



Norges miljø- og biovitenskapelige universitet

Master's Thesis 2020 30 ECTS

Faculty of Landscape and Society
Department of International Environment and Development Studies (Noragric)

The Perception of Energy Security and Its Influence on Sino-Russian Relations

Xiaodi Guo _{M-IR} The Department of International Environment and Development Studies, Noragric, is the international gateway for the Norwegian University of Life Sciences (NMBU). Eight departments, associated research institutions and the Norwegian College of Veterinary Medicine in Oslo. Established in 1986, Noragric's contribution to international development lies in the interface between research, education (Bachelor, Master and PhD programmes) and assignments.

The Noragric Master theses are the final theses submitted by students in order to fulfil the requirements under the Noragric Master programme "International Environmental Studies", "International Development Studies" and "International Relations".

The findings in this thesis do not necessarily reflect the views of Noragric. Extracts from this publication may only be reproduced after prior consultation with the author and on condition that the source is indicated. For rights of reproduction or translation contact Noragric.

© Xiaodi Guo, June 2020 xigu@nmbu.no

Noragric

Department of International Environment and Development Studies P.O. Box 5003

N-1432 Ås

Norway

Tel.: +47 67 23 00 00

Internet: https://www.nmbu.no/om/fakulteter/samvit/institutter/noragric

Ī

Declaration

I, Xiaodi Guo, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature	Xiaodi Guo.	 	
DateJun	e 2, 2020	 	

Acknowledgement

It is unique experience to write the graduation thesis at a time of global pandemic. While encounter great mental and physical challenges during the lockdown, it is fulfilling to overcome all the difficulties and finish the paper at due course.

I would like to extend my sincere gratitude towards my supervisor Tomohiro Harada for giving me direction and valuable advice on how to write the paper, showing great patience and tolerance for my personal shortcoming and constantly reminding and encouraging to finish this tough task. I really don't think I deserve such an excellent supervisor.

I would also like to thank my family and friends for all their support and encouragement.

The responsibility for errors and omissions is mine alone.

Abstract

Sino-Russian Relations is an important topic in the discipline of International Relations and plays an important role in shaping regional and global economic and political order. Energy cooperation playing a crucial part in shaping Sino-Russian relations. China's increasing energy consumption have placed itself in the top list in all energy statistical document and exerted great influence on global energy market. Bordering with top-ranking energy producer Russia, China should have active energy cooperation with Russia. Yet the reality tells us different, The energy cooperation between two countries seems lack of substantial development. Only in recent years, several energy projects have been developed and operated. With the east-shifting of Russia's energy focus and land route pursuit of China's energy import diversification, more and more scholars pay attention to Sino-Russian energy relations. This paper is aiming to study the perception of energy security from both consumer and supplier's side in order to decipher the Sino-Russian Relations and also conduct comparative analysis by bringing in a lot of Chinese scholar's ideas.

Keywords: Sino-Russian Relations, Central Asia, Energy Security, Perception and Conceptualization

Table of contents

1. Introduction	1
1.1 Research questions	3
1.2 Outline of the thesis	4
1.3 Literature review	5
2.Energy Security in international relations	7
2.1 What is Energy Security?	7
2.2 History of Energy Security	7
2.3 Definition from IR schools	10
2.4 Energy Security Concept from the perspective of actors in energy	
supply chain	11
3. Application of Energy Security Analysis on China and Its influence on	
Sino-Russian Relations	14
3.1 Development of China's Energy Security Policy	16
3.2 Sea Road Analysis and Malacca Dilemma	17
3.1.3 Land Road Alternative and Sino-Russian Cooperation	18
4. Application of Energy Security Analysis on Russia and Its influence on	
Sino-Russian Relations	21
4.1 Russia's energy security	22
4.2 Russia's relation with EU	22
4.3 East Orient and Sino-Russian Cooperation	23
5 Central Asia's Role on Sino-Russian Relations	26
6. Methodology	31
6.1 Qualitative Research Strategy	31
6.2 Research Design	32
6.3 Case Study Design	32
6.4 Comparative Design	33
6.5 Research Methods	34
6.6 Discourse Analysis	35
6.7 Critical Discourse Analysis	37
7. Conclusion	37
8. References.	

Chapter 1 Introduction

Henry Kissinger used to say 'Control energy and you control the nations' (Engdahl W., 2004, p ix), which pinpointed most of US domestic and foreign policies after the cold war. William Engdahl vividly depicted in his book A Century of War that in recent world history, the pursuit of energy by Western countries around the world often coincided with or leads to the eruption of wars and conflicts. The two oil crisis left devastating effects both to developed and developing countries. Energy, especially oil and natural gas, been held as the most important strategic resources for all countries, have in one way greatly contributed to the rapid economic growth and improvement of human lives; while created chaos and disruptions to our world in another way, such as wars, climate change, environmental problems, to name just a few. For almost a century, our world has been built on and our society has been developed with cheap and abundant oil. Along with our increasing dependence on energy, comes the dramatic decline of its availability. The imbalance between our dependence and its availability leads to insecurity and uncertainty of all nations. The perceptions of energy security, maybe falling into different categories, trigger even more intense competitions not only in old energy centers, but also in newly prominent energy-rich regions.

Eurasia, a continent of birthplace to various global powers in history, has now emerged as a new geopolitical and geo-economic center and a New Great Game playground in 21st century. Energy plays an important role in forging the bi-lateral and multilateral relations in this region. Harboring most of the world's politically assertive and dynamic states (Brzezinski, Z. 1997 & Pepe, J.M, 2019), Eurasia have stood out as an interesting world energy governance arena surrounded by energy hungry and energy rich nations. Russia and Central Asia are well-known great energy producers situated in the North and Center, attracts fierce competition from the energy mammoth with China, Japan, South Korea in the east, European Union in west and India in the south.

Among all those dynamic states or nation groups in Eurasia continent, China and Russia, work together as comprehensive strategic partners, along with other emerging countries in other parts of the world, intending to create new world order to challenge US-led western supremacy in international arena. As pretenders to regional hegemony in Eurasia, China and Russia, cooperate with each together to maintain the regional stability and prosperity, meanwhile compete with each other for leadership role as well.

Within the past 70 years, Sino-Russian relations have become increasingly mature, stable and tenacious. By reviewing the past development of Sino-Russia relations, the bilateral ties had gone through several phase of development, from constructive partnership in 1992, to strategic partnership in 1996, then friendship and cooperation in 2001 and most recently comprehensive strategic partnership of coordination in 2019. Under the backdrop of US trade war with China and sanctions towards Russia, Sino-Russian relation has entered into fast development period. Yet, China and Russia are partners, but not allies (Bolt, P. J., & Cross, S. N, 2018,p.2). Also there are studies showing that China and Russia are reluctant allies. China-Russia relations display an ambivalent pattern that consists of a consolidating strategic cooperation and simultaneously a persistent reluctance on both sides to form a full-fledged political-military alliance (Korolev & Portyakov, 2019). Both countries avoid to pick sides in cases related to their counterpart, such as China's attitude in Ukraine Crisis and Russia's South China Sea dispute.

Energy is viewed as an extremely important part in shaping Sino-Russia relation and the most developed sector in China-Russia economic ties (Eleanor A., 2019). Their interaction in energy field either from bilateral perspective or involving in mutual influential and border-sharing Central Asia have undoubtedly gone through extensive scrutiny and speculation from outsiders, produced hot debates on world energy governance, and exerted remarkable influence on world energy system.

The energy relation between countries reflects their external foreign policy and behavior, which has been shaped by the individual interpretation and perceptions of energy security. Energy security, as a universal concern (Ang, B. W., Choong, W. L., & Ng, T. S, 2015, p.2), is a fluid concept and can be conceptualized in different dimensions and by different actors in the chain of energy market. It can be viewed as an economic concept or as an important subset of national security (Flaherty, C., & Leal Filho, W., 2013) and has geopolitical implication.

1.1 Research Questions

It is important to contextualize the concept of energy security accordingly. Each country's perception of energy security affect their making and implementation of energy policy towards their interaction in energy sectors, China and Russia has no exception. In this paper, the notion of energy security will be conceptualized by energy consumer China and energy supplier Russia, adding the supplier and transit region Central Asia, to understand the energy relations between China and Russia.

The importance of Central Asia in shaping Sino-Russia relations is also attracting many.attention. It is argued that avoid adding Central Asia element in evaluating Sino-Russia relations or neglect looking at Russia element in evaluating China-Central Asia relations will all lead to false or incomplete understanding of bilateral or multilateral relations among the three energy players (Zhao, C.2011). To analyze China and Russia's perception of Central Asia in their energy security framework will shed light on further understanding of Sino-Russian energy relations. So the following research questions will be addressed:

- 1. How does perception of energy security affect bilateral energy relations? specifically from energy consumers' and energy producers' perspective?
- 2. How does the development of energy security in the context of China direct their general energy policy and in particular influence China's energy policy towards Russia?

- 3. How does the development of energy security in the context of Russia direct their general energy policy and in particular influence Russia's energy policy towards China?
- 4. How does China and Russia's respective view of Central Asia as an energy actor, influence their energy security framework and also Sino-Russia energy relations?

In this paper, energy is mainly referring to oil and natural gas, which is main energy area cooperation between China, Russia and Central Asia. In addition, on the whole there is a visible tendency for energy security analyses written within International Relations (IR) to focus on oil (global commodity) or gas (regional strategic resource) security of supply (UiO, 2016).

1.2 Outline of Thesis

In order to address the four research questions, the rest part of the paper will be divided into six parts: theoretic framework, following with 3 case study; the comparative study of China, Russia and Central Asia's view on energy security and their associated action in bilateral energy relations, the possible mechanism for cooperation, methodology, and conclusion. The Second chapter is the key component of the paper, it is the theoretic framework that guide the whole paper. In this section, comprehensive investigation into the complex meaning of energy security, its historical development will be carried out; the interpretations by different IR schools and scholars, China and Russia's understanding of energy security will also be discussed, hoping to enlighten the next section.

In Chapter three, the influence of different perception of energy security from both import and export countries, specifically China, Russia and Central Asia on their foreign energy policy will be studied, a historical exploration of their energy policies and major shifts that promoted bilateral cooperation or competition will also be addressed. The Central Asia section will also bring in other major actors in that Eurasia, which will clarify the complicated energy geopolitics. This section will add a

lot of Chinese scholars' viewpoints to demonstrate the common understanding of China's energy pursuit and Sino-Russia-Central Asia bilateral or multilateral relations. from local context. It is worthy demonstrating both Western and Chinese scholars' view point on China's energy consumption and Chinese role in regional and global energy market.

Chapter four is developed based on the comparative study in previous chapter. Shared interests between China and Russia will lead to possible further bilateral cooperation. The Belt and Road Initiative and Eurasia Economic Union will be presented, the overlapping area will produce the next possible cooperation point beneficial for all partners involved, meanwhile the competing interests in the overlapping area of two projects will be avoided or solved through dialogue and mitigation. Shanghai Cooperation Organization will provide a good platform to enhance cooperation or ease tensions since Russia, China, Central Asia and other countries from Eurasia area are all memberships of this regional organization. The Energy club under SCO framework will also contribute to the deeper cooperation among energy consumer and energy supplier in member countries.

Chapter five present the methodology framework in carrying out this research projects. The reason to choose and the application of the qualitative research strategy, case study and comparative research design and critical discourse analysis methods will be discussed.

Chapter six is the final chapter that summarize all of the previous contents and check if the research questions have been properly answered. Bilateral relation is also under the great influence of global events. Given current Covid-19 pandemic, it will try to apply some statistical data to project the possible influence on individual countries and the future development of Sino-Russia relations.

1.3 Literature Review

At beginning of preparing this project, I have read some related literature. Most of the prominent articles come from western scholars or western trained scholars, which undoubtedly carry bias and limitation. To bring in scholars from local context and read articles wrote from different angels, I have added local Chinese scholar's understanding of China and Russia relations and their energy security pursuit, How do they see China behavior in those relations and how they interpret Russia's behavior, those aspects will also be mentioned.

Another topic I bring in this paper is related to the concept of energy security. Most of the energy security concept focus on supply's perspective, so does the literature. China and Russia as the opposite side of the energy supply chain, It is important to mention both side's interests. Central Asia is also positioned in the producer's side. To bring producer's idea will help fill the previous gap in this area.

It of course contain bias and limitation without understanding the true context. It is hard to comprehend the Russia or Central Asia scholar's perspective without understanding their language. Besides the new development of Sina-Russia is still happening, little new articles have been written on this subject, so it would be challenging to get most recent literature. So in addition to the western literature, I have tried to collect some scholarly articles from Chinese scholars and English paper published by Russia writer to get more comprehensive understanding of how the main actors thinks about energy security and view the bilateral relations.

Chapter 2 Energy Security in international relations

2.1 What is Energy Security

There are contesting understanding of energy security, some say it is a concept, rather than a policy (Flaherty, C., & Leal Filho, W. 2013), other indicates energy security is a policy problem, or Energy security is a means; it is not a goal. (Leung, GCK, 2010). Different meanings of energy security do not necessarily mean different concepts of energy security. In some cases it maybe just because different people express it differently, or under different conditions. It is still the same energy security. It seems cause more confusion. without understand exact what the term really means.

Energy Security is s complex and multifaceted topic, although a lot of literature has contributed to this topic, still not commonly agreed definition attached to it (Cox, E., 2016). The term continues to resist a commonly-accepted definition. It was said there are more than 50 definitions associated with this term. As we may often heard from the government officials that, this policy was implemented in order to policy 'improving energy security'. Energy security can be used as an umbrella term to explain every ambiguous policies, here it seems be used as a goal, just without clear understanding what the goal really is.

Among all the famous definitions or interpretations of energy security, it is not surprising to know that overlapping and reciprocal aspects between the views of different theoretical schools. but the concept of "energy security" was not unified, because "the explanation of energy security changes according to the constantly changing content of energy security with the changing times" (Bohi, D. & Toman, M., 1996: 2-3). At the same time, the perspectives from which the scholars form different parties study, assess and advocate energy politics and energy security concepts differ from one another.

2.2. History of energy security

The proposal of the concept of energy security can be dated back to 1970s oil crisis.

The concept of energy security was first brought out by Mason Willrich in book "Energy and world politics" published in 1975, is a western scholar that made early analysis of energy issues from a political point of view. He put forward the concept of "energy security" in his book published in 1975, and stated that energy security is the most important concern in international energy politics, in that energy is crucial for both industrialized and developing countries, while there is a huge inequality in the allocation, technology and capital of energy resources among nations and there is also a lack of a centralized body capable of allocating resources in the international political structure." (World Coal Institute, 2005).

From that early, we started the worry about oil. After the establishment of international energy agency in 1974, the Concepcion of national energy security was formally proposed, the core of this concept being the stabilization of crude oil supply and price security. Thus, energy security is defined as a country or religion able to obtain a stable, adequate, economic and clear energy supply to meet demand, ensure stable economic and social operation, and guarantee the ability and status of sustainable and coordinated development. (Hu, Z., & Ge, Y. 2014)

From the above definition, although not approved by all, we can find three aspects to evaluate: the first aspect is the stability of energy supply, which seems the most important one according to the current fight in energy market,; the second one should be the security of energy use, the consumption and the last one should be the use of energy does not pose threats to the human survival and environment,

If we look back, we could see the foremost notion of energy security was closely related military activities, to which supply of fuels ended. With the development of global economy and its increased reliance on oil, the notion of energy security extended into the realm of protecting supply of oil to vital military and economic use. Contemporary concept involved the use of natural gas. (Yu, J.H.& Dai, Y.C.2012).

A lot of scholars have brought excellent interpretation or standards to help us understand the term and apply to real world. To just list several interesting or easy to understand. First, there are several 4 critires one:

Dr, Daniel Yergin, experts in international energy security research, understand energy security from the following 4 parts: 1. diversified supply channels; 2. post-crisis recovery force; 3, the stable operation of the overall market; 4, timely and correct supply and demand information. The first two criteria has been overlapped with other interpretations. The third and fourth points covered the energy suppliers, which is more complete for both energy importer and exporters.

Another four points explanation of energy security came from Cherp A & Jewell J. (2014).:

"Four As of energy security" refers to availability, accessibility, affordability and acceptability: this seems also importer biased.. have enough energy and able to access and buy and use energy.

Baldwin (Cherp A & Jewell J, 2014) defines security as a "low probability of damage to acquired values", building on a half-century tradition of security studies starting with Wolfers (1952). He then point out that that this general definition need to be understand under specific situations and that such 'closer specifications of security' should answer at least the following three questions:

Security for whom?

Security for which values?

From what threats?

The term security was shaped by the perception of threat and risks. Riskes around energy can and often refer to the vulnerability of vital energy systems

At last, we here list some definition given by government section:

United Nations defines "Energy security is the continuous availability of energy in varied forms, in sufficient quantities and at affordable prices" (World Coal Institute, 2005).

International Energy Association (2018) refer to Energy security as the uninterrupted availability of energy sources at an affordable price.

US DOE (2017) indicate : a particular aspect of energy security is assuring access to a ready supply of energy.

Study IR, there will be a lot of IR schools and they all have their own explanation and understanding of certain terms, let's see how can we use IR discipline explain energy security.

2.3 Definition from IR schools

Realism Approach of Energy Security

Realism is the oldest IR discipline and still very useful in explain IR concepts or events. Here we can simply say that state competition defines global energy of politics. States are still the main actors in international system, with the scarcity of energy and resources, in order to defend national interest, state will compete for the vital resources. Energy security is a sublet of national security. State compete for scarce recourse and access to resource rich region. US expansion in middle East and Central Asia has all underlying the states are led by self-interests, and national interest does play a very bias role when states make decisions in the international arena. (Rehman, F. 2012)

"Control of oil may be seen as the centre of gravity of US economic hegemony" (Bromley S, 2005, p.227).

The realism and neorealism perspectives can also be correlated with classical geopolitics to underline the fact that 'accumulation of resources' and controlling 'strategic landmasses' are some of the primary drivers of global politics. (Mohapatra,

N.K. 2017)

Realist approach to energy security can be widely used, since energy has been closed connected with economic and national interests.

Liberalism Approach to Energy Security

Markets and international institutions have been established to control the price of oil, and improve the producer-consumer relations; developments which in turn ensure that markets trading oil on a global scale have become more transparent.

Constructism approach of energy security

Energy security is one of the main targets of energy policy. The term has not been clearly defined, has no common interpretation, elusive. which makes it hard to measure and difficult to balance against other policy objectives. Which leads to diverse perception of energy security and then guided different political actions. (Winzer, C. 2012, p.36)

Common concept behind all energy security definitions is the absence of, protection from or adaptability to threats that are caused by or have an impact on the energy supply chain.

Energy Security can also viewed from economic perspective, which associated with national security and the availability of natural resources. Energy consumption is vital for economic development, therefore, vital for national interests and national security. Uneven distribution of energy will lead to different energy pursuits. Like China, its fast economic development was closed connected with comsumption of coal, oil, gas and other energy types. Different countries have different energy security plan, which is very distinct between energy importing and energy exporting countries.

2.4 Energy Security Concept from the perspective of actors in energy supply chain

Although we have listed several most influential interpretations of energy security from various IR schools and scholars, some of them share overlapping meanings, the most distinctive difference in energy security concepts is found between energy importers and exporters, resulting from the emphasis on security of supply for the former and security of demand for the latter. (Energy Charter Secretariat, 2015). the most practical definition would be evaluate one's perspective on energy security from their position in the energy supply chain.

Yergin stated (as cited in Energy Charter Secretariat, 2015) that an example of demand security is "stable commercial relations with their customers, whose purchases often provide a significant part of their national revenues" (Yergin 2005, p.56). Similarly, Dannreuther (as cited in Energy Charter Secretariat, 2015) analyses the essence of energy demand security, and states it is stable and secure revenue for development. These definitions coincide with stable energy flow, but, not surprisingly, there is no agreement about what "reasonable" prices are for importers and exporters, which can perfectly apply to Sino-Russia energy cooperation, which has been staled for very long time. Price and route selection causes great dispute between importers and exporters. Here the realist view of energy security can be tested, because both parties try maintain their own economic and national interests.

From importing countries' standing point, their sincere concern lies on supply security, According to IEA (2014), supply security refers to uninterrupted availability of energy sources at reasonable price. Of course, there's no set standard for reasonable price. From China's perspective, the transformation from self-reliance consumer to net importer with increasing energy demand, the supply security enjoys the top priority on government official's agenda. The increasing dependence on sea-route energy import and insecurity and fear of sudden cut because of the unstable situation in their major energy suppliers in Middle East and Africa, along with the unsolvable Malacca Dilemma, has all urged us to transfer our import diversification plan towards land route. Russia become our first choice not only because its proximity but also its huge

energy reserve.

Russia as the exporting country hope to secure the demand and also the price. Because there two will great affect their economy. For energy exporting countries, large part of their revenue come from energy exporting, For Russia,half of the government revenue come from energy deal. That's why government chose to take hold of their energy firms and control the investment from foreign companies. If not, losing control of the energy will devastate the whole country.

During the energy supply chain, there are other elements or parties involved, because we are not using those parties, so we will not give detailed explain here.

Chapter 3: Application of Energy Security Analysis and Its influence on Sino-Russian Relations

On December 2, 2019, President Putin and President Xi, through video conference, announced the Power of Siberia (Russia-East line), the first-ever pipeline supplies from Russia gas to China has brought into operation, which demonstrated another success of Sino-Russia cooperation in energy sector. The sales and purchase agreement for 30-year, signed by Gazprom and China National Petroleum Corporation (CNPC) in May 2014 has promised to deliver 38 billion cubic meters per year, according to Gazprom. There are news saying several other lines are also under consideration by two parties. It seems to be the best time for Sino-Russia cooperation, compared to previous year-long stagnation of bilateral energy cooperation, some scholars says.

There are a lot of studies that discussed about the relationship between China and Russia in the world, providing us with valuable learning resources. Although different and even contradicting findings have been presented by scholars because of different research methods or strategies, there are common areas reached. China and Russia compete and cooperate at the same time. In the perspective of competition, both countries have been superpower in history, their intention to restore the position in the world have undoubtedly led them to compete with each other. According to Weissmann, Carlsson, & Oxenstierna (2015, p.36), China and Russia share a geopolitical world view and the preference for a multipolar world order. They have in common the experience of losing their position in the world. China, a great power for 4000 years, went through "a century of humiliation", 1839-1949, and Russia experienced the disintegration of the Soviet Union in 1991. These events constituted a crisis for two countries with deeply embedded great-power identities. Since then they have tried to regain what they consider to be their rightful positions in the international system.

Despite the naturally bounded competition, both countries tend to focus more on cooperation, both politically and economically. From political perspective, China and Russia have intended to form alliance to overcome the US-led western pressure, they have signed a lot of treaties and operated joint military exercise to further their political and military cooperation, safeguarding security issues.

Logically, China and Russia seems to be a good match in energy cooperation on the backdrop of China as a desperate consumer and importer of oil and gas, while Russia as the rich holder and provider of oil and natural gas in addition to their geographic proximity. Yet observers have noted that China-Russia partnership is in fact an 'axis of convenience' rather than a common front driven by a 'deeper like-mindedness'. (Yilmaz, S., & Daksueva, O. 2019). It is obvious that the comprehensive strategic partners work closely with each other, in some degree, to counterbalance Western pressures. The sanction on Russia due to the annexation of Crimea was imposed by USA and its European Allies, which used to be the biggest consumer of Russia. EU's shrinking market because of the rapid penetration of renewable (Hu, Z., & Ge, Y. 2014) and sanction on Russia by cutting their energy trade, has become a major blow towards Russia. Russia's US's trade war with China and China's increasing anxiety of unstable sea route energy import, make China eager to find alternative energy supplier and energy route. Russia's Pivot to Asia and China's land route energy pursuit seems to create a natural marriage between Russia resources and China's demand.(Downs, E., Henderson, J., Herberg, M, 2018, p.12)

Central Asia, as another huge energy center, the second Persian Gulf, and the heartland of Eurasia continent attracts a lot of world major powers, As former parts of Soviet Union, Central Asia has close tie with Russia, meanwhile, bordering with our West Xinjiang province, Central Asia also enjoy close relation with China.

Energy security issues are often context-specific, therefore it makes sense for the analysis to focus on one specific country(Cox, E., 2016). There are perceptions to

achieve energy security: acquisition of oil reserves abroad cannot necessarily guarantee China a supply of oil that is more reliable and less expensive. The contribution of oil pipelines to China's energy security is smaller than assumed. In order to promote further cooperation, we will look closer at individual country's energy security pursuit and their foreign energy policies at the following part.

3.1 Development of China's Energy Security Policy.

According to 2019 BP Statistical Review, China stood for 24% of global energy consumption and 34% of global energy consumption growth in 2018; China was the largest contributor to global growth for the 18th consecutive year; China's gas consumption increased by 18% in 2018, accounting for 22% of global gas consumption net growth. Leung, G. C.(cited in Flaherty, C., & Leal Filho, W. 2013) argue that China should pay more attention to internal energy security problems, rather than obsessed with external dependence of oil. The internal energy security problems such as environmental degradation, and inconsistent enengy governance is more dangerous than the fear of unstable and possible disruption of oil imports

There are four phases of China's energy pursuits, explored by Cai, L. (2013): the first period dating from 1949-1992 reflected our energy was self-sufficient and even enough to export. The second period started from 1992, the year we became the net energy importer. The security policy at this time was energy supply-oriented. Our energy companies have been encouraged to go abroad and make investment in energy rich regions, so as to preserve enough energy for domestic consumption. The most important investments at time were in Sudan and Venezuela, these investments have been critisized by westerners for they accusing Chinese government invested and maintained good relationship roger or authoritarian states. The third phase of energy security pursuit was from 2003 to 2010, the main policy implemented domestically was to optimize the industrial structure and change energy consuming structure in order to achieve green and sustainable development. In outside market, China has

employed energy diplomacy and diversified its import resources. Middle East, Africa, Asia Pacific, South America, Central Asia and Russia have all became China's energy partners. (Cai, L, 2013). China's sustainable development plan have made some progress, The share of coal in China's primary energy mix declined to 58% in 2018 from 60% in 2017 and 72% just 10 years ago.(BP Review 2019).

While China's domestic oil company Like Daqing is aging and have less reserve, our total consumption, The discrepancy of consuming and energy production has increased China's dependence on energy importing, majority part of which delivered by sea, and then the Malacca Dilemma become prominent.

The phrase "Malacca Dilemma" (Maliujia kunju) was first coined by President Hu

Jintao at the closing of a Chinese Communist Party (CCP) economic work conference
in November 2003 when he publicly commented on the increasingly complex
problem of energy security in light of China's increasing dependence upon oil imports,
especially those from the Middle East. (Lanteigne, M,2008)

3.2 Sea Road Analysis and Malacca Dilemma

China's global pursuit of energy have gone through intense scrutiny. Some scholars even commented that China's energy security is a threat toward other nations, because they will do any thing to fulfil its energy demand, which may even trigger wars (Lai, H.H. 2007). It seems that the concept of China threat can be applied by other everywhere.

China has taken three steps to satisfy its growing domestic demand for oil-expanding overseas oil supplies from the Middle East, diversifying its importing sources by reaching out to Africa, Russia, Central Asia and the Americas, and securing oil transport routes. (Lai, H.H. 2007).

The oil diplomacy went well, yet China's oil and gas import mainly from Persian gulf,

Africa, areas super rich with energy reserve and heavily engaged in big games, has to use sea route and pass the Straits of Malacca, which is a very narrow channel and a choke point. Possible disruption from pirate attack, blockage or embargo by US and its allies, domestic turmoil at exporting countries or the tension in disputable South China Sea increase our government's anxiety. Besides China does not have a strong navy don't have proper sea right to escort the energy, meanwhile US Supremacy in navel seems indefeatable in the foreseeable future, which makes China's pursuit of energy security through sea route isn't easy.

So it is natural for China pursue land route for energy import, in addition to the sea transportation. Although compare to sea transportation, land route cost more money and also have security risk if attack. But the geographical proximity and complementary supply-consumer relation makes Russia and China a good match in energy cooperation.

3.3 Land Road Alternative and Sino-Russia Cooperation

1.1 Although logically a natural partner in energy sector, Sino-Russia Cooperation did not make much accomplishment. The reason underlying the staleness of Sino-Russia energy cooperation, lies in 1. the natural inequality between energy producer and consumer. interests difference between China and Russia as consumer and producer. Russia, as the producer, prioritize EU as its major energy partner, which compose 60% percent of its total exports. 2. China and Russia has price dispute, Russia wants China pay the same as EU price, but China want the same price as common wealth partner price, 3. it was said that Russia intends to contain China's development through its energy advantage, which has been practice in its other partners, like EU, central Asia.

It have gone through four stages since the starting in 90s, which could help us understand why previous China and Russia are reluctant partners.

At the beginning phase from 1992 to 2000, China did not have much energy demand, the decrease of international oil price also lower mutual desire to cooperation. The signed deal at this period did not operate well.

From 2000-2004, the bilateral relation has warmed up and more cooperation have been carried out. With increasing need for energy import, China was wiling to collaborate more with Russia, but at that time, the international oil price was very high and Russia had more other options, so the cooperation didn't go well.

The breakthrough had been made in the third phase from 2004 to 2012. the oil deal between two government had signed in April 2009 and also several pipeline gad trade deal. In January 2011, the first crude oil pipeline was launched and promised to send 15 million ton for 20 years and the first loan for oil deal in 2012 with 4 million tun.

Now we are entering in to sustainable development period. The 9th energy negotiation was held in Moscow in February 2013 and comprehensive energy cooperation started, later with more energy deal signed.

China and Russia has complementary resources and demands. The international society promoted the idea of low carbon economy, consuming of clear energy and sustainable development, Coal is China's major fuel consumption, in order to comply with international norms, China has to increase its demand for clean energy import Russia, at that time still suffer from the sanction from EU and USA, fluctuating oil price and the decreasing gas demand from EU, it definitively need a stable hungry consumer, which China suits well.

Some domestic scholars consider the availability, reasonable price, transportation safety and environment safety as the criteria for energy security. (Shen, Q.T., 2012)

We should increase our domestic energy reserve, explore new energy, safeguard our transportation ability and safety, maintain good relationship with partners through

diplomatic ways, and actively engage in the investment and exploration of foreign energy. (Shen, Q.T., 2012)

It is said that the slow development between two countries attribute a larger part to the lack of high-level mutual trust. As old competitors and now comprehensive strategic partners, the sense of uneven trade and disadvantage position felt by Russia elites, which have been mentioned by many Chinese scholars, made further cooperation more difficult. We need to figure out mutual or shared interest either in bilateral cooperation or triangle cooperation involving Central Asia.

Chapter 4 Application of Energy Security Analysis on Russia and Its influence on Sino-Russian Relations

Luft et al (as cited in Energy Charter Secretariat, 2015) states "where countries stand on energy security depends on where they sit", Energy Security depend on individual country's focus. As discussed previously, China as a consumer, need uninterrupted source of energy supply at reasonable price, while Russia, as producer, needs stable commercial relations with their customers, whose purchases often provide a significant part of their national revenues".

Russia, ranking as the 2nd largest gas producer (accounting for 17% of the global output) and the 3rd largest oil producer (accounting for 12% of the global output) in 2019 BP report, will continue exerting great influence on international energy market and energy system. Its increasing energy exports have accounted for half of domestic economies earnings and the energy exports. According to 2019 BP report, .Its energy exports also take great share of global oil trade,for example, its oil exports grew by 2% (to 9.2 Mb/d) and accounted for 13% of the global total; gas exports grew by 5.4% (to 248 bcm) accounting for 26% of the global total. Russia's LNG exports grew by 62% to 25 bcm in 2018, contributing; while pipeline exports grew by only 1.5%. Russia's gas imports declined by 12% to 25 bcm in 2018

Energy is an important part of Russia's economy, almost hold half of Russia's revenue. Russia's leader President Putin also values energy economy and considers it essential in maintaining national interests and national security. Their 2030 Energy strategy has set to fully integrate into world energy market and use its own energy advantage to boost Russia' role and fight for maximum national interests. There are four layer of information: maintain energy security, improve energy and efficiency, keep energy ecological safety.

4.1 Russia's energy security

Russia always hope to re-emerge as a world great power. Now bestowed with vast oil and gas resources, boosted by the post-1999 boom in world oil price, Russia has already seized the opportunity to exert their influence on global politics, which equals to its nuclear weapons in the Soviet era. When Kremlin officials speak of Russia being an 'energy superpower', they are really saying that it is back as a global, multi-dimensional power. Energy is seen not simply as an instrument of influence in itself, but as underpinning other (Petersen, A., & Barysch, K. 2011)

They value cooperation and their main energy strategy is, maintaining relationship with West Europe and protect benefits from middle east, trying to collaborate with Caspian Sea, increase control over Caspian sea and Central Asia,, open up East Asia and North America market.

They have set new plan for energy sector, which including diversification of exports to lower their dependence on European market, increase clear energy nuclear, wind, solar power exploration to replace traditional oil and gas and maintain ecological safety, strengthen the national control of energy sector and tighten the investment from foreign countries.

4.2 Russia's relation with EU

EU has been Russia's biggest energy importers for many years, 80% gas from Russia has been sold to EU and EU consumption of oil has 1/3 came from Russia. It has said Russia has used the energy as leverage in negotiating with EU, just like the cutting of gas to Ukraine. In response to the aggressive expansion of NATO and US influence in Central Asia, Russia has annexated Crimea in 2014, which resulted in the sanction posed by US and EU and other allies. From 2014, EU has stopped part of their energy trade with Russia and withdraw investment and exports of high-tech products to Russia. Along with their desire for green energy, EU has decreased its business cooperation with Russia, which greatly affected Russia's energy sale and economy.

Both Russia and EU are expanding their exports and import markets. Yet both Russia and the EU remain essentially in denial that the time for energy -geopolitical games around the small north-western corner of Eurasia is coming to an end; the nexus of energy flows is fast shifting to Asia-Pacific, and while Russia can connect with this trend, the EU will have to work hard to prove its relevance. (Baev, P. K. 2012).

4.3 East Orient and Sino-Russian Cooperation

As one of the three major players oscillated between European and Asia in Eurasian chessboard, Russia is inevitably leaning towards one orbit. From the previous tendency, Russia preferred to drawn into the expanding European orbit (Bolt, P. J., & Cross, S. N, 2018) and assimilate into the framework of European cooperation. Asia pacific countries are the most prominent areas that displaying contradictions between energy supply and demand (Lang, Y.H. & Wang, M.L.2005). The increasing thirst for resources and promising energy market has attracted world attention, Russia is no exception, In addition, under the backdrop of .EU sanction and shrinking oil gas market because of its clean energy pursuit, Russia pivoted more sharply to the east (Bolt, P. J., & Cross, S. N, 2018)

Russia has put China as their priority list of multidimentional exports targets in the East, according to the 2030 Russia Energy Strategy. China and Russia are natural partner in energy cooperation due to their energy status and geographic proximity. Bolt and Cross (2018) proposed Russia's ambition and halting movement towards political union in Europe, increased tensions between Russia and the West, under the backdrop of which, Russia can become the rear of a guaranteed and reliable supply base for China

As strategic partners, Russia and China has increased their cooperation in energy sectors and made remarkable achievements in the past few years. Russia became the 2nd largest oil exporter to China after Saudi Arabia. The natural gas deal in 2014 held

the century record and they promised to send gas for next three decades. Russia will replace Turkmenistan as the largest gas supplier after the operation of the Power of Siberia pipeline. China has also increased its investment in Russian energy projects: CNPC held 20% stake in Yamal LPG, Silk Road Fund held 9.9% stake in Russia's Arctic project. Sinopec buys 10% stake in CHEYP, Beijing Gas buys 10% shares of Rosneft. Energy commodities account for 80% of Russia's export to China

In June 2018, Putin announced that the two sides will discuss the holding of the China-Russia Energy Business Forum. The decision was confirmed in August. The first session was held in Beijing in November. The amount of energy trade between two countries was more than 40 billion out of total transaction the US\$108 billion. In September 2019, the second China-Russia Energy Business Forum was held in Saint Petersberg International Economic Forum. There are more pipeline deal under consideration.

The United States and Canada prohibit the export of highly sophisticated mining equipment to Russia since 2014. China's energy equipment is expected to continue to expand its market share in Russia. The structure avoids becoming China's energy vassal.

Although the cooperation made some progress, there are still a lot of problems needed to be pay attention. Western Media are speculating that the power of Siberia is not as profitable and positive as it is advertised. Like Forbes article says, the project is not as strong as it seems just like currently Russia's position compared to China in the bilateral relations: China is in the senior position with eight times larger economy than Russia, Russia has mixed feelings: China is in a favorable bargaining position, as China has more options with import sources, either from Turkmenistan, Mynanmar or sea-road LNG. It close many doors and endangers its own energy trade and national sovereignty in the long run. Cohen, A, (2019) said that the cooperation between China and Russia is Marriage of convenience out of their mutual and deep-seated distruct of

west-led global order.

Besides, The global energy market and system also have several influential changes that might affect Russia's energy trade. Under the backdrop of US large-scale exploration and globe promotion of shale gas, Russia role in global energy market and system has declined, The decrease of oil price and the declining power of OPEC has contributed to the Eurasia energy geopolitics, which breach Russia's geopolitical concern. Besides, in global energy market, the power has been shifted from the exporters to importers. In the negotiation, China, as a big energy consumer, should realize they have the structure power and great influence in global energy strategy. We can use it leverage on price setting, but the basic thing is we should improve the mutual trust between two countries, (Feng, Y.J., Pang C.W., Xu. Q. H. etc. 2018)

Russia's perception of asymmetric relationship and unbalanced trade attribute to the fact that Russia is exporting essential and critical energy products, while China is exporting manufactured stuff. Some observers said Russia needs China more than China needs Russia (Bolt, P. J., & Cross, S. N, 2018, p.52). Although not yet met expectations, oil sale from Russia to China is one area of success, in their pursuit of stronger economic linkage and further strategic partnership (Bolt, P. J., & Cross, S. N, 2018).

From Chinese perspective, Russia consciously intensifies the competition for energy demand in countries such as China, Japan, and South Korea, which is extremely beneficial to Russia, enhancing its political and economic status and gaining bargaining chips in Northeast Asia, which also made China fear it wll hinder mutual cooperation.

Besides, Central Asia also plays an important role in Sino-Russia Relations, which will be discussed in the following part.

Chapter 5, Central Asia's role on Sino-Russia Relations

In Mackinder's geopolitics, Central Asia is the heartland of Eurasia. Mackinder summarized his theory thus:

"Who rules East Europe commands the Heartland; who rules the Heartland commands the World-Island; who rules the World-Island commands the world."

(Mackinder, Democratic Ideals and Reality, p. 150)

Central Asia held an extremely important position in geopolitics. The discovery of abundant energy in Central Asia and Caspian Sea, grant it the title the second Persian Gulf. As the battle ground for the new great game, Central Asia has attracted major world powerful countries. Besides the three major powers in Eurasia continent, China, Russia and EU, Japan, India, Pakistan, USA has also joined the chessboard. Especially with US participation, the competition for resources and dominance become even fierce.

Central Asia used to be the members of Soviet union, during that time, they shared the same system of transport, electricity, pipeline, which was under control of Russia, so Russia control the transportation of the Central Asia energy. Central Asia also have the industry to develop "technological independence" through the use of Russian technology, equipment, material and software in energy investment projects. Basically, Russia considered its own interest during the collaboration with Central Asia countries, and also In order to counterbalance Russia's ambition to control the energy resources in that region, CIS countries also began to attaching more importance to energy security because of the the conflict directly impacted the operations of the Baku-Ceyhan pipeline and the western route export pipeline. CIS countries hope to diversify energy exploitation and their directions are virtually opposite of Russian intention to monopolize internal regional energy export. Central Asia are proactively exploring new ways for their energy development, examples are cooperation with

China and Iran in the natural gas field. They want to occupy favorable position in the energy competition and not reply on a single actor (Bedeski, R. E., & Swanström, 2012, p.210)

Russia perceive itself the dominant power in Central Asia and views Central Asia as its own sphere of influence. They shared deep cultural bandage and also control regional economy. In Central Asia, Russia emphasized power and control as a regional great power, as well as shared the deep cultural bonds with the Central Asian neighbors, Central Asia was considered to be part of its security system, mainly military, but now energy also included. Russia has explicit plans for a Greater Eurasia that unite major Asia states and Europe as well. This vision has been revealed president Putin in June 2016 Old soviet union controlled countries. Russia's longer-term role in Eurasia will depend largely on its self-definition. (Brzezinski.,Z. 1007, p.56) Russia also import from Central Asia, lack of funding for further investment, Russia preferred to import the necessary energy from Central Asia, which is cheap and convenient, Central Asian resources basically have a strategic meaning for Russia energy security.

Russia still held strong geopolitical influence on Central Asia, treating Central Asia as its security barriers and economic vassals, maintaining and expanding the market share of Russian enterprises in Central Asia and CIS., kept its status as the energy transit center. They also coordinated and competed in the international market, and actively participated in the exploration of energy in Central Asia; worked closely with Central Asia to fight for the right to speak in the international energy market, and compete with OPEC pricing organizations; meanwhile work together with China and Iran jointly boycott the United States, establish regional common market, set product and service price mechanism, and maintain good balance with friend (Cai, L, 2013).

Central Asia countries want to seek less dependence on Russia and turn to the west and east for more export partners, they wish to lower the influence of Russia at that

region

In Central Asia, China and Russia have tended to cooperate and compete in an atmosphere of restrained rivalry (Bolt, P. J., & Cross, S. N, 2018, p.47)

Old rivals, although shared same feeling of mistreatment and suppression by US-led western world, their relationship has gone multiple rounds of competition and cooperation. How do China and Russia perceive and view Central Asia as an energy actor in their energy security framework also place great important on Sino-Russia Relations.

Contrary to Russia, China exerts soft hegemony, increasingly embraced Eurasian integration, mainly through revive the old silk road and enhance economic cooperation. The project now called Belt and Road initiative, billions of dollars invested in Central Asia, with Kazak as focal point, opened pipeline and signed trade and investment deals worth billions

China's push into Central Asia through Belt and Road-linked investment projects has made Central Asia into a geopolitical laboratory—and a new frontier for global trade. Economics changed the dynamics in the region, opening up a new era of recalibration In addition to China, the involvement of India, Japan, EU and US has made the situation in central Asia even more complex. Competitions exist among countries within Central Asia and also the outside countries that made strategic plans to explore Central Asia either from geopolitical perspective or economic perspective.

On the fundamental geopolitical issues, the two countries are in a vague position or have not reached a consensus.

The deepening of energy cooperation between China and Central Asian countries is also prone to cause Russia's doubts and fears that its leading Eurasian integration process will be blocked. Russia try to ease China's influence and maintain its dominance with new energy projects, own economic blocs Eurasia Economic Union as approach to counterbalance China. With regard to China's Belt and Road Initiative, Russia participated as a member of the Eurasian Economic Union, and did not formally connect with the initiative as an independent entity, with strategic collateral concerns

The Eurasian Economic Union is an economic union consisting states located in Eastern Europe, Central Asia and Western Asia. The Treaty was signed on 29 May 2014 by the leaders of Belarus, Kazakhstan and Russia, and became effective on 1 January 2015. Later Armenia's and Kyrgyzstan joined and the Treaties were signed on 9 October and 23 December 2014, respectively.and came onto effective on 2 January 2015.and on 6 August 2015.

The Belt and Road Initiative was first brought out by President Xi in September 2013 when he delivered speech at Kazakhstan, in order to strength economic ties, promote comprehensive cooperation, find innovative cooperation mode among countries in Eurasia. This initiative involves policy, transportation, finance and culture. There are five basic targets: policy suplimentation, transportation connection, smooth trade, agreed currencies and common understanding among people. This is the land route, there's also a sea route initiative.

Both projects involved energy cooperation and other economic relationships. China aims at more integration into the Central Asia region and mutual benefits, but, for Russia, they hope to take the leadership role, more focus on own national interest, which also arouse criticize from Central Asia countries. China and Russia cannot agree at the strategic level since the two sides have different views on a number of regional issues. They also have different interests in CIS region. China: respect their sovereign independence and territorial integrity and supports long-term stability and prosperity in the CIS region as it will give China stable environment for its own development. In line with this, China does not want to see CIS region become a

particular countries' or groups' area of influence. Realized CIS region traditionally had a close relationship with Russia and recognizes Russia's concern for regional affairs. Russia China are strategic partners, broader cooperation conform to each other's essential interests. (Bedeski, R. E., & Swanström, N. (Eds.). (2012))

The problems encountered during the cooperation in Central Asia are listed below:

- 1. Central Asia's energy policy changes frequently, which affect China's investment enthusiasm
- 2. It is hoped that Central Asia will become one of the most stable oil and gas resource suppliers in China, and the security of the western border and the development of energy economy,
- 2. China and Central Asia have the longest natural gas pipeline, which ends at Xinjiang and then connect our domestic West-to-East gas pipeline, although the cost was very high, it was good for long-term benefit and safety

4.energy pipeline construction in Persian region, if work out, China's import do't need to pass the Strait of Malacca, maintain energy safe impact. (Cai, L, 2013).

To further cooperation between China, Russia and Central Asia, it would be better to operate under a platform, such as Shanghai Cooperation Organization, trying to find the possible connecting point between two initiatives.

Chapter 6 Methodology

This chapter is developed to illustrate the research methodology underpinning the whole paper. Remenyi claimed (as cited in Mohajan, 2018, p.4) research methodology indicates the logic of development of the process used to generate theory that is procedural framework within which the research is conducted. Viswambharan & Priya (as cited in Mohajan, 2018, p.2) pointed out that the choice of methodology is directed by the questions being raised. The methodology of this article is to discuss how the perception of energy security influence bilateral relations, by using China and Russia as an example and comparing their stance. It is hoping to see if the correlation can be applied to wider extension, other consumers and producers in energy field. A well-developed social research could not be separated from the proper research strategies, fitting research design and methods. Research strategy gives a general structure of how this research will be conducted, research design provides direction for the collection and analysis of information and prioritize the chosen dimensions in the research process; research methods refers to technique or instruments using for information and data collection (Bryman, 2014). The qualitative research strategy, combined with case study and comparative research design, critical discourse analysis methods to complete this section of methodology in this paper. Each parts of the framework will be explained in the following paragraphs.

6.1 Qualitative Research Strategy

Research strategies usually contain two types: the qualitative and quantitative ones. Qualitative research strategy emphasize words rather than quantification and use inductive approach to study the relationship between theory and research (Bryman, 2014). Qualitative research strategy is more flexible than quantitative strategy, it is easily adjusted when meeting unexpected events. Compared to quantitative, qualitative research does not require to collect a large number of information and can effectively process collected materials. It is more convenient and easy to use in research projects during this global pandemic. It is more commonly applied in social

science researches.

Zohrabi (as cited in Mohajan, 2018, p.4) stated: Qualitative research is a form of social action that stresses on the way of people interpret, and make sense of their experiences to understand the social reality of individuals. The whole paper is constructed on interpreting the relations between perceptions of energy security and its implication on bilateral relations, It helps people to understand this particular phenomenon in regional energy markets and shed light on global energy cooperation or in certain contexts.

6.2 Research Design

There are five types of research design: experimental design, cross-sectional or survey design, longitudinal design, case study design, and comparative design. It is said that case study design has the high application tendency in qualitative research (Bryman, 2014) and also it is one of the first types of research to be used in the field of qualitative methodology (Mohajan, 2018, p.11). , yet a research project is not limited to one research design, some may require more than one research design, so that the research questions can be better evaluated and answered. In this paper, a combination of case study and comparative design have been employed.

6.3 Case study design

Case study design aims at explaining complex theory or phenomenon by analyzing a single case or a small number of cases. The term 'case study' where the 'case' is the focus or object of interest in its own right and and the researcher aims to provide an in-depth elucidation of it. (Bryman, 2014, pp.67-69). The structure of a case study should be the problem, the context, the issues, and the lessons learned. In this project, the case is Sino-Russia energy relations, we focus on studying one of the important factors in shaping this interaction, while the application of conceptualized energy security assists with explain the casual relations.

As described in Bryman's book (2014), there are several types of cases in case study. The critical case, which the case is chosen to use developed theory to test the hypothesis; the representative or typical case, or exemplifying case is the one that can lead to broader application, the extreme or unique case, commonly focuses on clinical studies, or practical application. The practical energy cooperation and competition between China and Russia is unique, due to its locations, geopolitical position and stance in energy chain market. It is debatable that single case study and its findings can be applied and generalized in wider context, but exponents of case study research counter suggestions case study researchers tend to argue that they aim to generate an intensive examination of a single case (Bryman, 2014, p.71),

6.4 Comparative Design

In additional to case study design, it is worthy bringing in comparative design, which has various advantages, better serving the research project. Esser, F., & Vliegenthart, R. (2017) explained

"Comparative design analysis performs several important functions that are closely interlinked. More specifically, comparative analysis enhances the understanding of one's own society by placing its familiar structures and routines against those of other systems (understanding); comparison heightens our awareness of other systems, cultures, and patterns of thinking and acting, thereby casting a fresh light on our own political communication arrangements and enabling us to contrast them critically with those prevalent in other countries(awareness); comparison allows for the testing of theories across diverse settings and for the evaluating of the scope and significance of certain phenomena, thereby contributing to the development of universally applicable theory (generalization); comparison prevents scholars from over-generalizing based on their own, often idiosyncratic, experiences and challenges claims to ethnocentrism or naïve universalism (relativization); and comparison provides access to a wide range of alternative options and problem solutions that can facilitate or reveal away out of similar dilemmas at home(alternatives)" (p.2).

In the previous section of case study, we have set the focus on Sino-Russia Relations as the specific case. It naturally contains two parts that contrast each other as self and other in the sense of national identity or consumer and supplier in the realm of energy supply chain. With the identical evaluation of each countries' concept of energy security and its influence on actions during energy cooperation, we can better understanding our own perceptions, the difference presented by each side, their different interests and logical causal actions. It offers a reasonable and complementary measures in research design.

6.5 Research Methods

There are plenty of research methods available to analyze the research project, discourse analysis and critical discourse analysis are chosen in study this project, the specific reasons will be conveyed in this last part.

6.6 Discourse analysis

Discourse analysis is an effective method in answering research questions, widely used both in quantitative and qualitative research strategies. Discourse is conceived of as a means of conveying meaning (Bryman, 2014). Simply put, discourse analysis studies and analyzes the uses of language in constituting or producing the world. Potter (cited in Bryman, 2014), addressed: DA 'emphasizes the way versions of the world, of society, events and inner psychological worlds are produced in discourse'. In this research project, a lot of articles from different background have been analyzed. A lot of domestic Chinese scholars' or researchers' articles have been reviewed, which in most of the cases does not give any voice in international platform of IR study. By analyzing the different discourse either from domestic scholars, or international scholars, the different perspective have been compared and discussed. Although each side has their own bias, it is worthy bringing together these various perspectives in understanding the research questions. Domestic Chinese scholars' perception on China and Russian energy security and their imprint on bilateral relations give fresh

understanding to current dominant views in IR field. It is always beneficial when looking into the specific context or adding viewpoints from people greatly involved in that event.

In Bryman's book (2014), Gill has categorized four themes in discourse analysis which is talk here.

- 1. Discourse is a topic that worthy to be studied, not just a means to understand or a reason to explain the social problems.
- 2. Language construct the personal view on social reality or social problems, reflecting the characters of the speakers.
- 3. Discourse is a form of action, which uses language to express opinions and direct action.
- 4. Discourse is rhetorically organized that DA practitioners recognize that discourse is concerned with 'establishing one version of the world in the face of competing versions', so as to persuade or influence others.

6.7 Critical Discourse Analysis

Critical discourse analysis (CDA) emphasizes the role of language as a power resource that is related to ideology and sociocultural change. CDA practitioners seek to trace is how discourses are constructed and maintained in relation to certain phenomena, discourses are conceived of as drawing on and influencing other discourses (Bryman, 2014, pp.536-537). The discourse on energy security from the international scholars surely influence and affect other researchers' understanding of the energy policy and the decision-making of policy makers in China, while the discourse in policy documents released by the government or sponsoring agencies affect other interested people's understanding of the topic.

The above section covers the research methodology composed with research strategies, design and methods. Although using a more complex qualitative methodology, it provides us opportunities to better understand the roots of the

phenomenon. This thesis has its limitations: the case study is unique, maybe not able to generate findings applicable to broader area; the discourse is biased and my analysis also attaches my own bias, but to some extent it can offer valuable advise to further study.

Chapter 7 Conclusion

This paper is intended to address how the perception of energy security influence bilateral relations, taking China and Russia as an example. The major concept used in this paper is energy security. Energy security is a constantly changing concept. There's no common or generally agreed definition, although there are some overlapping interpretation by different IR school or scholars. The theory of this paper is mainly built on the supplier and consumer perspective.

For consumers, the uninterrupted availability of energy source at reasonable price are their main energy security concern. So after being a net importer, China started to its global search for oil import from both sea route and land route, compared to land route, sea route is too vulnerable to threats. In order to main sustainable energy supply, China need to develop both import route. China's energy security complement Russia's and there's still room for further cooperation. Russia as the energy producer, emphasize on "stable commercial relations with their customers, whose purchases often provide a significant part of their national revenues". Now since its major consumer European Union cut the energy import, Russia choose to move eastward where a lot of big energy consumer locate.

Central Asia as the heartland in Eurasia continent, has attracted a lot of world super powers, the competition for energy resources and dominance are very fierce. It also has greatly geopolitical meaning. Russia, as a leading actor in this area, try to integrate Central Asia to its energy security framework, to win more influence in international energy price and system. as a consumer of energy from Central Asia, Russia also need to maintain the steady supply. With their historical interaction, Russia hope to maintain dominant position, which can use realist view to explain. Russia's opinion on China's presence in Central Asia, although in one way, they work together to counterbalance western powers, especially US and its allies, in another, they also compete for energy resources. For China's involvement in central Asia, foremost, as a consumer, China need Century Asia as its stable energy partner and

also promote the development of west part of China. China's economic engagement into Central Asia is based on mutual respect and agreed share of the benefit.

Central Asia as an energy supplier and consumer of more Chinese products, welcome China's engagement in Central Asia, which not only help them get a lot of investment, but also promoted local business development.

Their feeling about Russia is mixed. Historically belonging to Solvet Union, they share a lot of common things, which closely tie them to together, through similar culture, ideology, shared military defense, transportation and energy system. Yet while cooperating with Russia, their benefits were not taken care of, They view Russia as trying to control their critical resources, so they are willing to invite more nations or groups into Central Asia, in order to strike a balance among all superpowers and won room for their own development.

In general, not matter it is Sino-Russia, or Sino-Central Asia, or Russia-Central Asia, the actual war will not exit, but the tension does. The most preferable and profitable proposal would be enhance bilateral or triangle relationship, further cooperation in business, especially in energy field. A regional or local organization or system, that approve by all nations in that area will better serve the cooperation, not matter from legal terms, or administrative process. Shanghai Cooperation Organization should shoulder its responsibility as a powerful regional organization that provide platform for further cooperation and integration, not only in military, but also in economics, cultural. With all the regional important actors join SCO membership and the regular meetings between members states. It provided the platform for regional integration, especially in energy sector, since both energy importers and exporters part of the community. We should all put aside disputes and misunderstanding, so as to more effectively work together.

The energy cooperation among countries is not set, it will be affected by other influential factors, like the reconstruction in global energy market, price change and

other global events. The energy giant like Russia and Central Asia, should joint efforts to improve their role in international platform and fight for the right to engaged in price setting along with OPEC.

2020 is an unprecedented year, The outbreak of Coronavirus (Covid-19) has not only taken away numerous people lives, but also caused devastating effect to our society, our health system, education ,economy, and all other sectors.

The massive lockdown in most place of the world, has greatly changed people's life style. With less movement, the consumption of energy drop sharply. The decline of energy demand made the newly operated Power of Sybria cut its export, so does the pipeline from Turkmenistan. The international oil price also drop dramatically, Russia and OPEC countries have agreed to cut the daily output in order to stabilize the oil price.

According to the International Energy Association Global Energy Review 2020, countries in full lockdown are experiencing an average 25% decline in energy demand per week and countries in partial lockdown an average 18% decline. Energy investment is set to fall by one-fifth in 2020, the immediate influence is already so shocking, we could image how the long-term impact not matter in energy field or other social sector would be.

IEA has explore a scenario to quantified the energy impact, the result is very gloomy: Energy demand contracts by 6%, the largest in 70 years in percentage terms and the largest ever in absolute terms. The impact of Covid-19 on energy demand in 2020 would be more than seven times larger than the impact of the 2008 financial crisis on global energy demand.

Even though currently some countries have lifted their lockdown and gradually started normal operation in some important sectors. the recovery of business and

economy is still very fragile. The global freedom of movement and transportation seems still far away.

Everything has been tested, our society, health system, economy and energy security. China and Russia, as major forces in the world, should work together as real strategic partners to fight for the global pandemic, perform their duty as responsible actor in international system.

It was said, the cooperation between China and Russia is a calculated geopolitical choose (Lukin A. 2019), we just need to realize cooperation is the universal trend for all future relationship between nations. We need to seek every opportunity to promote bilateral cooperation, together, we can face all the challenges.

Reference List

- Ang, B. W., Choong, W. L., & Ng, T. S. (2015). Energy security: Definitions, dimensions and indexes. *Renewable and sustainable energy reviews*, 42, 1077-1093.
- Baev, P. K. (2012). From European to Eurasian energy security: Russia needs and energy Perestroika. *Journal of Eurasian Studies*, *3*(2), 177-184.
- Bedeski, R. E., & Swanström, N. (Eds.). (2012). Eurasia's Ascent in Energy and Geopolitics: Rivalry Or Partnership for China, Russia and Central Asia?. Routledge.
- Bolt, P. J., & Cross, S. N. (2018). *China, Russia, and twenty-first century global geopolitics*. Oxford University Press.
- Brzezinski, Z. (1997). A geostrategy for Eurasia. *Foreign Affairs*. Vol. 76, No. 5, pp. 50-64. DOI: 10.2307/20048199. https://www.jstor.org/stable/20048199
- BP https://www.bp.com/
- Bryman, A. (2014). Social research methods (4th ed.). Oxford University Press.
- Cai, L (2013). Study on Countermeasures of energy cooperation between China and Central Asia Countries. Social Science Academic Press (China)
- Cherp, A & Jewell J. (2014). The concept of energy security: Beyond the four As. *Energy Policy*
- Qin J & Chen M. (2015) Two nations vow to grow energy links. China Daily. http://www.chinadaily.com.cn/kindle/2015-11/13/content_22450643.htm
- Cohen A. (2019), The Strategic Upside Behind Russia's \$55 Billion 'Power Of Siberia' Pipeline To China,

 https://www.forbes.com/sites/arielcohen/2019/12/06/is-there-strength-behind-rus sia-and-chinas-new-power-of-siberia-pipeline/#5543bc351faf
- Cox, E. (2016). Opening the black box of energy security: A study of conceptions of electricity security in the United Kingdom. *Energy research & social science*, 21, 1-11.

- De Wijk, R. (2016). Power Politics: How China and Russia Reshape the World.

 Amsterdam: Amsterdam University Press.Downs, E., Henderson, J., Herberg, M. E., Itoh, S., O'Sullivan, M. L., Skalamera, M., & Soylu, C. (2018). The Emerging Russia-Asia Energy Nexus. *National Bureau of Asian Research*, 1.
- Eleanor A. (2019). Russia, China's Neighborhood Energy Alternative. The Diplomat. https://thediplomat.com/2019/12/russia-chinas-neighborhood-energy-alternative/
- Energy Charter Secretariat. International Energy Security:Common Concept for Energy Producing, Consuming and Transit Countries (2015)
- Engdahl, W. (2004). A century of war: Anglo-American oil politics and the new world order. Pluto Press.
- Esser, F., & Vliegenthart, R. (2017). Comparative research methods. *The international encyclopedia of communication research methods*, 1-22.
- Feng, Y.J., Pang C.W., Xu. Q. H. etc. (2018). Russia's prole in international energy strategy change and sino-russia energy cooperation. *OUYA Jingji*
- Flaherty, C., & Leal Filho, W. (2013). Energy security as a subset of national security. In W.L.Filho & V. Voudouris. (Eds.). *Global energy policy and security* (pp.11-26). London, Springer.
- Gazprom: https://www.gazprom.com/projects/power-of-siberia/
- Hu, Z., & Ge, Y. (2014). The geopolitical energy security evaluation method and a China case application based on politics of scale. Sustainability, 6(9), 5682-5696.
- Han, L.H. (2007). International Energy Geo-strategic Pattern and SCO Energy Integration. *Journal of International Economic Cooperation*
- IEA. https://www.iea.org/topics/world-energy-outlook
- Korolev, A., & Portyakov, V. (2019). Reluctant allies: System-unit dynamics and China-Russia relations. International Relations, 33(1), 40-66.
- Lang, Y.H. & Wang, M.L. (2005). Russian Energy Geopolitics Strategy and the Prospects of Sino-Russia Energy Cooperation. *Resources Science*
- Lanteigne, M. (2008) . China's Maritime Security and the "Malacca Dilemma", Asia Security
 - https://doi.org/10.1080/14799850802006555

- Li. Xia. (2019). Xinhua Headlines: Xi's visit to open new prospects for China-Russia ties. *Xinhua News Online*.
- Lai, H. H. (2007). China's oil diplomacy: is it a global security threat?. Third World Quarterly, 28(3), 519-537.
- Leung, G. C. (2011). China's energy security: perception and reality. *Energy Policy*, 39(3), 1330-1337.
- Leung G.C., Li R. and Kuhn M. (2013) China's new energy security: a swing of the pendulum. In W.L.Filho & V. Voudouris. (Eds.). *Global energy policy and security* (pp.195-208). London: Springer.
- Li, Y.(2020). On the success and dilemma of China-Russia Economic Cooperation under the New International Situation, *Northeast Asia Economic Research*,
- Liu Z.W. & Tang, H.Y (2017) Sino-Russia energy cooperation under the vision of the silk road economic belt. *Globalization*
- Lukin A. (2019). How a huge new gas pipeline boosts Russia' Strategic entente with China, World Politics Review
- Mackinder, H. J. (1942). Democratic ideals and reality a study in the politics of reconstruction. DIANE Publishing.Xuetong,
- Maçães, B. (2018). *The dawn of Eurasia: On the trail of the new world order*. Yale University Press.
- Mohajan, H.K.(2018). Qualitative Research Methodology in Social Sciences and Related Subjects. *Journal of Economic Development, Environment and People*, p. 23-48
- Mohapatra, N.K. (2017). Energy security paradigm, structure of geopolitics and international relations theory: from global south perspectives. *GeoJournal* volume 82, pp.683-700
- Ouyang X.Y. & Fang, X.H. (2020). Self-Perception and Development Strategy: How to integrate the Belt and Road Initiative with the Eurasian Economic Union.

 International Economic Review

- Pepe, J.M (2019). Eurasia: Playing Field or Battle Field? Defining an Effective German and European Approach on Connectivity Toward China and Russia? DGAP Analysis, *German Council on Foreign Relations*. https://dgap.org/en/research/publications/eurasia-playing-field-or-battle-field
- Petersen, A., & Barysch, K. (2011). Russia, China and the geopolitics of energy in Central Asia. Centre for European Reform.
- Rehman, F. (2012). State Competition and the Global Politics of Energy. *E-International Relations*.

 https://www.e-ir.info/2012/05/01/state-competition-and-the-global-politics-of-energy/.
- Shen, Q.T. (2012) Analysis of China's Energy Security from Geopolitics Perspective.

 Securities and Future of China
- Universitetet i Oslo. (2016, August). Energy Security: Critical Perspectives. The European Consortium for Political Research.

 https://ecpr.eu/Events/PanelDetails.aspx?PanelID=5041&EventID=95
- Weissmann, Mikael, Carlsson, Märta, & Oxenstierna, Susanne. (2015). China and Russia A Study on Cooperation, Competition and Distrust.
- Winzer, C. (2012). Conceptualizing energy security. *Energy policy*, 46, 36-48. https://doi.org/10.1016/j.enpol.2012.02.067
- Wu L. (2013). The Strategic Situation and Countermeasures Faced by China's Energy Security. *Journal of International Security Studies*
- Yilmaz, S., & Daksueva, O. (2019). The energy nexus in China–Russia strategic partnership. International Relations of the Asia-Pacific, 19(1), 63-88.
- Yilmaz, S., & Changming, L. (2019). Remaking Eurasia: The Belt and Road Initiative and China-Russia strategic partnership. Asia Europe Journal, Asia Europe Journal, 5/22/2019.
- Yan. (2013). For A New Bipolarity: China and Russia vs. America.(Report). New Perspectives Quarterly, 30, 12.

- Yilmaz, S., & Daksueva, O. (2019). The energy nexus in China–Russia strategic partnership. *International Relations of the Asia-Pacific*, 19(1), 63-88.
- Yu, J.H.& Dai, Y.C.(2012). Energy Politics and Security Concepts from Multidimensional Perspectives. *Journal of Middle Eastern and Islamic Studies* (in Asia), 6:4, pp. 91-120, DOI: 10.1080/19370679.2012.12023215
- Zhao, C.Q. (2011) On Russia Factor and Central Asian Factor Affecting
 Sino-Central-Asia Ties and Sino-Russia Relation. Journal of Xinjiang Normal
 University (Social Science Edition)
- Zhao, S.S. (2008) China's Global Search for Energy Security: cooperation and competition in Asia-Pacific, Journal of Contemporary School
- Zhang, J. (2005). The complexity of Malacca straits, International Politics Research

