.
[263] Lincoln E. Flake, "Forecasting Conflict in the Arctic: The Historical Context of Russia's Security Intentions," *Journal of Slavic Military Studies* 28 (2015): 79.

perception. The futuristic design of the decree proved its prophecy when "Germany and Sweden became active in the Arctic region through claiming Bear Island and Svalbard"[264] respectively.

The loophole in the Russian security policy in terms of Arctic maritime development and military installments became obvious in the early years of the 20th century. Tsarist Russia's land-based security policies and its focus over its other regions rather than the Arctic, put Russian security at stake. Indeed, lack of expanded naval force in the Arctic region can be considered as one of the reasons for the defeat of Tsarist Russia in 1905 in the war with Japan since the Russian fleet had to "traverse the globe to defend its Pacific shores".[265]

Only after this defeat, Russian Arctic zones were found their place in the military and economy plans of Tsarist Russia to adopt this region into her security policies.[266] The same initiatives for developing the Arctic region fasten unprecedentedly after the Soviet Union politically consolidated itself. It pursued policies to secure early version of NSR for scientific, military and domestic purposes.[267] Consequently, the region turned out to be a place to "settle and explore"[268] for the Soviet Union. In that period, the Soviet Union also established a committee for NSR. The base for that was sustained with the 1926 Decree, which declares sovereign Soviet authority for the all lands between the North Pole and its Northern shores.[269] Furthermore, new islands like Victoria were discovered and Sovietized to use them as bastions for military aviations and for the security of the Soviet Union.[270] In the Arctic, further territorial expansion regarded as necessary in the dynamics of the Cold War for the Soviet Union in order ease the effects of containment. This idea of it originated from the security perception of Tsarist Russia that is based on territorial expansion.

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[264] Laurelle, *Russia's Arctic Strategies and the Future of the Far North*, 25.
[265] Ibid.
[266] Arctic Forum, "Russian Arctic Policy in the 21st Century: From International to Transnational Cooperation?," *Global Review*, Winter 2013, 3, http://www.arcticforum.org/wp-content/uploads/2015/01/Russian-Arctic-Policy-in-the-21st-Century-From-International-to-Transnational-Cooperation.pdf (Accessed April 19, 2018).
[267] Ibid.
[268] Paul R. Josephson, *The Conquest of the Russian Arctic*, (Harvard University Press: Massachusetts, 2014), 4.
[269] Reisser, "Russia's Arctic Cities: Recent Evolution and Drivers of Change," 4.
[270] Laurelle, *Russia's Arctic Strategies and the Future of the Far North*, 27.

Those developments and the Soviet Union's desire to establish control over the region eventually lead to positioning of the Arctic region in a vital place for the security policies of it. Moreover, the existence of the energy resources in the region, pluralized the security policies of the Soviet Union towards the region. Pioneered by Stalin and succeeded by the other leaders of the Soviet Union, the military facilities used for dual purposes to serve for both border security and for supporting energy facilities in the Arctic.[271] Later on, production phase of the energy resources was secured with the "military stations at the shores of the Arctic but especially in the Kola peninsula".[272] Indeed, the Arctic region played a strategic role in the making of ideologically formed security policies and navigating the Soviet Union's navy units. With the dissolution of the Soviet Union, the importance of the Arctic in the security policies of Russia "slowly diminished" up until the early years of the 21st century.[273]

Tsarist and Soviet past of the region still put an impact over the up to date politics and security policies of Russia that is revisited by President Putin especially after the enlargement policies of the EU and NATO towards its borders.[274] In this regard, the strategic meaning is pledged to this specific region by Russia's policy making elite. Accordingly, the Arctic region is depicted as the "strategic resource base of mankind, zone of peace and cooperation, juncture road that connects Europe and Asia via NSR", and a place to "go beyond the fourth bridge of containment wall".[275] Around this strategic meaning, metanarratives have been developed by Russia for the region. These metanerratives intersect with Russian energy security policies.[276] First of all, President

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[271] Marlene Laurelle, "Russian Military Presence in the High North: Projection of Power and Capacities of Action" in *Russia in the Arctic*, ed., Stephen J Blank, *Strategic Studies Institute*, 2011, 64, https://ssi.armywarcollege.edu/pdffiles/PUB1073.pdf (Accessed May 20, 2018).

[272] Ibid.

[273] Sergunin and Konyshev, "Russia's Arctic Strategy" in *Russia: Strategy, Policy and Administration*, ed., Irvin Studin (Palgrave Macmillan: UK, 2018), 136-140.

[274] Michael Rühle, "NATO Enlargement and Russia: Die-Hard Myths and Real Dilemmas," *NATO Defense College*, NDC Research Report, May 15, 2014, 1-5, https://www.files.ethz.ch/isn/180632/Report_Ruehle_15May14-1.pdf (Accessed May 21, 2018).

[275] Caitlyn L. Antrim, "The Next Geographical Pivot: The Russian Arctic in the Twenty-First Century," July 1, 2010, 18, 24, https://arcticsummercollege.org/sites/default/files/Caytlin%202010%20The-Next-Geographical-Pivot-The-Russian-Arctic.pdf (Accessed June 18, 2018). Also See; Russian Federation, *Basics of the State Policy of Russian Federation in the Arctic For the Period till 2020 and for a Further Perspective, Arctis Knowledge Hub*, 2009, http://www.arctis-search.com/Russian+Federation+Policy+for+the+Arctic+to+2020 (Accessed May 21, 2018).

[276] Marlene Laurelle, "Larger, Higher, Farther North … Geographical Metanarratives of the Nation in Russia", *Eurasian Geography and Economics* 53, no.5 (2012): 560- 569.

Putin set nationalist policies for the Arctic by giving reference to the Russian past since 16th century and "red identity of the Soviet Union"[277] to strengthen the bounds between the Moscow and the North.[278] Secondly, Russia by giving reference to the Soviet past and geological findings in its Arctic seabed, stand behind the internal waterway status argument for NSR both to establish its sovereign rights over this route and for utilizing NSR for international trade and in its energy security policies.[279] Indeed, NSR has crucial importance in Russia's security policies in general and energy security policies in particular, since the "duration for navigable seasons for NSR has been increasing year by year and this route can be used for both military and civilian purposes".[280] In return, exploitation of the richness of this region and regaining the superpower status again are expected by Russia through having a dominant voice on energy and security issues. In short, the Arctic region represents mixed results for Russia in which economic gains, historic, and iconic features occupy great place for the upcoming years to use them for its power projections.

To be more specific, since the large portion of Russian territories lies on the Arctic and sub-Arctic regions and its psychological understanding of security lies on "expanded total size of the state",[281] the Arctic region occupies a great space in terms of Russia's security. In line with President Putin's perception of size and its necessity to be a great power, Arctic region aimed to be articulated into the "Eurasianist policies of Russia" to compete against its rivals from geopolital perspective.[282] In the light of Russia's security perception that is modified throughout the history, the Arctic and territorial disputes related with it, gained another dimension for Russia's security understanding in general and its energy security in particular.

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[277] Ibid.
[278] Tim Marshall, "Russia and the Curse of Geography," *The Atlantic,* October 31, 2015, https://www.theatlantic.com/international/archive/2015/10/russia-geography-ukraine-syria/413248/ (Accessed May 22, 2018).
[279] Pavel Devyatkin, "Russia's Arctic Strategy: Maritime Shipping," *The Arctic Institute,* February 27, 2018, https://www.thearcticinstitute.org/russias-arctic-strategy-maritime-shipping-part-iv/ (Accessed on June 18, 2018).
[280] Ibid.
[281] John B. Dunlop, "Aleksandr Dugin's Foundation of Geopolitics," *Demokratizatsiya,* January 31, 2004, 6, http://demokratizatsiya.pub/archives/Geopolitics.pdf (Accessed May 21, 2018).
[282] Laurelle, Russia's Arctic Stragies and the Future of the Far North, 39. Also see; Michael Bravo and Nicola Triscott, eds., "Arctic Geopolitics and Autonomy," *Arctic Perspective Cahier,* no.2, 2011, 90- 91, http://arcticperspective.org/sites/arcticperspective.org/files/cahier/ArcticPerspectiveCahierNo2.pdf (Accessed May 23, 2018).

From these lenses, the examination of Bering Sea dispute can be categorized under three subjects.[283] First of all, Bering Sea's richness in terms of protein resources makes it strategically important for both Russian and the U.S food and fishing industry.[284] 30% of Russian and 50% of the U.S protein supplies come from there.[285] Secondly, fossil fuels in the seabed of the Bering Sea keep territorial disputes vibrant.[286] Since the territorial disputes could not be settled down, it is much more lingered because of the energy deposits in the de facto Russian part which has huge economic potential. Last but not least, the claims for having sovereign rights over the NSR remain as one of the most important issues for the conflict. Without any doubt, both parties want to exert their own rules and sovereignty over this part of the route to meet their security needs.[287] Since the Bering Sea and its part for NSR can gain importance as a direct consequence of the climate change, Russia's sphere of influence can expand beyond its mainland territories by deciding whom to pass from NSR and utilizing this route for energy sales to the Asia-Pacific region. Namely, this means that Russia can meet its main goals for its security policies in general and energy security policy in particular under its sovereign rights.

Apart from the conflict with the U.S, conflict with Denmark and Canada for the North Pole means the same thing for Russia. Indeed, further territorial expansion towards the North Pole means expanding its sovereign rights up to there for Russia which in return gives geopolitical advantage to it. Also, the possible acquisition of these lands under the sovereign rule of Russia means further exploitation of the resources of the Arctic.[288] To achieve those ends, Russia relies on international law and investigates geological proves gathered from Mendeleev and Lomonsov Ridge to acquire these lands legaly.[289] Furthermore, Russia is committed to follow this scientific fact up until for its territorial claims in the Arctic region.

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[283] Valery Konyshev and Alexander Sergunin, "Russia's Policies on the Territorial Disputes in the Arctic," *Journal of International Relations and Foreign Policy*, vol.2, no.1 (2014), 56.
[284] Ibid.
[285] Ibid.
[286] Ibid., 57.
[287] Ibid.
[288] Rob Huebert, "Five Myths about the North Pole", *The Washington Post*, December 20, 2013, https://www.washingtonpost.com/opinions/five-myths-about-the-north-pole/2013/12/20/22267a62-6694-11e3-8b5b-a77187b716a3_story.html?noredirect=on&utm_term=.c98884d0eceb (Accessed June 2, 2019).
[289] E.V. Verzhbitskii, L. I. Lobkovski and M.V. Kononov et al., "Age of Alpha-Mendelev and Lomonosov Ridges," *Doklady Earth Sciences* 441, issue 1, 2011, 1587-1588.

Differently than these two territorial conflicts, the boundary issue with Norway shows difference in the Russia's security policies. Indeed, the Realist base of its security policies supplied with Liberal assumptions for resolving the territorial issue with Norway. In this regard, Russia initiated talks with Norway in line with the UN framework, sea laws, and continental shelves regulations to draw maritime boundary.[290] However, it should be noted that Russia's desired goals, which is formulated in line with her security perception, remained the same. To achieve its desires and to embark on exploiting the resources of Barents Sea with its new NSR projections, Russia pursued different sort of policies[291] that set a base for her hybrid policy settings for the region.

To sum up, because of reliance on the territorial depth in the Russian security perception, the Arctic region has been represented as the indispensable part of its territories to form this understanding starting from the end of 14th century. Thus, increasing importance of the region after the impacts of climate change, located this region at the top of Russian security formulations including energy security policies to challenge Western dominance. This understanding, when combined with the expansion of sovereignty of Russia towards the North urged to revitalize its policies towards the region. For that purpose, with the accession of President Putin to power and especially after the effects of climate change become visible, new Arctic policies were introduced starting from 2008.[292] In other words, basing on resurrection policies and to become an active great power again in the international political scene, "development strategies for the region were introduced by the Russian Federation since 2008".[293] However, to make sense of these documents in the Russian security perception and energy security formulation for the Arctic, Russian energy security is needed to be examined.

3.3. RUSSIA'S ENERGY SECURITY FORMULATIONS IN LINE WITH ITS SECURITY PERCEPTION

In line with Russian security perception, the Soviet Union relied on the energy rents both to secure its borders and to keep wounded economy alive especially after the end

[290] Konyshev and Sergunin, "Russia's Policies on the Territorial Disputes in the Arctic", 69.
[291] Ibid.
[292] Pavel Devyatkin, "Russia's Arctic Strategy: Military and Security (Part II)," *The Arctic Institute,* February 13, 2018, https://www.thearcticinstitute.org/russias-arctic-military-and-security-part-two/ (Accessed May 24, 2018).
[293] Ibid.

of the WWII. In the periods following this specific era, the Soviet Union has created an economy which was greatly depends on oil and gas money.[294] Although energy rents set a base for the Soviet Union to compete with the West in terms of welfare and technological development in the realms of the Cold War, eventually it made Soviet Union more dependent on the energy commodities.

The dependency of the economy on energy rents further blocked asserting its influence on the energy market, although the Soviet Union was supplying the energy needs of the opposite block especially in the Central and Western Europe since the 1950s.[295] Consequently, the energy production of the Soviet Union reached greater amounts, without a valid strategy base, "that accounted for %21 of global production in 1989"[296] in order to meet the military, social and economic needs of it. These needs of the Soviet Union increased its dependency over fluctuating energy rents which constituted almost half of the generated income. The necessity for establishing energy security strategy became obvious at that time.

The dissolution of the Soviet Union and the political ambiguity that it left to Russia further delayed establishing an energy strategy. Within this ambigious environment, energy continued to be pumped towards "Commenwealth of Independent States (CIS) members at a price which was lower than world levels".[297] It is mainly because Russia could not afford to lose its influence over the former Soviet republics.[298] Furthermore, reliance over fluctuating price of energy commodities when combined with the privatization moves in the energy sector, Russia's economy further stagnated. Also,

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[294] Sergei Ermolev, "The Formulation and Evolution of the Soviet Union's Oil and Gas Dependence," *Carniege Endowement*, Working Paper, March 29, 2017, https://carnegieendowment.org/2017/03/29/formation-and-evolution-of-soviet-union-s-oil-and-gas-dependence-pub-68443 (Accessed May 26, 2018).

[295] Agnia Grigas, "Is Russia's Energy Weapon Still Potent in the Era of Integrated Energy Markets?," *Hybridcoe Strategic Analysis*, November 2017, 3, https://www.hybridcoe.fi/wp-content/uploads/2017/12/Strategic-Analysis-November-2017.pdf (Accessed May 26, 2018). Also see; Ermolev, "The Formulation and Evolution of the Soviet Union's Oil and Gas Dependence".

[296] Ibid.

[297] Domitilla Sagramosso, *Russia's Geopolitical Orienation Towards the Former Soviet States: Was Russia Able to Discard its Imperial Legacy? An Examination into the Nature of Russia's Economic, Military and Diplomatic Policies Towards the Former Soviet States During the Bories Yeltsin's First Term as President of Independent Russia*, PhD diss., University College London School of Slavic and East European Studies, 2000, 99, http://discovery.ucl.ac.uk/1348746/1/324624.pdf (Accessed May 27, 2018).

[298] Ibid., 72.

these factors weakened the ability of the government to influence energy politics at that time. Indeed, energy liberalization moves of Gorbachev period were strongly supported by President Yeltsin that ended up with the fell of "energy production to half and division of energy sector in between the oligarchs and foreign groups".[299]

To keep up with the conditions of the era, *Main Provisions of the Concept for Energy Policy Under New Economic Conditions up to 2010* was declared by Russian government in 1992 as Russia's energy policy. According to 1992 strategy, energy resources of Russia are considered as the commodities that support "independent Russia" both in terms of economy and politics.[300] Thus, Russia had to create "a reliable supplier" image to be a respective member of the energy market, according to this strategy.[301] Furthermore, the need for the "development of new raw material bases with efficiency in order to accelerate energy export to the energy market" was highlighted in this strategy.[302] There was a need for Foreign Direct Investment (FDI) to achieve those ends. The need for FDI both for Russian companies and for energy transportation routes wanted to sustained by Russia with this energy strategy.[303] However, Russia was experiencing economic hardship at that time that effect the success of this strategy. Indeed, the inflation rate was reached to 874% in 1993[304] that forced policy making elite of Russia to revitalize energy security policy.

Russia under the presidency of Boris Yeltsin, declared its new energy security policy under the name of *On the Main Directions of Energy Policy and Restructuring of Fuel and Energy Industry of the Russian Federation for the Period up to 2010* in 1995 as its Energy Strategy.[305] 1995 strategy was not different than the 1992 energy strategy of Russia and same points were highlighted in the strategy of 1995. Thus, 1995 strategy could not have implemented effectively since privatization of the energy resources

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[299] Lauren Goodrich, "The Past, Present and Future of Russian Energy Strategy," *Worldview Stratfor*, February 12, 2013, https://worldview.stratfor.com/article/past-present-and-future-russian-energy-strategy (Accessed June 6, 2019).
[300] "Energy Security Priorities till 2020," *Analize.lt*. http://analize.lt/publikacijos/lithuanian-energy-security-in-the-light-of-eu-russia-energy-dialogue/167-energy-policy-priorities-till-2020.html (Accessed May 28, 2018).
[301] Ibid.
[302] Ibid.
[303] Tuğçe Varol, *The Russian Foreign Energy Policy* (Kocani: European Scientific Institute, 2013), 126. https://eujournal.org/files/journals/1/books/TugceVarol.pdf (Accessed May 27, 2018).
[304] "Inflation, Consumer Prices (Annual %)-Russia," *The World Bank*, http://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?locations=RU (Accessed May 27, 2018).
[305] Varol, *The Russian Foreign Energy Policy*, 126.

limited the abilities of Russian Federation.[306] It was only the last years of Yeltsin period, "Russian Federation started to take control over its natural resources with a limited extent".[307]

Vladimir Putin who succeed Yeltsin, followed the same policies for the nationalization of the resources to establish new energy strategy. However, in the early years of President Putin, a valid energy strategy that was different than the other could not be prepared. Again, this was mainly because of the "lack of state control over the energy sources".[308] President Putin declared the frame of the energy strategy of Russia under the name of *Main Provisions of the Russian Energy Strategy to 2020* in 2000. Russia's social and economic development were associated with its new energy security policy of it. Accordingly, increase in GDP growth, physical investment for both transportation infrastructure and extraction capabilities, and energy extraction were foreseen for about 3.3, 3.6 and 2 times more, respectively, with that strategy.[309]

Although this strategy regarded as a successful strategy with a solid base, the positive effects of it on the energy sector and Russian economy were not seen until 2003. The underlying reason behind that was the pursuit of power of President Putin to consolidate its power and to eliminate opposing power centers of oligarchs.[310] Afterwards, Putin showed his perception of energy security policy by "establishing control of state over energy sources and nationalizing them like by eliminating the opposing power centers".[311] Eventually biggest shares of energy companies transferred to the Russian Federation owned energy corporations.[312]

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[306] Ibid., 76.
[307] Randall Newnham, "Oil, Carrot and Sticks: Russia's Energy Resources as a Foreign Policy Tool," *Journal of Eurasian Studies* 2 (2011), 137, https://ac.els-cdn.com/S187936651100011X/1-s2.0-S187936651100011X-main.pdf?_tid=6729e2e7-9678-488f-a006-2e4a556b23d7&acdnat=1528660550_95b4bd110f62f8c642fcdc0c7e7d2e18 (Accessed May 27, 2018).
[308] Ibid.
[309] Varol, *The Russian Foreign Energy Policy*, 125-126.
[310] Pavel K. Baev, "From European to Eurasian Energy Security: Russia needs and Energy Perestroika," *Jorunal of Eurasian Studies* 3, no.2 (2012), 178- 179, https://ac.els-cdn.com/S1879366512000097/1-s2.0-S1879366512000097-main.pdf?_tid=52e510f8-d3b1-4682-9263-2a915b74a8e6&acdnat=1529158119_191e0c5b0d5a97ac56961a2a979a357d (Accessed May 27, 2018).
[311] Jeffrey Mankoff, "Eurasian Energy Security," *Council on Foreign Relations*, Special Report No.43, 2009, 8- 9, https://cfrd8-files.cfr.org/sites/default/files/pdf/2009/01/Eurasia_CSR43.pdf (Accessed May 27, 2018).
[312] Varol, *The Russian Foreign Energy Policy*, 120.

The important factor here is that the energy sector consequently was put under the control of the Russian Federation that pave the way for Russia to influence energy market via state led energy corporations and implement more independent energy security policies. To achieve that a revision made in the energy strategy of Russia in 2003. According to new version of its energy security policy, energy sales regarded as the backbone of the development path of the Russian economy which is "expected to have an impact for about %50 of Russian Federation income".[313] Furthermore, technical issues with respect to extraction, production, and transportation to increase efficient energy production were outlined "including natural gas and related development of them" in 2003 energy strategy of it.[314]

However, slight differences between energy strategies of 2000 and 2003 Russia cannot be mentioned at all up until to 2008 strategy. Undoubtedly, the difference in 2000 and 2003 energy strategies can be seen in geopolitical and economy points of view. Continuously, this paves the way for utilization of energy strategies or policies as a foreign policy tool. Indeed, Russia after consolidating its state authority over the energy companies and resources, "aimed to use energy policy or security formulations for the purchase of influence in abroad to get its superpower status".[315] In this regard, Russian energy security strategy's features could only be understood through examining the actions of it towards neighboring states and regions.

Since energy security formulations and energy strategies of Russia were formed for economic development, examination of 2000 and revised version of it in 2003 has to be made from economy point of view as well. On the grounds of these strategies, Russia established Eurasian Gas Alliance with Kazakhstan, Turkmenistan, and Uzbekistan in 2002 in order to make itself more visible and embed its influence in energy sector and market.[316] In line with this, Russia's permanent existence in the close regions and energy extraction in those places was aimed to be sustained by having a say in energy related issues of the members.[317] In other words, Russia restored its place over some of

[313] Nikolay Kaveshnikov, "The Issue of Energy Security in Relations Between Russia and the European Union," *European Security* 19, no.4 (2010): 594.
[314] Nalin Kumar Mohapatra, "Energy Security and Russia's Foreign Policy," *CRP Working Paper*, No. 11, 2013, 12.
[315] Varol, *The Russian Foreign Energy Policy*, 126- 127.
[316] Mohapatra, "Energy Security and Russia's Foreign Policy," 12.
[317] Ibid.

the post-Soviet republics by connecting these states under the gas alliance with that action of Putin. Furthermore, Russia got upper hand in geopolitical and energy strategy formulations to further block realization of other energy routes that bypasses Russia.

Russia's understanding of raw materials of the country as a strategic foreign policy tool officially remains in the energy strategy documents of it since 2000.[318] This creates a link between geopolitics with economics. Indeed, direct references in 2003 Energy Strategy for infrastructural developments to transport energy sources with a limited amount of foreign investment prove the desire of Russia to use this card as leverage.[319] Indeed, Orange Revolution in Ukraine, and the following Russian-Ukrainian crisis of 2006 that ended up with the cutting of the flow of gas by Russia to restore pro-Russian government by threatening the supply security of Europe and increasing the price of energy[320] is regarded as an example to that. Furthermore, Russia's political decisions to cut energy flow towards Baltic and post-Soviet states whose energy needs are heavly depending on the Russian energy resources remain as the signature of the political repercussions of this strategy.

Open statements in the Energy Strategy for alternative markets and routes for this leverage become visible during Putin's Presidency. Consequently, Russia engaged with "Asian powers like China and Japan for energy sale while strengthening ties with European states".[321] Russian existence in those markets had increased sharply that "Asia accounted for %16 of Russian energy sale while Europe's gas export from Russia reached %50 in 2010".[322] In return, Russia aims to achieve its great power status by influencing energy relations towards those regions.

In this regard, the success of Russian Energy strategy of 2000 and 2003 will remain optimistic mainly because of increase in oil and gas prices and established control of state over the energy sector.[323] The assertiveness of Russia's energy security and foreign policy started to reach expected levels. In short, Russian energy strategy under first

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[318] Ibid.
[319] "Energy Security Priorities till 2020," op. cit.
[320] Andrew E. Kramer, "Russia Cuts Off Gas to Ukraine in Cost Dispute." *The New York Times*, 2 January, 2006, https://www.nytimes.com/2006/01/02/world/europe/russia-cuts-off-gas-to-ukraine-in-cost-dispute.html (Accessed January 6, 2019).
[321] Mohapatra, "Energy Security and Russia's Foreign Policy," 13.
[322] Ibid.
[323] Newnham, "Oil, Carrot and Sticks: Russia's Energy Resources as a Foreign Policy Tool," 135-136.

Putin presidency can be defined as increase in Russian visibility in energy markets and international relations with a controlled production of energy, and sales under equal market-driven policies even towards CIS members.[324] Moreover, by consolidating itself in the Asia, Russia's old linkage with the post-Soviet states was strengthened. Also, Russia asserted its control over the existing routes while contracting new ones both to block bypassing ones and to decrease the efficiency of the alternative routes like Baku-Tblisi-Ceyhan by decreasing the price of oil and offering Blue Stream project for natural gas.[325] On the one hand, in line with the diversification strategy for energy sales to the customers, links with Asia Asia-Pacific were established. On the other hand, the place of the European market for Russian sales was further improved and consolidated. Indeed, Russia with its energy strategy has become more powerful and more visible with the new consumers and sources to sustain everyone energy needs.[326] The economic side of the energy strategy gave its fruit with the rise in the price of the energy in 2008 and Russian GDP reached 1.661 trillion U.S dollars.[327] Last but not least, the resurrection of the historical security perception of Russia has felt on the energy security and strategy of it too. Because, Russia wanted to control its neighbours and their energy assets although pro-Russian sentiments has been declared by its neighbours.

However, the color revolutions experience in the ex-Soviet territories starting from 2003 to 2005, expansion of NATO and EU towards Russia to contain it more, and 2008 financial crisis urged the need for new conservative and visible Russian energy strategy.[328] Moreover, to mitigate negative developments towards Russia, new energy strategy is needed. Among these developments, the 2008 financial crisis can be outlined as one of the most important development to reformulate energy strategy since

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[324] Kaveshnikov, "The Issue of Energy Security in Relations Between Russia and the European Union," 596-597.
[325] Guzel Nurieva, "Natural Gas Factor in Israel-Turkey-Russia "Energy Triangle"," *Turkish Journal of Middle Eastern Studies* 4, no.1 (2017): 105-108, 117.
[326] Kaveshnikov, "The Issue of Energy Security in Relations Between Russia and the European Union," 596-597.
[327] "GDP (Current US$)-Russia," *The World Bank*, https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=RU. (Accessed May 27, 2018).
[328] Thilo Neumann, "Norway and Russia Agree on Maritime Boundary in the Barents Sea and the Arctic Ocean," *American Society of International Law* 14, issue 34, November 2010, https://www.asil.org/insights/volume/14/issue/34/norway-and-russia-agree-maritime-boundary-barents-sea-and-arctic-ocean. (Accessed April 15, 2018). See Also; Kavesnikov, "The Issue of Energy Security in Relations Between Russia and the European Union".

production and sale phase of the sources were disrupted because of sharp change in prices.[329]

Learning from these experiences, Russian energy strategy formulated "around new philosophy to coopt with the conditions both in domestic and international sphere".[330] In this context, new energy strategy under the name of *Russian Energy Strategy for the Period up to 2030* was approved by President Medvedev in 2009 in order to keep the main vein of the Russian economy alive. New energy strategy formulated around more precautious features for Russia to strengthen its position in global affairs while improving economic conditions of the state. Accordingly, more efficient production with continuing extraction process to meet global and internal demand was aimed.[331] The technological revolution both for the energy sector and transportation infrastructures with environmental efficiency records were to be implemented as well.[332] In addition to that, integration of Russia to the energy market is pursued with this document by dividing this strategy into three phases.

In line with it, to overcome negative "effects of the financial crisis of 2008 with social and economic improvements",[333] a base for funding new energy strategy is aimed to be set down in the first phase of the document. In the second phase, "efficiency and technological base to sustain energy production"[334] are introduced so that energy companies can compete for offshore and onshore reserves in the international arena. Independency feature for Russian energy security for this period in terms of production and sale can be sustained through extracting newly found energy sources. In this regard, the Arctic offshores and sub-Arctic lands gained importance that needed to be supplied with new infrastructures to distribute energy goods. In the last phase, the dependency of Russia energy rents and her energy strategy over the fossil fuels will asserted to be

[329] Ministry of Energy of the Russian Federation, *Energy Strategy of Russia for the Period up to 2030*, Moscow, 2010, 3, http://www.energystrategy.ru/projects/docs/ES-2030_(Eng).pdf (Accessed May 29, 2018).
[330] Ibid., 6.
[331] Ibid., 12, 27.
[332] Ibid., 13-16.
[333] Ibid., 18.
[334] Varol, *The Russian Foreign Energy Policy*, 128.

tackled through systematically decreasing the shares of fossil fuels sale to the half while focusing on other sources to export.[335]

Since Russia experience the second phase nowadays, the development of new basins in the sub-Arctic region and Arctic shores, construction of new pipelines with Asian powers and European ones remain as the target goals for Russian energy strategy. For that purpose, geopolitical formulations in line with foreign policy settings in the strategy being pursued by Russia, based on extraction of the energy sources. Actions towards Ukraine starting from 2006 and Crimea issue of 2014 for protecting Russia's geopolitical goals when combined with the "efficient use of energy policy to gather higher profits" feature of the strategy, the path of Russian energy strategy to follow through have been set.[336]

The historical backbone of the Russian economy is restored with new energy strategies to convert this source of income to the other fields in line with her security perception and needs. For this reason, compensation of depleted sources and integration of Russian energy sector to the global market are highlighted priorities of Russian energy strategies in order not to face with disruptions in energy sale. Additionally, independency for policy and energy strategy formulations aimed to be asserted through technological development by the Russia to put into operation the basins in the Arctic.[337] Last but not least, 2003 strategy is further strengthened with the political repercussions of the 2008 strategy of Russia. On the grounds of the actions of Russia that is elaborated in its 2008 energy strategy, Russia's weight in the international system has increased slightly. However, through considering the latest developments in the sector and international relations, the Russian Federation introduced a new energy strategy in 2014 under the name of *Energy Strategy Period up to 2035*, to keep up with the developments.

Accordingly, innovation-based energy strategy rather than extraction based one was introduced in this strategy.[338] Furthermore, short-term benefits aimed to be

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[335] *Energy Strategy of Russia for the Period up to 2030*, 3.
[336] Varol, *The Russian Foreign Energy Policy*, 128. See also; *Energy Strategy of Russia for the Period up to 2030*.
[337] Energy Strategy of Russia for the Period up to 2030, 60.
[338] Natalia Victorovna Kuznetsova and Ekaterina Vasilievna Kuznetsova, "Energy Strategy of Russian Federation," *Mediterranean Journal of Social Sciences* 6, no.5 (2015): 164, https://www.researchgate.net/publication/301343232_Russian_Federation_Energy_Strategy (Accessed May 29, 2018).

supplemented with the long-term benefits in which infrastructural progress and technological development occupy great place. Additionally, energy strategy intertwined with the energy security and environmental perception of Russia whose technological inferiority is infamous.[339] With the 2035 strategy, infrastructural developments in the new regions, which are full with energy sources, are represented as the main goal of Russia to sustain its security both physically and energy wise. In this regard, regions like the Arctic regarded as the valuable regions to build infrastructure and embark on the extraction process. Indeed, the desire to develop NSR and to extract the richness of the Arctic requires new technological apparatus for Russia to pursue independent energy policy.

To sum up, Russia pursues energy security strategies different than the Soviet ones, although energy rents were used by both states to sustain their security and other needs. Since Russia forms energy security strategies in line with its domestic and international needs, Russian energy security strategies can be regarded as an example of its general security perception. Indeed, the actions of Russia to block the realization of new energy routes that bypass it and coming with new plans to decrease the efficiency of the bypassing routes, to control its neighbours' energy sales by favoring its status even if they are selling to the other customers, and to use energy resources in line with its political aims are the example of its security perception that is mainly based on the Realist premises. In this regard, the Arctic region means a lot for Russia to successfully continue this understanding of it. Furthermore, in line with the last two energy strategies and Russian security perception, Russia can form energy security policy for Arctic region for where the impact of climate change set valuable grounds. However, the relevancy of the Arctic region and its sources to Russia and Russian energy security is needed to be examined first to decide whether there is a valuable ground or not.

3.4. THE RELEVANCY OF ARCTIC SOURCES FOR RUSSIA: THE NEED FOR ESTABLISHING A STRATEGIC BASE

The Arctic region is regarded as the strategically important region for mankind because of its untapped "energy sources, fish stocks and being located at the transportation

[339] Ibid.

junction that connects Europe and America continents".[340] The same thing can be said for Russia as well since some part of its territories located in the Arctic region. Furthermore, it wants to exploit the resources of the region which is considered as the blessing after the perceived impacts of climate change towards the region.

On the grounds of abstract and concrete reasons, the Arctic region is relevant to and vitally important for Russia. Starting from concrete reasons, Russia as the biggest Arctic state, outnumbers other littoral states in terms of numbers that represent coastlines, population, and energy and mineral existence. In respect to coastlines, Russia holds 22,600 km coastline that accounts for %60 of the total coastline of the Arctic while four other littoral states coastlines to the Arctic account for 16,100 km.[341] In addition to that, large number of its vast territories lies on the Arctic region which equals to total of other littoral states size of the Arctic territories. In its huge Arctic territories which is equal to more than %60 of all its territories, "approximately 2.1 million people lives"[342] that relates Russia with these territories. Indeed, its total population of the Arctic region, relatively more than other littoral states total population which gives Arctic identity to Russia as well.[343]

Other than population and length, Russian Arctic territories support the wheels of the economy through energy sources that already "accounts for %80 percent of Russian energy production and extractions".[344] Moreover, Arctic territories of Russia expected to generate "30 trillion US dollars through minerals, energy sources and vital elements"[345] sale. Most importantly, the Arctic territories of Russia with its small number of population that equals to less than %1 of its overall population, have already being contributed the Russian economy by %22.[346] With newly founded reserves, the

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[340] Nadezhda Klimovna Kharlampyeva, "The Transnational Arctic and Russia" in *Energy Security and Geopolitics in the Arctic: Challanges and Opportunities in the 21st Century*, ed., Hooman Peimani (London: World Scientific Publishing, 2013), 95.
[341] Ibid., 96-97.
[342] Anastasia Emelyanova, "Population Projection of the Arctic by Levels of Education," IIASA Working Paper, Australia, 2017, 27, http://pure.iiasa.ac.at/id/eprint/14981/1/WP-17-022.pdf (Accessed May 16, 2018).
[343] Ibid.
[344] Russian Federation, *Meeting on Arctic Region's Comprehensive Development*, Events, March 29, 2017, http://en.kremlin.ru/events/president/news/page/83 (Accessed May 18, 2018).
[345] Ibid.
[346] Katarzyna Zysk, "The Evolving Arctic Security Environment" in *Russia in the Arctic*, ed., Stephen J. Blank (*Strategic Studies Institute*, 2011), 97.

contribution of this region to the economy expected to rise. New reserves can also compensate already exhausted extraction bases.

Other than solid benefits that generate economic wealth, abstract benefits are aimed to be used as a supplementary source by Russia to "regain her superpower status".[347] The geopolitical base of abstract gains can be achieved in a solid form in which geopolitics of energy, economics, and geopolitics act in a harmonious way. Indeed, the importance of NSR to become a sea lane for international trade and domestic purposes, Russian geopolitical orientation can be relevantly formulated on this specific route. Through doing so, Russia can install its military units into the region as well in order to defend its sovereign rights, energy basins and international trade to boost itself both in regional and international affairs.

Overall, Arctic territories of Russia when combined with its EEZ can be related with Russian general strategy for economy and energy that has to be secured and developed through policy formulations. On the grounds of these and by extracting from the official state documents, Russian energy strategy for the Arctic region after the effects of climate change will be examined in the following chapter.

[347] Elena Conde and Sara Iglesias Sanchez (eds), *Global Challanges in the Arctic Region: Sovereignty, Environment and Geopolitical Balance* (New York: Routledge, 2017), 424.

CHAPTER 4

RUSSIA'S ENERGY SECURITY POLICY TOWARDS THE ARCTIC REGION UNDER THE EFFECTS OF CLIMATE CHANGE

The area surrounding the North Pole has been experiencing unprecedented climatic shifts in the recorded history as a direct consequence of the latest climate change. Climate change makes "possible to exploit the benefits of the Arctic seabed for the first time in the recorded history".[348] Fossil sources, precious metals in the seabed of the Arctic have become possible to exploit by littoral states in addition to the emerging shipping lanes like NSR and NWP to utilize them for trade interactions. For Russia, NSR also provides a domestic link between its regions while NWP does the same for Canada. On the grounds of these, melting ices of the Arctic region flared the competition between littoral states where all of them have short-term benefits. Consequently, increasing importance of the region put it to the central focus of the littoral states but especially for Russia while revoking the territorial disputes and causing new ones among them.

Increasing importance of the region even found its place in the speeches of the Russian officials. Indeed, the use of word "Arctic" by Russian officials in the international fora in between 2003 and 2007 increased tenfold that declared the Russia's intention to take part in the race for the Arctic.[349] Furthermore, the race for the Arctic started physically in 2007 for Russia by planting Russian flag into the seabed of the Arctic Ocean during

[348] Rylin McGee, "What Climate Change and Arctic Development Means for Russia, the Envrionment, and the International Community," *Geohistory,* January 12, 2018, http://geohistory.today/russia-arctic-development-power/ (Accessed June 20, 2018).
[349] Jakub M. Godzimirski, Elena Wilson Rowe and Helge Blakkisrud, "The Arctic: What Russia See? and What Russia Want?," Brieffing Paper, Oslo, 2012, 3.

the Northern expedition of Artur Chilingarov.[350] The reason for that can be associated with the very existence of the energy resources in the region since the Arctic region is estimated to have "%14 of oil and %40 of gas of Russia's proved reserves".[351] In fact, according to Russian data's, "the Arctic energy resources consist of an estimated 412 billion barrels of recoverable and conventional oil, natural gas, and natural gas liquids"[352] which are keep expanding with the newly conducted explorations. Moreover, the discovery of "200 new oil and gas fields"[353] in the offshore of the Russian Arctic whet the appetite of Russia to utilize those resources as soon as possible. For that reason, climate change considered as a blessing by Russia since it makes easy to detect and extract energy sources in the region which is unequaly distributed between littoral states Arctic zones in favor of Russia.[354] When this quantitative data combined with the exhaustion of Russia's energy fields, one can understand Russia's aim to establish full scaled Arctic energy security policy after the effects of climate change.

The energy strategy policy and other strategies of littoral states are expected to be implemented over their sovereign lands in the Arctic. However, territorial boundaries of the littoral states are not easy to define and deliminate since "the geography is not static in the Arctic and it's being changing".[355] It is mainly because of the climate change-related impact in the region that keeps changing the existing conditions. Therefore, the resources in the Arctic seabed and negotiations to share those by drawing the boundaries are not that simple and it is not easy to make other states to follow the outcomes. In this regard, existing territorial problems and conflicting interests of littoral states aimed to be settled through international law and mutual agreements in order to draw the boundaries.

Russia, by basing its territorial claims on "UNCLOS, applied for its new boundaries, which consist of an area that is equal for 1.2 million km square, to CLCS first in

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[350] Tom Parfitt, "Russia Plants Flag on North Pole Seabed," *The Guardian*, August 2, 2007, https://www.theguardian.com/world/2007/aug/02/russia.arctic (Accessed June 20, 2018).
[351] Stanislan Pritchin, "Russia's Untapped Arctic Potential, *Chatham House*, January 29, 2018, https://www.chathamhouse.org/expert/comment/russia-s-untapped-arctic-potential (Accessed June 21, 2018).
[352] McGee, "What Climate Change and Arctic Development Means for Russia, the Envrionment, and the International Community".
[353] Alexander Sergunin and Valery Konyshev, "Russia's Arctic Strategy," 135.
[354] Russian Federation, "Resources".
[355] Şebnem Udum, Notes Which Are Taken During the Preperation Phase of this Thesis, Hacettepe University, Ankara, 2017.

2001".[356] Furthermore, this declaration led to introduction of a proper new Arctic strategy to defend its national interest, territories, and assets in the region. So, Russia could set a base for energy security policy for the region. Since state policies can only be applied in the respective sovereign lands of the states, "Russia introduced new evidences and applied to the CLCS in 2015"[357] to fix the missing parts in the 2001 application. Indeed, energy security formulations for the region could only be further proceded then. Moreover, the territories in the Arctic have a vital strategic role in infrastructural development, energy extraction and security issues for Russia as well. Since Russian security policies base on further territorial expansion, the energy security strategies of it for the Arctic region formulated around the same understanding to use these lands on behalf of its infrastructural and resource development.

Indeed, operating in almost fully recognized borders pave the way for Russia to set the collumns of its energy security settings. Under the new environmental and geographical settings of the Arctic, a changing base for its energy security policy set on mixed policies for Russia to pursue. This trend of Russia is further deepened for the Arctic in the following years especially for the energy related issues to start exploiting the resources of the region. In this regard, 2008 Arctic Strategy of Russia was introduced that is widen with 2013 Arctic Strategy which is followed by 2020, 2030 and 2035 Energy Strategy of it. Even the word "Arctic" has mentioned for 31 times in total in its energy strategies that pave the way for establishing energy security policy towards the region.[358] However, Russia's security understanding and energy security policies for the Arctic region cannot be extracted from one document. Indeed, there is no single state document of Russia for the security issues, especially for the Arctic. Although the Arctic Policy of 2008 and 2013 draw general lines for the policies of Russia towards the region, those strategies need to be filled by other state documents.

In this regard, Russia's security policies and perception for the Arctic region is determined and shaped by its National Security Strategy, Foreign Policy, Military Doctrines, Maritime Strategy, and Energy Security documents. Combination of all of

[356] Godzimirski, Rowe and Helge Blakkisrud, "The Arctic: What Russia See? and What Russia Want?," 4.
[357] Jørgen Staun, "Russia's Strategies in the Arctic," *Royal Danish Defence College*, Copenhagen, March 2015, 21.
[358] See; Energy Security Priorities till 2020, Energy Strategy of Russia for the Period up to 2030, and Energy Strategy of Russia for the Period up to 2035.

them set the frames of Russia's Arctic strategy to project and embed its power and will into the region. Moreover, these official documents of Russia, put all the pieces of its security understanding into their place for the Arctic region while linking each of the document together. In this part of the thesis, these official documents will be examined to understand the impact of impact of climate change on the Russia's Arctic energy security policy under the titles of security, transportation, and its widening base for energy policy.

4.1. "SECURITY DIMENSION" OF THE ARCTIC ENERGY SECURITY OF RUSSIA

For the Arctic region, security issues answered in line with muscle reflexing approach by Russia like in the heydays of Cold War and the early days of the new millennium. Since then, the way to claim richness of the Arctic formulated around the hard power projections through maximizing its security and interest in the region by Russia.[359] However, the base of Russian interest was widened with the focusing on short-term gains provided by climate change through mixing economic and security based issues under one strategy. In this regard, Russia introduced the *Foundation of the State Policy of the Russian Federation in the Arctic for the Period 2020 and Beyond* in 2008, after planting its flag into the seabed of the Arctic Ocean in 2007.[360]

This strategy and planting of Russian flag means a lot to grasp mixed security approach of Russia since hard and soft power elements harmonized together for securing its interest in the Arctic region. Indeed, depiction of the Arctic region as "a zone of peace and cooperation, and national strategic resource base"[361] that has to be protected and defended by the "general purpose units of the Armed Forces of Russian Federation in the national boundaries of the Russian Federation"[362] is the product of this mixed strategy. Thus, short-term benefits of the climate change did not come with a free price,

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[359] Pavel Devyatkin, "Russia's Arctic Strategy: Military and Security," *The Arctic Institute: Center for Circumpolar Security Studies*, February 13, 2018, https://www.thearcticinstitute.org/russias-arctic-military-and-security-part-two/ (Accessed June 15, 2018).
[360] Alexander Golts, "The Arctic: Clash of Interest or Clash of Ambitions" in *Russia in the Arctic*, ed., Stephen J. Blank, Strategic Studies Institute, 2011, 43-49.
[361] "Russia's New Arctic Strategy: Translation of The Foundations of Russian Federation Policy in the Arctic Until 2020 and Beyond," *The Journal of International Security Affairs*, no.18 (2010): 98. http://www.arctic.or.kr/files/pdf/m4/rusia_eng.pdf (Accessed June 15, 2018).
[362] Ibid., 99.

one part of Russia's energy security policy (in)directly based upon hard power projection to ensure the security of the resources.

The return of the Northern Fleet and Russian Air Forces for strategic border patrols right after planting Russian flag into the seabed in 2007, is the proof that Russia decided to increase its military presence in the region to secure its interests.[363] In other words, Russia returned to the Arctic region by deploying Northern Fleet with its 80 strategic units and "Air Forces with supersonic bombers, anti-submarine warfare and turboprop aircrafts for the first time after the end of Cold War".[364] Furthermore, Russia decided to "modernize the existing infrastructure and improving capabilities of the border units" in the Arctic "to eliminate threats against its national security"[365] in line with the 2008 Arctic Strategy. However, the lack of delimitated maritime borders made hard for Russia to defend its coasts. In this regard, Russia wanted to "create active and functioning system of coastal security within the Federal Security Service (FSB) for the Arctic".[366] In the end, it wanted to develop "complex system of control to establish full control over NSR"[367] and its borders base on 2008 Arctic Strategy and its general security perception.

2008 Strategy proved Russian actions in the region to be in a defensive way to defend its national boundaries and interests in the region. Moreover, this defensive stance intersected with its energy security policy for the region with the aim of securing the resource basins and the sea lanes of the NSR in the region. To reach those ends, Russian Armed Forces needed to be modernized. Russia, in line with State Rearmament Program of 2007 to 2015, embarked on modernization of its Armed Forces units, especially the Northern Fleet units, to strongly exist in the region.[368] However, defensive stance of Russia has been perceived in an offensive and aggressive way by the other littoral states when Russia speeded up the modernization process of its military units.

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[363] Marlene Laurelle, "Russian Military Presence in the High North: Projection of Power and Capabilities of Action" in *Russia in the Arctic*, ed., Stephen J. Blank, Strategic Studies Institute, July 2011, 72.
[364] Staun, "Russia's Strategies in the Arctic," 21.
[365] "Russia's New Arctic Strategy: Translation of The Foundations of Russian Federation Policy in the Arctic Until 2020 and Beyond," *The Journal of International Security Affairs*, no.18 (2010): 102.
[366] Ibid.
[367] Ibid.
[368] Konsyhev and Sergunin, "Russia's Arctic Strategy," 136-140.

The NATO was invited by Norway and the U.S in the Arctic region in order to balance Russia and to take counter measures against it.[369] Under the imaginary scenario of a military exercise, NATO show its willingness in an aggressive manner to put its weight in the regional affairs. According to military scenario of 2009, a small republic of Midland (Norway) got crushing victory against the huge Nordland (Russia) with the help of its democratic allies "to secure new oil deposits and balance Nordland in the Arctic".[370]

The scenario of this military exercise created fear in the minds of Russian policy making elite that NATO could threaten it interests in the region. As a result of it, Russia pursued security policies to defend its borders with 'all necessary means' including nuclear weapons.[371] Another political repercussion of 2009 NATO exercise for Russia's security policies is that the national security of Russia also associated with the Arctic region where huge deposits of Barents, Kara, and Laptev Sea natural resources are located. Those places regarded as possible "conflictual and competitive zone" which requires full control over them "in the sphere of security" as stated in the "National Security Strategy (NSS) of 2009.[372] In line with NSS of 2009, two stations for border security were established in Murmansk and Arkhangelsk region.[373] The inclusion of the security of the resources in the Arctic region in NSS of 2009, linked Arctic region with Russia's general foreign, military and energy security policies in a strict way to form security formulations for the region. In fact, the combination of NSS of 2009 and 2008 Arctic Strategy of Russia widen the security policies of it since the number of military units has also been increasing in line with the climate change related issues in general and search and rescue activities in particular.[374]

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[369] "From Neutrality to NATO," *Nordic News Netrwork*, September 2012, 69, http://www.nnn.se/nordic/americult/nato/steps.pdf (Accessed June 16, 2018).
[370] Ibid.
[371] Konsyhev and Sergunin, "Russia's Arctic Strategy," 137.
[372] Ekaterina Klimenko, "Russia's Arctic Security Policy: Still Quiet in the High North?," *SIPRI Policy Paper*, no. 45, 2016, 14, https://www.sipri.org/sites/default/files/SIPRIPP45.pdf (Accessed June 16, 2018).
[373] Konsyhev and Sergunin, "Russia's Arctic Strategy," 137-140.
[374] Devyatkini op. cit. See also: Klimenko, "Russia's Arctic Security Policy: Still Quiet in the High North?," 14-15.

The mixed security policies of Russia to ensure its energy security was elaborated by Russian officials at international forum formed by Arctic states in 2010.[375] According to statements of Russian policymaking elite in the forum, "the desire to ensure the Arctic region as a zone of peace and cooperation" prioritized as goal number one for resolving the issues and to utilize the Arctic resources as soon as possible while using Russian Armed Forces to resolve the conflicts and for offensive purposes always regarded as a second option.[376] Indeed, the defense of the borders and protection of the Arctic resourses would be much easier for Russia if the territorial boundaries of littoral states would be set down. In this regard, one of the reasons for Russian military activism in the region is associated with the lack of border delimitation and recognition in the Arctic that makes hard to compromise with littoral states in a peaceful manner. On the ground of this reason, the security of the border lanes strengthened with the FSB which are deployed to the (re)opened stations in the region by Russia.[377] This action of Russia has increased the tension among littoral states. However, this decision was made by Russia to eliminate the threats against its national security including illegal human and drug trafficking by establishing Russian control over the passing ships via NSR.[378] Because, a stable environment to form energy security policies can only be achieved with Russian military elements which are deployed in line with the international law and its sovereign rights.

Although Russia followed international law for its expansion towards the North Pole, the unwarranted results for the status of NSR and energy resources distribution pulled NATO to the region again with no possible benefits but increasing arms race among parties. Furthermore, the establishment of new air and naval bases that strengthened with infantry forces in the Arctic region turned the region into one of the bastions of Russia for defensive purposes.[379] Because, Russia needed its military elements in the

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[375] Caroline Mükusch, "Perspective From Moscow: The International Arctic Forum," *Second Line of Defense*, October 15, 2010, https://sldinfo.com/2010/10/perspective-from-moscow-the-international-arctic-forum-moscow/ (Accessed June 17, 2018).
[376] Ibid.
[377] Ibid.
[378] N. I. Sydnyayev, "Ensuring Russia's National Security in the Arctic," *Military Thought*, no.1, 2017, 3-6, http://www.eastviewpress.com/Files/MT_FROM%20THE%20CURRENT%20ISSUE_No.1_2017.pdf (Accessed June 18, 2018).
[379] Atle Staalesen, "Russia Wants More Control Over Arctic Airspace," *The Barents Observer*, January 2, 2017, https://thebarentsobserver.com/en/2017/01/russia-wants-more-control-over-arctic-airspace

region to protect its interests in the Arctic region and to "go beyond the fourth bridge of containment wall"[380] by securing its expanded sovereign lands in expense to NATO.

Even if Russia had pursued defensive policies up until 2013, permanent Russian military stance in the Arctic region was declared with Russia's Arctic strategy of 2013.[381] It was mainly because of the actions of other littoral states and NATO exercises in the region. For that purpose, finalizing continental shelves and boundary delimitation related research are prioritized in the strategy in order for Russia to legally stand against threats to its national security.[382] Moreover, in line with 2013 Arctic Strategy, Russia officially declared its desire to deploy "military units with combat readiness to protect Russian interest in the external and sovereign border limits of Russian Arctic".[383] The importance of this official declaration is that Russia is planning to use these military units to "eliminate military threats and danger against its national security".[384] Indeed, Russia's declaration to use all necessary means to protect its interest in the Arctic region in the 2013 Arctic Strategy[385], set a new policy direction for Russia to implement for the Arctic region.

In the light of this policy direction, Russia form its security frames for its energy security policy on a solid ground for the region. Indeed, 2013 Arctic Strategy filled the lack of Russian Armed forces by showing Russia's desire to have hybrid composition of military units which is strengthened with "new infrastructures and modern armaments" in the region that is to be monitored by new systems.[386] Furthermore, installation of new radar equipment in the Arctic Islands of Russia, including newly founded ones,[387]

(Accessed June 15, 2018). See Also; Devyatkin, "Russia's Arctic Strategy: Military and Security (Part II),"and Sydnyayev, "Ensuring Russia's National Security in the Arctic".

[380] Caitlyn L. Antrim, "The Next Geographical Pivot: The Russian Arctic in the Twenty-First Century," July 1, 2010, 18, 24, https://arcticsummercollege.org/sites/default/files/Caytlin%202010%20The-Next-Geographical-Pivot-The-Russian-Arctic.pdf (Accessed June 18, 2018).

[381] Russian Federation, *Development of the Arctic Zone of the Russian Federation and National Security up to 2020*, 2013, 4-7, http://www.research.kobe-u.ac.jp/gsics-pcrc/sympo/20160728/documents/Keynote/Russian%20Arctic%20strategy%202013.pdf (Accessed March 6, 2018).

[382] Ibid, 5- 7.

[383] Ibid, 8.

[384] Ibid.

[385] Ibid, 3-10.

[386] Ibid.

[387] Atle Staalesen, "Russia Wants More Control Over Arctic Airspace," *The Barents Observer*, January 2, 2017, https://thebarentsobserver.com/en/2017/01/russia-wants-more-control-over-arctic-airspace (Accessed June 15, 2018).

elevated Russian security to another level. The installation of these declared Russia's desires for its Arctic Islands to the world.

Nevertheless, the position of the Arctic in the state documents secured only after the series of events. The foreign policy concepts of Russia linked with the Arctic region as well especially after 2014 Ukranian Crisis. This crisis showed that Russia will not tolerate Western penetration to its sphere of influence and Russia can adequately respond this crisis if it is necessary as Sergunin stated.[388] On the other hand, the Russia's actions in the Ukraine regarded as "being aggressive and militarist power not only in the Eastern Europe but also in the Arctic by the Western states, through giving reference to 2007 flag implanting of Russia"[389] that had to be stopped with economic and political embargoes. In this context, 2014 Ukrainian Crisis put an impact on the ongoing relations between NATO members and Russia in the Arctic that increased the tension between them while forcing Russia to shift its security policies for the Arctic. For Russia, the need for strong Russian military presence in the Arctic region became obvious especially after 2014 as a result of these events.[390]

Russia, by relying on its sovereign rights, decided to install its military elements and to develop them officially in line with the 2014 Military Doctrine right after the Ukranian crisis.[391] The concrete example of this perception against NATO resembled with the Vostok 2014 military exercise of Russia. It is the largest "military exercise with the 155 thousand personnel and 1500 tanks and 70 ships involvement"[392] that showed the determination of Russia to stand behind its interest. Also, this doctrine is vitally important since it links Russian national interests with energy security, maritime policy, and the Arctic together. Indeed, by adding the Arctic region under the category of possible zone of conflict, Atlantic security policies of Russia has intertwined for the

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[388] Valery Konyshev, Alexander Sergunin and Sergei Subbotin, "Russia's Arctic Strategies in the Context of the Ukranian Crisis," *The Polar Journal* (2017): 4.
[389] Ibid., 2.
[390] Ibid., 13-15.
[391] Russian Federation, *Military Doctrine of Russian Federation*, 2014, 1-9, https://www.offiziere.ch/wp-content/uploads-001/2015/08/Russia-s-2014-Military-Doctrine.pdf (Accessed June 16, 2018). Also see; Konsyhev, Sergunin and Subbotin, "Russia's Arctic Strategies in the Context of the Ukranian Crisis," 4.
[392] Sebastien Roblin, "Russia's Massive Vostok Military Exercise Was Intented to Prepare for War with China. So What Happened?," *National Interest*, September 2, 2018, https://nationalinterest.org/blog/buzz/russia%E2%80%99s-massive-vostok-military-exercise-was-intended-prepare-war-china-so-what-happened (Accessed June 22, 2018).

Arctic as well in its Maritime Doctrine of 2015.[393] Thus, the security of this region highly stressed first time in the Maritime Doctrine of Russia after its military doctrine.

2013 Arctic Strategy, 2014 Military Doctrine, and 2015 Maritime Doctrine merged together to ensure its security by relying on dual use of its navy elements via the Arctic Ocean. Consequently, Russia pushed for development and "application of dual-use technologies to ensure both Russia's Arctic territories military security and sustainable socio-economic development".[394] In short, as one can grasp from Russia's state documents, opening of the Arctic for Northern Fleet in a sustainable manner matters a life or death scenario for Russia's survival in the region in terms of geopolitics to take the advantage of the natural barriers in the region and to use them as a bastion for Russia's defence. Additionaly, new military stations were founded by Russia (See Figure 9 below for Russia's Military Bases in the Arctic). As provided in the 2013 Arctic Strategy, these stations aimed to be used against the threats to its national interests.[395] This sets one column of its security for the Arctic region.

Figure 9: Russia's Arctic Military Bases **Source:** https://foreignpolicy.com/2017/01/25

[393] Anna Davis, "Maritime Doctrine of the Russian Federation," *Russia Maritime Studies Institute,* 2015, 19.
[394] *Development of the Arctic Zone of the Russian Federation and National Security up to 2020*, 8.
[395] Ibid., 9.

In other words, "Russia has been turning Novaya Zemlya, Severnaya Zemlaya, Nadym, Tiksi, Vorkuta, Alykel, Anadyr, Wrangel Island, Franz Joseph Land, Barneo, Kuril Island, Alakurtti"[396] to its strategic military bastions since 2014. Without any doubt, the presence of NATO in the region through its members (Canada, Denmark, Norway, the U.S) and its growing numbers of military elements in the region paved the way for Russia to add its security considerations into NSS. As a result of this, "further military buildup is encouraged by Russia in the year of 2018 that it has just turned newly founded island to nuclear bastion".[397]

Russian official stance for the Arctic region and military buildup in the region has found its place in the 2016 Foreign Policy Concept of Russia. As Sergunin stated, two times referral of the Arctic region for "cooperation, development of natural resources, and preservation of peace and stability"[398] signals the return of soft security policies of Russia. Russia used this concept to gather around with littoral and regional states and to solve the problematic relations after the Ukrainian Crisis rather than relying on its military might.

Consequently, Russia formed security policy for the Arctic region that based on defensive military installments for protecting its lands, natural resources and strategic sea lanes. In return, Russia aims securing its energy resources and the NSR by relying on its military might to utilize them in its Arctic energy security policy. The signals of that policy can be found in military, national security, foreign policy, Arctic policies, and maritime policies of Russia. In this regard, defensive capabilities and dual usage of Russian Army units placed in Russia's security policy for the Arctic region both for geopolitical and energy security related issues.

4.2. TRANSPORTATION AND MARITIME DIMENSION OF RUSSIAN ARCTIC ENERGY SECURITY POLICY

Energy security term includes delivery infrastructures between trading states to transfer energy goods from one state to another. In this regard, Russia considers NSR as its

[396] Ernie Regehr and Michelle Jacket, "Circumpolar Military Facilities of the Arctic Five," *The Simons Foundation,* July 2018, 52-56, http://www.thesimonsfoundation.ca/sites/default/files/Circumpolar%20Military%20Facilities%20of%20the%20Arctic%20Five%20-%20updated%20to%20July%202018_2.pdf (Accessed August 21, 2018).
[397] Staalesen, "Russia Wants More Control Over Arctic Airspace".
[398] Konyshev, Sergunin and Subbotin, "Russia's Arctic Strategies in the Context of the Ukranian Crisis," 1-3.

natural main transportation infrastructure to deliver energy sources to the consumers around it. Therefore, Russia's ambition to exploit fossil fuel reserves in the Arctic and to deliver these sources via NSR, combines too many state policies under its Arctic strategy. On the grounds of them, Russia frames its transportation feature of energy security policy for the Arctic region. However, as provided in the energy security strategies documents and other official documents of Russia, one of the main problem concentrates over the lack of infrastructure in the Arctic region.[399] Infrastructural growth for the Arctic region, mostly for the NSR, is proposed by Russia in its state documents to solve this problem. Indeed, this has already occupied great space in the 2008 and 2013 energy strategies of Russia[400] to form its energy strategy policy for the Arctic region.

In this regard, visible effects of climate change in the Arctic contributed positively to Russia's ideals for the Arctic region while formulating its policies for the Arctic in general and its energy security policy towards the region in particular. In this connection, NSR played crucial role in the Russia's Arctic policy in general since it is regarded as an important sea route that is going to support trade between European and Asian states by cutting the distance, and saving great amount of fuel and time.[401] Furthermore, NSR has the advantage to bypass chokepoints in the current sea routes that also decrease the threat of piracy attempts.[402] Increasing ice free seasons in the NSR, "between 2 to 4 months from 2016 to 2019"[403] but it is expected to reach a year-

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[399] *Development of the Arctic Zone of the Russian Federation and National Security up to 2020*, 2-11. See also; *Energy Strategy of Russia for the Period up to 2030*, 60. Davis, "Maritime Doctrine of the Russian Federation," 22-24.

[400] *Energy Strategy of Russia for the Period up to 2030*, 60.

[401] "What is the Northern Sea Route?," *The Economist*, September 24, 2018, https://www.economist.com/the-economist-explains/2018/09/24/what-is-the-northern-sea-route (Accessed June 1, 2019).

[402] Ibid.

[403] Data gathered from two resources. For 2019 Data see; Arthur Gushchin, "One Belt One Route Initiative and the Arctic," *Fudan Development Institute*, 2017, 34, https://static1.squarespace.com/static/556563bae4b026b4ede38085/t/5a571756ec212d24a8b19070/1515657126532/Belt+and+Road+Initiative+and+the+Northern+Sea+Route.pdf (Accessed 1 June 2019). For 2016 Data See; Russian Federation, Analytical Department of the Council of the Federation, *The Importance of the Northern Sea Route for the Development of the Russian Arctic Area*, 2016, 1, http://council.gov.ru/media/files/80F80UYvBNDS3k2LZkOgjzr927dAPcXG.pdf (Accessed 1 June, 2019).

round in 2050,[404] strengthen the hands of Russia for utilizing this route not only for international trade but also for her energy security policies.

To attract international voice for forming an investment pool for the North, Russia stress the importance of NSR for too many times.[405] In this regard, the desire and necessity of Russia to embed her own sovereignty over NSR and the energy sources, urged the formation of transportation strategy to keep the others out of its zone. In line with it, Russia declared its *Transportation Strategy up to 2030* that highlights "the need to develop the NSR, the shipping along with it and the infrastructure on its shores".[406] With that declaration, Russia aims both to overcome lack of infrastructural development and to link this strategy with general Arctic and energy strategy together. Indeed, infrastructural development is needed for the "development of the Northern Sea Route as well as the regional port, riverine, and search rescue infrastructure".[407] For Russia, NSR and its components vitally important for its energy strategy to be realized. Furthermore, parallel with Arctic and transportation strategy of Russia, Russia's Energy strategy of 2013 identifies the "development of infrastructure and an integrated transport system in the Arctic as one of the primary goals".[408] Because, "by the year 2022, the volume of traffic through NSR is expected to reach 40 million tons"[409].

Russian Federation deeply invests to the infrastructures of NSR and its military elements including radar units to protect NSR since 2011, although the decision was made in 2004. However, the realization of the NSR plans of Russia relies on the expansion of its icebreaker fleet with an increasing quantity and modernization of existing ones. Because Russia fears from other states activities in the Arctic and NSR. This situation forced Russia to modernize its icebreaker ships while decommissioning the existing ones by 2020.[410] Indeed, Chinese presence in the region with icebreaker

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[404] David Thorpe, "Does Opening the Northern Sea Route Give Russia a Vested Interest in Not Tackling Climate Change?," *Energy Central*, October 3, 2017. https://www.energycentral.com/c/ec/does-opening-northern-sea-route-give-russia-vested-interest-not-tackling-climate (Accessed June 18, 2018).
[405] Ibid.
[406] Heather A. Conley and Caroline Rohloff, "The New Ice Curtain: Russia's Strategic Reach to the Arctic," *Center for Strategic and International Studies,* August 2015, 83.
[407] Ibid., 32.
[408] *Energy Strategy of Russia for the Period up to 2030*, 72, 116. See also; *Development of the Arctic Zone of the Russian Federation and National Security up to 2020*, 3.
[409] Thorpe, "Does Opening the Northern Sea Route Give Russia a Vested Interest in Not Tackling Climate Change?".
[410] Konyshev and Sergunin, "Russia's Arctic Strategy," 135-136.

ships since 2012, created the controversial perception for Russia that both welcomed and feared. It is mainly because Russia felt the fear of both losing its sovereignty over the NSR, and the change in the internal waterway status of NSR on the grounds of the essence of its security perception, Chinese presence and its lack of icebreaker fleet.[411]

Although Russia encourages investments for the realization of NSR, it wants to create its own fleet both to uniletarly support the passage from NSR and to establish its own rules for its internal waterway. To achieve that, Russia declared new state budget to produce new icebreaker ships in 2010 that gave its fruits in 2013.[412] This policy of Russia further increased the number and the sort of icebreaker ships of it in 2018 with the title of largest icebreaker fleet owner.[413]

Furthermore, as provided in the transportation, Arctic and energy strategy of Russia, it has also improved the conditions of the ports in the Arctic region while constructing new ones to open up to the globe. In this regard, the Sabetta Port construction, which was initiated in 2013, is the product of this thought that could link the Arctic with the Yamal Peninsula via NSR and transport energy resources through this new infrastructure.[414] In line with this thought and to link NSR with its energy security formulations, Russia developed Norilsk energy hub as well. The feature of Yamal and these hubs to rely on the NSR shows Russia's understanding for diversification of the consumer scale. Otherwise, the demand security of Russia could be threatened as it was the case during the Ukrainian Crisis. Furthermore, 16.5 million metric tons of LNG expected to be sent from Russia to Asia in every single year with this project.[415]

Accordingly, the traffic that passes via NSR is expected to increase in line with the impacts of climate change and developed infrastructure to carry on. In order to

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[411] Conley and Rohloff, "The New Ice Curtain: Russia's Strategic Reach to the Arctic," 13. Also See; Russian Federation, Russian International Affairs Council, *Northern Sea Route*, https://russiancouncil.ru/en/northernsearoute (Accessed on 1 June 2019).

[412] Aleksandr Yemelyanenkov, "New Nuclear-Powered Icebreakers Poised to Change the Game at Northern Sea Route," *Russia Beyond*, Dec 13, 2013, https://www.rbth.com/economics/2013/12/13/new_nuclear-powered_icebreakers_poised_to_change_the_game_at_northe_31773 (Accessed June 16, 2018).

[413] David Hambling, "Does U.S Stand a Chance Against Russia's Icebreakers?," *Popular Mechanics*, April 4, 2018. https://www.popularmechanics.com/military/navy-ships/a19673250/future-icebreakers/ (Accessed June 17, 2018).

[414] Thorpe, "Does Opening the Northern Sea Route Give Russia a Vested Interest in Not Tackling Climate Change?".

[415] Ibid.

strengthen its sovereign position over NSR, Russia declared a federal law in 2017 to combine its position with energy security initiatives. Accordingly, it "prohibits foreign flagged vessels to carry energy sources via NSR which was the evaluated form of law of 2015 whose passage fixed in line with the federal law of 2012".[416] This law paves the way for both developing Arctic fields of Russia and makes easy to use of NSR for security and transportation related issues.

When this idea combined with inland infrastructural growth, Russia aims to link its energy security to the NSR and its supplementary elements both on the land and in the sea under its sovereign rights. Indeed, with Murmansk and other 18 ports in the Arctic, the East and the West part of the "Russian Arctic aimed to be strategic hub"[417] both in terms of logistics and energy flow. Therefore, Russia would establish links between its regions with the Arctic for the Arctic energy security policies as provided in the transportation and Arctic strategy of it.[418] In this regard, "Baikal-Amur Main line (BAM) railway of Russia, "which stretches from Lake Baikal in Siberia to the Khabarovski Krai on Pacific Shores of Russia",[419] can easily be linked with the ports"[420] of it too that further work as pipelines to transfer energy resources via NSR and oceangoing tankers in there.

The effects of these developments on energy security of Russia for the region further realized with the Russia's establishment of new facilities for LNG which can be transferred "via sea vessels of NSR to Asia-Pacific and Europe".[421] Indeed, the effects of climate change in terms of sea ice extinction and conditions of the trade passage via NSR are stressed by Russian officials in the international fora. As stated by Ambrosov, consequently "NSR is expected to transfer 65 million tons of hydrocarbons" with the contribution of new production rigs and infrastructures for LNG export.[422]

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[416] Pavel Devyatkin. Russia's Arctic Strategy: Maritime Shipping, *The Arctic Institute*, February 27, 2018, https://www.thearcticinstitute.org/russias-arctic-strategy-maritime-shipping-part-iv/ (Accessed June 18, 2018).
[417] Conley and Rohhlof, "The New Ice Curtain: Russia's Strategic Reach to the Arctic," 51-52.
[418] Ibid., 37.
[419] Russian Federation. "Baikal – Amur Line", *Russian Railways, Rdz.ru.* http://eng.rzd.ru/statice/public/en?STRUCTURE_ID=88 (Accessed September 9, 2019).
[420] Thorpe, "Does Opening the Northern Sea Route Give Russia a Vested Interest in Not Tackling Climate Change?".
[421] Ibid.
[422] Ibid.

Overall, Russia's stance about NSR and strategic position of NSR for its Arctic energy security policy strategy lies over the infrastructural growth on the sea, land, and inland to project it as a complementary vein for Russia's energy transportation. In this scenario, Russia aims to utilize these newly founded energy resources of the Arctic for delivering them to Asia-Pacific,[423] Europe and other parts of the world. However, as provided in the transportation and Arctic strategy in general, Russia's position to develop NSR is not only related with energy sale. Indeed, Russia also wants this road to use for international container transportation. Furthermore, NSR that is secured by Russian navy units and trade ships which are escorted by new icebreaker fleet of Russia, increase the importance of the route.[424] Additionally, travel via NSR remains time efficient and more safe mainly because those ships travel on the shortest way and there is no piracy in the Arctic.[425] From geopolitical perspective, these strategies and related infrastructural growth have already worked for the split of Western camp in general and "Japan and South Korea's stance against Russia in particular".[426] Without any doubt, measures taken by Russia leads to the realization of the full potential of the NSR. In other words, Russia by using its newly constructed infrastructures on NSR, links its Arctic energy security policy with NSR to reach both European and Asian consumers. With the new infrastructural lead, Russia hopes to avoid problems in international sphere. However, it should be noted that, for Russia, NSR and its link with its energy strategy for the region cannot be sustained without a military presence. In this regard, fully developed NSR and its components located in the heart of Russian energy security strategies for the region that otherwise cannot be pursued in a beneficial way.

Nevertheless, these projects cannot be realized fully if technological deficiency of Russia is to be overcome. Technological backwardness and Russia's inexperience to operate in the offshore drillings, pushed Russia to pursue more cooperative regional

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[423] Donald Gasper, "China and Russia Want to Develop Arctic Energy Resources Together, and US Disapproval May Not Deter Them," *South China Morning Post*, September 12, 2018, https://www.scmp.com/comment/insight-opinion/asia/article/2163719/china-and-russia-want-develop-arctic-energy-resources (Accessed October 13, 2018).

[424] Pavel Devyatkin, "Russia's Arctic Strategy: Maritime Shipping," *The Arctic Institute*, February 27, 2018, https://www.thearcticinstitute.org/russias-arctic-strategy-maritime-shipping-part-iv/ (Accessed May 20, 2018).

[425] Ibid.

[426] Tsuyoshi Inajima, "Russia Eyes Island Storage for Arctic LNG Amid China Demand Boom," *Bloomberg*, January 12, 2019, https://www.bloomberg.com/news/articles/2019-01-12/russia-eyes-island-storage-for-arctic-lng-amid-china-demand-boom (Accessed January 13, 2019).

affairs. In return, Russia aimed to combine its own security perception with the liberal assumptions, the international law and norms to set its Arctic energy security policy. In this regard, technological spurt moves of Russia with neighboring and other states, Russia's reliance of international law, its initiatives to preserve ecosystem of the Arctic, and widening its base for energy security policies with liberal assumptions have to be examined as the last column to set the framework of the energy security policy for the Arctic region.

4.3. THE HYBRID BASE OF RUSSIA'S ARCTIC ENERGY SECURITY POLICY

Although Liberal assumptions find their place in the official state documents of Russia for energy strategies since 1990s, climate change put an impact over Russia's Arctic energy security policy to be relied on more to these assumptions for realizing its goals. In this regard, the geographical proximity of littoral states to the Arctic Ocean and the cost of the energy exploration for individual littoral states provide beneficial ground to cooperate for energy exploration and extraction in the Arctic region. Furthermore, the need for exploring new energy fields to compensate exhausted ones in Siberia, Yamburg, Urengoy and Medvezh'ye become obvious to Russia since almost half of the national production came from there.[427] Thus, environmental challenges of the Arctic, and lack of expertise and technology of Russia to operate in the offshore areas, paved the way for the change in the stance of Russia to cooperate with other states.

As provided in the 2008 and 2013 energy strategy of it, the lack of technological development is to be overcome through international cooperation[428] and direct investment to extract energy resources of the Arctic region. Moreover, Russia needs to solve its problems with the littoral states in the Arctic in a peaceful manner to transfer the technology of the West. Within this context, the agreement between Norway and Russia in 2010 is the result of this policy so that cooperation between two parties in terms of technology could be sustained and both parties could start extracting oil and gas in their economic zones in the Arctic region. Moreover, peaceful resolution of the

[427] Vincenzo Ligorio, "The New Russian Energy Strategy: The Future of the Economic Development Process Between Old and New Players," *International Scientific Journal,* no. 9 (2015): 191.
[428] "Energy Strategy of Russia for the Period up to 2030", 21, 32, 55- 57.

territorial conflict with Norway means easining of the tension between NATO members like the U.S and Norway, and Russia.

To combine with transfer of the technological means, Russia was able to attract FDI's, which is necessary for it to allocate money for developing its Arctic energy sector, as a result of these policies. Indeed, ExxonMobil and Rosneft struck a deal "worths 500 billion dollars in 2012"[429] to operate and cooperate in the Russia's Arctic zone for energy exploration and extraction. Consequently, Gazprom and Rosneft started drilling with the expertise of the U.S, Norway, and France in Pechora and Prirazlomnoye Fields in 2013.[430] However, the ongoing cooperation between Russia, Statoil, Total, and ExxonMobil lost its effectiveness prior and after the Ukrainian Crisis of 2014. Because energy companies feared that they can be crushed under the sanctions.

The desire of Russia to exploit resources of the Arctic shifted the focus of it to the Eastern economies that are after the energy sources of the region, when the sanctions towards it realized. The harsh conditions of the Arctic to extract energy sources from its seabed aimed to be reversed through these investments. Under those circumstances, Russian energy and technology companies like Rosneft, Gazprom, and Novatek initiated talks with the Chinese, Japanese, Indian and South Korean companies to conveince them investing in the Russia's Arctic zone. India and China invested in the Russian Arctic that Sakhalin-I and Yamal Project agreed to be developed with those powers with the %20 shares for each project starting from 2001 and 2014 respectively.[431] More importantly than Sakhalin I project, "Yamal Project symbolizes

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[429] Andrew E. Kramer, "Exxon Reaches Arctic Oil Deal With Russians," *The New York Times*, August 30, 2011, https://www.nytimes.com/2011/08/31/business/global/exxon-and-rosneft-partner-in-russian-oil-deal.html (Accessed June 22, 2018).

[430] "Rosneft and ExxonMobil Advance Strategic Cooperation," *Rosneft*, 21 June, 2013, https://www.rosneft.com/press/releases/item/114359/ (Accessed June 26, 2018). Also See; Lars Petter Lunden and Daniel Fjaertoft, "Government Support to Upstream Oil and Gas in Russia: How Subsidies Influence the Yamal LNG and Prirazlomnoe Projects," Geneva-Oslo-Moscow, July 2014, 35- 36. https://www.iisd.org/gsi/sites/default/files/ffs_awc_russia_yamalprirazlomnoe_en.pdf (Accessed June 26, 2018).

[431] Gasper, "China and Russia Want to Develop Arctic Energy Resources Together, and US Disapproval May not Deter Them". See also; Henry Foy, "Russia's Novatek Shows Resillience Despite Sanctions," *Financial Times*, August 1, 2018, https://www.ft.com/content/3f638d74-956d-11e8-b67b-b8205561c3fe (Accessed October 12, 2018). "Indian Firm to Pay Russia's Rosneft 230 Mln Dollars to Settle Sakhalin-I Dispute," *Sputnik*, Novermber 1, 2018, https://sputniknews.com/asia/201810011068487884-india-frim-pays-damages-rosneft/ (Accessed on Novermber 10, 2018).

the Russian ambitions in the Arctic in terms of new energy security policies".[432] Because, Yamal Project was completed with the investments of Chinese energy and trade firms' that is argued to be realized as a result of Russia's concessions to China for some of its energy fields in the Arctic.[433] This policy of Russia gave its first fruits with the "first LNG shipment from Yamal LNG at Sabetta to Fujian LNG Terminal" in November 2018.[434] After successful shiping of LNG to China via NSR, other regional powers like Japan and South Korea set their priorities for energy upon the new bases in the Russian Arctic.

As a result of the interest coming from the Asian powers for Russia's Arctic energy resources, Novatek advertised the Arctic-2 LNG project since all "three sectors of Yamal LNG Project is now online with the capacity of 17,5 millions tons a year"[435] and new projects are needed to supply more energy to those states. With the increase in the transaction volume of the energy resources, the attention over the Arctic-2 LNG project has immensely grew that even teared down the sanctions towards Russia. Indeed, Russia and Norway still are cooperating in the Yamal region.[436] Moreover, Italian energy corporation ENI, American ExxonMobile, South Korean and Japanese corporations do the same[437] even after the 2014 sanctions. This further encouraged Russia to allocate more money for investing to its Arctic resources. 6 billion dollars in total allocated by Russia for its Arctic resources up to 2025 that is also contributed by

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[432] Nikos Tsafos, "Is Russia Winning the Race to Develop Arctic Energy?," *CSIS*, March 22, 2019. https://www.csis.org/analysis/russia-winning-race-develop-arctic-energy (Accessed April 11, 2019)

[433] Nikolas Groffman. "Why China Russia Relations Are Warming Up in the Arctic," *TWIA*, February 17, 2018, https://www.scmp.com/week-asia/geopolitics/article/2133039/why-china-russia-relations-are-warming-arctic (Accessed 2 June 2019).

[434] "Novatek Ships 1st LNG to CNOOC," *World Maritime News*, 14 November 2018. https://worldmaritimenews.com/archives/264660/novatek-ships-1st-lng-to-cnooc/ (Accessed March 11, 2019). See Also; Tsafos, "Is Russia Winning the Race to Develop Arctic Energy?".

[435] Olga Tanas, Dina Khrennikova, and Anna Shiryaevska, "Russia Eyes Greater Energy Dominance As Novatek Taps Arctic," *Bloomberg*, April 8, 2019, https://www.bloomberg.com/news/articles/2019-04-07/russia-eyes-greater-energy-dominance-as-novatek-taps-arctic-lng (Accessed April 11, 2019).

[436] Atle Staalesen, "This is Where Norway and Russia Continue Cooperation Over Arctic Oil," *The Barents Observer*, September 7, 2017, https://thebarentsobserver.com/en/industry-and-energy/2017/09/where-norway-and-russia-continue-cooperation-over-arctic-oil (Accessed June 27, 2018).

[437] Cliifford Krauss, "Exxon Mobil Seeks U.S Sanctions Waiver for Oil Projects in Russia," *The New York Times*, April 19, 2017, https://www.nytimes.com/2017/04/19/business/energy-environment/exxon-mobil-russia-sanctions-waiver-oil.html (Accessed June 27, 2018).

Rosneft through opening new 28 fields in the region and investing them.[438] Furthermore, French company Total, Kogas of South Korea, Jogmec of Japan has initiated negotiations with Novatek[439] to get some of the shares of the Arctic-2 LNG project (See Figure 10 for Russia's energy plants in the Arctic).

Figure 10: Russia's Planned and New LNG Plants for the Arctic Energy Resources **Source:** https://www.bloomberg.com/news/articles/2019-04-07/

Accordingly, Total paid to have the 10% share of the Arctic-2 LNG project while Japan and Korea is considering to have 10% share of the project respectively.[440] Other than Asian states and France, Vitol of England, Repsol of Spain and Aramco of Saudi Arabia are also interested with the Arctic-2 LNG project. Vitol and Repsol concluded an agreement with Novatek for the purchase of LNG for 15 years after the project become online in between 2022 and 2023.[441] Furthermore, Aramco has initiated talks with Novatek to purchase 30% of the shares of the project[442] while "Ronesans of Turkey and

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[438] Tsvetana Paraskova, "Russia Goes All in on Arctic Oil Development," *USA TODAY*, October 24, 2017, https://www.usatoday.com/story/money/energy/2017/10/24/russia-goes-all-arctic-oil development/792990001/ (Accessed June 27, 2018).

[439] Tsafos, "Is Russia Winning the Race to Develop Arctic Energy?".

[440] "Joint Extraction of Russian Energy Sources in the Arctic – Platform for International Mutually Beneficial Cooperation", *Russian Peacekeeper*, April 4, 2019, http://peacekeeper.ru/en/?module=news&action=view&id=32315 (Accessed April 11, 2019). Also see; Emiko Terazono and David Sheppard, "Vitol Signs LNG Deal with Russia's Novatek for Arctic 2 Plant," *Financial Times*, April 2, 2019, https://www.ft.com/content/d057e79e-552a-11e9-a3db-1fe89bedc16e (Accessed April 11, 2019).

[441] Teranazo and Sheppard, "Vitol Signs LNG Deal with Russia's Novatek for Arctic 2 Plant".

[442] "Joint Extraction of Russian Energy Sources in the Arctic – Platform for International Mutually Beneficial Cooperation".

Saipem of Italy concluded joint venture agreement which worths 2.2 billion euros".[443] By the year "2030, these LNG projects expected to produce 220 billion cubic meters"[444] that makes "Russia one of the leading LNG exporter".[445] Indeed, Russia needs the technology and the experience of those states whose companies have already worked on the harsh conditions of the offshore drillings. This situation ended up with the realization of more plants. With the initiatives of Novatek, Russia announced Arctic-3 LNG project as of May 2019 to realize its Arctic energy security policy.[446] Even though the Russian security perception requires the opposite stance, the reliance on its mixed strategic formulation is needed for Russia to take the support of international cooperation.

Change in global dynamics and desire of Western states to participate in the energy production phase of Russia in the Arctic, regarded as a game changer for Russia to start negotiations with them not only for oil and gas extraction but also for shipbuilding to deliver energy goods. To achieve that, Russia stroke deals with Japan and China for shipbuilding and opening NSR which is further deepened with initiating deals with other Western states for the shipbuilding.[447] In return, Russia would be able to utilize NSR and widen its customers for energy goods under new routes (See Figure 11).

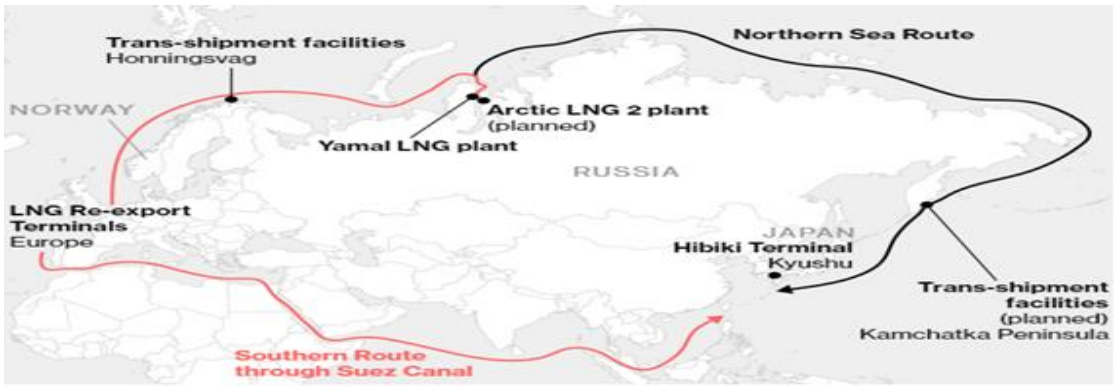

Figure 11: New Routes and Energy Plants of Russia **Source:** https://www.bloomberg.com/news/articles/2019-04-07

[443] Murat Temizer, "Saipem, Turkish Ronesans Partner for Arctic LNG-2," *Anatolian Agency*, December 19, 2018, https://www.aa.com.tr/en/energy/general/saipem-turkish-ronesans-partner-for-arctic-lng-2/22791 (Accessed March 11, 2019).
[444] Tsafos, "Is Russia Winning the Race to Develop Arctic Energy?"
[445] Tanas, Khrennikova and Shiryaevskaya, "Russia Eyes Greater Energy Dominance As Novatek Taps Arctic".
[446] "Joint Extraction of Russian Energy Sources in the Arctic – Platform for International Mutually Beneficial Cooperation".
[447] "Novatek Ships 1st LNG to CNOOC".

Other than technological issues, Russia aims to "preserve the unique ecological systems of the Arctic"[448] in line with its Arctic and energy strategy that requires regional and global initiatives to tackle it. Russia has been actively attending to discuss environmental problems in the Arctic region especially after the announcement of 2008 Arctic strategy that provided the culture for cooperation on other issues. Indeed, AC and EBAC have been used as the main platform to discuss and take measures against climate change and environmental degradations. Consequently, attendance of Russia to these platforms both increased the statute of it in the eyes of other littoral states and set a cultural base for regional negotiations.

Furthermore, Russia constructively engaged with other littoral states, international organizations and companies through this hybrid base of it to soften the military buildup in the Arctic region and the release the tension in bilateral relations with littoral states. For energy security related issues, Russia by relying on this base, trying to form an order in the Arctic region by strategically allying itself with Europe and China to balance the U.S.[449] Moreover, to avoid geopolitical conflicts, regional organizations like Arctic Council and Barents Euro-Arctic Council[450] are effectively used by Russia. Consequently, Russia forms collective decision making system that base on international norms. Also, Russia is acting in line with international law such as UNCLOS, CLCS for territorial conflicts, delimitations, military buildup in new islands and the Russian Arctic in general. Much more strikingly, Russia leads to inclusion of five Asian states to the AC[451] with observer status to keep the development phase of the Arctic especially by adding China into the equation. In short, the lack of technology for energy exploration and extraction phase especially for the harsh conditions of the Arctic region forced Russia to mix its policies with a cooperation based one. Otherwise, exploiting the resources of the Arctic would be nothing but a dream for Russia. By looking these facts, Russia's state documents and actions to utilize Arctic as the strategic reserve base of the mankind, it is for sure that Russia is following a hybrid

[448] "Russia's New Arctic Strategy: Translation of The Foundations of Russian Federation Policy in the Arctic Until 2020 and Beyond," *The Journal of International Security Affairs,* no.18 (2010): 98.
[449] Kharlampyeva, "The Transnational Arctic and Russia", 99.
[450] Ibid.
[451] Sebastian Knecth, "The Politics of Arctic International Cooperation: Introducing a Dataset on Stakeholder Participation in Arctic Council Meetings 1998-2015," *Cooperation and Conflict*, 52, no.2 (2017): 216. (Accessed March 1, 2018).

base. This approach based on international cooperation, technology transfer and regional peaceful negotiations via regional organizations on the one hand, and hard security measures in line with its security policies on the other hand.

To sum up, the Russia's Arctic energy policy cannot be extracted from one source but many official documents of the Russian Federation. Although Russia's Arctic Strategy of 2008 and 2013, and Energy Strategies of 2020, 2030 and 2035 gives the general lines of the framework, Russia's Arctic energy security policy can fully be understood through examining military, maritime, transportation, foreign policy and national security strategies of it. In line with those, one can unserstood that Russia defensively protect its borders and energy resources in the Arctic region which remains indefinite up until to the climate change-related shifts. Furthermore, it uses the military force of it for delivery and tactical moves as well in the NSR as this proposed in its strategies. Consistently, NSR will operate as a main transportation route of Russian energy delivery in which Russian LNG delivery used to lack. Through opening NSR, Russia will also diversify its supply routes and customers that definitely supports its demand based energy security policies. Last but not least, with new infrastructural growth in the Arctic region, Russia can be able to link its Arctic ports with its inner lands, pipelines and the rest of the world that pave the way for more utilization of the resources to compensate exhausted ones. However, Russia's lack of technological development and experience to operate in the Arctic region is needed to be overcome through regional and international cooperation. Otherwise, it will block the realization of Russia's Arctic energy security policies. In this regard, Russia other than technology related issues, solve its problem and acts in the international arena by relying on its hybrid base. Indeed, it was the case for territorial disputes, continental shelves issue and for regional affairs that has been changing Russian perception of energy security and creates a more hybrid base. Finally, the possibility for the realization of the Arctic energy security policy of Russia is the direct consequence of the climate change that otherwise cannot be realized and further developed. Because of the expansionist mentality of Russia in line with its security perception and cooperative understanding for the Arctic region, Russia's Energy Strategy represents changing features in general but especially for the Arctic region where it stresses the hybrid policy formulations.

4.4. EVALUATION

In this part of the thesis, theoretical framework will be applied to the findings of the chapters to evaluate Russia's Arctic energy security policy in the end. The progress in the civilization of mankind in the fields of industry, military and economy increased both the need for energy and consumption of energy resources. States increasing dependency over the energy sources to perform in those fields shifted their concern to sustainable flow of energy resources to them. In this regard, the effects of energy resources, which has a strategic value beyond the market price from the perspective of Realism, over the relations among states has been increasing year by year.

Accordingly, states, as the key actor in international relations, aim to establish control over their energy resources, and dominate this strategic resources both in and out of their territorial boundaries by using their energy companies. More than dominating energy sources alone, states needed firm energy security policies both to maximize their power to secure their interests. Through maximizing their power, states can ensure their security under the anarchical conditions in where the true intensions of them can never be known. In this context, energy sources can be considered as an element of power that can be converted into the other elements of power ranging from economy to military. Thus, states, which has vast energy reservers or influencial energy companies, can use these scarce resources as a leverage in their interactions with other states to sustain their unlimited interests. In other words, energy sources can be used as a foreign policy tool as it was the case for 1973 Arab oil embargo towards the Western states. Russia does the same in 2006 and 2009 towards Ukraine to achieve its political goals. Therefore, asymmetric dependency relations can be established between states which can paralyze the demanding state. Although technology is needed to extract energy resources and distribute them from one place to another, having energy resources also means increase in the power of a state that comes with an influence in the international relations. In addition to those, detection of new reserves by the states in their territorial boundaries also increase their power since those resources are unevenly distributed and states who has energy sources got upper hand in the material distribution capacity from the perspective of Realism in general.

The thinking behind the Russia's energy security policies show similarities with the Realism dominant examination of energy security. Furthermore, dependency of Russian economy over the energy rents forces Russia to compensate exhausted energy basins with new ones. In this regard, the discovery of huge amount of energy resources in the Arctic region, as a result of the effects of climate change towards the region, whet the appetite of it to utilize those resources and continue its energy security policies that based on demand security.

Although Realism has no direct saying on climate change, the astatic environment that climate change creates remains in the scope of it. Indeed, climate change pave the way for the melting of the sea ice in the Arctic Ocean that make possible to exploit energy resources, and mineral and rare earth elements in its seabed. Furthermore, sea routes like NSR and NWP shorten the distance between Europe and Asia, when current sea routes are taken into account, that increased the importance of the region. In this context, climate change flared the competition among littoral states to get a large share from energy resources in the Arctic. Moreover, boundary issues between littoral states have arouse that created instabile path for regional affairs. From the perspective of Russia, existence of vast energy resources in its Arctic zone, and navigable NSR perceived as a blessing that is provided by climate change.

When the relevancy of the Arctic resources and the Arctic region with Russia's general security and energy security policies is questioned, Russia decided to establish Arctic strategy in general and energy security policy for the region in particular. Indeed, the Arctic region with a small number of population has been contributing to its economy by %22 with energy rents. However, Russia's base for its energy security policies, which is mainly dominated by Realist assumptions, has been widen with Liberal assumptions. To see the widening base of Russia's energy security policies and to analyze the effects of climate change on this hybrid base, Russia's security perception and the place of the Arctic are examined since its energy security strategy and policies are parvenued from its security perception.

Lack of natural barriers in Russia's geography, size, climate, history, ideology and psychological limitations of Russian ruling elite have set the collumns of Russia's security perception to base on expansion of its borders far away from its political center.

Indeed, Russian Empire aimed to put a distance with the foes in order not to face them in places which are close to its political center to ensure its survival. In this regard, the Arctic region found its place in the security policies of the Russian Empire only after the geographical explorations when the external powers come close to the its territories. Furthermore, territory, which is accepted as an element of power from the perspective of Realism, means more power for Russia whose vastness is regarded as the source of conflict by the neighboring and other powers throughout the history. However, because of the natural barriers of the region that covered with multilayered sea ice, the Russian Empire's desire for expanding its territorial boundaries towards the North Pole was not possible.

When this 'geographically fixed setting' threatened with the impacts of climate change to the region, Russia's security understanding was also put at stake. In this astatic nature, the threat that Russia felt is alerted it to react physically for finalizing its borders and utilizing energy resources in the seabed of the Arctic Ocean as soon as possible. Furthermore, existence of energy sources in the seabed of the Arctic and Russia's dependence over them for rent money are regarded as the facts for Russia to introduce Arctic energy security policy. As a first step to establish Arctic energy security policy, the territorial extension of Russia to the North Pole, which is formed around its security perception, was declared in 2001 that later on resubmitted in 2015.

In line with it, the reserves under its control are increasing as well. For Russia, who gets used to achieve political goals with energy trump card in the international affairs, the Realist paradigm fits for creating its energy security policy to pursue in line with her general security perception. Russia, whose energy security mainly relies on these Realist premises, favors to use energy sources as a tool and leverage as it was the case in Ukraine and Belarus. Furthermore, the strategic place of those in the economy pie of Russia combined with the exhaustion of existing energy rigs in its sovereign lands, created an impetus to utilize Arctic energy sources. Under the subtitles of security, transportation and hybrid base, Russia's Arctic energy security policy can be examined.

Starting from security dimension, Russia's decision to plant its flag into the seabed of the Arctic Ocean in 2007 to claim the territories in the Arctic, flared the competition physically between littoral states for sharing the energy resources of the region. As a

result of it, Russia decided to increase its number of military units, installaments and patrols in the Arctic region in line with its strategies to its secure its energy reserves physically. Moreover, the involvement of NATO into the Arctic affairs with military exercises that are targeting Russia, resulted with the tightening of Russia's Realism based security policies for the region. This set the security dimension of Russia's Arctic energy security policy as well. Indeed, the lack of recognized border lines when combined with the securing energy reserves int the Arctic zone of Russia, it has no choice but to install its military elements, modernize them and get ready for the defensive war to protect its national interest. Here, the important point is that Russia increasing its military capabilities in the Arctic region, which Russia normally consideres as a zone of peace and cooperation, for defensive purposes in line with its state documents. In this regard, one can assume that Realism dominant security policies of Russia for the Arctic region also modified with diplomatic means to settle disputes peacefully. However, since those resources have strategic importance and states cannot be sure about the true intentions of other states, Russia, at the same time, has to form security policies by relying on its military might to survive and defend its interest in the region. Because, war is inevitable from the perspective of Realism, and NATO with its increasing military units coming close to Russia's border lines. Moreover, Russia turning newly foun islands into bastions with nuclear arms to deter any attack to its lands from other powers. In short, Russia forms its security dimension for the Arctic energy security policy by indirectly basing security side of the resources, the NSR, its lands and interests on its military might in a defensive manner.

Navigable NSR forms transportation dimension of Russia's Arctic energy security policy. Being located at the top of the Earth, NSR can be used as a sea route that shortens the distance between Europe, Asia and America. Russia wants to open this route and forms its Arctic energy security strategy to use this route for energy transporation. Russia will be able to eliminate transit states, which can threaten its energy security policies, by relying on its sovereign internal waterway, namely the NSR. From the perspective of Realism, this remains as another element of power that paves the way for getting upper hand in the material distribution capacity and foreign policy settings for Russia.

Also, the energy security strategy of Russia for the region further sustained as a result of climate change since it sets the proper conditions for providing link between NSR, Russia's inland infrastructures, and newly constructed ports on Russia's Arctic shores. Furthermore, emerging new sea route in the territorial limits of Russia means that states who wants to navigate via NSR has to accept Russia's rules to operate in the NSR. Furthermore, this will help Russia to securitize its energy security policies while transportating its energy resources to the consumer states via NSR. Also, Russia has a right to choose who can pass from these waters which in return offers a geopolitical advantage to it. Up to that point, as one can understand from Russia's decisions and state strategies, it formed its Arctic energy security policy mainly based on Realist premises that is secured by Russian might for the Russians. This means that security policies which based on Realist premises and Russia's hard power elements are necessary to protect its energy resources, to sustain NSR's internal waterway status, and to utilize NSR in its Arctic energy security policy.

However, lack of modern icebreaker fleet forced Russia to include China for the opening up of NSR. Furthermore, the desire of Russia to utilize NSR as soon as possible led it to initiate talks with other Western great powers for ship building to strengthen her icebreaker fleet. Consequently, Realism dominated security policies of it, has twisted to make NSR operational for the international trade but most importantly for energy transportation. Indeed, Russia gave concession to Chinese firms and other Western firms that eventualy widen its base for security policies with Liberal assumptions to cooperate in the opening up of the NSR if one takes Chinese, Japanese and South Korean ships presence and operations in the Arctic Ocean.

Little shift has seen in the Russian energy security formulations set a base for hybrid policy making to pursue in the Arctic region. Also, the very basic universal essence in climate change related issues to tackle against it, provides a base for its energy security policy formulations for the region that is based on cooperation. Furthermore, the resemblance of the region "as a zone of peace and cooperation" by Russia, strengthen the opposite view of its Realist perception of security policies. Indeed, the source of conduct, development of Arctic region and bilateral relations constructed on cooperation and respect to international law that showed the difference in Russian thinking. In line with this thought, it offers the strengthening of multilateral and regional

mechanisms to solve disputes by takin the norms and laws as a reference. Even the policies for land grasp in the Arctic made by Russia in line with the international law such as UNCLOS, CLCS for territorial conflicts, delimitations, military buildup, and opening up of the Arctic sea route. Furthermore, extraction phase of energy sources stressed to be handled in a cooperative manner by Russia which finds the available spots in the state strategies of it. This shows the change in her Realist energy security policies. In fact, territorial dispute with Norway resolved in a peaceful way that caused problems in the domestic affairs of Russia which even questioned the loss of war by the opposition party to make sense of the concession of it. In short, those actions of Russia set the base for hybrid policy making for its Arctic energy security policy.

Moreover, as a respective player of international affairs, Russia did what it must supposed to do in line with the international law for those issues to fasten the process of energy extraction and resolve of the conflicts in the Arctic region. Additionally, the lack of technological advancement to operate in a harsh climate of the Arctic widened the base of Russia's general energy security policies to form its Arctic energy security policy in a cooperative way to sustain its goals. Indeed, even some concessions are given by Russia to Chinese companies to have equal rights on some energy basins. In this regard, Russia is widening its Realism dominant base for Arctic energy security policy with hybrid settings to realize its goals.

Other than these issues, the ecological stress in the energy policies for the region and revoking regional institutions to settle environmental and regional issues are also highlighted by Russia that widens its Realist base. Indeed, Russia let 5 Asian states to have a say in Arctic affairs for which Russia used opposing vote before.

By gathering all of these under the one roof, Russia aims to attract technological and capital investment to realize its energy security for the region. The inclusion of Norway, Asia-Pacific powers, the U.S, France and other European states to the related energy rig projects is the example of this policy. In short, the lack of technology for energy extraction in the harsh conditions of the Arctic region forced Russia to mix its perception with a cooperation based one. Otherwise, exploiting the resources of the Arctic would be nothing but a dream for Russia to set energy security policy for the region.

Last but not least, saying Russia's energy security perception in general and for the Arctic region in particular has shifted slightly to the cooperation based approach in line with the climate change-related effects won't be wrong. Indeed, for the Arctic region, it is for sure that Russia is following the hybrid base that relies on hardline military formulations and international cooperation at the same time both to secure its interest and establish Arctic energy security policy which is different than its general understanding.

CONCLUSION

The experience of the world in terms of the shift in climatic patterns, plants the seed of the life on it throughout the history. Periodical glacier advance and warm centuries set the balance of the Earth to make life possible on its surface. However, unprecedented climatic shifts in its patterns become the subject of scientist and international actors in the 21st century to understand the main causes of climate change and to effectively tackle against it. Although two camps exist on this issue for regarding climate change hysteria or a fact, the existence of scientific proofs and observation of extreme weather events proves nothing but the reality of the notion.

It is for sure that the change in climate patterns comes with other consequences that affect the environment of the earth and the other subjects of human life with its multiplier effect. However, arguing the climate change related impact is perceived at the same ratio in regions of the Earth would be misleading, although the effects of it put an implication on the Earth's linked systems. In this regard, the Arctic region with an immense rate of warming, regarded as the most affected region from the climate change that put the world's cooling system at stake.

Nevertheless, other than environmental degradation of climate change effects, it is perceived as a blessing by the regional states of the Arctic since it makes possible to explore and exploit possible richness of the Arctic seabed. The proof of the existence of energy sources in the seabed of the Arctic when combined with the emerging new routes, mineral sources existence, and tourism potential, the importance of the region have increased slightly. Furthermore, the unequal distribution of these treasures of the Arctic in favor of Russia whose economy based on the energy rent money, urged Russia to form a state strategy and energy security formulations for the region. However, the lack technical expertise and experience to operate the harsh conditions of the Arctic shifted the perception of Russia towards cooperative one to make hybrid settings. Previously, energy security formulations of Russia were just based on Realist premises

of IR literature. In light of this information, the thesis aimed to inquire and analyze the following question;

How did Russia formulate its energy security policy in terms of the implications of climate change in the Arctic region?

The Chapter IV of the thesis offered a hybrid base for an answer to this question that based on the extractions from official state documents of Russian Federation and it's security perception. As a result, it shows the smooth change from pure Realist perception to institutionalist and cooperative parts of the Liberalism for some issues in the energy strategy formulation for the Arctic. As provided in this chapter, changing or softened culture because of climate change-related implications when combined with the historic security perception of it set a base for a mixed approach. Russia to form Arctic energy security formulations used different way of thinking than its main perception of energy security. Indeed, other than security dimension in the domain of Realist assumption of Russian energy security formulations for the Arctic region, cooperation related spots opened in its energy security formulations.

However, to reach the full answer of the main research question of the thesis, the sub-questions are examined from the deductive approah in the thesis with the exclusion of theory and conceptual framework section.

In this regard, Chapter 1 of the thesis presented the chosen methodology, sources and the conceptual and theoretical frame to evaluate the main research question of the thesis from IR discipline. Since the lenses of IR theories provides valuable grounds to examine abstract concepts like energy security from different perspectives, Realism with its variants and Liberalism are introduced in this chapter. Furthermore, to establish a link between the term energy security and defined framework, the term energy security and dimensions of it from the perspective of a state or organizations are provided. Interpretation of the term energy security from Realism regarding energy as an element of power beyond the strategic market price and usage of it as a leverage in international relations reflect the Realist understanding of energy security that is utilized as the guideline to understand changing base of the Russian Arctic energy security formulations in the era of climate change in the chapter four of thesis. However, since climate change cannot be examined from the perspective of Realism, climate change

and the consequences of it are needed to be examined alone to relate its impact on the Arctic region from the defined theoretical and conceptual framework.

For that purpose and to create the boundaries of the geography of the thesis that Russia is operating in the high North, the Chapter 2 of the thesis focused on climate change notion within the context of the sub-research question, *what are the political implications of climate change in general and for the Arctic region in respect to territorial claims, a division of continental shelf and newly projected sea routes and energy extraction?*, of the thesis. In line with it, be it anthropogenic or natural causes, the climate change accepted as a fact on the grounds of Milankovich's, other scientific findings and reports, rather than a hysteria. After examining the negative consequences of the term, the secondary risks that climate change can accelerate are discussed to set a solid base for examining the Arctic. In this regard, the Arctic region is examined first that is further deepened with the inquiring the implications of the climate change on the region. Consequently, the rate of climate change related impacts on the Arctic region is revealed which is twice as much than other regions of the Earth. Furthermore, the richness in the Arctic seabed which become possible to exploit after the impacts of climate change towards the region inquired as well to make sense of flaring competition and territorial conflicts among the littoral states. Amongst one of the findings of this research question, Russia is regarded in an advantageous position when uneven distribution of energy sources in favor of Russia, and NSR to utilize it as Russia's main sea route for international trade interactions are taken into account. Last but not least, littoral states legal grounds for territorial conflicts and their boundary drawing efforts that is base on UNCLOS, CLCS and regional mechanisims have given to set the territorial limits of littoral states but especially of Russia.

As an example of Russian way of thinking, newly formed strategy of Russia for the Arctic in general and its energy security strategy in particular can be regarded as an example of its general security perception. In this regard, in the context of the sub research question of *what are the determinants of Russia's energy security policy?*, the security perception of Russia by giving reference to its history is inquired in Chapter 3 of the thesis. Base on its geography, culture, the mindset of ruling elite, ideological stance and the history, the determinant of Russia's security perception related with further expansionism to protect its political center and main territories from its foes.

Consequently, it is asserted that Russia framed its dimensions of the security perception over the further expansion with the desire of controlling the others both politically and territorial wise because of its dominated past by the other nations. In line with it, the position of the Arctic in this general security perception of Russia is questioned. As a result, the Arctic region regarded as its indispensable part for its security projections throughout the history for navigational, domestic and international purposes in order not the face enemies of Russia on its main territories. Even here, the effects of Realist assumptions can be seen in its general and Arctic related security formulations. Furthermore, energy security policy of Russia, by giving reference to its energy strategy documents and international events, is explored and framed for the Arctic region which is mentioned for 31 times in there. On the grounds of this information, climate change, which shifts Russia's focus to the Arctic region, even forced Russia to include this region in its general energy security strategy. It means that climate change can be regarded as another determinant of Russia for its Arctic energy security policy. However, the relevancy of the region for its energy security formulations remained shallow. To overcome that and to link the subject with Russia from the deductive perspective, the relevancy of the Arctic and its sources for Russia is questioned in the last part of this chapter. It is found in the thesis that the historical presence of Russia in the Arctic and contribution of its Arctic territories to its economy set a base for Russia to form state strategy and energy security for the Arctic.

By summarizing the findings in the second and third chapter at the beginning of Chapter IV of the thesis, the examination of Russia's Arctic energy security policy aimed to be conducted in a complex manner. Indeed, around the *how did Russia's security policies change in the Arctic region?* and w*hat are the determinants of Russia's energy security policy?* Sub research questions, this part of the thesis inquired the hybrid base of Russia's Arctic energy security policy that climate change put an affect on. Merging of the findings that gathered around from the official state documents of Russia ranging from military, transportation, maritime, NSS, foreign policy, Arctic and to energy strategy, the chapter aimed to reflect Arctic energy security policy formulations under three subtitle. Basing on the structure of the concept of energy security, Arctic energy security of Russia examined from security, transportation, and other dimensions that reflects the hybrid base of it from the defined theoretical framework.

First of all, security dimension to protect the national interest, borders, and energy resources of Russia in the possible conflictual environment of the Arctic region is examined through its military, Arctic, energy security, NSS and foreign policy strategies. In line with those, the necessities to modernize Russian military elements, deployment of new radar units, and turning of islands to military bastions are realized in a defensive way to secure its existence and interest in the region. Indeed, the reliance of Russia for deploying its military units' and justifying its actions in the newly found islands base on international law to stand against NATO. Furthermore, Russia needed its military elements to secure energy bases in its Arctic EEZ. On the ground of those, Russia formed the first column of its energy security policy for the region in the domain of Realism.

Under the transportation section of this chapter, the key position of NSR both for energy security policy and international trade as the main vein of Russia's energy transfer are examined. Although NSR has a key position in the energy security strategy, the changing stance of Russia by including Japan, South Korea but mainly China to open up the sea route, showed the lack of icebreaker fleet and funds of it that foced Russia to twist its security perception. Indeed, this is both welcomed and damned by Russia in order not to lose sovereign rights over NSR as provided in this part. Because sovereignty means the implication of Russian rules in the Arctic that both strengthen energy security of Russia by opting out the transit states, and its geopolitical formulation in expense to other littoral states. However, the lack of technological advancement and experience turns Russia to the back of this equation to develop cooperative relations. In this regard, a hybrid base for its Arctic energy security strategy set and widened by Russia by including with Liberal assumptions.

For that purpose, the third subtitle of this part examined the reliance of Russia on the international law and norms almost for everything related with the regional affairs. Indeed, actions of Russia to solve conflicts and to operate in the Arctic region rely on international law and norms to become a respective player in the region. Furthermore, active participation in institutions for regional, territorial and environmental affairs, and sharing a great amount of percentages for technology transfer to operate in the Arctic energy rigs are the examples of this changing mentality. The inclusion of oil companies of France, Italy, China, South Korea, India, Japan, Saudi Arabia, Qatar, Turkey and

other littoral states, are another examples of this changing mentality as provided in that part. However, it should be noted that, this extraction for Russia's Arctic energy security policy cannot be made by looking just energy strategies and Arctic strategies of Russia, but combining all of those together.

In short, Russian energy security policy formulations for the Arctic region in line with climate change, shows the change in perception of Russia that is mainly based on Realism. Although the percentage of Realist assumptions in security and energy security formulation of Russia remains persistent for the Arctic region, it is also shared with Liberal concepts as well in favor of Realism. By looking the points of the thesis, saying Russia thinks in the domain of Realism for security related issues of the energy security policy of the Arctic while for the energy part reflects a hybrid base that relies on international law, cooperation, mutual respect and technology transfer to combine both of them under one roof for its Arctic energy strategy policy would not be wrong. In this regard, climate change put an effect on Russian energy security formulation for the Arctic region by stressing cooperation, multilateral extraction and international law, along with the Realist domain of general Russian perception.

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